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AGRICULTURAL ECONOMICS

by

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AGRICULTURAL ECONOMICS

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PREFACE

Although agricultural economics has been taught for several years, it has the disadvantage of being a comparatively new subject and the books that undertake to cover the field are still few. Some teachers handle the subject altogether by lectures, a method which will, no doubt, always be needed and used. It is hoped that this book may make it somewhat easier to present the many aspects of the subject. The chapters for the most part are relatively short. The material presented in the book may easily lead to further expansion. Outside the teaching field, the book should lead to a clearer understanding of the problems that the farmer must continue to meet. The questions will probably never all be solved, and, if they were, they would not stay so. The world that agriculture faces is always changing rapidly.

Like almost any author of a general textbook on a broad subject, the author is indebted to those who have previously written on the subject, specific acknowledgments of which are made in the footnotes, as well as to a considerable number who have given immediate assistance, especially Profs. R. K. Froker, P. E. McNall, W. P. Mortenson, K. H. Parsons, L. A. Salter, Jr., and R. J. Penn. Their help has been generous and excellent. The author's son, Howard Hibbard, has given much help, especially on the language of the book. Mrs. Hibbard has read all the page proof.

BENJAMIN HORACE HIBBARD

MADISON, WIS.
September, 1948

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Chapter 1

MEANING OF ECONOMICS

The word "economics" is old. The Greeks used it for the management of the household, apparently in its pecuniary, money, or material aspect as distinguished from family relationship or spiritual or cultural life. The economy of the household meant the provision of food, clothing, and shelter. It was the business side of home life and as a rule did not include much buying, selling, borrowing, or hiring. The thinking that was done in connection with these phases of life was largely of an ethical nature. For example, Aristotle taught that to take interest was wrong; to him money was barren. The Hebrews also did their economic thinking mainly in connection with the rights and wrongs of transactions among individuals. A lender should not use harsh means in collecting from a borrower. The sympathy of the moralist was almost altogether with the debtor; the creditor was suspected of being an oppressor.

During these early times the moralist urged the use of honest measures and balances. Cheating and lying were discouraged. While life was simple and especially while it was mainly individualistic, there was little occasion for anyone to develop a system of thought like that of modern economics. In fact, it is almost invariably true that social practices precede the sciences that undertake their explanation. Some sort of language was used long before any effort was made to reduce the spoken words to a logical system or to develop a grammar. Practical counting and something in the way of calculation had been practiced long before arithmetics or algebras existed. Justice was meted out to wrongdoers for endless generations before law-books were written or courts such as we now know were established.

Thus economics came into being as a means of explaining human activities in the effort to get a living. As usually defined, *economics is the study of the social relationships due to wealth getting and wealth using.* It must be kept in mind that economics does not deal with wealth as such, but only with wealth as it involves the dealings of one man with another. If, for

example, ten men on an island should each accumulate a vast store of goods such as gold or grain or cattle, but did no trading among themselves, each living on his own, economic principles or practice would not be involved, any more than in the accumulation of a store of acorns or nuts by a group of squirrels or the filling of a hollow tree with honey by a swarm of wild bees. Economic life begins when one man deals with another in matters of goods or services that require estimates of the value of one good in terms of another. Even though the individualistic family mode of life involves the acquisition of goods that under other circumstances would have value, so long as each small group of people are doing the same things without occasion for exchange, their actions involve nothing recognizable as modern economics. Labor is performed, but it has no price. Goods are made, grown, or gathered, but they have no relationship to a market. Within the small circle of people doing the work for the household the products are free. Within the group of households each has the same variety of possessions. In case of shortage those who have plenty will share with those who are short, without pay.

Economics treats of those relationships that grow up around the trading of goods of one sort for goods of another sort. It accompanies the development of special, or commercial, production. When farmers find a market for wheat, cotton, or dairy products in cities, or in countries where such things are not produced to the desired extent, the farmers favorably situated for producing wheat, cotton, or dairy products will devote a large part of their time to producing these crops. They will produce more of these crops than they need for themselves, but at the same time they will produce less than they need of other things. For example, they will operate less diversified farms. In the cotton districts much corn will not be grown or many cows milked. In the wheat districts, such as parts of Kansas and North Dakota, upward of half of the whole crop acreage will be in wheat. For example, in McPherson County, Kans., in 1929, out of 408,000 acres of total cropland, 258,000 were in wheat, while ten years later 266,000 were in wheat. In North Dakota in the same year, wheat occupied over half the cropland in Benson, Bottineau, and Ward Counties; if we leave out of account wild grass cut for hay and consider only cultivated land, wheat was more than equal in area to all other cultivated crops in many counties. For the year 1939 the ten leading counties of the state showed a falling off of a little less than a fourth from the acreage sown to wheat in 1929. These examples illustrate the strong tendency of farmers to grow the crop which will sell for cash and which will give them a large income compared with what they would get from producing a great number of different things. If they were to spend their time and energy in growing the things needed for themselves and families, there would be a great reduction in the amount

of wheat produced for the market. On the other hand, when the price of wheat is high enough to yield some profit over cost, emphasis on the wheat crop means an increase in family income and welfare. A grocer cannot afford to take time out of his store for making shoes for himself and family; he isn't a shoemaker. The preacher who takes time to raise his own vegetables and fruit and who keeps cows and pigs may be a first-class small farmer, but he isn't likely to become noted as a preacher.

When each family takes care of the main part of its wants, providing food, shelter, clothing, doctoring, and nursing, it may develop interesting and able people. They live simple lives and may be the best of citizens. They are not, however, likely to make much progress in the way of better things to use, more comforts to enjoy, or more ability to contribute to the welfare of the community. The simple life with self-sufficing families developed but few economic problems, and these simple ones. For example, there were no labor or wage questions of importance, since there was no wage class. There were no pressing marketing problems, since little produce was marketed. Questions relating to interest were of minor significance, since there was little dependence on credit. Money theories did not occupy the minds of many thinkers, since money does not play a major role in a self-sufficing economy. There was no fight between the common people and monopolists, since no one can monopolize many of the things produced in a self-sufficing community. In old settled countries some vital economic issues might arise, such as the ownership of land by landlords who would lease it out on unfavorable terms to tenants; this would lead to social relationships meriting attention. But so long as economic problems appeared mainly as between local individuals there was little or no development of economics, though specific economic grievances were much discussed, and at times laws were passed to set them right.

When people begin to live and work apart at different occupations and with a great diversity of production within a given general occupation, a new group of social relationships is bound to develop. In these relationships wages, interest payments, and rent contracts and payments become basic questions. Close on their heels come an endless number of concrete problems involving disputes over such matters as freight charges; tariff rates; municipal ownership vs. private ownership of businesses that have become monopolistic; the way to handle monopolies of nation-wide operation, such as the mining and sale of anthracite coal, the price-making system in the steel business, or the influence of the packers on livestock prices. All these problems involve the welfare of men and women in the work of making a living, *i.e.*, in the activities of getting possession of much or little wealth and the use made of it. Thus we are brought back to the definition with which we started. Economics deals almost altogether with matters

pertaining to value; to questions relating to goods and services that can be exchanged one for another or are bought and sold, which indirectly is about the same as exchanging one for another.

Agricultural Economics Defined. The subject of economics seems to take in primarily the *social phenomena due to the wealth-getting and wealth-using activities of man.* This is substantially the definition given in Ely's textbook. In these few words we have the main meaning of economics. Now agricultural economics is a part of general economics, and it requires at least a fairly clear understanding of general economics.

Professor H. C. Taylor's treatment of agricultural economics deals with agricultural matters as bearing on state and world affairs. His definition, however, pertains to a single farm, which is undoubtedly the main concern of the vast number of farmers, but which does not include the extremely vital problems which should concern all people and which are involved in the pittances earned by Japanese farmers or the relatively ample incomes of the Americans. Many questions such as tariffs and their effects, interest rates, money and its influence, land tenure, and so on, must be considered in framing an adequate definition, which must undertake to cover the question of the income and the outgo of a great class of people. In the paragraph following his definition of agricultural economics, Professor Taylor shows that his ideas on the subject are, unlike his definition, as broad as possible.[1]

Professor Gray, in his *Introduction to Agricultural Economics*, gives an excellent definition of the subject: "*It may be defined as the science in which the principles and methods of economics are applied to the special*

[1] Professor Taylor defines the subject as follows: ". . . agricultural economics treats of the selection of land, labor, and equipments for a farm, the choice of crops to be grown, the selection of livestock enterprises to be carried on, and the whole question of the proportions in which all these agencies should be combined." Later he remarks, "These questions are treated primarily from the point of view of costs and prices." What he gives appears to be a pretty careful definition of farming from the standpoint of farm management. It would seem that by knowing what is going on in the world a man could solve all the questions that arise in connection with his own farm, and since it is not easy to change social matters by individual action, it must be true that a farmer's wants and his satisfactions come primarily from the management of his own farm. Although it is true that a given farmer's attention is directed primarily toward his own work rather than toward the work of the community of which he is a part, the farmer must give real attention to community and even to world affairs. Professor Taylor's definition is, to repeat, almost exclusively a definition of the farm-management phase of agricultural economics and hardly at all of the more general aspect of farm life. Under his definition a given farmer could live a lifetime strictly within the confines of his own farm. In the world of economics implied and suggested in the general definitions of most textbooks on general economics, he is a world citizen, and every phase of economic life comes to him for decision and action.

conditions of agricultural industry." We may say: *Agricultural economics is the study of relationships arising from the wealth-getting and wealth-using activity of man in agriculture.* Agricultural economics is after all merely a part of an immense field called economics. What we are going to study is just a part of the general field of economics, the part applying to agriculture. The main subdivisions of the subject are worth mentioning.

Under one or another wording probably every book on agricultural economics for years to come that poses as a general treatment will deal with the ownership of land, the hiring of labor, and the possession of movable capital. The size of the agricultural class is likely to continue to attract attention. Are there too many farmers? Also there is always occasion to consider the combination of the factors of production. To these may be added a large number of subjects such as the size of farms, the value of farms, the relation of tenant to landlord, credit, cooperation, and marketing.

Farm Management. We might have included farm management among the sample subjects mentioned above. There has been a good deal of argument about its classification. For the past three or four decades a group of men have insisted that agricultural economics and farm management are separate subjects and should be treated by different specialists and even in separate college departments. Separate starts were made in agricultural economics and in farm management, and the subjects have been separate over a considerable length of time. In Minnesota two distinct departments existed for very many years. In Cornell there was a Department of Farm Management, which finally came to include the main features of agricultural economics. At the Iowa State College there were two departments for some years. For the country as a whole there are always fewer and less significant departments devoted to farm management.

Farm management had the earlier start. Usually it grew out of general departments of agronomy. In a few instances at least, a dean of agriculture, who probably knew nothing about economics, would ask some young fellow to work up a course in farm management. Sometimes the prospective teachers got hold of translations of books left by Greek and Roman writers on agriculture. The courses were mainly based on such books as those by Cato and Varro, Daubeny, Heitland, and Xenophon,[2] which went much into detail on such subjects as the use of fertilizers, rotation, relation of labor to the manager, and so on. Not all the facts could be known about ancient farm undertakings, and few of the circumstances were like our own; the teachers were ill prepared to handle the facts they presented, and the courses were dreary. Presently these general surveys were dropped; in their place a few men of some ability worked out courses along the lines of accounting and costs. Out of the earlier attempts, which so often dwelt

[2] See references at the end of this chapter.

on the most practical farm operations, developed courses dealing with types of crops, acreage allotted to different crops, fertilizers, livestock and its feeding, and so on. In fact, an attempt was made to study the best farming methods known. The courses, so far as they had any value, were definitely restricted to farm management.

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Chapter 2

FARMING IN MODERN SOCIETY

Crucial Importance of Agriculture. For many centuries man was consciously dependent upon food. We are still just as dependent upon food, but not so consciously. It takes some 3,000 calories to maintain us each day, but we do not wake up thinking how to provide it ahead of anything else. We must as a second consideration provide ourselves with clothing for the day if we are to face the elements and meet the requirements of the society in which we live. Since both food and clothing are agricultural in origin and both are products of the farm, it is easy to prove or to appear to prove that of all the people upon whom we depend, the farmer comes first.

After proving that we are more dependent upon the farmer than upon anyone else, it seems a little shocking that of all the people upon whom we depend for a living, the farmer is about the poorest paid. As a rule, farmers make good incomes during wars. At the time of the First World War, American farmers did as well as nonfarm people. In the twenties, prices were less than half as high and only two-thirds of what they were in the prewar period. Two distinct periods of time are never alike. During the years of the First World War, the foreign demand for our agricultural goods was keen. During the two decades beginning two years after the close of the war, farm prices were the lowest known for two to three hundred years, assuming that such a comparison can be made. In 1933 wheat sold in Kansas, locally, for 20 to 30 cents a bushel. The long low period for farm products resulted in the forced sale of great numbers of farms. Livestock was low. In fact, the worst times ever known to farmers struck us during the Hoover Administration and the first F. D. Roosevelt Administration. How can it be explained that food and clothing prices were the lowest ever known; that farmers were bankrupt; and that during the second decade following the war, laborers were out of work as never before?

There are two explanations. First, we had lost our market for farm products. There were plenty of hungry people in both Europe and Asia; there were plenty of people who, if they had had the money, would have raised the bidding for our farm produce high enough to give our farmers good times. The real trouble was that the recent war had left many of the people of the Western world bankrupt, some actually starving. These people were too poor to buy the farm goods that we had in abundance. Then, too, laws were passed by country after country to restrict trade and especially trade with us. We had passed in 1930 the highest tariff act ever known where there was any plan or prospect for trade; Europe had then already begun putting her tariffs up higher and higher to protect her different countries against purchasing from us. By the thirties it was difficult to make sales of American goods in Europe. During these years agriculture began to assume an aspect of greater importance than it had previously held, but only on paper. We had become one of the greatest exporting nations of the world. For some years after the First World War, we continued to sell great quantities of goods to Europe, but we sold them on time, and collections were slow. The failure in collections resulted in less trade, and finally we virtually gave up the idea of any considerable sales of farm goods. Agriculture was still of crucial importance, but all we could do was to pile goods up at home and try to cut down output. At last a new demand for goods was caused by the Second World War.

Farm Prosperity as the Basis of General Prosperity. That we would all be prosperous if farmers as a class were prosperous seems to be the firm belief of many intelligent people. Possibly the make-up of a given society may be responsible for the prevalence of this view: under some circumstances prosperity may really rise and fall with the ups and downs of agriculture. No doubt the welfare of a country like Argentina depends mainly on the variations within agriculture. When crops are good and when at the same time prices and demand for cereals, flax, and the like are strong, people in general in Argentina are prosperous. Certainly when demand for these goods is weak and prices are low, then the whole business setup is weak, debts accumulate, and employment is slack; the best thinker in the land may truthfully say, "Agricultural produce is in the dumps, and we are all poor."

This view that fits present conditions in Argentina and most of South America was for some centuries accurate for all Europe and Asia. The importance of agriculture was so profound for centuries and centuries that it dominated the thought of man. Philosophers made agriculture the sole key to economics. Man had to have bread. Therefore making bread was the most necessary and the most constant concern of man. Notice what a part bread plays in the Bible. Almost from the first book to the last,

from Exodus to the writings of St. Paul, we keep hearing about bread. The masses of the people of those early times were greatly concerned from day to day with the question of bread. Only within recent years, primarily during the nineteenth century, has any important group of humanity reached the point of freedom from concern over feeding themselves, and this group still constitutes only a minority of the world's people. We have at last reached a plane of thinking not wholly dominated by bread.

As to the question whether we would all be prosperous if farmers as a class were prosperous, probably all others would be prosperous if farmers were. But farmers would be prosperous because other classes of people were able to pay them well for what they furnished. In case of scarcity of food and clothing material it might happen that no class was prosperous; all might indeed be poor in many densely populated countries. Or, again, it might be that the industrialists had lost their market, while the farmers of a given country were better off, for still other people might have money with which to buy. Someone must have money, or there can be no prosperity other than that of plenty to eat and wear; it takes only a moment's thinking to see that this is hardly prosperity at all. Modern people are characteristically in debt; few indeed merely live on their own product. Very few farmers who possess more than a shack and a pig can get what they regard as a decent living without making sales. Few families produce the major part of what they consume; they may produce nothing but milk or only wool and mutton, and thus have simply these articles to sell, while they buy many other things for their own living. Some who produce only one or two articles become millionaires.

For farmers to be prosperous unless there is a reasonable degree of prosperity among the people with whom they trade is almost unheard of. Farmers do not profit by producing an excess of products and selling them to others who are poor. Desperately poor people are poor customers. Millions of Chinese have starved to death while Americans had quantities of wheat going begging for a market. Hunger plus money makes a demand for goods. Hunger without money makes no appeal except to charity; hunger has never strongly impressed charity at long range, and a faint impression has never evoked great contributions. This is because people who work must ordinarily be paid. Suppose a farmer with 1,000 acres of land should employ 20 men and pay them $50 a month. Then suppose that a great appeal should come for foodstuff; could the farmer continue to produce if he gave his produce away? He would be obliged to pay his laborers $1,000 a month. With no income, how could he continue to pay them? Certainly he could not very long unless he were a man of wealth. A few well-to-do farmers might furnish goods for a year, but most farm operators would be in dire trouble as soon as their income stopped. On

Jan. 1 a big tax bill is presented. From time to time there will be bills for machinery. There will be considerable expenditures for keeping the farmer's own family. Then too he may be in debt, and his creditors in all probability will not be even aware of the faraway distress to the alleviation of which he is contributing. No ordinary farmer can put off his own creditors because many Chinese are suffering from famine. The needs right at his own door are so great as to demand the main part of his income. If he does not pay each of his 20 men $50 a month, 20 families will be hungry and complaining. By the time he stopped payment on all his usual obligations he would be in so much trouble that he could not run his farm.

The best our farmer can do is to contribute a bit out of his profits after his regular obligations have been met, but what he can contribute is a mere trifle in view of the needs of a million starving Chinese. Chronic or acute poverty can hardly be relieved by voluntary contributions. Some means should be devised whereby people could provide, under ordinary circumstances, against times of great distress. Contributions of the kindhearted to millions of people who habitually undertake to live beyond their means are not the answer. There is no hope for those who continually overpopulate considerable regions so that when bad years strike they die in great numbers, since there is no reserve, no credit, no businesslike method of providing for the bad times that they had every reason to expect.

People must learn what a country or district can do in the way of producing food and clothing not only during good years but over the long run. A population whose numbers exceed the probability of livelihood furnished by a given district is headed for trouble. People are willing to help those who can presumably pay back sometime or who do not need help too much or too often. America helped the people of Johnstown, Pa., out of their trouble following the flood caused by the giving way of a dam some half century ago. They were our own people; they were not to blame for the catastrophe; it was not a frequently recurring circumstance. If we should find twice too many people trying to make a living on a piece of ground commonly subject to drought or flood and populated to the limit of its best years, it would take a lot of planning, a lot of advising, and a lot of complying with advice before many would extend a hand. It is not easy to get help for starving Chinese. It is not even easy to get money for the poor people of our own country, as, for example, the tenant farmers of our own South.

More Prosperity, Fewer Farmers. As a country advances, farmers always decrease in numbers relatively. In a country where industry and transportation have attained a great development, agriculture always decreases in relation to other undertakings. In the early days of the United States farmers made up about 75 per cent of the population. At the same

time industry began to grow, and gradually the percentage of farmers began to decline, until now farm people number less than a quarter of the total. A few years ago the world wanted but little of our excess agricultural produce. We were able to live on the agricultural output of approximately 15 per cent of our people; the percentage grows smaller at every count. In other words, about two-thirds of our farmers for several years produced about all the goods we consumed within this country. The Second World War required somewhat more for a time, but with peace it looked as though we should need only some 15 per cent of our people for the work of agriculture, producing for our own consumption.[1]

Constantly it takes a relatively smaller and smaller number of people to provide all the agricultural produce we can consume, and this has been true for a century and a half. The amount of work done by the tractor is greater now than ever before. With every increase in the use of machinery, fewer hands are needed in the fields of the farmer; a smaller number of farmers are required to produce the crops from a given number of acres. The farmer always prefers more and more power, and more power always means fewer men. The decade 1930–1940 was not very prosperous for agriculture; yet tractors increased from two to three times in number.

The amount of work done on farms mounts while the number of people engaged in it falls off. The explanation is simple. Farmers do not work harder, but year after year they buy more equipment with which to do their different kinds of work. The man with the tractor accomplishes two or three times as much per day as the man with horses. The man with a milking machine milks two or three times as many cows as the man with only his hands and a pail. As long as this is true, so long the number of men working at farming will decrease relatively. Apparently 10 million dollars more were paid out for farm labor in Iowa in 1929 than in 1939; yet more work was done in 1939 than in 1929.

Agriculture and Exports. Our agriculture relied heavily on exports from the close of the Civil War to 1933 or thereabout. We sold our cotton for whatever it would bring when we had it to sell; often it was but about 5 cents a pound, which was always looked upon as a distressing price. From 1850 to 1860 it brought around 10 cents a pound. It was necessary to sell much of it outside the country, since we were producing far more than we ourselves could consume.

Tobacco was probably first among our important exports, but it became so abundant that it was worth but little at times.

We did not, however, sell a great deal of any agricultural product, compared to what we have done in recent years, until the development of our

[1] Mordecai Ezekiel, *Which Way, American Farmer?* at Open Forum, Chicago Sinai Congregation, Oct. 30, 1933.

railway system and the settlement of the prairies in the upper Mississippi Valley. It was the breaking of the prairies in Illinois, Iowa, and Nebraska and to the north and south of these states that furnished us with a surplus to sell. The products of the great Middle West, together with the cotton and tobacco of the South and the products of the Southeast, made us by far the greatest exporting nation of the world. From the close of the Civil War until the close of the First World War we poured out a constant huge stream of foodstuffs, cotton, and tobacco, which at times was so low in price that the producers could hardly live on the proceeds. High prices came with the First World War period, then sale on credit, then collapse. This was followed by the New Deal with higher prices. These looked dubious indeed, until the recent war promoted prosperity of a sort, which at present means selling what we produce for a fair price, probably somewhat below the level of prices we pay for what we buy.

We are apparently headed for a dreary period such as the thirties, during which the government had the job of holding up our prices artificially, with the simultaneous undertaking of holding our output down, an unprecedented effort. Now, after we have enjoyed a measure of prosperity, with great numbers of people shifted into new jobs, which are rapidly drawing to an end, the signs point to another period of great exportation, possibly a short one, followed by the necessity of again reducing our agriculture to a much lower level. And we ask ourselves, Have we learned how to do these things?

Farm Subsidies. We subsidize farmers in selling wheat, cotton, tobacco, corn, and other crops. The New Deal came into power when the leading farm products were so low in price that farmers could not hold their establishments together without help. The New Deal under the Democrats furnished the help. The Republicans had tried for some two or three years to do so, but were not yet ready for the sweeping program that seemed necessary. The Democrats have kept themselves in power, as long as either party was ever able to before, on the strength of a reform program that might be called revolutionary. The Republicans had always worked for more exports. They had been in power during a period of expansion; no other country in the world had ever grown up to such size, power, and influence within such a period as we had between 1865 and 1920. Through that period the Democrats had been the "outs." They had been in power for four administrations. But two of those were under Cleveland, and most of the time he did not have Congress with him strongly enough to work out great political changes. Cleveland let the tariff act become a law without signing the bill. The hour was not ripe for great changes.

The Republicans were determined to build up powerful tariff protection on the one hand and exports of cheap agricultural produce on the other.

Under this regime it was possible for the country to grow and to become wealthy. Land was cheap for the farmers. Manufacturers had the good will of laborers to the extent of making them believe that a large part of their wage was derived from the tariff, so that the whole labor group could be expected to vote for a high tariff. The Middle West for the most part voted with the East on the tariff, presumably because of the tariff on farmers' produce such as grains and meats. The Middle West was full of people who had moved from the East to the West, and having been Republicans in such states as Massachusetts and Pennsylvania, they could find good reasons for still sticking to the party. Besides, the hangover from the old slavery issue made it easy indeed to vote against views held by the South. Thus, for some three-quarters of a century, from 1860 to 1933, it was easier as a rule to vote for the Grand Old Party than for the opposition. It was not till 1932 that the Middle West finally turned over to the opposite ticket; then it voted four times in succession for Franklin D. Roosevelt for President. The South had voted Democratic with only one exception; it still votes that way.

The turn toward the New Deal involved a change of views on certain fundamental questions. For half a century we had given the farmers a tariff on all important farm products except cotton. We had a real tariff on wheat; since May, 1924, we have had a tariff of 42 cents a bushel. Corresponding tariffs were laid on nearly all farm produce. For example, we have had a tariff of 14 cents a pound on butter. When it happened that our hard Northern spring wheat was scarce, the high tariff took effect, but most of the time it was not felt by wheat prices, since we had enough of this sort of wheat so that it sold for what it was worth in Liverpool. We had fine-sounding tariffs of 25 cents a bushel on corn, 20 cents a bushel on barley, and the like. On meats the tariffs were intended to be almost prohibitive. At present (1947) they are, for example: on beef cattle, 2½ cents a pound; on beef, 6 cents a pound; on whole milk, 6½ cents a gallon; on cream, 56⅝₀ cents a gallon; on horses, $30 a head, or 20 per cent ad valorem. And so it goes. The intent was to make these tariffs prohibitive under most circumstances. We have lowered these rates somewhat in dealing with separate countries; just at present we deal very little with any other countries.

Subsidization of Crops and Animals. For several years past we have been subsidizing our own growers of the leading crops, including cotton, tobacco, wheat, corn, and rice, so that we have been getting much more for these crops than they would have brought in the open market. For cotton, without any help from the government, the price during some years would not have been over a nickel. There is a demand in Europe and Japan for it, and we would have on hand a perfectly huge amount if it were not for the

restraining hand of the government in holding down the amount grown. At present we have but little more cotton than we need; and it is held at 30 cents or about that. The war has helped in creating some added demand for it, largely because of the greater amount of money in circulation.

For such crops as wheat, of which we had a supply on hand at the close of the 1942 crop not far from double the demand, we sold some of the surplus at a price that made it desirable for feed. The difference between this price and the price for which it sold to the millers who made it into flour was around 40 or 50 cents a bushel, which had to be paid out of public funds. Presumably this covered the sale of many hundreds of thousands of bushels. But it was necessary to move some of the wheat, since at the time of threshing the 1942 crop there was not enough storage space in the country for the new crop. Higher war prices helped to sell much more than we could have sold otherwise. The demand for wheat abroad was about zero, except that our army, while in the field, added much to the demand until into 1946.

Corn was held at a fairly high figure for several years on account of war demands for pork and beef. The demand for corn for export is not a main consideration in setting corn prices. It takes but a small part of the corn crop to fill this demand. The demand for corn to feed cattle and hogs would no doubt keep corn at a good figure at least through 1947. There is less to quarrel about in connection with corn than in connection with cotton, since the basis used in figuring for cotton, *i.e.*, the price from 1909 to 1914, was higher than any price since the years just following the Civil War.

For the years immediately after the financial panic of 1929 hogs were not as low as they would have been except for their relative scarcity. With an increase in numbers in 1933 they went to $4.21 a head, farm value. This was only about $2 to $3 per 100 pounds. With droughts that reduced feed the number fell to a low figure and stayed low till 1940, with relatively low prices.

Cattle in 1934 fell to the lowest figure known in 40 years. With droughts they had reached the starving point on the plains and were rushed into the market. It took two years to get back to a fair price, twice that of 1934. Then drought reduced them to $17 a head for the country at large, hardly more than the ordinary price of a calf.

The low prices of the thirties turned us as a nation to subsidies. In a few instances the government bought products such as wheat and sold them at a lower price. In 1943 the government bought wheat at a price set by law and sold it at a lower price for use in feeding stock. Little if any produce other than wheat and cotton was held for long after the war. Wheat has been sold at a lower price, but no device was hit on for disposing of surplus

cotton. The soundness of subsidies has not been established. Except for the war we might not have been able to take care of several surpluses that were developing. To dispose of surplus wheat, while not impossible, might have cost the party in power many votes. It is quite possible that the many demands, still due to the war, may continue for a year or two.

Increased Demand in Wartime. The war pushed up the demand for agricultural products. While we were somewhat short of goods and were put on rations, most of our people suffered little on this account. We substantially always had enough to eat and to wear. We were quite short of household goods. We were distinctly short of rubber for tires. We were short of farming implements, gasoline, the better kinds of clothing, the choicer cuts of steak, and so on without end, but we were fully equipped with fighting gear.

The Second World War helped farmers to get out of debt, because every price was high and yields were heavy. As a reflex from the war, agriculture might for some time afterward seem more fundamental, more necessary, than other activities. More mature thought suggests that food and clothing are no more of consequence than a considerable number of other things. Of course we cannot live long without food, but we must have water oftener than food. In the war it was fully as necessary to be provided with the best of weapons, with speedy airplanes, with a knowledge of the enemies' equipment and movements, as it was to be well fed. During the First World War we said, to cheer up the farmers, "Food will win the war." We were not short of food or likely to be during that war, which was won by strictly military movements executed by well-trained soldiers. Food supplies constituted a small and simple contribution to the winning of that war. The farmer was only one part of the equipment of victory. He was no more and no less important than railroads, ships, soldiers, officers, ammunition, and so on.

Farm prices were lower in the Second than in the First World War, but during the latter war the farmer was well paid for what he furnished.

Chapter 3

WHY DO SO MANY FARM?

Some sound reason must exist for there being so many farmers, but to date it has not been put forward. Do we have too many farmers? There is the simplest, most direct answer to this question. We have more people farming than we need in peacetime. Until the First World War it was not clear that we had too many farmers, for we could sell substantially anything and everything we could raise and ship. Our farm products sold for low prices, but still they always sold; we could raise them for what we got and live on the amount. On many occasions the upper half did not appear to live too well, while the lower half was poor indeed. But up until the aftermath of the First World War our farmers had done well enough to keep more people farming than was necessary. With all the ups and downs of farming only relatively few get rich, but a small percentage always do very well indeed, and a larger percentage get along quite well. This leaves at the bottom a large number who are always distinctly poor. In the inter-war period the number of those who did well was smaller than had been the case within a generation preceding.

The fact that we had in our cities many people who were not fully employed, for example, during the thirties, is often held up as a demonstration that our population was too numerous in the cities, even more so than in the country. It is perfectly plain, however, that the country people produced much more foodstuffs and clothing material than the entire American population needed; our agricultural machine was geared to supply the domestic market and still have products left over for export, but our export market broke down. The result was that prices of farm products fell to the point where farm people were too poor to buy the goods which they should have had and which city people could produce, and which indeed they had produced a few years previously. City people failed to produce anything approaching the amount of goods that the whole population could use and use properly; there is no logical limit to the quantity of city-made

goods that might be produced and consumed nor to services wanted. The trouble was that our distributing machine, which had never worked too well, was out of gear and out of use. The virtual end of the increased demand for food and clothing stuffs is nearly in sight. It is inconceivable that 140 million people should eat vast quantities of food beyond what they have been eating; and while the demand for clothing has more expansibility, it is inconceivable that we should use several times our present amount of clothing. Even to the extent that clothing can be increased in quantity and quality, it will require more city people to manufacture the raw material and return it to the general populace than farm people to produce the raw material in the first place. Apparently the number of city people can increase almost without limit and be properly employed, while country people will forever be near the final number who can hope to be well employed and paid for producing the goods out of which food, clothing, and the like may be provided.

How Farmers Are Recruited. Farmers' sons become farmers naturally. Aside from mining it is hard to find a case in which the son follows the father's trade or industry as often as the farmer boy. Without doubt the circumstances are such that he finds it easiest to enter farming, with more certainty of some success. It is more probable that the boy born on a farm will become a farmer than that other boys will follow their fathers' callings. Probably the reason for this is that the farm boy is pretty thoroughly cut off from all other trades and callings during the time that he is susceptible to formative influences. By the time a farm boy is free to choose, at twenty-one years of age, he has a very strong feeling that he is getting pretty old to make a new start. His feeling is that the town boys have had several years' start of him. While a considerable number of farm boys, let us hope an always larger number as the years go by, have been to high school, it must be acknowledged that that number is still small. Those who have not been to high school have had little experience or training outside of farming. In farming they have had much experience and in a sense have learned the trade. Most farm boys of that age can do substantially anything that needs to be done on the farm, from milking cows to planting corn or running the combine. As a rule it would not take the farm boy many months to catch up with the skills attained by the town boy, but he feels green and bashful. The city boy who finished high school at seventeen or eighteen years of age went into a store, bank, or shop and at twenty-one could wait on customers at a bank window, suavely meet customers at a store, work on a lathe, or acquit himself creditably in some other of numberless trades and business transactions; he would seem to the farm boy, without even a high school course, hopelessly beyond him. The things the farm boy can do are also done by all other farm boys, of whom

there are too many for the farms needed. For the majority, however, the farm is the one place where such boys feel at home.

Independence in Farming. Until quite recently over a large part of the country there has always appeared to be plenty of room for oncoming farmers. Livestock, meat, corn, wheat, tobacco, and cotton were always readily acceptable as exports until around 1930. Sometimes they were indeed cheap, but at any rate they would sell. The prices for which one could make sales have been pretty low through most of the years since the Civil War. As a class farmers have been so used to low prices that they would not have known what to do if prices had been 50 per cent higher. If prices had become 50 per cent higher and had remained at that point for a few years, nothing in the world could have happened except for them to decline to distressingly low levels. In fact the low prices that prevailed so long were the only possible prices that could have been maintained. This meant that the only people who could prosper were the few with exceptionally high yields or those able to do their work easily without hiring a great deal of help. It must not be forgotten that while the rank and file of farmers make very little money, there is always, in all the better sections of the country, some considerable proportion of them who do fairly well. There are sure to be some who pay out very little for help, very little for doctoring, very little for cultural things. When such farmers happen to be good businessmen, able, say, to buy at bargain prices calves and pigs that under their care will improve much in appearance within a short time, they can make a little money. As the years pass, good bargainers, always ready to pick up any stock at a bargain or any other sort of farm property for sale at a figure a little below its real worth, add appreciably to their wealth. Every neighborhood has at least a few men like these.

The farm boy who has stayed on the farm till he is twenty-one feels that he can become a farmer at once. The road from the first little tasks around the barn to the final work of plowing, planting, and harvesting seems long. The work of farming has been very thoroughly learned and in the best manner known, in a class of one pupil, usually managed in a kindly way. As a rule the boy has learned to do the work as well or a little better than his father. The boy takes hold of any question involving expense, additional work, or the like rather more readily than his father. In Wisconsin a boy of twelve or fourteen came home from school one evening in early June with a pound of mixed fertilizer and instructions for applying it to a single square rod of corn. The father objected to using it; within the last few years, he said, he had paid for a quarter section of land and had lent his neighbors enough money for the purchase of another quarter section "without any such nonsense as commercial fertilizer." Still the fertilizer was ap-

plied, and when fall came, the one little square rod had produced at a rate between 10 and 20 bu. an acre more than the rest of the field. Within the next two or three years the father was buying the same fertilizer and applying it to all the plowland on his farm with remarkable results. The boy now runs the farm.

Why So Many Farmers? If farm boys could get acquainted with other lines of work at impressionable ages and try their hand at various other ways of making a living, great numbers of them would choose something else. But the farm home is a remarkably lonesome place. What is meant is not that the family suffers from a feeling of loneliness. Rather, the people on the farm are living their lives unto themselves far more than most other people. When a farm child is away from his own home, he is almost always at some other farm home. His close acquaintanceship is with people who do the same sort of work as his own family. He gets new ideas by visiting the neighbors, but they are ideas pertaining to the same sort of undertakings that occupy the home.

In town the children of the storekeeper associate with the children of the doctor and the lawyer, with the children of the mason and the traveling salesman. A boy gets an insight into a dozen different jobs and shops every week of his life. What is more, a boy does not necessarily do the same kind of work as his father. He cannot very well help his father much in any of the trades for which membership in a craft is required, or special training such as doctors and lawyers have. The child may early learn to be useful around a store if it is of the miscellaneous country type, but not so readily in a modern well-organized mercantile establishment. It is reported that the sons of a famous pen manufacturer were caught working in his shop at fourteen to sixteen years of age and were thrown out by a labor inspector; yet their motives were those of learners, not earners. Troubles like these do not hit the farm, at least not often. The farm boy and girl grow up to the work of the farm gradually; they learn easily, with no great hurry, how to do the many things that need to be done from day to day, and almost without knowing it they become quite skillful workers. They reach full growth and a degree of maturity. To drop all this experience and start over at the beginning of a new job looks to them like starting life over, losing what they have already attained.

On a farm there is at any time a prospect of a place to sleep and something to eat; store bills are not more than about half as big, month by month, as the same family would pay in town. A house of equal size will cost not more than two-thirds as much on the farm as in town. It will not be as good a house, but millions of families are living happily in such houses. Thus, living a little simpler life, going without some town conveniences,

they get along about as well for very appreciably less money. Up to the great speculation of 1919 and 1920, farmers had all but an assurance of an increase in farm values. Now that prospect is not at all secure.

Why do people leave the farm and why do they come back? Professor Galpin of the Department of Agriculture made a study of these questions some years ago. He had reports from 2,745 people who left the farm and from 1,167 who had moved from the city back to or out to the farm. While there were undoubtedly many motives for moving to town, four leading reasons were given:

1. Inability to make ends meet. Some 30 per cent gave this reason. They were not able to meet the demands of country life financially.
2. Poor health conditions. Twenty-five per cent gave this reason.
3. Dissatisfaction with schools. This was a good reason for nearly half of the people leaving.
4. About 1 family in 40 left because they then had enough money to pay their way, at least for a time, in the city. The chances are that this group did not make their money in farming. Some of them undoubtedly inherited it. At any rate 1 family in 40 is a small proportion.

Some remarkable facts appear in connection with the smaller number of people who moved the other way, *i.e.*, from city to country. The most important is that 87 per cent had previously lived in the country. Of approximately twelve hundred people who gave an account of their origin, nearly 90 per cent were going back to a place in which they had previously lived. Why did they go back? Because they believed they would have better health; because it would cost them less to live. They had fallen into the laboring class in the city, and their living had cost them the main part of their earnings. Thus, although without doubt they had gone to town to escape hard work and low income, it was for the same reason that they were coming back. Finally, they were returning to the country in order to be their own bosses. They had not enjoyed doing as someone else in authority had constantly told them.

Farmers' Hopes. Many others besides farmers hope for better times and they have rather more prospect of enjoying them. For many years the farmers' hope for better times was centered on a more rapid rise in land values. Nobody had any reason to hope for the rise in land values to continue after 1920; yet the speculation craze went on still longer before land began its precipitous decline in price. Since mortgages are given for not less than five years as a rule, it was a few years after 1920 before great numbers of these newly inflated farms were again on the market; yet by 1925 according to the census report, farm real estate had fallen 25¾ per cent in value, from 66 billion dollars to 49 billion dollars. During the next five years, or by 1930, farm land and buildings fell but a little over a billion and

a half dollars ($1,588,000,000); by 1940 this property had fallen $33,642,000,000.

Thus, by January, 1940, land and buildings had fallen almost half from the high point of 1920. From 1940 to 1947 land made no such rapid rise as it did under quite similar circumstances in 1919 and the first few months of 1920, partly because farm prices were kept under somewhat better control. The main reason why a boom did not develop was probably bitter recollection of the grief that followed the absurd overbidding of land values 25 years earlier. Sales up to 1947 were made principally to people who had the major part of the cash needed for making the payment. Land indeed rose greatly after 1940; up to 1947 it had not started to fall. A moderate fall in price would not wreck a great number of purchasers, though a disastrous fall would ruin most owners, whether they had purchased recently or had held their farms for a long time.

The Urban Movement. Many boys and girls have gone to the towns. On the other hand, most of those born on farms remain there. The farm population has remained redundant for many years. In early American times this merely meant that the country to the west was settled so much the faster. Marriages came early in life in the long colonial period; likewise during the first hundred years and more of independence marriage took place at a distinctly early age. The couple, probably in the majority of cases, built a new cabin but a few miles farther out in the woods as we slowly but surely pushed westward. Then when the rapid settlement of the prairies came, the young couple moved probably a few hundred miles into the West and settled a new quarter section of land. This was the regular procedure after the passage of the Homestead Act at the beginning of the Civil War. Thousands of newly married couples settled all the way from just west of the Mississippi River to the Rocky Mountains, across a great stretch of prairies and plains. The process occupied the greater part of a half-century during which not many young people went to high school, especially from the country districts. The great retreat back to the factories of the East was just getting under way, since the West still offered its lands to the young couples who were used to the open districts and who believed that land prices would always continue to rise.

Throughout these years the cities were continually filling up from the constantly growing farm population and, until into the twentieth century, from the constant influx of foreign settlers, many of whom filled up the cities and mining centers of the East. As attractive land seemed to grow scarce following the great settlements of the nineties and nineteen-hundreds, new farm settlers became fewer; they were always plentiful, but the bulk of the overplus of farm population for the past forty years has moved to our Eastern cities rather than onto Western farms. Aside from the Southeast-

ern and Southern districts of the country the nation has concentrated most of its excess population in manufacturing centers. Inventions applied to farming and new applications of old inventions mean that every year the work can be done by fewer people per 100 acres of land. Just as surely as this is true there must be fewer people on the acres concerned, or the people on them will be poorer from year to year.

The Rural Movement. When a considerable number of people move to the country because they cannot make a living in the city, they usually go to some of the poorest sections of the country, the good land frontiers having been closed. This situation has not been studied with much care. In Wisconsin around 1942 to 1944, people living on marginal land, in poor houses, were advised by state authority to move to more prosperous parts of the state. The idea was that certain men who had been excused from Army service in order to make a living where a living could not be made might as well go into the Army. Three acres and a pig are not farm enough to occupy a man and his wife in such a manner as to excuse the man from the Army. In Oklahoma a state board a few years ago decided that a certain part of the state was overpopulated. Then came hard times in the cities, and into one of the poor districts moved 13,400 families from cities in which employment was harder and harder to get. The state board had recommended the removal of 31,000 families! Why did so many people move into a district of this character? They went there because there were shacks there on land that was not in use and hence no one to object to their occupancy. Such people do not move into a district where there are a few small cities and towns, where farms are fenced and used for wheat fields or pasture, looked after daily by some fairly well-to-do farmer. If anyone should camp on such a farmer's acres uninvited, he would be asked how he got there and how long he expected to stay. But on land that has no appreciable amount of grass, no areas that tempt the plow, no deer, and but few rabbits, even sportsmen will pay little attention to those who come and go. A case of this kind means that since there is little local money to be used in taking care of the needy, the government higher up must come to the rescue. Ne'er-do-wells seldom move into a prosperous district. They may get caught there when employment fails. Why do some of these people try to get back to some scrap of land, with something in the way of shelter and a few bites to eat? They may have escaped the landlord and the tax collector.

An additional number of people could more properly be taken into a good section of the country than into a poor section, one would suppose. However, if any of us were looking for a place to stay for a month free of charge, we would much rather look along the unused bank of a stream out in a wooded hilly section than on a well-kept farm or ranch that was well

fenced and inspected at frequent intervals or even on good grazing acres under fence and somebody's care.

Do the people who settle, or "squat," on this nearly worthless land farm it? For the most part they do not. They simply get a place to stay, to find a little fuel, to work for a neighbor if he will hire them, or to "get on the town" if things are too bad. This is a situation that we have to face, a situation that requires the attention of a larger division of society than the little township or even the county into which a large number of such people drift.

Land Hunger. Is land hunger a real fact? Are great numbers of people so extremely anxious to own land that they will sacrifice anything and everything for it? As public domain of a desirable character became relatively scarce, we had great numbers of instances, involving several times the number of people who could be accommodated, of rushes for scraps of land released by Indians. There was the well-known and spectacular instance of many thousands of people in Oklahoma, on foot, on bicycles, on horseback, and on trains, with courage and with guns, struggling to put up some show of having been first to arrive on a given quarter section. This was in 1889, and in numbers it was the grandest land rush the world had ever seen. Was it a manifestation of land hunger? Probably not, except in size. Twenty years earlier settlers were going into western Iowa in great numbers, but the migration was not very spectacular. There was still plenty of land just about as good, for which there was no contest, a few miles beyond. The great rush in 1889 in Oklahoma came after the good land was about all gone. For years this land had been wanted, but Indian claims prevented its being opened for settlement. Everybody knew about it. For years people had been hanging around just to the east of the line; they had been dispersed by the Army, but they came back. Finally the Indian title was taken care of, and the land was opened. At the time this land was worth a very few dollars per acre. Even at $5 per acre a quarter section of land represents $800. A value like that, offered free, will attract a great deal of interest.

There is a widespread belief in land hunger because of its widespread prevalence and because of its persistence in certain countries or localities. Of course land is in great demand where it is scarce, as the basis of a livelihood. There has been land hunger in China for many years, because it is the means of a living, and other ways of earning a living are unknown to millions. In Ireland some years ago it was usual for prospective tenants to offer absurd rents for land, several times the full product. Why should a tenant offer $15 or $20 an acre for land that could not yield a gross product of that amount? Merely because someone's bidding against him compelled it. During the year he would raise what he could and eat it all

up. In one way or another he scraped up what few dollars he could and made a payment with it. The landlord's agent accepted it and left on the books a bigger sum unpaid. The same tenant could bid the land off again at two or three times what it was worth and could repeat the procedure year after year. Was it land hunger that prompted him repeatedly to offer more than he could pay? He was hungry for potatoes, and this was his only means of getting a chance to raise them.

Over a long period American farm land was worth a few dollars after the trees were cut down and burned so that crops could be grown, a house of some sort built, and a well dug. A farm with such improvements was always worth a few dollars per acre, ordinarily a little more than it had cost. Over a long stretch of years speculation kept ahead of actual costs, and the privilege of living near roads that were kept open, schools to which children could walk, and stores at which butter might be traded for sugar was one for which people would pay. Still more potent was the belief that land would rise in value. In fact, over a large part of America land always had risen in value. This was a real advantage to the farmer. If his land went up slowly, to his mind, it still went up $2 a year. Even this, about the lowest increase known, meant that a quarter section of land would rise $320 per year.

Country Child vs. City Child. A few years ago the relative status of the country child was discussed in a magazine. First it was held that farming provided protection against unemployment. A second article asked whether farm people have employment and adequate pay for the work done. Next it was held that farm people get a better living, shelter, and food. The answer to this claim was that the city may be worse off in a sense, but farmers' families are also in difficulty. The country advocate cited the advantages of greater physical strength, less traffic danger, closer guidance by parents, and the like. But, the other side asked, is freedom from traffic dangers enough to offset good schools, concerts, and libraries, to mention just a few urban advantages? The advocate of country life pointed to cooperation between parents and children, to be answered with the question: Does this forced association lead to so much congeniality? Then it was urged that the open country is still characterized by satisfying group activities. The answer was: "The farmers' need of association is far less a product of social feeling than of the sterility of their long-vaunted independence."

The disputants went on: The farm affords more opportunity for leisure than does the city, and more than we usually appreciate; the poor farmer's cultural enjoyments are not secure, because his income is not secure, and indeed a labor-union member's factory routine offers more freedom. In farm life there is great opportunity to meditate and so a chance to determine a

philosophy of life; country life teaches responsibility, obedience to nature and the laws of life. On the other hand we seek philosophy in quietude, yet mortgaged fields with their insecurity will no doubt, in many instances, lead to experiences quite far from those contemplated by the seeker after responsibility and obedience to nature.[1]

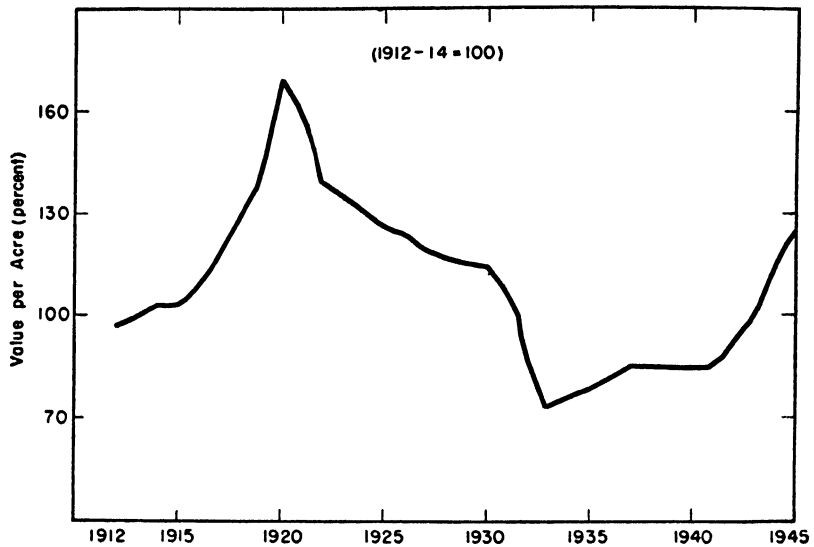


CHART I.—Farm real estate. Index numbers of estimated value per acre, United States, 1912–1945. (*The Farm Real Estate Situation, 1944–1945, pp. 6–7, U. S. Department of Agriculture, Circ.* 743.)

Security. For generations there has been a strong feeling that the farm gives an assurance of enough to eat and a place to sleep. To the better fixed and more prosperous this is probably not a powerful economic motive, since such people do not doubt their ability to make a living at something or other. On the other hand there are in every farm community a great many people who are very glad of having a place to live, are not at all sure of themselves as competitors in the business world, and therefore stick to farming because of the safety they feel in it. Many farmers are aware that it costs $50 to $100 a month to own a desirable home in town. This looks like a lot of money to those who can be sure of nothing but wages. On a farm a house costs no more, at least, than a similar one in town, and it is built on a little piece of land worth from $25 to $150, furnishing plenty of garden space. This is a thousand or several thousand dollars less than a

[1] Based on two articles, A Farm Philosophy by E. J. Kirkpatrick, in *Survey*, July, 1933, and Seven Answers, a reply by Jean Paton, *Survey*, October, 1933.

town lot costs. The taxes on the land on which a farmhouse stands will be perhaps only $1; in town they may easily be $50 or $75 on a modest-sized lot. In this one small item we have a month's wages for a laborer in ordinary times. Furthermore, the house in town costing $5,000 to $10,000 will be taxed $200 to $400 a year.

On a farm one ordinarily has security. The security is not what it was 20 years ago. The feeling respecting security had been strong prior to the slump after 1920. Until that time few farmers sold out at a loss. Even the farmer who was not making his farming go well could ordinarily sell out for more than he had paid or agreed to pay.

Farm Values. For a long while farms had always gone up in value, and as viewed by the interested parties these rises had always been rapid. Between 1900 and 1910 farm property doubled in value. From 1910 to 1920 it was said to have doubled again, although it fell slightly short of this; according to census reports it rose from almost 41 billion dollars to 78 billion. This meant that farms, big and little, good and poor, rose, with all their belongings, from a value of $6,444 per farm in 1910 to $12,084 in 1920.

With very few exceptions land kept rising in value from the time it was settled until it reached the high point of 1920. In Illinois and Iowa, for example, land prices rose and then fell from 1920 to 1940, according to the census. In 1920 Illinois farm land was valued at $187.59 per acre with buildings, in 1940 at $81.76. This means that the average value of farm land, with buildings, went down 56.4 per cent in the 20 years to 43.3 per cent of its former value. In Iowa, farm land with buildings fell in value from 1920 to 1940 from $227.09 per acre to $78.79, or 65 per cent, to a mere 35 per cent of its high price. In Nebraska and the Dakotas the falls in price were greater relatively, although in most other states they were less.

Most of the increase in farm property during the decade before 1920 occurred after the close of the First World War. Not having studied the history of such cases too carefully, people believed that since farm prices continued to rise for some months after the close of the war, higher prices were permanent. Prices continued upward until the middle of 1920; they probably went a little higher than those reported to the census takers in January, 1920. By the fall months they were distinctly on the downgrade. The time of taking the census may very properly be considered the period of highest prices. Land was selling for all sorts of prices. An occasional farm in Iowa sold for $600 an acre, at least one for $800. Not only were Iowa farms selling at more than twice the 1910 values; a certain small number were very far above that average and were often sold appreciably above this doubled value. The very high prices disappeared in a hurry. In one county, the second winter after the highest prices were reached, the county board voted to buy corn to be used as fuel in heating the courthouse. Num-

ber 4 corn could be bought for 18 cents a bushel, which was cheaper than coal for fuel. Two years before some of it sold at $2.10 a bushel. The condition of the farmers was bad enough in any part of the country, but it was worse in the heart of the corn belt, where hogs, cattle, and therefore corn were beyond all reason in price, and where the banks proceeded at once to collect all paper as fast as it came due.

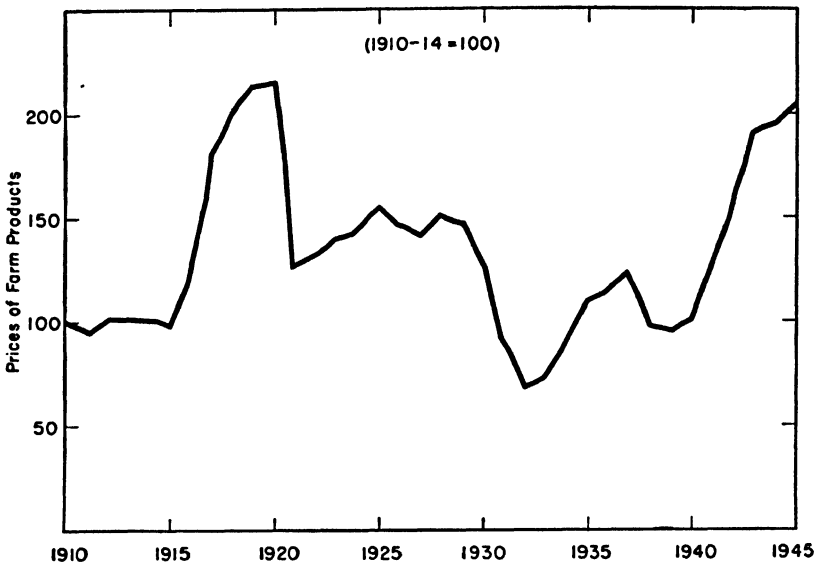


CHART II.—The price of farm products, 1910–1945. (*The Farm Real Estate Situation, 1944–1945, p. 25, U. S. Department of Agriculture, Circ.* 743.)

When we say in general terms that farm property was always rising, we therefore mean only until after 1920. During the 20 years from 1920 to 1940, farm property went down spectacularly. The great change in the direction of general values that struck the country following the First World War has had a distinct effect on the feeling of the majority of our farm people about the prices of farm property. Until 1920 the American people lived under the established belief that since populations always seemed to increase in numbers, while the quantity of land remained stationary, land in general must of necessity go up in value per acre. Since then the American people have learned that land may go either one of the two ways possible for prices to take, down or up, and almost without hope of recovery from its lower points. The main reasons for the collapse of farm prices for farm products after 1920 were (1) the payment of American debts to foreign countries, and (2) the anxiety of country after country, with raw farm products in excess of needs, to make sales. The prices

of farm products were so low that land likewise had to fall in value. Our ability to produce more and more farm products in excess of our home needs was embarrassing until the Second World War again created an artificial demand for more raw farm goods.

The hope was for an increase in farm prices for a few years. It would seem that with the added demand for a considerable number of leading farm products, like the demand for meat, dairy products, and fruit, prices for these products would tend to stay up for at least a few years. Just what will happen to the prices of cotton and cereals is hard to predict. Unless we have a series of bad years in the near future, it is altogether possible that prices in general may fail to stay up for any number of years following the war. One thing is certain: if for any reason (and there is much cause to anticipate such an outcome) tariffs in general should be lower than they have been for the past 10 to 20 years, prices may run much lower, with more shipment of goods, than has recently been the case. Not much of the world will be in shape to pay high prices for some years to follow the present (1947) breaking down of world relationships—high, that is, on a basis such as we are now using. If all countries get further and further away from present quantities of money and issue more and more paper, our prices will be higher, though real income may be less.

Psychological Aspects. First among the motives for staying on the farm comes a fear of change. People born and reared on a farm are among the most reluctant to change. The isolated life of the farmer, the lack of social contacts, and fear of the unknown are the leading considerations that keep the majority of farm people put. Second, isolation from other kinds of work, many of them quite beyond farming in the mental activity required, keeps the farm boy permanently out of them. Third, inertia gets a strong hold on a farm boy. He will farm because he is a farmer. Fourth, the farm boy has an independent spirit and is afraid of being bossed. Not having had to get along with any considerable number of other people, he dreads new associations.

Important Personal Preferences. The fact that a boy or girl will inherit a farm or part of one, with the chance to buy out brothers and sisters, has kept many a young person on a farm. The farm is tangible; it is concrete; it has a powerful appeal to many of those who have grown up on it. Of course there is another side to inheritance; a farm seldom passes to the heirs just when they are ready to farm it. The majority get an inheritance of this kind distinctly late in life.

Another matter of profound importance to beginners is the ease with which possession of a farm may be gained. There is hardly any other piece of property equal to it in value that can be acquired so readily. There is so little required in the way of payment by the purchaser in case after case

of purchase that it is hardly an exaggeration to say that a farm can be purchased on terms set by the purchaser. Many farms are purchased by relatives or close acquaintances, and there has thus far been so little fear that the purchaser will damage the property that if he wants to, he may buy on a basis of payments hardly more burdensome than rent. Of course on such a deal he does not get a deed transferring the property to him at once, but he does get a contract under which he can gain possession; this gives him secure possession of the property for a period of years, and with a very small down payment he may become the full possessor of the farm, or he may begin payments that will give him a secure title within a few years. He cannot (except under very rare circumstances) bargain for a store on such favorable terms. He can get started in the professions, such as law, medicine, or teaching, without investing much capital beyond what he pays for his training, but this is a formidable amount to the average farm boy.

To sum up, it is safe to say that the cases are rare in which a young man can get started either as owner or tenant, in any other line with as little capital as in farming. With these easy financial arrangements, acquaintanceship in the neighborhood, the feeling that the period of training is pretty well past, and finally the lack of familiarity with other possibilities, too many young men are always ready to swell the ranks of farmers. During the nineteen-thirties the government made a powerful attempt to keep as many men farming as possible in spite of the fact that we had many more farmers than we needed to keep us supplied with all the products that farmers supply. We had about an extra year's supply of cotton in 1945 at something near double the price. It is still the effects of the war that help us out in 1947 in disposing of wheat, meats, dairy products, and eggs and make them scarce at home. We were in 1946 and 1947 limiting the use of wheat in order to send more to Europe and Asia. No one has yet dared face the difficulties of price control once these troubles are past. That we shall then be burdened with unsalable produce seems inevitable.

Chapter 4

FARMING BECOMES MODERN

As we look over developments within a single lifetime we may feel that things move slowly. In the history of our own country there were few important changes in farming methods from the close of the Revolutionary War until the forties of the next century. Changes did not become spectacular until after the Civil War. Many implements had been invented that were not yet in general use. The prairies in general were not occupied until after that time.

Change from Self-sufficiency to Economic Farming. For some years after America was settled the people followed a self-sufficing system. It was not easy to make a living, and to produce goods to ship out of the country was hardly possible, although a very little grain, meat, and tobacco were shipped out at a surprisingly early date. One of the first products sent out of the country was wood from the forests. Just when farming got onto a commercial basis is hard to say, since it was only to a very small extent that we depended on shipping farm staples out of the country until after the Civil War. Even so, Virginia and Maryland relied heavily on foreign trade in disposing of their tobacco as early as the second half of the seventeenth century.

Commercial farming, *i.e.*, dependence on sales and purchases, while it began early and became important so far as one or two states were concerned, did not spread to the main body of farmers throughout any considerable portion of the country until cotton became the basis of the transactions. Southern farmers were the first in the country to depend mainly on purchases and sales as their means of living. Because of the inadaptability of the Negro to factory work, manufacturing went to New England and other Eastern states, while agriculture dominated the South almost exclusively. Growing along these lines, the country became agricultural over the upper Mississippi Valley and in the West, agricultural and manufacturing in the East, and agricultural in the South.

The outcome was an extreme type of manufacturing, greatly localized, with commercial farming dominant in the South and the West. It was this extreme breaking off of the South from interest in manufacturing, the powerful growth of commercial interests in the East, together with the close sympathy of the West with the East, that gave us the Civil War. An extreme type of commercialized agriculture had developed in both the South and the West. In the West the part to the north outdistanced the more southerly section, and this threw the country as a whole hopelessly out of balance. The situation gave us long lines of shipping, a lack of sympathy between the South and the manufacturing areas, with poverty in the South and longer hauls in the North than would have developed had the growth of industrial society been a little more natural, as it undoubtedly would have been save for slavery. Agriculture became far more rapidly commercialized than would have been the case with a little more normal mode of growth. We might have had an earlier development of shipping between the North and South and a more widely spread system of factories. We would have had a development of commercialized agriculture in any case, but a much more widely spread system of manufactures and less extremes of concentrated population around Eastern manufactures could have been achieved, with more widely scattered centerings of agriculture and manufacturing in the country as a whole. The break between self-sufficing and commercial agriculture would have been less marked.

Disappearance of the Frontier. America had a pronounced frontier for two and three-quarters centuries. During that time we had more farms of 40 acres or so than of any other size. This meant more in the North than in the South, where a different type of agriculture developed. Until settlement had surmounted the long stretch of timber that reached to Illinois, crossed southern Missouri, and included Wisconsin, a man could not clear more than a few acres yearly. No matter how many cultivating implements ingenious men created, only a mile or two each year could be gained in the advance of settlement into the wilderness, since there was no quick way of taking the trees out. For such reasons as these the frontier moved slowly for over two centuries. As a matter of fact the slow movement continued until after 1850. Then came railroads and a considerable number of excellent implements. Horses did not generally replace oxen until after 1860. The Civil War and the railroads quickened the pace from that of the ox to that of the horse.

The frontier disappeared soon after the American people got out of the woods. Sticking to the woods, they moved around the prairies, through southern Illinois into the counties to the south and somewhat to the west of the prairie regions. In Iowa they stuck to the woods of the eastern end of the state and crossed the southern part from grove to grove; they settled

along the rivers, which were bordered with trees, before taking up the better prairie lands. During the fifties, which saw the Crimean War, and later following our Civil War, they finally began to settle the prairies. The railroads brought them plenty of the cheap soft timber they needed. The old fear of the prairies faded out, and after driving around or across them for half a century, people finally accepted them as the best of land.[1]

During the nineteenth century the rise in land values was slow. Through its first half we had little in the way of travel facilities. Canals were a slow means of getting across the country, and we had few canals. The far-famed Erie Canal, finished in 1825, was the only serviceable long canal ever built in this country. It joined the East to the West and soon began to carry Illinois wheat to the people of New York City for home use or for shipment abroad. It was 25 years after the canal was built before a railroad connected New York and Chicago, and even then it was not a continuous railroad, but rather a collection of lines joining end to end. The first railroad passengers from New York to Chicago were obliged to buy 11 separate tickets for the trip. Wheat was shipped to the East by canal and soon after the middle of the century by rail.

It took 50 years to subdue the woods after settlement started. Much more than that was often required in the earliest colonial times, but from as far west as Ohio it was still taking half a century to clear the woods. It seems to surprise many people that throughout the North the farm of 40 acres was the commonest in size in most of the states as they were settled before 1860. Many Wisconsin students thought that the great prevalence of 40-acre farms in the state for several decades after settlement was due to the great numbers of foreigners. Germans, Norwegians, Irish, Scotch, and Swiss who went there, all from countries where people with very little money were working small pieces of land and just about making a living out of it, got onto the land and started to clear it. These people often took the lead of native Americans in acquiring wild timber land; within one man's working lifetime, a stretch of thirty or forty years, such settlers could just about do the major part of the first clearing, while days of stump pulling, stone removal, and drainage remained to be done later on the average farm. In some 50 years the woods farm began to look tamed. At last this amount of work had been done on most of our woodland, and the frontier had disappeared. It must not be forgotten that America had a broad strip of settlement, crooked and irregular from north to south, but reaching substantially halfway across the country, as it moved slowly but surely westward. We were clearing woods for 200 years and were just nicely started into the prairies before the Civil War.

[1] B. H. Hibbard, *The History of Dane County*, University of Wisconsin Press, Madison, 1904, p. 1.

Bigger and Better Farms. Great numbers of agricultural implements and machines were sold to farmers during the decade of the eighteen-fifties; many were in the experimental stage. Most grain was cut by hand almost to the time of the Civil War. Many farms lacked horses, many machines were disappointing, and it took the labor shortage, the wartime inflation of farm incomes, and the improvement of the machines of the sixties to bring us into the machine age. Farming was carried on with the same general type of machinery, gradually improved, until another step came after 1920 with the tractor and auxiliary machines, such as balers, combines, and multiple-row cultivators. For a good many years it was not evident that our farms were getting appreciably bigger; yet now it is plain that throughout the corn belt, the wheat belts, and to some extent in the cotton belt farms are steadily and surely expanding. The frontier is pretty well gone, and land now costs much more than 50 years ago. It is harder for a young man to become an independent farmer, and although there are still great numbers of young men who would like to become farmers, it is much harder than it was a generation ago for the average young man who has grown up on a farm to become an owner.

The Farm Labor Problem. A generation ago we had no serious farm labor problem outside of the South. Forty years ago there were few places outside the cotton belt or the smaller tobacco districts where any considerable number of men beyond marriageable age were hired as laborers on farms. Previously it had been comparatively easy for young men to get a start in farming as tenants; this took not more than ten years, after which they could buy farms for themselves, and over a large part of the country they did so. Outside the cotton belt the tenant was a young man; now he is an older man. His hope of owning a farm is probably not half what it was for his father or grandfather. In fact, many tenants have come to the conclusion that it may not pay to own a farm. This situation has a distinct influence on the question of help on farms. It is certain that the tenant will hire less help than he would hire if he were an owner. The result is that the tenant farms less well. He does not feel like putting money into help in order to improve the farm. Over a large part of the country the trend seems to be to buy more machinery and keep less help. What has happened to the value of farm labor is illustrated by the figures in Table I.

Wages were still rising in 1946. With board, farm wage rates were in April, 1946, for the country, $83.80 per month; in the Pacific states $141.00; in the East South Central states $40.40. These farm wages were high from the standpoint of the farmer.[2]

[2] Wages in California were $142 per month and in South Carolina, $35.25. *Crops and Markets,* April, 1946.

Table 1.—Comparison of Value of Farms per Acre and Farm Wages per Month, Iowa, 1870–1945

Year	Value of land and buildings per acre*	Farm wages per month, without board.†
1945	$100	$117
1940	78	43
1935	72	33
1930	124	56
1925	149	56
1920	227	84
1910	96	39
1900	43	27
1890	28	25
1880	23	23
1870	20	21

* From *U. S. Census.*

† Data for 1910 to 1945 from Farm Labor (mimeo.), B.A.E., January and February, 1946. Earlier wage rates from G. K. Holmes, Wages of Farm Labor, Bureau of Statistics, U. S. D. A. Bull. 99, 1912. Wages listed as 1870 and 1900 are for 1869 and 1899 respectively.

It will be noticed that for the first three wage rates and for land prices there was a close resemblance between the farm values per acre and wages per month. Later they were, until 1945, quite far apart. During these years the hired man could hardly expect to pay for land out of wages earned over a few years.

Sectional Problems. In a country as big as ours there are bound to be great variations. We have many sections and many sectional problems. Probably the first one that will occur to anyone acquainted with the United States is the sectionalism based on mixed races. It is evident in the North, say in Harlem; less distinctive but still important districts of most of our Northern cities show it, and so does the whole South. In the South the greatest problem is that of the Negro. His children are not allowed in public schools except where special ones are provided. The race question is one of our most serious difficulties. The majority of our Negroes are desperately poor. What schooling they get is for the most part apparently given to them by the white people. On the other hand, the work done by these people, all told, is enormous. But the Negro is at the foot of the ladder. The great majority of Negro farmers are cotton growers. Very great numbers of them do not have ground enough for a garden but plant cotton right up to a wagon track around the cabin. The cabins in which they are obliged to live are forlorn, costing but one or two hundred dollars to build. Under the New Deal many tenants, white as well as Negro,

were turned out of their country cabins, to which they had no legal claim, and the cotton on the land they had farmed was put in and tended by hired labor. Such help need not be as numerous as the field hands of a few years ago, since the cotton can be grown by fewer hands than were used before big machinery or in other cases clever devices were introduced. The great job in cotton growing is that of picking; since the Negro, recently pushed out of the country districts into the villages and cities, is only too glad to be employed for a few weeks picking cotton, the people who own the cotton "migrate 'em in," as a foreman on one big plantation expressed it.

Great numbers of poor people who went out to California in the nineteen-thirties were in the most wretched shape. They picked fruit for a cent or two a quart and were just able to live from day to day on what they made. By 1946 wages were better with so many of the younger men in the Army, but a few years earlier the situation was bad indeed. People had come from the western part of the South to California in such numbers that they could not be employed promptly; residences were not available, and much disorder occurred. Just why California should be obliged to care for such crowds as daily came to her camps is without answer. People on the verge of starvation will ask for help; yet no society is ready to take care of such mobs as trooped into California during the early and middle thirties. They were leaving a part of the country in which they could not make a good living and going to one where they could not get work at any good figure and where the authorities did not know what to do for them. This sort of question, *i.e.*, what to do with hundreds of thousands of immigrants coming with no money, no plans, no equipment, had then no answer; neither has it now. The author of *The Grapes of Wrath* was wrong in many details. He was altogether wrong in the choice of a county from which his main family of people came in Oklahoma. The county from which he pictured their coming was without a tractor working on a big wheat field; it was and is almost wheatless. Nobody was driven out of that county in any such manner as he pictured. Yet here and there over the state people were squeezed off land to which they had had some claim. Still it has to be admitted that the story carried a great truth bound up in the tragedy of the moving of thousands of people from the poverty of the South to a distracted and to some extent inhospitable California.

Advent of Machine Farming. Machinery of any kind applied to farming made very little progress in the United States before the middle of the nineteenth century, and handwork was the order of the day down to the time of the Civil War. The old cast-iron plows used for a century or more were unsatisfactory in almost every respect. To begin with, being dull and

heavy, they could be pulled only with an immense amount of power.[3] They would not scour in the lighter soils of the prairie country, and it took from four to eight oxen to pull them; even then the plowing was of poor quality.

Main Draft Animal. The scarcity of farm help during the Civil War prompted many forward steps in farming. None was more important than the general introduction of the horse as the regular farm draft animal. The ox had been the regular animal for drawing the plow, which he did do not so badly, but he was never successful hitched to a reaper, mower, or cultivator. The scarcity of horses brought them up in price at a rapid rate, but from here and there enough were found to pull the new styles of farm implements, and during the war farming moved forward at a pace never before known.

With the invention of machinery which had many moving parts, such as reapers and mowers, or which required straight driving, like a corn planter, the ox was not suitable. Horses had already outnumbered oxen by 1860, although by no means in all states. In 1850 there were just over a third as many oxen as horses in the country. In 1890 there were over 17 million horses and mules in the United States and only a million oxen. After that date oxen were not mentioned in the Federal census.

Improvement in Machinery. Aside from the breaking plow and the self-binder, which in themselves made farming on a larger scale much more feasible than ever before, many other agricultural machines were invented that made farming move along at an unparalleled rate. The first invention that had a revolutionary effect on farming in America was the cotton gin. This was invented by Eli Whitney in 1793. A few years previously English inventors had devised spinning and weaving machinery that revolutionized the manufacture of cloth. These gave England, with her large population, first rank in the manufacture of cloth for some years. Our leading position in furnishing England as well as ourselves with the raw material for the manufacture of cotton fabrics was dependent on the cotton gin; for the last 150 years the gin has been the key to the history of our South. The great mass of colored people were greatly affected by the cotton gin. It took a Negro all day to pick the seed out of 2 lb. of cotton, or it may perhaps better be said that the rate of picking varied from 1 to 4 lb., whereas a gin, with perhaps 10 "stands," gins a bale (500 lb.) in a few minutes at one or several of these stands simultaneously.

Such were the main agricultural improvements, but not a year passed without other significant changes in the machinery used on farms. Gang plows, pulled by engines or tractors, plowed a dozen furrows at once. Disk harrows tore up the tough soil to a width of many feet to kill weeds

[3] The steel plow is noted later in this chapter.

or merely cultivate the soil. Corn was planted at least two rows at a time. Grain was cut by combines pulled by 20 or 30 horses and threshed at once over the field. These machines, sometimes pulled by tractors instead of horses, would cut 20 or 30 acres a day. With the invention of the tractor the horse became less prevalent, the tractor taking his place, often completely. Hired men on farms are usually fewer than a year or a decade ago. A milking machine, a tractor, a truck, automatic watering devices, two-row corn cultivators, and so on without end make it possible for a man alone to tend a larger farm than he could with a hired man ten or twenty years ago and for him to do a better job.

Machine Farming the Usual Type. It would be difficult to say just when machine farming became dominant. There were, of course, some few implements used in England before America was discovered. The main tools used at that time were the plow, harrow, and cart. The plow was poor and had been so for centuries, and the harrow was small, made almost entirely of wood. Both of these implements were extremely useful, however, and enabled the farmer and his family to work several times as much land as they could have with spade and hoe.

The ordinary plow was apparently too much for human brains for centuries. Just what sort of plow Elisha and the 11 boys or men who worked with him used in plowing the field will probably never be known. More than likely it was a crooked stick, heavy enough to run some portion of itself into the ground and break up the surface. Though we have no accounts of what was done during the many centuries of evolution of the plow, it must have been improved from time to time and probably at relatively frequent intervals. A real change in the very nature of the plow occurred in 1720 in England when a patent was taken out on a plow with an iron moldboard and a colter and share of wrought iron with steel edges. One of these plows was imported and used on George Washington's farm in Virginia, but when it became worn it had to be abandoned, because no one could repair it. Sir Robert Peel presented two iron plows to a farmers' club, but later, in 1835, he found them abandoned. A member of the club reported, "We tried the iron, and be all of one mind, *that they make the weeds grow.*" In America much earlier, in 1797, a New Jersey man who had spent $30,000 on iron plows gave up trying to get them used; farmers declared that they poisoned the soil and prevented the growth of crops. A modification of this sort of plow was sold and patented in 1807. By 1830 124 plows were patented; before 1848, between 300 and 400. By this time the invention of the plow had really matured, and steel had come into use very generally in making it.[4]

[4] The facts just noted, and many more, are found in the *U. S. Census, 1860:* Agriculture.

Plowing the Woodland. Just prior to 1840 a plow was often made with a beam 14 ft. long and a share weighing 125 lb., to which were hitched from three to seven yoke of oxen. It turned a furrow 18 to 26 in. wide; the furrow was deep, or the plow could not have been kept in the ground. This type of plow as a rule turned not more than an acre a day; it was virtually an impossible implement with which to turn prairie sod: it plowed too deep. As a result the grass did not die the first summer, but had to be turned several times before it was killed. Something on the order of the modern breaking plow was necessary before whole states could be turned over and made into cultivated land.

By 1865, the close of the Civil War, we had reapers, mowers, gang plows, and horse-drawn machines, followed by steam threshing machines, by the use of which we settled the whole middle prairie section of the United States. This immense amount of effective machinery, together with the immigration of millions of farmers from western and northwestern Europe, gave us grain to sell to Europe at such low figures as to keep the majority of American farmers poor. We were farming with machines.

Learning to Break Prairie. It is reported that the first steel breaking plow was made near Rockford, Ill., in 1837 by John Deere, who became a leading manufacturer of agricultural machinery. He made this plow out of a crosscut saw. It was thin and light and would hold a cutting edge, and with this as a start he devised the steel plow with a lay soft enough so that it could be hammered out cold with a hammer and wedge. A 14-in. plow could be pulled by three horses and would plow about 2 acres of prairie per day. This came to be the regular outfit with which millions upon millions of prairie acres were broken. It was soon learned that the breaking season was comparatively short. Starting soon after the grass was well up in the spring, about June 1 or in many localities a week or two earlier, the work was continued until about July 4, when the sod was so tough that the draft was much heavier. A great point to take into account was that after the grass roots had grown for a few weeks, but had not quite finished their growth for the season, they would die on being cut loose and turned over. Breaking was done not over 2 to 3 in. deep. Farther west, where the sod was not quite so tough, flax was frequently raised on the freshly turned sod. It had been learned much earlier that sod corn could be grown, though never in large quantities, on the freshly turned sod.

The breaking plow was easily one of the most important devices applied to Western farming. Within some 10 or 15 years after its invention the breaking plow was found wherever there was prairie to break. It is hard even to imagine how the prairies could have been broken with the terribly heavy, dull cast-iron plows which were pulled by five or six yoke of oxen

and which left the sod still likely to remain alive and almost impossible to cultivate.

The land was subdued slowly. The settlers encountered little prairie till they reached Illinois, and for the most part the prairies were settled later than the wooded lands. In general people were afraid of the prairies. They were afraid of the winds, afraid of freezing to death during the winters, afraid of disease. They supposed that there were many ailments to which dwellers on the prairies were subject, which those in the woods escaped. For instance, they felt that people living on the prairies were more subject to ague and that their chances of a long life were better in wooded country. Another thing they feared was scarcity of water; well-digging on the prairies was supposed to be a formidable job. Drilled wells were rare during the early and middle nineteenth century, and probably springs and creeks are somewhat more plentiful in wooded sections than on the prairies. As a rule wells were dug only to the blue clay, some 20 to 40 ft. down. Over a large part of the country, especially in the prairie sections, going through something like 30 to 40 ft. of blue clay is enough to reach an ample supply of water, and this depth of blue clay can ordinarily be drilled within a day or two.

Railroads and Agriculture after the Civil War. At the time of the Civil War the country was scantily supplied with railroads. There were three railroads coming into Chicago from the East and about five reaching to the West and Southwest. Illinois, Indiana, and Ohio had what might be called a system of roads, with plenty of 50-mile gaps between. Iowa had one road reaching to the middle of the state from the East and several shorter ones, about six, headed west. Farmers of Iowa were still hauling grain 100 miles to market. Railroads had reached most of the farming land east of the Missouri River by 1875.

By the middle of the seventies the farmers of the Middle West had a pretty good outlet for produce to the East. The emigration to the West was about the greatest ever known during the first generation following the Civil War. During the 20 years from 1860 to 1880 the West North Central states, seven in number, increased almost 200 per cent in population. The states farther west, starting from a low figure, also showed great gains.

Diversification and Specialization. Within thirty-five to fifty years after the Civil War, American farming took on essentially its present (1947) pattern. The Dakotas, Kansas, and parts of other states farther west grew wheat. Iowa and Illinois grew corn; Wisconsin, part of Illinois, and parts of other states produced dairy products; small portions of many Western states produced fruit; the South depended on cotton. Cattle were produced

in Texas, the Plains states, and the corn belt, and hogs principally in the corn belt. The weather was bad for big areas year after year; great stretches that were ill fitted for growing wheat were dried up. During the driest years cattle died on the plains. The separate states tried to help their citizens. Although there is still suffering on the plains during droughts, there are fewer cattle, and those are better provided for. The people usually do not suffer physically because of too dry weather, but they may lose what money they have.

The question is often argued whether people living in regions to the west of ample rainfall should diversify greatly in what they try to grow. Local circumstances will largely govern what should be undertaken in this respect, but the fact is that no great number of crops can be grown on the high, dry plains. Trees usually will not flourish. Gardens are greatly limited in what they will produce. "Diversification" has been used as a term of great charm to people farther east. Whether or not it pays the farmer to spread his energy over a dozen different crops, with every kind of animal the climate will permit him to keep, depends on too many factors for the same advice to be sound for people living in Montana and in Maine. Sensible diversification of crops and animals is related to the interests of the different members of the family, the ability to hire, the size of the farm, and many other variables.

For example, on the Great Plains farming is somewhat precarious. So far as we know, a farmer is likely to get a big crop or two during a decade, a few mediocre returns, and several near failures. To succeed, he must have his 200- to 1,000-acre farm in shape to handle the big returns of the years when the weather favors him, not be putting in his time at a lot of gardening. If his tastes run to gardening, he should be in Florida or in the little hilly farms down the Ohio River. There are many thousands of square miles of territory where small fruits and vegetables do splendidly and where many people are making a good living. In these places diversification is probably a good thing. But specialization is likewise the proper program for certain people to follow. To advise everybody to diversify broadly or to specialize narrowly is foolish. In a one-crop country, if there be such, one crop should be grown. In a country where a dozen different crops will flourish or possibly several times that number, the farmer should pick out those that seem to do best, are most in demand, and can be most easily handled by him. The man who is a bit of a gambler, likes to take risks, and also has enough to live on for a few years can perhaps afford the greater risks with the chances of an occasional big winning that exist out on the plains with wheat, cattle, or sheep.

Harvesting Machinery. The first reaping machine was made in 1831 by Cyrus Hall McCormick of Virginia. Within half a dozen years it was

seen to be a great invention. Several machines already existed that might have been developed into successful reaping machines; in fact McCormick's father had invented something of the sort. One such machine was invented in Scotland, but it was not exploited. A patent was issued to Obed Hussey in December, 1833; McCormick got his machine patented in 1834, and there was a lot of fighting over patents. Within a very few years after these patents were issued it was certain that in one or another form the machine was here to stay. About all that can be said as to why McCormick's invention was the one that finally won out is that the inventor was a good fighter. Cases involving one patent or another were in the courts for years.

A machine necessary in the extended farming of the last third of the nineteenth century was the threshing machine. It was invented about the same time as the reaper.

The Self-binder. The first plan for binding by a machine undertook to do the work with wire. This might have been made to work rather easily, but the objections of the farmers were conclusive. Small pieces of wire mingled with the straw were swallowed by cattle, and many of them were killed. Binding by means of twine seemed far more hopeful. Some progress had been made by different inventors toward binding a bundle with twine, and some machines were actually made and sold. Several men occupied themselves very industriously with the twine binders, and in 1874 Marquis L. Gorham had a patented twine binder at work in Illinois. The inventor who won out, John F. Appleby, had worked on a twine binder before the Civil War; at the close of the war he worked for some years on a wire binder, but in 1875 he visited the Gorham binder demonstration at Rockford, Ill., and very soon after that he abandoned his wire binder and patented and put on the market a twine binder that has held the field ever since. It was strikingly like the Gorham machine, and there is much dispute over who was the real inventor, Appleby or Gorham.[5] In the later seventies the twine binder became common, and during the eighties it reached all grain farms of any size.

The Combine. The combine was in use a half century ago in the dry regions of the West. It was assumed then that this machine was not adapted to the more humid regions farther east. It was too big to use on a quarter-section farm; 20 to 30 horses were needed to pull the machine, which cut and threshed the grain at one operation. In the West summer

[5] Appleby began his work on the knotter before the Civil War. He enlisted and served through the war, during which time he invented the pin-fire gun. He sold his right to the gun improvement for $75,000 and again went at the knotter. After spending some time on the wire binder he turned to the idea of twine. After working on this idea until he had spent the money received for his gun and a friend's loan of an equal amount, he worked on the knotter until 1875.

weather is distinctly dry, but in the Middle West it seemed hazardous to allow grain to remain uncut until it was dead ripe. But after a much smaller machine was built, the combine proved adaptable to the smaller fields of the Mississippi Valley. The first real use made of the combine in the Middle West was in Texas, Colorado, and Kansas during the First World War. About ten years later the machine was tried out successfully in the Northwest, and it appeared to some extent throughout the Middle West about the same time. There were five such machines at work in Indiana in 1926 and many more the next year. Now (1947) it is in use from the Pacific Coast to the extreme East.

Under favorable conditions grain may be cut with little more than the regular amount of farm help, and if the outfit can be used for a considerable number of days during the season, the cost is only about half as much as when the binder and the threshing machine are used. It takes good judgment to use the combine successfully during a wet harvest period.[6]

Increase in Farm Land, 1880–1900. The increase in farm-land settlement was slow from 1880 to 1890, for really good land for the usual type of farming was becoming somewhat hard to find by the close of the eighties. The hundredth-meridian states, North Dakota to Kansas, were becoming quite well settled, and people were beginning to hunt for land, whereas 20 years earlier they had merely gone out and taken it in the knowledge that it was good. The North Atlantic states were on the downgrade in amount of improved land in use. The North Central states continued to show great increases and so did the South Central. The amount of land in farms for the United States rose between 1880 and 1900 not much less than 60 per cent. This was a period of great increases in farm land, with the main gains in the North and South Central divisions. Although many improvements were made in agricultural implements during this 20-year period, they were not revolutionary. We were still using the same general style of breaking plow and the same style of binder.

Farm Land in 1920. A distinct increase appeared in the decade before 1920 in the acreage cultivated in the West North Central states except Iowa, with a very small increase for Missouri. There was considerable increase in the Mountain states, mostly for wheat, with a real though not so very large increase in the Pacific states. In almost all the Eastern states cultivated acreage was reduced, and in the East North Central it was practically at a standstill. In the South Central states there was a decline of 7 million acres in the first decade of this century and an increase of 2 million acres the next. In the South Atlantic states a very slight decrease in

[6] For the main facts involved in the use of the combine see Minnesota Agricultural Extension C, 30, 1929; *ibid.* B. 256, 1, 1929; Purdue Agricultural, 22, 149, March 1928; North Dakota Agricultural Experiment, B. 220, 1, 1928.

farm acreage marked the years from 1900 to 1910; then there was a rapid falling off, totaling some 6 million acres, in the next decade, while in improved acreage there was a gain of much smaller percentage.

The total acreage went up, for the nation, from 841 million in 1900 to 879 million in 1910 and from there to 956 million in 1920, an increase of nearly 14 per cent during the 20-year period.

Pork, corn, beef, and wheat were low in price for years after 1920, and the Middle Western and Mountain states were the hardest hit. In these states, beginning in the twenties and running well through the thirties, prices of farm products were low. Farmers of these states were driven off their farms in great numbers, tenants were left without farms to work, and times in general were hard. Those who owned farms with heavy indebtedness on them, as well as those with no farms, were desperate.

HOW DID FARMERS TRY TO BETTER THEIR CONDITIONS?

For many years the Republican party had depended strongly on the Middle West for support, and at elections it was rare for these states to go back on it. Of course Indiana and Ohio sometimes wobbled, and occasionally another state or two voted wrong, but as a rule the Middle West could be depended on for good Republican majorities. The reason is rooted well back in the history of the nation. A few years before the Civil War the Middle West voted with the South and helped to elect Democratic Presidents even from the South, but the war brought this pretty well to an end. The people of the West came from the East. Voters from Ohio to Montana were, and still are, descendants of the people of the New England and Middle Atlantic states, and they were always looking for some reason for voting with the East. That these Western states would be carried by an Eastern candidate or at least one nominated by the East was taken for granted for years.

The farmers voted strongly for Harding for President in 1920, but with the almost immediate fall of prices they became quite dissatisfied with the grand promises made to them on the old subject of the tariff. They had voted for an increase in the tariff in the fall of 1920, but back of a high tariff wall prices were relatively low and going down every day, so that even in Iowa there began to be complaints that the tariff no longer brought prosperity.

Nobody knew what to do. As the farmers saw it, freer trade would undoubtedly bring lower prices, and since they had bought land at unheard-of figures, it seemed that nothing but higher prices for their products could save them from bankruptcy. They had no faith in merely lowering the tariff. When the election of 1924 came around, they voted for Coolidge;

hey were still in the Republican groove, but they wanted something different, nevertheless, that would help them over the mountain of debts that rose higher with every payday. The farmers may have been more or less blind, but at least they were smart enough to see that Coolidge's ideas were old—accepted, and probably out of date, while he was still an undergraduate. For example, in a Chicago speech in 1925 he told the Farm Bureau that very shortly the appetites of the world would outrun all means of production, so that soon the farmers would again be getting high prices for their produce.

Our first effort was to let production run on but to export the surplus at a price lower than prevailed at home. This was the McNary-Haugen plan, which was before Congress for about seven years, although not in the form of bills for all that time. It took about two years to arrive at a bill after the subject had come before the country informally and especially before the Department of Agriculture. At least the first two of several bills were much like the original proposed by Peek and Johnson. Those following were quite different, although the essential proposal to sell the surplus for whatever it would bring in a foreign market, with enough tariff to keep imports out, was retained. The tariff required was always enough to cover the difference in price between what we used at home, at our own figure, and what the product was worth outside. Since the bill was never approved by both Congress and the President, no changes were made in the tariff. If the bill had become law, without doubt changes would have been required in the tariff in order to provide for exports without imports.

We proposed to sell to our creditors such agricultural products as we could spare. We were by no means ready, however, to receive their goods in exchange, either agricultural or manufactured. On this topic very little was said in Congress. We innocently assumed that since these people had taken much of our agricultural produce in the past, they would still want it. No attention was paid to the fact that during the war we had paid our foreign debts and built up credits; this means the shelving of the old system under which for a hundred years we had been heavy borrowers, with interest to be paid every year. A large part of the world's gold had made its way to this country. Moreover, at that time it would have struck any outsider that we should consider how we might receive a little more of the only sort of payment our debtors might make, in goods. Instead we elected a weak President and a powerful Congress in 1920, and during the following two years they passed the Fordney-McCumber Tariff.

Probably nothing could have been done in 1920 that would really have set us right. The only thing that could have saved us was too distasteful. There was no example in all historical international relationships that could have been taken as a pattern. We could have furnished the world with

immense quantities of manufactured goods and with such quantities of agricultural goods as had never been seen. Immediately after the war the world was short of such goods and was more or less glad to get our manufactures. But purchases had to be made in the mere hope that something would happen in the future to make payments possible and nothing of the sort came to pass. Interest accumulated. Bills got bigger. We raised our tariff a second time following the war. Foreign nations raised their tariffs also. Trade was cut to a lower level.

Probably no measure that could have actually passed Congress at the time would have done any good. Few would have voted to stop trade, although most of it did stop. Few would have voted to lower tariffs and so keep trade alive; yet trade stopped because of impossible tariffs. We would not accept foreign-made goods at figures that were at all attractive to the sellers. We wanted to make many manufactured goods to sell for cash to foreigners. But foreigners had no cash to pay, and we cared for no more tea, coffee, or bananas than we were already taking. The result was that we had millions of workmen out of work. We had great numbers of farmers who could not continue to produce at the old rates without merely piling up goods.

No plan that might have been followed would or could have pleased everybody. When England decided in 1846 to change over to a free-trade basis, many thousands of landlords and farmers could see no fairness to them in the matter. It meant that foodstuffs especially would be much cheaper and that farm products therefore would all be sold at a lower level. It meant that land values, rents, wages, and every value related to farming would decline. The move was made, and landlords failed in great numbers; they received so much less that many lost their farms. These people were a minority of the voters and could not effectively resist the plan of reducing them to a lower level of income. The manufacturers and laborers, the majority, rose to a higher level of income and prospered for three-quarters of a century. Manufacturing people had been struggling along for half a century before the change, had become numerous, and finally won. We were at considerable distance from England and were better off after the change was made over there; we had little fellow feeling for the English farming class, and our sympathies were not aroused.

In our own country a quarter of a century ago our manufacturing people were the most numerous class. We had been prospering for many years on manufacturing and trade. These were the people who spoke the loudest in Congress. Politically they were the people who ran the country, with help from many who lived on farms and who for years had voted with the prosperous manufacturing group without realizing that the prosperity benefited a small group. Ever since the great mechanical inventions that

began about the middle of the eighteenth century the prosperity of the Western world has meant mainly the prosperity of capitalists, consisting primarily of a small group of businessmen, mostly manufacturers, tradesmen, and bankers. The great masses of mankind consisted, and still do, of laborers and farmers. The farmers are better off, in general, than the laborers; but that does not affect the fact that the great masses of the world's wealth have been in relatively few hands for a century and a half.

Whether this could have been prevented is not clear. Probably things were bound to go much as they have. Laborers in general are poor. Farmers seemed to be accumulating a fair amount of wealth until the great wild speculative period of the First World War. After that their wealth was very much less, until within the past few years it grew again.

Chapter 5

SPECIALIZED FARMING IS HAZARDOUS

Until some years after the First World War it seemed that we could hardly have too many farmers, because, for instance, we could, and did, export more than half our cotton; a large amount of our pork; a quarter or a third of our tobacco; a fifth of our wheat; and anything else we might find ourselves a bit oversupplied with. We did expect the majority of cotton growers to be poor, and to appreciate how poor they were it was necessary to see them. Most cotton growers are poorer than the majority of Americans can understand. "Croppers" are generally so poor that everything they own can be stowed in a wagon without making much of a load. When the time comes for settling up the accounts of the preceding year, the chances are that the owner of the land they have occupied during the preceding year will find that they owe him something, maybe only $50, but even this is more than their belongings are worth. Yet these people were raising millions of tons of cotton to ship to foreign buyers until during the past few years the buyers no longer wanted our cotton at the prices we asked for it. We cut down the amount grown a little, but we still grow up to twice the quantity that foreign buyers would take if we were to cut the price in two. As matters have been for some years, no one wants our cotton. Tobacco also was a drug on the market until we were well into the Second World War. The reason we cannot move several of our crops is that we have prices so high that they cannot be sold abroad, and at the same time the prices are too high for sales at home in any such quantity as we produce. If it were not for the war, we would have in many lines too much produce to use. At present (1947) we are overloaded with a few products, but so far as most of our products are concerned, we are, no doubt temporarily, distinctly short.

Effects of Specialization. When the great majority of the people of the United States lived east of the Mississippi River and there were so few in the West that we did not worry much about them, poverty was not a

matter that we were often deeply concerned about. Our cities were not very big, and with the connections that many city people had with country people, the number of the former who had to be taken care of publicly was, all counted, small. But now our population consists so largely of city people that there is nothing they can do, when a third of them are out of work, except appeal to the states and the nation for help. Many country people are hardly better off. They too require public help.

The specialization of the farmers was the leading cause of their troubles. One of the worst instances of this kind was found in the cotton belt. Cotton was selling in 1931 and 1932, much good cotton, for 5 cents a pound. Their cotton crop was about all that the poorer cotton growers had. The usual cropper had nothing else, with little or no garden. The amount of cotton usually grown was 190 to 240 lb. per acre. A family with 10 or 12 acres, worked on shares, would, outside of a few exceptionally good spots, get about 5 or 6 bales of cotton, which during those years were worth about $125 to $150 for the tenant's share. Over a large part of the South the tenant would have a considerable bill for fertilizer and be left with too small a sum of money to live on. Just how such people did manage to live is a question. Some got a little income by working out at odd times; some were helped to a small extent by their landlords. Occasionally a family would have a garden, a bit of corn that might be ground, or a pig or two to be killed. But in the real cotton country these additions are unusual and at best frightfully inadequate.

In the wheat districts income was entirely inadequate. The prices were lower one year than they had been within the known markets of the world for about four centuries. With a price often as low as 20 cents a bushel for wheat in western Kansas, the farmer was left in debt for having grown it. Corn sold in Iowa during the fall of 1932 for 8 cents a bushel, while in South Dakota it sold for 5 cents a bushel for the highest grade, though according to advertisements No. 5 corn was worth less than nothing at all on the market. In this state many farmers could not pay a cent of taxes that year.

Specialization of a high degree, such as growing corn, wheat, or, still worse, cotton, meant that the prices were so low that a farmer could not get even his expenses out of the crops. It is plain that too much specialization makes us more and more helpless in hard times. Going back to 1838, a very bad year for sales, we see that most farmers could get along fairly well then with respect to food and clothing. The majority of the farmers in such states as New York and Ohio raised both corn and wheat, which they could take to mill. There were sheep in every county and on most farms. A hundred years ago there were farmers with a good half dozen different lines of products for sale or trade that they could use in exchange for the

goods kept by their storekeepers. Out over the main stretch of the country the produce now offered by most farmers is very different in kind from what it was a century ago.

Specializing Makes Us Dependent. Whenever any group of people specialize greatly, they become highly dependent on the public to which they sell. For example, some years ago the women in this country wore their hair long, and it was customary to do it up with hair nets bought in stores. A large number of Chinese women induced other women to cut their long hair and sell it to them; with it they made many thousands of genuine hair nets, which they sold to the women in this country. Then the style changed. Our women cut their hair and wore it short. The Chinese women lost their trade, and in a country where opportunities for making a living are not very plentiful, it became extremely difficult for some thousands of Chinese women to get along. This is merely one instance, similar to many that occur among us all the time, though the example may be rather extreme.

The demand for agricultural goods is probably subject to as few changes as any lines of goods that can easily be cited. We have, for example, eaten bread and meat for some centuries as the main articles of our diet. Even so, the most staple part of our diet has suffered changes in demand. During the First World War wheat was wanted at the front; bread was a primary article in the soldier's diet, and the rest of us were asked to go without at least one day each week and to eat sparingly on the days when it was served. At the same time dietitians demonstrated the values of other kinds of food and advised us to eat less bread, but especially to eat many other things, such as dairy products, vegetables, and fruits. Automatically we cut down on the consumption of bread by at least 20 per cent and have never since increased it. Without any question we like our present diets better than we would like the same quantities of bread that we were eating before 1917 and 1918, and no amount of advertising would induce us to change back to the old ration.

The farmers have specialized to meet the requirements of the new views, and the vegetable growers are selling us great quantities of green vegetables and many kinds of fruit, while the dairies have sold us more milk constantly during the past 25 years.

Should a Farmer Specialize? We may ask first whether farmers do specialize greatly. Agriculture is not so highly specialized as several other occupations. On the usual farm there are several different crops raised and several kinds of animals kept. There is no one single answer to the question of specialization. For example, in southern Illinois there is no one dominant crop. Farmers raise more different things than are grown in the northern part of the state; they raise much fruit, including peaches

and pears, raspberries and strawberries, quinces and apricots, as well as lespedeza and cotton.

Whether one should specialize or not depends largely on where he lives. In the southern part of Illinois, where the land is rough, with the surface rather badly broken, big acreages of cereals are pretty nearly impossible to handle, and the crops grown as a rule consist of many different kinds, with fruits and vegetables making up a large part of the whole.

Illinois Farmers Compared. Taking the ten Illinois counties with the biggest values of farms per county, we find that they show 188 acres of land, with buildings, worth $20,060 per farm, which is fourteen times as much per farm as we find in the poorest counties of the state. The farmers on the poor farms, however, can pay for them, while on the better farm land during the two decades up to 1940 the tenants could not buy and pay the prices asked. In the best counties the average rate of tenancy in 1940 was 61 per cent, in the poorest 22 per cent; in other words, more than three-fifths of the best farms of the state are occupied by tenants, while in the 10 poorest counties the proportion of tenants is just over one-fifth.

Let us contrast the value of a farm in the corn belt with that of one in the southern part of the state. In the southern counties, with 22 per cent tenancy, we find about 99 acres of land per farm, worth, with improvements, about $2,636. Thus a corn-belt farm is worth about 7.6 times as much as the poorer farm; it equals half a school district of these smaller farms.

Another matter of interest is that in the better parts the number of hired men is much greater than in the poorer districts. In the 10 counties keeping the most help in 1939, the aggregate number of men hired was 902 per county. In the 10 counties with the smallest number of men hired the number was 22. Thus the counties with the larger number of hired men had forty-one times as many hired men as the counties hiring the fewest.[1] Perhaps it should be mentioned that the good counties are somewhat larger than the poorer ones. It may also be mentioned that while the census does not show this fact, it is altogether probable that hired men in the poorer counties got poorer pay.

Ten counties, about the greatest in growing corn, produced in 1939 a little over 9 million bushels of corn per county. In the 10 poorest counties 623,000 bushels of corn were reported per county; the good counties raised about thirteen times as much corn as the 10 poor ones. In these poor counties, 10 in number, the people were using up at home about $148 worth of produce per family and selling about $114 worth. Twenty per cent of the farmers of the 10 best counties (or more likely their boys)

[1] For just how long these men are hired is not shown in the census.

work away from their farms for pay, while in the 10 poor counties 41 per cent do the same.

The amount of work done for pay is almost three times as great in the poor counties as in the rich counties. There were 60 days per year when one man from each and every farm home worked somewhere else. In the better counties the figure was just over a third as much, 20.5 days. Thus work was done away from home about three times as often among the poor people as among those presumably more prosperous. Of course the amount of work done away from home was not evenly spread among all families, but was much more widely and evenly spread among the poor farmers than among those on the better farms. Among those with the large, high-priced farms, working out for someone else is unusual; while among the poorer groups the farm owner himself is often found working for someone else.

In the southern part of the state it is not unusual for a farmer, which often means a part-time farmer, to work at mining or anything else he can get for many days a year.

Farms in the Poorer Counties. One can make a rather attractive case in favor of farms in the poorer counties in contrast with the high-priced ones from the standpoint of ownership. In the poor counties it is apparently a rather easy matter to buy a farm. The whole farm, of 100 acres, is, in 10 counties, worth but $2,802, as reported by the census. This means only $28 per acre; or it might be said that the whole farm is worth no more than a house fit for a farm family to live in should be worth. On very many good Illinois farms the house is worth twice as much as the figure given for the value of the whole farm in poor parts of the state. In the best counties, for example, the buildings are reported at $3,000 to $6,000 per farm. In many poor counties they are reported at less than $1,000.

Many states show similar contrasts between the best and poorest sections.[2]

Land in a Falling Market. In the 20 years from 1920 to 1940 there was, on the high-priced farms of Illinois, an increase of over 20 acres per farm, from 166 to 188 acres. On the small farms in the southern part of the state no such spectacular change occurred; there was an increase of 2 acres in 20 years. The farms in the northern part of the state had been altogether too high in price. In 1920 the highest 10 counties averaged $53,900 per farm, ranging from $66,000 in Piatt County down to $44,000 in DeKalb

[2] It is suggested that students from various parts of the country work for a day or two on data from their home state or several near-by states, and later report to the class. The main part of the information can be found in *U. S. Census, 1940,* Vol. I: *Agriculture,* Parts 1 to 6.

County. Those were figures that it took 20 years to adjust. It is strange that it should take so long to readjust farms downward in price when they are double what they should be. In storekeeping such changes are made in a hurry; high-priced goods are soon replaced by low-priced goods, and while a few storekeepers are bound to fail, a large part of them stand the grief and soon are doing about as well on the goods bought at a much lower price. There seems to be no way to adjust the fortunes of the man who has put his money into land at $200 an acre that was worth not over $100. The quicker turnover in the mercantile business is a godsend to the storekeeper. The slow turnover among farmers who have bought at prices much too high, the lack of sales except at a price that wrecks the seller, are tragic.

High-priced Land in 1920. It was our best land that made the most trouble. In a large part of Iowa, in east central Illinois, in the better counties of Indiana, and in the rest of the heart of the corn belt, it was a long, dreary fight. The trouble was fundamental. The farmers of the Middle West were producing, in part, for the European market, and Europe was no longer able to buy at a price high enough to keep the farmer going. In fact many people in Europe had lost their buying power. Yet the farmers of the Middle West were bound to sell to these people or break up because of the lack of ample bidding. The outcome was that a bankrupt Europe was unable to buy, and we also went bankrupt. The case is complex, closely related to the tariff, since it prevented sales. We soon found ourselves unable to sell to people whose goods we were not willing or able to buy.

Farmers Swamped with Debt. By 1930, in fact starting soon after 1920, large numbers of our farms, especially those that had recently changed hands, were hopelessly burdened with debt. Europe no longer needed to pay our high prices. There came onto the market, soon after the First World War, a vast amount of produce offered at low prices. It seemed to come from all parts of the world—Canada, South America, Australia, New Zealand, the Dutch East Indies. Our Northwestern farmers had for many years believed so thoroughly in high tariffs that they turned in with a shout and voted for an increase in the tariff. This was in 1922. Though with some disaffections and doubts, they did the same for Hoover's tariff in 1930, but the worst decline in prices ever known in America was then in progress and caused even Iowa to vote Democratic in two Presidential elections in the hope that a new Federal administration would improve conditions.

American farmers had been selling their produce at frightfully low prices most of the time from 1921 to 1932 and later. In 1932 and 1936 they voted Democratic. In 1940 most of them did the same, though by no means

unanimously. Probably the majority of farmers who voted for Franklin D. Roosevelt in the Middle West did not feel that they had thereby become Democrats. Although still heavily in debt, they were getting back to the point where they could carry their debts moderately well. The majority were not so well pleased with bonus payments figured on this and that as they would have been with generally satisfactory prices. The farmers fretted at their inability to pay off their debts, and by the time we had had the Democratic party in power for eight years and were still considerably in debt they were not too enthusiastic over the New Deal. But in the fall of 1940 there was a strong feeling that the world was again heading for serious trouble and that Roosevelt was probably better equipped to straighten it out than his untried opponent. So even with rather heavy unpaid debts many farmers voted for him, though by no means as many as in the two previous elections.

The farm vote in 1940, while extremely important in deciding the election, was much reduced. From 1940 to 1947 farmers' income was much greater, due in large part to the war, with its much greater demand for substantially everything the farmer can raise. At the same time the President's decisions on many hard problems did not in most cases greatly reinforce his standing. It was a time for testing souls, decidedly trying for the President.

The poor farmers were not so badly off. Let us see how the poor counties of Illinois fared. To begin with, their farms were much smaller, and they sold at much lower prices than formerly. Farms in these poor counties sold at less than 11 per cent as much as those up in the good counties. The rate of interest paid was over 6 per cent instead of 5 per cent, but it was on small amounts of money. In these counties farms in general sold at $55 per acre in 1920. At that time whatever was mortgaged was mortgaged at 27 per cent of its value. This figure rose to 30 per cent in 1930 and to 35 per cent in 1940. While this represents a considerable increase, it is still not very high, and it does not appear to have been difficult to hold farms with that indebtedness. While these farmers paid 6.35 per cent interest on their mortgages in 1920, they were obliged to make it 6.7 per cent in 1930, but were back just under 6 per cent in 1940. This meant that those in debt were paying about $60 a year interest on an indebtedness of $1,000. It should be remembered that but 23 per cent of the farms were mortgaged, so that it was only on a scant quarter of the farms that any interest at all had to be paid. Working for somebody else, as the majority of the men on these farms were regularly doing, it would take but one to two months to earn enough to pay up the interest charges; yet very many indeed of these people were working out as much as half the year. They were sure to pay up any bill as insistent as an interest bill. Certainly

they were poor, but they had their affairs in hand and could meet their obligations.

High-priced Farms. The high-priced farms were on a strictly commercial basis. In the southern part of the state farmers were making their farms support their families to a great extent. In the northern part of the state the case was essentially different. There were and are sheep in every county, but nothing is done with the wool locally; it is all sold. All household furniture, all clothing, all toys, are obtained at the store. Of their own food they produce something like a third, but they buy almost everything else, and the saving of a third of their table cost is of little importance in balancing their books at the end of the year.

The trouble with the big, high-priced farms was largely their size reckoned in dollars' worth. The figures given above are for all the farms of the county in each case; many small farms command only a fraction of the prices of the big ones, while many other farms were selling at twice the average figures shown in the census. It must be kept in mind that on a large number of farms considerations were at least double the figures given for many farms that were bought and sold. Thus a great many farms were selling at prices ranging from $100,000 to $200,000. What it cost a family to live for a year was such a small consideration that it was hardly worth taking into account in the bookkeeping involved in the purchase of a farm of 200 acres, or occasionally even double that, at somewhere from $200 per acre to possibly twice as much. The cost of these farms was based on $2 a bushel for corn. When prices fell to one-third of that amount, as they did within a year or two after 1920, with everything else in proportion, the mere point of what it cost a farm purchaser to set his table was immaterial. Some farms were sold at such absurd figures that at the close of accounts for 1920 the entire crop was too small to pay the interest due on the indebtedness, even with every dollar's worth of sales used for that one purpose, the farmer keeping not a cent for living expenses, hired men's pay, and the many outgoes of running a farm for a year. Of course it was not possible to run a farm without paying some current bills. Thus 2 or 3 per cent of the farms of state after state went hopelessly bankrupt over a considerable stretch of years.

For the most part it was the high-priced farms that came to grief. The poor little farms with their thin soil, their much smaller acreage, their distinctly poor buildings, their families running hither and yon to earn a few dollars to live on or to meet the demands of the man who held the mortgage, were seldom sold at a sheriff's sale. These mortgaged farms were worth but $5,477, with a mortgage of $1,479 against them on an average; that means, however, against 27 per cent of all farms in the 10 poor counties.

It took little over $100 to pay the annual interest, and a farm is seldom taken from a man who can pay the interest he owes.

Why did the buyers and the owners of the high-priced land get into trouble? It was because they had unconsciously become part of an international plan. The farmers on the good, productive land had become producers for world markets, many of which were thousands of miles away. To us this was for the most part a new way of living. Probably a quarter of the American population were on that plan, at least to a large extent, before the Civil War. Since that time many more have reached that stage. We were selling our products to the business world, to the manufacturers, and to laborers. As farmers we were selling them wheat, cotton, meat animals, butter, eggs, and the like. If we had produced no more of these goods than our own people wanted to use, the chances of getting into trouble would have been small, but we continued to produce more than our own buyers could handle. Therefore we developed foreign trade. We developed this to such an extent that we became very dependent upon it from day to day. The price of wheat was the Liverpool price minus the cost of getting the grain from America to England. It was the same with pork and lard, and possibly we were dependent on foreign markets to the greatest measure for our cotton, of which until recently we sold two-thirds of what we produced.

For many years we had felt that European markets were not very satisfactory; prices were often too low. Even so, we had always got along more or less well, and besides there wasn't much we could do about it, short of reducing output. When we sold too much wheat, wheat had to be cheap. When we had more cotton than England, Germany, and Japan wanted at high prices, we let them have it at a low price. Very often prices were much lower than we liked, but still we could sell all we offered. After the First World War we found ourselves with many goods that we could not sell at any price. Cotton went to a nominal 5 cents a pound here, and at times it was practically impossible to sell it even for a nickel. It is usually agreed that 5 cents is too little to keep growers at work. Wheat got down to less than 30 cents a bushel out in the Western wheat fields, and in Chicago wheat sold below any price previously known in England for more than three hundred years.

The people who owned the high-priced land, the land that had for many years produced the grain, the meat, the dairy products, and the cotton at relatively low prices, had got their land up to a pretty high figure even at these prices in advance of the First World War. The extremely high First World War prices were so stimulating to land sales that prices went to levels never before known. Farms, land alone, in six Illinois counties,

were valued at $319 per acre. In Iowa land was above $300 in two counties and stood at $200 for the state, while in Illinois it averaged only $164, due to the larger amount of poor land. Iowa had only one county with land reported as selling below $100 per acre; Illinois had 36.

Thus it is plain that it becomes much harder to buy and sell farms on a safe basis where international trade is involved. It is harder to manage one's bargaining in relation to the ups and downs of world prices running into big sums of money than it is to live on a lower scale, eat simply, wear cheap clothes, and drive a horse or walk. The man on a few acres appears to be safer. He seldom goes bankrupt; he usually has enough to eat and a place to sleep. At the same time he seldom goes on long trips or meets people of distinction. Many small farmers get along quite comfortably, and not a few manage to secure a decent education.

In recent years the status of farm ownership among the supposedly well to do has demonstrated that when times become harder in general, a few will still make a notable success, tenants will stay tenants longer, farms will become a little larger, and the range between the top and bottom lines of prosperity will widen.

Chapter 6

COUNTRY POPULATION

Surplus Population. America and, for that matter, almost all countries have had a surplus country population. Whether or not all country boys should farm has always been a question. So far as America is concerned, it was not realized that we had too many farmers until within a generation or so. During the first three centuries of American settlement it was the regular thing for farm people to stay on the farm. There were always people going to town to live, but decidedly the great majority of American farm people remained such. Massachusetts farm boys and girls settled western New York; people from all the Eastern states, at least as far south as Virginia, settled Ohio; the surplus settlers of Ohio settled in every state from there to the Pacific Ocean. It was the same in the South; the Eastern states furnished settlers for the Western states till the plains, the mountains, and the ocean stopped them.

During all this time the country furnished the settlers for the villages and the new cities, which were constantly growing. Cities were still small, however, until within the past 75 years, during which they have received great numbers of people from our country districts and, until the past few decades, from Europe. For half a century and more we have had a considerable number of our country people moving into the cities. This has been caused primarily by (1) the positive demands of the city for country people to do its work, and (2) the surplus of people in our farming districts. For a long generation it has been believed that there was a better chance for many country people to earn higher wages in the city than in the country. The demand for country people in the city has also constantly drawn a considerable number of village people to the city, so that positions in villages were left open for country people.

For a long time and over a large part of the country the farmers were much more numerous than townspeople and could have outvoted them with ease, though they seldom did. The men in the villages nominated their

fellows for all public offices and usually elected them. During the first half of the nineteenth century, especially in the North, the villages and cities soon came to dominate in substantially all state and Federal matters. The farmers were more numerous, but they were less aggressive, and they were easily beaten politically.

The settlement situation has been undergoing a real change during the past half century or more, since changes of a notable character began at least as long ago as the Civil War. It would be hard to say just when any considerable part of the country became somewhat overpopulated. Plenty of instances of overpopulation of many a district rather close to the Atlantic seaboard occurred long ago. Since families were large, with a full dozen children often to one household, finding suitable places for the hundreds of young people who wanted to marry and settle fairly near their parents was not easy. Roads in our Eastern states were hard to build. Kentucky, Tennessee, and Ohio had been states 30 or 35 years before railroads were known and much longer before railroads were built within many miles of the homes of most of the Western settlers. Leaving an Eastern home for one in the West meant a genuine break in family life. Such a move took real courage. Many families were broken up in this way and never afterward reunited. The result was that in many portions of the East frequent small instances of overpopulation developed. Farms in general were small and the majority of the people poor. Their land, which had never been high in price, began to fall in all the poorer districts, among the hills and less fertile parts of New England, the Middle Atlantic states, and many parts of the older South, particularly in parts of Virginia, the Carolinas, and the back country of the Alleghenies. A constant demand for more Negroes in the cotton-growing states led to sales of Negroes from the more northerly slave states to the line of states from South Carolina to Texas, where they became field hands. Cotton acreage was always being extended in these states, and there were more Negroes in the border states than were needed for the work that they could do acceptably.

Farm People Not Fitted to Rule Villages. The country districts were not well informed on village matters. The village people felt that they were ahead of the country people in many particulars. The citizen of the village, paying probably twice as high taxes, had more and better government. The village had a better and much more costly school, which soon ran four years and often still further beyond the highest point reached by the country school. Editors, doctors, and the more influential preachers lived in the villages.

The village dweller subscribed for a daily paper, whereas the country dweller took a local paper that was likely to be a weekly. As a rule the

village dweller was much better informed, more of a reader, and more of a student than the farmer. When an occasional farm boy or girl got some higher education, it usually led to a separation from country life and going to live in a village or a city. The farmers were not even as well fitted to rule the villages as the townspeople were to rule the country. When it came to country and state government, legislatures and boards were much more likely to represent the villages than the country.

Farmer Too Much at Home. The farmer has stayed too much at home. He knows too little of what is going on in the world. Even though he takes an occasional trip that contributes greatly to his education, it is no more than a start. It is possible to cross a state in a day or half a day in an automobile, but it takes months or years to form real acquaintances. An Iowa family would need a long time to become well acquainted in Kentucky or Mississippi. We can seldom claim to be acquainted with people who live far from us. On the other hand, the automobile, telephone, newspaper, and the like have done and are doing wonders to widen our acquaintance and inform us of the thoughts and views of people outside our own neighborhood.

The farmer is probably not the last, worst, or most ignorant of our citizens. But without being anything like the least informed, he is far from being really well informed. In general the farmer is too tired when evening comes to care much about what is going on in other parts of the world. We greatly need a group of farm leaders who have time to read, travel, and consider what is going on in territories other than their own after they have really become acquainted with their neighbors. We have in very few parts of the country such people with ideas reaching beyond their neighborhoods with the ability to interest and stimulate their groups. Any township is rich that has a farmer who has traveled and read and who still likes to live among his own people and stir them to interests a little above and outside their ordinary routine. The great majority of capable people in country districts move to the city, where from their own standpoint they find more stimulus and companionship, but the country is poorer by the loss of them. Thus our country districts are usually not very rich in cultured people or well supplied with those capable of cultural leadership. The city keeps gathering in the best of the country population.

Culture Seeks Companionship. We find relatively few people in the country proper who have spent many years in school. Neither have the majority of them had a real chance to make an intelligent choice of a lifework. They grew up in the country where there is one occupation with slight variations; it was among those differences that they had to make their choice, or else they postponed a decision until about the time of

marriage and then moved to town and took some job with little prospect of advancement. The majority who go to town with a fifth- to eighth-grade education really have a slim chance to get far along in the struggle for success or position, although every now and then a man with almost no training may succeed marvelously. The man who starts out with a college degree in law or medicine or as a teacher is likely to get far beyond the almost uneducated farm boy.

The usual farm boy spends little. He has been brought up in a setting where little is spent, and he gets the habit. He does not even want to spend much, because he knows how hard it is to accumulate money. Farm boys and girls are not overanxious for much schooling, although recently they have been going to high school appreciably more than they did 20 or more years ago. The main reason that country children go to high school so much more than they did, let us say, before 1920 appears to be the change that has come over the country highway travel in winter. Good roads in the country do not date back more than some 25 years, while most of the good road work is not quite so old. Within the past 20 years or so a great many country highways have become usable winter and summer, which means that a great number of young people drive themselves to school, while probably more use some public conveyance. The former failure of farm children to attend high school was due to the near impossibility of driving on uncleared roads during the winter months or the difficulty of getting a boarding place for them in town.

Though there are many exceptions, the farm class as a rule has a feeling of inferiority in contacts with town people. The farmer is conscious of his comparative inexperience and lack of means. His clothes are usually not so good as the businessman's. The man in town lives in a better house and is much better able to express himself on public affairs. These differences may seem superficial, but they are enough to determine which of two men, one from the country and one from the village, shall go to county and state meetings and take part in determining questions to be debated, rules and laws to be passed, and in general the handling of public matters.

Farmers in Public Affairs. A few years ago a man at the University of Indiana wrote an article for *Who's Who in America*[1] that contradicted the frequent belief that children of farmers are the most likely to attain prominence. This article carries conviction, though a different choice of subjects, from different occupations, might have given a different result. There are enough names in the list, however, so that it might well be doubted that any other selection would make a serious change in the findings, which were as shown in the accompanying table.

[1] Stephen S. Visher, The Occupations and Environment of Fathers of American Notables, in *Who's Who in America*, 1924–1925.

Where born	Number in *Who's Who*	Percentage living in these places
On farms	6,288, or 25.9%	69.9
In villages	5,948, or 24.5%	8.2 (below 8,000)
In small cities	6,045, or 24.8%	10.9
In large cities	5,001, or 20.6%	10.0
In large city suburbs	996, or 4.1%	1.0

In general, then, it seems to have made little difference, at the time considered,[2] what sort of village or city a man was brought up in; his chances were much the same anywhere. Village people had a little advantage in arriving, and small-city people a very slight advantage over those of the large cities, but the differences are negligible. It is the farmers who make the poorest showing. Just about halfway between two-thirds and three-quarters of the people of the United States in 1870 lived on farms. The village people are represented, among those who attained distinction, by about the same numbers as the farmers, which means that villages recently produced about as many people who are listed in *Who's Who* as farms did, though farmers were eight and a half times as numerous. The people of the smaller and larger cities, with a little over a fifth (22.0 per cent) of the whole population of the United States, furnished about half of the names in *Who's Who* (49.5 per cent).

While farmers do not make a very excellent showing in this respect as compared with the business and professional classes, they still do remarkably as compared with laborers. In the article referred to still further comparisons are made. Speaking of the different classes of people by occupations, it is noticed that businessmen are seven times as likely to become the fathers of notable people as their mere numbers suggest, while the professional fathers are sixteen times as likely to see their sons and daughters reach distinction. On the other hand, the farmers were the fathers of such people two and a third times as often as skilled and semi-skilled laborers were and seventy times as often as unskilled laborers. This means that unskilled laborers, our most numerous class, have the fewest distinguished children.

Incidentally, sons and daughters of clergymen were especially noticed. These people, according to this report, ranked particularly high. It was found that clergymen fathered twenty-eight times the regular proportional number of notable men and women. In the year 1870 it appeared that about 1 Protestant minister in 15 had a son or daughter in *Who's Who*.

Country Families. It costs less to rear children in the country than in villages or cities. There is some question whether children are more

[2] The figures and proportions refer to 1870.

numerous in the country than in villages and cities because it costs less to bring them up there; the real reason may lie deeper. Young people who are planning to begin farming get married early, because it is extremely difficult to farm with no one to keep house. There is much work for a woman on a farm. It is hard to hire anyone to do farm housework, and farm income is not high enough for household help. Hence it is taken for granted that a farmer will have a wife and that she will do the housework. In cities and towns single people can take care of almost any work for almost any length of time, but it takes a family to run a farm.

In the country, then, we expect to find a house with a woman in it. The farm woman will have from one to a considerable number of children in the great majority of cases. At least the number of children below twenty years of age per family for the United States equaled 38.8 per cent of the population in 1930, while for the East North Central states the number was 36.6 per cent, and for the six states of Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Mississippi children below twenty years of age made up 47.1 per cent. Thus in the poorest part of the United States the children are the most numerous, school taxes highest, and schools probably poorest.

In the cotton and tobacco districts children are the most numerous and the least able to take care of themselves or be taken care of by their parents in all the United States. The children of the cotton belt begin work at the lowest age. They work in the cotton fields whenever there is work to be done; in the spring there is cotton to "chop," during the summer general weeding, and the picking job, which comes anywhere from August to December and may interfere seriously with a fall or even winter term of school. Where tobacco is grown, the chances of missing more days of school than in cotton country are considerable. The children of the cotton and tobacco areas are easily out of school more than any other large group.

These children marry at early ages, probably because there is no purpose to be served by waiting. They are not going to school, they are not expecting to buy a farm, they are not going into business. Since about all there is for them to do is rent a piece of land and work it as their fathers and mothers have been doing, they can start at one time about as well as another. With a wife a boy can get started in farming as a tenant, or especially as a cropper, more easily than he can get work for hire. The regular thing is for a young couple to get married soon after they are twenty years old, provided there is a piece of land with some sort of cabin available. Fifty dollars' worth of furniture will start them off; they may never have twice that amount of money. Thus another large family is started. The country boy of the South starts with almost nothing. Those farther north need a little more, but not much.

Too Many Farmers. Probably we have always had too many farmers, yet until after our Civil War it was not noticeable, since the usual procedure was for each family to make a living out of its work, with but small sales and a little store trading. Farm people struggled along mainly on what they raised and accumulated a trifling amount of money or money's worth during a lifetime. In 1860 many Iowa farm families had been on their farms there for 20 years. The average size of an Iowa farm was then just under 165 acres, with 80 acres improved. These farms were worth about $10 per acre, on which the farmer was in debt to an unknown amount, probably a very few dollars per acre; this meant that he was paying interest of something like 6 or 8 per cent on a few hundred dollars. In general these farmers owned only 6 head of cattle, 4 sheep, and 15 hogs; they raised on an average 138 bu. of wheat, 695 bu. of corn, and 97 bu. of oats, or less than 1,000 bu. of grain altogether. By the time two or three horses had been fed grain for a considerable part of the year and a little had been fed to oxen and other cattle, a very small amount remained to be sold. It is hard for us now to believe the census report that there was on an average only $87.30 of farming implements and machinery; evidently the Iowa farmer was meagerly equipped. Until later than 1860, some 25 years after Iowa was settled to some extent, she was contributing but little foodstuff to the nation, and it was more than 10 years later that Iowa began to pour immense quantities of foodstuff into the Eastern markets. Just how many farmers we had at that period mattered little, because they were putting only small amounts of foodstuffs on the market.

About 10 years after the close of the Civil War quantities of farm produce from both the Northwest and the South began to exceed the wants of the American people and to flood the European markets. Farming was being overdone. We often say that we began to see that we had too many farmers right after the Civil War. It was, however, about 10 years after that that we were really suffering the evil effects of farm overproduction. By the middle of the seventies we had an army of energetic farmers on new, rich soil, with good machinery, who for 40 years persisted in producing quantities of food and fiber such as had never been known before, and which helped to build up a great civilization, but which kept the great majority of farmers poor for a long generation.

We clearly had too much good soil and too many people to work it, with the result that we wore down the soil and wore out many of these people, shipping wheat, cotton, and meat to the ends of the earth, at prices that required the farmers to work long days for a minimum of cash return.

No Count of Farm People until 1920. For many years we did not know just how many farm people we had. We did know about how many were farm owners, and the number of people over ten years old who worked on

farms was reported. But we could not say that there were just so many farm people to be found in Massachusetts or North Carolina. It was 130 years before we were convinced of the desirability of knowing how many farm people we really had. In 1790, at the time of the first census, 3.3 per cent of our people were living in cities of 8,000 or more. How many lived in towns and cities of less than 8,000 no one knows or ever can know. It seems rather strange that this subject attracted little or no attention until 1920. For the census of 1880 we did inquire how many lived in villages over 4,000. Just why it did not occur to anyone then that many people would like to know how many farm people we had and how many in small villages cannot be explained. All we know is how many lived in villages of 4,000 and over. Then in 1890 a further change was made, taking out of the country figures all villages of 1,000 or more. In 1900 all incorporated places were taken out of the farm figures.

Influence of the Steam Engine. The first half of the nineteenth century, and for very many of our people at least another ten years, had passed before what we now know as modern life had become common. During those early years our people lived mainly on what they themselves produced rather than on what they bought. Their farms were not by any means as large as they have since become. In particular, the part of the land actually used was much smaller than the average farm of the present. It took a lot of work to clear the new farms, while in some parts of the country, especially those affected by erosion, land that had been used for generations was no longer productive and fell into disuse. On the typical farm, from the Atlantic Ocean to the prairies of the Mississippi Valley, the usual farm family worked all but constantly at the growing of foodstuffs and the manufacture of clothing. Little money was used or needed, because relatively little of the products used were bought or sold; most of them were produced or made at home.

It was the coming and the use of the steam engine that made life over. The engine began with us around 1830, but it was 1850 before the first railroad reached Chicago. After 1850 things moved fast, and right after the Civil War a complete revolution had been accomplished. Within a few years the Mississippi Valley was all settled, and the American farmer quit growing his own wool, flax, and tobacco and began to grow wheat, corn, and cattle in large quantities for sale. His wife could no longer be happy at her spinning wheel or with a needle, and life was essentially different from what it had been a few years earlier. The farmer was now a man of business. He must have money; he must buy manufactured goods and sell hundreds of bushels of his product. This meant that money and credit were in daily use. As a businessman he was far removed from the status of his immediate ancestors.

On agriculture the effect of the steam engine was revolutionary. The farmer became dependent on the prices he could get for his crops and products. He could no longer live on what he produced, which now did not number a dozen or two different things. Many produced little but wheat. After a few years many farmers specialized in cattle and hogs. No family can live on the ordinary products of a Nebraska or a central or northern Illinois farm; the farmer must sell a few things and buy many. He must sell what he produces for money, and he must have a good deal of credit.

Overpopulation in the Southeast. It is probably true that our farm population is too heavy over a large part of America, but it is especially true in the Southeastern states. Here, on a soil that is not rich, there is a large population of both white and black people. Children here are the most numerous in the United States, their schools the poorest. From the population figures, the reports of these people's poverty, and their schooling, it appears that we have a national question here that requires attention. We may not have too many children in the country as a whole, but we have too many of the kind found in these states.

Chapter 7

THE SIZE OF FARMS

The *U. S. Census of Agriculture* for 1940 devotes 65 pages to the subject of size of farms and treats almost everything appropriate of a statistical character to be found in the census returns. There was a total of 6,097,000 farms, varying so greatly in size that the census divides them into 15 classes, with the last class subdivided into three parts. The smallest averages only 1.4 acres, the largest 27,248. The sizes used for the smaller classifications are somewhat confusing. For example, the smallest consists of farms on which the buildings are worth three times as much as the land. It is difficult to deal with such farms as these, since very many of them are really homes, near towns and cities, but there is no easy line of demarcation between places called homes and those kept on account of the income they yield. In any case holdings of this kind do not qualify the facts seriously, since there are but 35,000 such farms in the whole country.

Probably the majority of farms in the second class, 3 to 9 acres, are truck farms, with modest little houses and highly cultivated land; yet without more accurate classification they are not easily described, since great numbers of them are primarily homes just outside of cities and towns. They are likely to have considerable income aside from the land; yet enough is made from the land to require their inclusion in the farm class. Buildings vary greatly, from mere shacks up to buildings of size and beauty. The value of such farms is given in the census as $381 per acre, well beyond that of the next larger size, but only about a sixth as great as the smaller size. The smaller size, with but 1.3 acres at a high value per acre, must be primarily a home. The farms in the second class, with nearly 4 acres of cultivated land, must mostly be places on which to make a living; yet they include a real percentage of little home farms held primarily for the sake of living in the country rather than the city.

In the fourth class, 20 to 49 acres, we have a group of farms, the largest

number of all, just over the 1½ million mark for the year 1920.[1] Thus, of our 6 million farmers almost one out of every four ran a farm of this size. Over a fifth of all farmers of the United States now operate farms between 50 and 99 acres, while the next two classes, with 100 to 259 acres each, operated 282,000,000 acres of land in 1940, or 26.5 per cent of the total farm land. Nearly 10 per cent of the farms, varying from 260 to 999 acres and operating a quarter of the total farm land, is estimated at 17.6 per cent of the total value of land and buildings. The last item in the table showing the land in farms, values, etc., shows that land in the 10,000-acre tracts is worth just over $5 per acre. While these farms show a considerable amount of buildings, implements, and machinery, the land used for crops is only about 2 per cent of the whole acreage. This is primarily ranch land and is only remotely related to the usual farm land in which we are interested.[2] The 1,000-acre farms, while a few are primarily for cultivation, are for the most part grazing farms or ranches, found in the Mountain states, Texas, and the Pacific states. Nearly all of these Western states have two or three times as many farms of 1,000 acres and more than they had a few decades back. This change has been brought about largely by differences in farmer reporting of the range used.[3]

In 1920 there was not a state in the Union showing farms averaging 1,000 acres each, although on three different occasions previously Nevada had shown ranches bigger than that, and once Wyoming had done so. In 1940 five of the Mountain states showed ranches averaging over 1,000 acres each, and one, Wyoming, showed them of 1,866 acres. Of the eight Mountain states, three had ranches averaging below 1,000 acres, Idaho with 236 acres, Utah with 287, and Colorado with 613. Where conditions permit, the operations consist mainly of grazing great numbers of cattle and sheep the year around; usually the stock is fed hay for some part of the winter.

It is not strange that the hundredth-meridian states have a considerable number of large farms. Texas, with 15,000 farms of 1,000 acres, outranks all other states in this respect. There are a considerable number of big holdings classed as farms in the South. The west line of West Central and Southwest Central states reaches onto the plains, and therefore they have many cattle and hence large holdings. In a smaller way many large holdings are found in the South. A few states have a thousand so-called farms

[1] A different grouping is used later in *U. S. Census, 1940,* Vol. III: *General Report,* Chap. 2, Table 5.

[2] *U. S. Census, 1940,* Vol. III: *General Report,* p. 75.

[3] Under the Taylor Grazing Act, ranchers are required to lease publicly owned land which they formerly used as free range. Consequently these lands are now reported as a part of their ranches.

of 1,000 acres or more. These holdings are undoubtedly farms; yet they have much land in timber. Mostly the stand is light, already cut over, but with small trees everywhere. The value of these large holdings is usually low, $10, $12, $15, or a little more per acre, apparently never as high per acre as on the smaller farms.

The American Farm. It takes some thought to comprehend what is happening to the size of farms in the United States. The census handling of the size of farms does not agree with the understanding of all the people concerned with the subject. For example, the people of the South have for a long time insisted that the words "plantation" and "farm" mean the same thing. A piece of land owned by one man may be 1,000 acres in extent, but may include 500 acres of cropland that are worked in 20 pieces by croppers, somewhat more often colored than white. Now a cropper owns substantially nothing as a rule. He lives out of the store, probably run by the farm owner, and settles up when the year is over. It is usual for the owner of a tract of land on which this is done to look upon the plantation as a single farm. He tells these tenants what to do and sees that it is done. To the Southern owner this tract of land is his farm, a single farm worked by 20 families. The census, however, regards the tract as comprising 20 farms and so classifies it. The owner of the land tells the tenants how to proceed, when to plant, when to cultivate, when to pick, and how to market the crop. This is at least quite unlike the landlord-tenant procedure of the North. In the North the farm is of the size usually worked by the tenant and his boy or hired man; after reaching a general understanding with his landlord, the tenant proceeds as best he can with his own family. Thus there are in the cotton belt a vast number of holdings of 10 to 40 acres. In the North the tenant farm is a little larger than that of an owner.

Size of Holdings. American farm holdings range in size from a single acre to 3 million; this means from garden size to a tenth the size of New York state, or almost the size of Connecticut. The smallest farms listed as such can be cultivated by one man with hand tools, while the biggest approach state undertakings in the character of the men required to manage them. The vast majority of farms, however, are managed by one man, who is at the same time the leading worker. In the South we have a few big owners who do no ordinary work themselves, but spend their time directing managers, foremen, and the like. The big holdings are mainly found among stockmen or cotton growers, with a few scattered among sugar-beet and vegetable growers. The great majority of American farmers, doing the main part of their own work, hire less than one man per farm, and therefore the vast bulk of our farms are small. Farming is predominantly a family business. A few unusually large wheat farmers in

Kansas prompted the state legislature to pass acts supposedly preventing the spread of corporation farming, but the big undertakings failed. One wheat farm in Montana that lasted for some years expanded to a million acres, but it is gone. In Dakota some 40 or 50 years ago a considerable number of wheat farms as big as a township were started; within a comparatively short period they all passed off the scene.

Very large farms now consist mainly of stock farms in the West and Southwest; they are not so spectacular as a few decades ago, but especially in the South and Southwest many big ones are running successfully. In the South a good many cotton plantations are getting along rather well, some of them depending primarily on a tenant system and an increasing number on hired labor and big power machinery. These latter will do well while prices stay high.

Thus our farms vary from a few acres to many thousand, but the great majority are operated by the head of a family and his household. A large number are worked by the family plus a hired man or two, usually for the busy season of three to eight or nine months. On big stock farms more help is hired, as well as on certain other sorts of farms. On the majority of all farms the main work is done by the head of the family; all the work is done either by him alone or by him with the help of his family or one hired man. As has been many times reported, the American farm is characteristically a two-man enterprise. From the standpoint of labor required, the American farm is a small undertaking.

Actual Size of Farms. A farm may indeed be measured in some other way than by acres. It is just as reasonable to speak of a 20-cow dairy farm as of a 150-acre farm, and to very many people the number of cows would mean more than the number of acres. A farm of 120 to 200 acres might, for example, be run by one man much more easily than a farm with only two-thirds as many acres, but with twice as many cows. Though many circumstances are involved in determining the amount of work done on a given farm, it is a fact that the American people have learned to speak of farms as large or small mainly with respect to acreage. This is probably the easiest and certainly one of the most important distinctions respecting size.

Changes Since the Last Century. The census of 1850 was the first to attempt a report on the farm acreage of states. The amounts given, which in all reason were not very accurate, were 113,032,000 acres of improved land and 180,528,000 acres of unimproved land in farms. The total amount of land reported for 1850 was therefore 293,561,000 acres. The great period of the country's growth was from 1870 to 1900. The amount of land in farms grew during this 30-year period more than 100 per cent, from 408,000,000 to 841,000,00 acres. The remarkable increase in the amount

of land in farms during the decade ending in 1900 was due mainly to the speed with which grazing land was taken into farms. Almost as much unimproved as improved land was added to the farms of the country during this decade. The size of farms during the half century showed a genuine decline, from over 200 acres to less than 150. This change, however, was due primarily to the facts of the reduction in the size of farms as reckoned in the South and the persistent carrying of the quarter-section homestead into the West. This meant, in all probability, both in the West and the South, a change that appears to be subject to still further moves in the same direction, since farms have been growing larger in both the South and the West, probably a permanent trend, for some years. For some reason the size of farms took one more drop in 1910, when it went down about 8 acres, after which the size continued to rise until it was reported to have reached 190.1 acres for 1945. A gain of 16 acres per farm occurred during the preceding five years; this was most pronounced in the South and West.

Larger Farms. During the three and a half decades after 1910 farms throughout the whole country have increased steadily in size. The three smallest sizes need not concern us much. They just about hold their own in numbers and in proportion. The next largest size, 20 to 49 acres, is disappearing. This size, the commonest for cotton farms throughout a large part of the cotton belt, vanished rapidly. In 1930 there were 1,055,000 such farms in the South; in 1940 there were 818,000, or 237,000 less. This was clearly the result of using power machinery in growing cotton, with higher prices for the product; tenants were replaced by hired help and better machinery.

The important increases in size of farms from 1920 to 1940 have taken place in the Mountain states, in the West North Central, and in the West South Central, which means that the great increase in farm size has occurred mainly in the grazing sections, including the high Plains and Mountain states. Outside of these sections, which logically constitute one section of the country, including the short-grass, low-rainfall districts, there are some instances of somewhat larger farms. Oregon, a state with much arid land, is up 34 acres per farm. In parts of the South there are a few rather small increases. Georgia shows a gain of 18 acres, South Carolina of 7. Illinois has gone up 10 acres.[4] In Iowa there has been an increase of exactly 3.3 acres during the past 20 years, during which there has been much comment on the extraordinary increase in the size of Iowa farms. Almost no other state of the Union has held right to the quarter-section average size of farm as Iowa has. In 1860 her farms averaged almost 165 acres; after

[4] Nearly all during the decade 1920–1930. From 1930 to 1940 there was but three-tenths of an acre gain.

that they fell below 160 acres, and there they stayed for 65 years. During substantially all of these years the very small farms, from 3 to 19 acres, increased in numbers, while the two largest sizes decreased in numbers, and the two sizes of 100 to 174 and of 175 to 259 increased; farms of 175 to 259 acres increased less steadily than those of 100 to 174 acres. The small gain in the numbers of little farms and the constant fall in the numbers of big farms kept the average about the same all through these years. The ease with which larger tracts may be handled with the constantly increased use of tractors has finally given even Iowa a tendency toward a slightly larger farm. With, however, no more people working on such farms than formerly, but actually fewer, the size of farms in general is quite beyond what it has been since before the Civil War.

Apparently something else has been at work to keep the farms of Iowa uniformly smaller than the farms of the Plains states. This factor seems to be livestock. In general, Iowa farmers appear to prefer the numbers they can handle on a quarter section or a little more.

The first year that a census was taken showing the relative sizes of all farms held by the farmers of the country was 1860. At that time seven different sizes of farms were listed. The smallest was 3 acres, the largest, as at present, 1,000 acres or more. One of the most interesting facts revealed in the early figures on this subject is the prevalent size of farm held; in the first year, 1860, it was 20 to 50 acres. The next larger size, however, 50 to 100 acres, was almost as common. From that figure the numbers ran down rapidly to the largest size given. It is rather likely that the prevalent size was already on the increase and that if we had begun to record these figures a little earlier, we would already have noticed at least one rise in the most frequent holding in state after state.

In several of the Eastern states in 1860, such as New York and Pennsylvania, the largest number of farms were in the group of 50 to 100 acres. At the same time the states that had reached the highest figures for the country were Alabama, Louisiana, Georgia, Mississippi, and South Carolina. By 1870, with a different status of Negroes, the Southern states had their greatest number of farms in the group of 20 to 50 acres. The states with the largest farms for this date were, in the group with 50 to 100 acres, New York, Pennsylvania, Illinois, Iowa, and Ohio, while California had the largest farms for the country.

The Family-size Farm. Farms everywhere have usually been operated by families, with relatively little hired help. This method of getting the work done has predominated throughout the world for centuries, though with certain exceptions. For example, slaves have been kept to do much of the farm work. This has been true in a large part of the world at one time

TABLE II.—FARMS IN THE UNITED STATES, 1920 AND 1940, CLASSIFIED BY AREA

Size, acres	Number, 1940	Number, 1920	Per cent, 1940	Per cent, 1920
Under 3	35,977	20,350	0.6	0.3
3– 9	470,425	268,422	7.7	4.2
10– 19	559,254	507,763	9.2	7.9
20– 49	1,221,006	1,503,732	20.0	23 3
50– 99	1,291,048	1,474,745	21.2	22.9
100–174	1,278,617	1,449,630	21.0	22.5
175–259	517,460	530,800	8.5	8.2
260–499	458,787	475,677	7.5	7.4
500–999	163,694	149,819	2.7	2.3
1,000 and over	100,531	67,405	1.6	1.0
All farms	6,096,799	6,448,343		

or another, and continued well into the nineteenth century. The last and probably the greatest known system of slavery was that of the Western world, with black people as the slaves and with Englishmen primarily the slaveholders. Even in the period of widespread Negro slavery in the Western world the great majority of American farm people were small landowners doing their own work. Small farmers indeed were known substantially around the world, in spite of a majority of English farmers with an average of four hired men and in spite of enormous landholdings in certain South American countries.

Changes in Farm Population. The people who for several centuries have produced more than enough children to fill their own places are outstandingly the farm people. For the first two centuries after settlement was begun in America young people moved west when more land was needed. But after our Civil War, while many people seemed to be approaching our last frontier, there was at the same time a strong countercurrent moving back from the West to our rapidly growing cities. The movement from farm to city was so great during all the early part of the twentieth century that great concern was frequently expressed that the farms would be unmanned. On this general subject our last census report is excellent.[5] The agricultural population increased 0.3 per cent during the decade from 1930 to 1940. During this time the West North Central states lost 7 per cent of their farm population, the West South Central states 5.1 per cent, and the Mountain states 1.8 per cent. These sections make up one continuous block of 19 states all told. If the same forces should continue to act in the same manner, there is no doubt that the major part of the United States will finally have fewer people on farms. A very

[5] *U. S. Census, 1940,* Vol. III: *General Report,* Chap. 1.

large part of the region referred to where agricultural population has already gone down has been planting and sowing as heavily as ever and has tended as many cattle, hogs, and sheep. The work has been done as well and as promptly as before. The whole line of border Plains states from North Dakota to Texas shows fewer farm people; there are 8 per cent less in Texas, which is by no means wholly a Plains state, and 21 per cent less in South Dakota. How can the work be done with fewer people? Actually it is so easy that the method is hardly appreciated. No doubt the main reason that the cattle are all fattened and the grain all threshed without anyone's working longer hours or more days per year (these figures were gathered virtually before the war) is the use of more and better machinery, such as the little combines and balers for baling hay in the field; here and there hogs gather their own corn. Farms have lighting systems, devices for easy watering, a few more milking machines; the tractors are a joy to handle, and with them the corn is cultivated at the rate of 12 to 20 acres a day. Farmers are getting their work done with less effort than their fathers, and better done.

Hence the smaller number of farm families does not seem calamitous merely in terms of work done. In modern farming there is less work for the back and a little more for the head, which had had little to do for many years. Farms are getting a little bigger, but fewer people are doing the work much better than it was done a generation or two ago.[6]

Farm Size and Amount of Help. It is easy to believe that one farm is 50 per cent too big and another too small for good management, but to prove it is usually extremely difficult. Take the case of the farmer with two boys of high school age as helpers. The boys on one farm go to high school; those on another do not go. The boys who go to high school may be useful to the extent of a quarter of a man's work for their father while school is in session. The other boys may work full time. But the boys in school are free to work on the farm just about three months in vacation, the busiest time of the year. The corn cultivating is mainly done during the summer vacation; so is most of the haying, the small-grain harvesting, and even part of silo filling. One man may get along very well with incidental help from his schoolboys and a little other help occasionally in the fall and winter. By such means as this a two-man farm may be well handled with what amounts to two and a half men's work for a scant half of a season's time. It may happen that boys in high school will be able to do a considerable amount of milking and other chores without interfering with their schoolwork. Thus to say that this farm is a one-man farm or

[6] See H. C. Taylor, *Outlines of Agricultural Economics*, p. 174, The Macmillan Company, New York, 1931.

a two-man farm is not quite correct. To say that it is halfway between a one- and a two-man farm and therefore impossible to manage economically ignores the workable means by which a man can average one and a half men's work, with some help in his own family and a chance to hire needed help on occasion. There are farms everywhere that do not correspond to an ideal one-, two-, or three-man farm, but still the work on them is done in a satisfactory manner year after year. These farms, requiring rather less or more than an even number of men's work, probably make up the majority of our farms. On any farm there are likely to be rather frequent times when another man or two would be desirable from a day to a month. But the number of capable men available for such jobs is sure to be small. If farmers were prepared to pay $5 a day for such additional help, they could probably get it easily enough; but $1, $2, or possibly $3 a day will not do the trick. Farmers have by no means studied their work carefully enough to be able to say just when such additional help would pay. In any case it is not easy to accommodate additional men in the ordinary farm home on short notice. So the farmer generally gets along without the help that would be desirable beyond the regular amount that he finds it convenient to employ.

Importance of Good Management. A farmer will work until he feels that it is not worth while to exert himself longer. This does not mean that one will work 4 hours a day, while another works 14 hours. The great majority of men seem to work a fair length of day, such as 6 hours or 10; these may be men who are working for others. Those working under their own direction may, like farmers, work fully as long a day and now and then much longer. Those who work for themselves seem to work rather longer on an average than those who work for someone else; yet some of the greatest money-makers of the world work irregularly and do not seem to work any exact length of day, but long or short as circumstances demand.

Once in a long while a farmer makes some money, not merely by hard work and definitely not just because he has chosen a farm of a certain size. As a rule it takes a man a large part of his active lifetime to pay for a moderate-sized farm, but occasionally enough can be made to pay for a farm in a year. In 1936, when there was a drought in the Middle West, cattle on the plains grew poorer and poorer in flesh; some died, while others were sent to market in poor flesh and sold at low prices. A retired farmer in Iowa went to a wholesale market and bought 125 head of these cattle, 700 lb. each, at $35. He had not fed cattle the preceding year because he could not find any for sale then at attractive prices; so he had a year's crop of corn on hand. Unlike many Iowa farmers, he also had a fair crop of

corn just maturing. He fed these cattle the two crops of corn, built them up to more than twice what they weighed when he bought them, sold them for about two and a quarter times as much per pound as he had paid at a time when few farmers wanted to buy at all, and then bought a farm of 160 acres with the proceeds of his year's work. The farm on which this man had made this money was a half section. On a somewhat commoner size, the quarter section, he might easily have done the same thing; half of that would have been worth while. But farms of whatever size do not make themselves or run themselves. It was not the size of this man's farm that gave him prosperity, nor the fact that he put in some hard work on it. He was an old feeder; he knew how to direct his work and manage his resources. During the same year other equally good farms in the vicinity were sold under the hammer.

How Large a Farm? Does the average farmer want a big farm or a little one? Apparently the farmers of the country are fairly well satisfied with the sizes of the farms they have; these farms vary from a single acre up to thousands. In the corn belt, however, farms average somewhat larger each year because of implements that make it possible to cultivate more corn. It is likely that one man can do the plowing, harrowing, planting, and cultivating for many more acres now than 20 years ago; though harvesting has hardly made such progress, a little earlier start at harvesting makes it altogether feasible for any given amount of help to get in more corn than was possible 10 or 20 years ago. Substantially all farming work can be done better and faster than was possible a few years ago. For these reasons farms are growing larger, especially in the more level and better parts of the country, while in rough, broken districts, such as southeastern Ohio, they are growing smaller. Indiana has smaller farms in perhaps half of her southern counties, while most of her better counties are showing larger farms. Many of the poorer counties of Illinois have rather small farms, which may even grow smaller. In general the poor counties have 75 to 120 acres per farm, while the best counties have 165 to over 200 acres. The main gains in the size of farms are in the good counties.[7]

The fact seems to be that with better power and equipment the same number of men can farm more and more land as equipment is improved, while this advantage is closed to men on poorer, rougher land.

Corn in the Middle Western States. The 12 states comprising the East North Central and West North Central groups grow about two-thirds of the country's corn. Very close to a third of a normal crop for the nation is produced in Iowa and Illinois. In 1942 Iowa produced 597 million

[7] An exception should be registered in the case of districts that have much grazing land, as on the plains.

bushels of corn, Illinois 433 million. Restriction of acreage was still in effect in 1942, and Iowa had over a million acres less in corn in 1942 than in the next years. Illinois was down somewhat less, four-fifths of a million acres. The yield for these two states, over 60 bu. per acre for many counties and even 61.5 bu. for Iowa as a whole, was the first state-wide yield of such an amount known to have been produced in any state of the Union. The first five states in yield of corn were, for 1939, Iowa, 63 bu. per acre; Illinois, 61; Indiana, 59; Ohio, 57; Minnesota, 56. These states are always likely to be the first five, with Nebraska occasionally ahead of Minnesota.

Size of Corn Farms. The average is easily obtained because the census reports the figures. This, however, does not tell us how big the larger farms have become. On an average for the 10 leading counties of Illinois, the size was 173 acres per farm. Next came Iowa with 159 acres per farm in the 10 leading counties, 14 acres less than in Illinois and 1 acre below the average for the state. Next came Indiana, with farms of 113 acres in 10 counties. Ohio, with farms for the state averaging 94 acres, had in her 10 leading corn counties 109 acres in the average farm. In the West the farms were larger. Average farm acreages for the 10 leading corn counties in several of these states were: Minnesota, 156 acres; Missouri, 139; South Dakota, 243; Nebraska, 167; Kansas, 153.

In the two leading corn states, Iowa and Illinois, the average number of acres of corn grown in the 10 leading counties was 49 per farm in Iowa and 61 in Illinois. For 1939, the Iowa figures were given for every 5-acre change from the beginning up to 25 acres and then by 10-acre jumps up to 54 acres. At the point of plantings of 55 to 74 acres, the highest figure, 32,000 acres, was grown. This was the highest number of farms growing any given acreage. About two-fifths as many, however, or 13,000, grew from 100 to 200 acres each, while 815 grew over 200 acres each. The census does not follow the question further or say anything about how many acres these biggest growers grew. Among the biggest raisers of corn could be found a considerable number of producers of hybrid seed corn. In Illinois there were decidedly more small and moderate growers of corn, with 1,082 additional growers of 200 and more acres each. Thus of the largest growers Illinois had over 200 who grew more of the largest number of acres than in Iowa. Nebraska had more corn acreages of over 200 per farm than Illinois and Iowa together, but it probably grew less corn than the big growers of either of these states.[8]

Changes in the Size of Farms. We have paid a little attention to the size of farms as seen in the main corn belt of America. In the tables given we have used the regular size of all farms as given in the census; for Indiana,

[8] *U. S. Census, 1940*, Vol. III: *General Report*, p. 720.

TABLE III.—INDIANA*

Counties	Average size of all farms	Increase or decrease in all farms, 1929–1939	Average size for corn farms†	Acres corn per farm	Yield per acre, 1939
Union	147	4	154	38	67
Tipton	108	14	118	34	66
Howard	94	5	114	31	60
Rush	142	9	153	45	60
Hamilton	92	1	112	29	59
Fayette	129	0	145	31	58
Henry	98	1	117	32	58
Wabash	111	1	130	29	57
Delaware	90	2	108	27	57
Clinton	121	9	136	38	47
Averages	113	4 6	129	33	59

* This and the following tables were worked out mainly from *U. S Census, 1940*, Vol. I, Part 2.
† This column shows actual acreage of corn farms, omitting all small farms with no corn, as far as possible.

TABLE IV.—ILLINOIS

Counties	Average size of all farms, 1939*	Increase or decrease in all farms, 1929–1939	Average size for corn farms	Acres corn per farm	Yield per acre, 1939
Bureau	169	−2	184	63	63
DeKalb	172	8	179	63	63
Warren	176	0	192	64	61
Woodford	162	−3	184	51	61
Henry	163	6	170	57	60
Mercer	173	0	189	55	60
Piatt	210	5	228	69	60
Whiteside	155	3	162	50	60
Stark	182	3	193	70	59
LaSalle	172	7	181	70	59
Averages	173	2.7	186	61	61

* The averages are for all farms of counties.

TABLE V.—MINNESOTA

Counties	Average size of all farms	Increase or decrease in all farms, 1929–1939	Average size for corn farms	Acres corn per farm	Yield per acre, 1939
Carver	107	1	193	57	58
Faribault	171	−1	187	51	57
Jackson	192	−2	198	54	57
Martin	176	2	180	59	57
McLeod	122	0	125	22	56
Waseca	155	1	162	37	56
Watonwan	184	3	190	52	55
Freeborn	143	4	155	29	54
Sibley	158	−6	163	31	54
Brown	179	−1	192	42	53
Averages	159	.1	174	39	56

TABLE VI.—IOWA

Counties	Average size of all farms	Increase or decrease in all farms, 1929–1939	Average size for corn farms	Acres corn per farm	Yield per acre, 1939
Benton	174	4	184	52	66
Marshall	153	2	166	49	64
Johnson	145	−1	153	41	64
Tama	163	1	174	45	63
Linn	115	0	130	35	62
O'Brien	181	−1	196	61	62
Clay	191	−1	201	63	61
Iowa	170	3	178	42	61
Washington	151	7	164	45	61
Story	153	2	164	57	61
Averages	159	1.6	171	49	63

TABLE VII.—NEBRASKA

Counties	Average size of all farms	Increase or decrease in all farms, 1929–1939	Average size for corn farms	Acres corn per farm	Yield per acre, 1939
Douglas	97	4	124	48	38
Sarpy	137	6	154	57	37
Dakota	196	23	205	71	35
Nemaha	172	10	189	59	30
Richardson	176	10	193	55	30
Otoe	173	7	188	54	25
Washington	155	8	166	54	25
Burt	195	12	204	79	24
Cass	171	6	188	64	23
Dixon	198	8	206	72	23
Averages	167	9.4	182	61	29

Illinois, Iowa, Minnesota, and Nebraska we calculated as carefully as possible the sizes of their corn-growing farms, which are appreciably bigger than the average farms in each county, but only by 11 to 16 acres. In other words, the majority of farms, big and little, grow corn. On the other hand, we have but few corn farms of very great size. The farms bigger than a half section are relatively few; among them are those recently developed for growing hybrid seed corn, which not infrequently reach several hundred or a thousand acres. All told, Illinois had, in 1939, just over 1,000 farms with more than 200 acres of corn each. Of the number of farms with over 200 acres, however, Nebraska had more than 1,900 and Iowa 815.

Planting and cultivating corn has become easy enough so that every now and then one farmer will grow from 200 to 300 acres; it can be done by three men or possibly by two in some parts of the country. With new types of cultivators a man can get over 30 or more acres in a day; with such two-row cultivators as are in use all over the corn belt more than 20 acres per day may be cultivated. One man can keep at least 100 acres of corn in good shape during the season. Farms producing from 200 to 300 acres of corn do not dismay the farmer of the Middle West whose grandfather was kept busy during the month of June by a 20-acre cornfield.

It cannot be denied that farms are increasing in size. With the exception of farms of 3 to 9 acres and of 10 to 19 acres, farms of less than 266 acres decreased in numbers from 1930 to 1940, while those of more than 266 acres increased quite perceptibly. It is by no means easy to trace the various changes that have occurred in size of farms, but such is the final change down to the present.

After the Civil War the number of small-sized farms in the South increased, and this increase continued until 1920. Then the application of bigger machinery to cotton growing resulted in the absorption of many small farms into larger ones; this process is still going on. The growth of the size of farms in the North is less disturbing, since not so many people are thrown out of work. In the East North Central states there is a decline in the number of farms until we are past the group of 100 to 174 acres. Then the increases begin, but the increase in the largest size of holding, over 1,000 acres, is quite limited. As we come to the West North Central states, the case is very different; the increase in farm size begins modestly with the next to the largest group, while in the largest group we find that between 5 and 6 million acres have been absorbed. Farther west we find that in the Mountain group, while a few smaller farms have been developed with little effect on acreages (probably mainly irrigated farms), an increase equal to the area of Tennessee appears in the acreages given for the largest group. This was the result of the Taylor Act, leasing public land to private operators, and also of the sale of small tracts that had been taken up during the past 20 or 30 years by people who could not handle them well. These big holdings are for the most part stock ranches, the only suitable use for this land, which must be handled in rather large tracts if it is to be worth owning at all. Similar circumstances have overtaken the West South Central states.

Thus with machinery to handle larger and larger tracts of land in the form of cotton plantations and, with less social disturbance, grain farms as well, it would appear that in our South and to the west of the Missouri River we are likely to become familiar with distinctly larger farms. East of the Missouri and in the parts of the South where cotton is not grown it looks as though increases in the size of farms, while probable, will not be disturbing. In the South the cotton farms appear to be moving toward distinctly larger sizes than for a generation past; while the little homestead quarter section that made its way out onto the plains, as well as the somewhat larger holdings that were tried farther west, appear to be giving way to much larger holdings for cattle and sheep raising and for growing wheat with big and effective machinery. It looks as though the large farm, especially in the dry-climate states, has come to stay. The case in the South is not quite so clear, but there is reason to expect a continuance of both big and little farms there. The blacks and the poor whites will no doubt remain on little farms, raising largely the things needed for their own living, while cotton will be grown on bigger farms with the best of help and big machinery. Within the great Middle West it looks as though fewer men would for some years succeed in doing the work of growing the corn. Where dairying predominates, the change in that direction will

be only moderate, yet positive. The farming will, in general, be done better by fewer people.

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Chapter 8

INCREASED USE OF MACHINERY

The total amount of machinery used on American farms is so small that, reduced to an average for the 6 million farmers, it represented an investment of no more than $510 apiece in 1939. This is not enough to equip any farm of the usual size, 174 acres, at all well if crops are grown. With this amount of land at least half of our farms could use tractors, but out of $510 no tractor of any size could be bought. If this machinery were equally divided among all farms, we should all be plowing again with the two-horse plow. But of course a very great many farms are without equipment worth even a quarter of the $510 average, and there are therefore certainly many, mostly in the upper quarter as to prosperity and economic worth, who can find enough money with which to buy equipment for a modern farm. No more than a quarter of our farms raise any considerable amount for sale, and this same quarter will possess most of the equipment.

Those who own least mechanical equipment are such farmers as grow truck crops in moderately small amounts, usually near the cities. Some of them do a considerable amount of business, but their work is done mostly by hand. Such would be the case with many strawberry and other small-fruit growers. Certain other kinds of fruit, such as grapes and even oranges, require little equipment; likewise, growers of small vegetables do most of their work with a single horse or two horses and a few simple tools. Most cotton growers also rely primarily on hand labor. Cotton picking keeps all the farm people in the fields for weeks. Chopping also uses all hands. Picking can be done pretty satisfactorily by machines, but only on comparatively smooth, level land with reasonably mellow soil. If a mechanical cotton picker ever really displaces hand picking, then indeed a revolution will occur in the lives of millions of Southern people. As it is now, almost every Southern farm person, from soon after daybreak until it grows too dark to work in picking time, is out in the fields, grab-

bing bolls of cotton and thrusting them into long sacks dragged along the ground. The triumph of the cotton picker will put people out of work and subtract so much from their earnings that they can no longer live on cotton farms.

Increase in the Uses of Land, Workers, and Machinery. For 20 years beginning in 1920, crop acres fell to a low point by 1940; they were up again appreciably in 1944. During the decade from 1930 to 1940 we appeared to subtract a tenth from our cropland, which means that we were at a standstill, about as we had been for the preceding decade. The number of people working on American farms was just lower in 1940 than 40 years earlier.

Table VIII shows that for 20 years we had subtracted a little from cropland cultivated and that for 40 years we had made no permanent additions

TABLE VIII.—RATE OF INCREASE OF CROPLAND, AGRICULTURAL WORKERS, AND VALUE OF MACHINERY

Year	Cropland		Persons engaged in agriculture		Value of implements and machines	
	Acres	Per cent increase	Number	Per cent increase	Value	Per cent increase
1940	324,239,000	−10 0	10,585,000*	−7 9	$3,060,187,000	−7.3
1930	361,945,000†	4 0	11,250,000	5 5	3,301,654,000	−8 2
1920	348,604,000	12.1	10,666,000	−13 5	3,594,772,000	184.9
1910	311,293,000	9.9	12,568,000	21.1	1,265,150,000	68 7
1900	283,218,000	28.9	10,382,000	13.4	749,776,000	51.7
1890	219,706,000	32.2	9,148,000	18.6	494,247,000	21.6
1880	166,187,000	....	7,714,000	....	406,520,000	

* This figure is taken from the *Yearbook of Agricultural Statistics*, 1945.
† Horticultural specialties omitted.

to the number of farm workers. We had done nothing worth mentioning in changing acreage or number of workers. The one change of importance was in the increased use of machinery. This increase appears to have reached its climax in 1920 and added close to twice the value of machinery of the preceding decade. This machinery was appraised by the owners when visited by the assessors in January, 1920. There was hardly another month when it would have been reported at such a high figure. Factory prices were at their highest. Farmers in general believed that high prices were here to stay. Businessmen were even surer that the high prices were permanent and that land, for example, was destined to go appreciably higher.

Much machinery and many implements had reached something like perfection, but newer and better machines were on the market each year and,

considering their quality, were selling for less than former prices. Farming was being revolutionized by the use of the tractor, which was being improved and almost revolutionized every few years, a process that by now has made it much safer, do its work on less fuel, last much longer, and take less repair than 20 years ago; yet the superior machines of today hardly cost more, with their self-starters, electric lights, and pneumatic tires and are adapted to many kinds of work that earlier models could not possibly do. The small combine, the hay baler, and numerous other machines have also disposed of much of the slower drudgery of 20 years ago. For example, it is now possible for one man with a tractor and proper cultivators to handle as much corn or cotton through the period of cultivation as 2 to 6 men could handle 20 years ago.

Table VIII needs some further explanation. For example, the amount of cropland increased 14 per cent between 1900 and 1940; the people employed in agriculture showed a slight decrease for the same 40 years. In 1900 they were working about 27 acres of cultivated land per person; in 1940 about 31 acres. We find that in 1900 farmers were using $2.70 worth of machinery per acre; in 1940 the figure stood at $9.40, which is close to three and a half times as much.

If the land supply increases less rapidly than the supply of labor and implements, probably land will increase in value more rapidly than the other two factors.[1] The very opposite happened during the 20 years from 1920 to 1940. Land increased much more slowly than laborers or agricultural equipment; yet the selling value of land went down constantly for 20 years, because the demand for our surplus could not absorb what we happened to have on hand. We were actually using less land in 1940 for crops, by nearly 25 million acres, than in 1920. This was due largely to the influence of the government in its crop-restriction program in its effort to reduce output in order to raise prices. Somewhere we still had the land that had been counted in as a higher acreage for the earlier years. Our surpluses were getting more and more formidable when the Second World War made demands for much greater quantities of farm produce. Until 1940 our land was still falling in price.[2] Until into the Second World War our government was greatly distressed over surplus outputs, which it was trying desperately, and with small success, to hold down in cotton, wheat, and corn. In 1940 our ability to produce outran our ability to sell, at least at a reasonably high price.

Cost of Farm Implements. In the early years of this century a man could get into farming on a quarter section of land with a very few hundred

[1] See H. C. Taylor, *Outlines of Agricultural Economics*, p. 152, The Macmillan Company, New York, 1931.

[2] Of course a rise in land values in many localities had taken place before 1940.

dollars. His three horses might cost about $300. If he bought all his machinery, as few beginners do, it would cost him, including such things as wagon, plow, harrow, seeder, self-rake, reaper, mower, hay rake, corn cultivator, and possibly a disk harrow, not far from $350. This, together with his horses, amounted to some $650. On the same average-sized farm in the corn belt today he would need to spend about $4,000 (see Table IX). This would include a tractor at $1,200; in addition he would need an automobile and a $200 team of horses, which most farms still have. The expenditure on a farm of more than average size would, of course, be greater.

One can carry on farming, and probably pretty well, with somewhat less investment in implements. The amount reckoned on for a combine was only one-third of the cost, for it was assumed that since a combine could do the work on three quarter-sections of land, three farmers could buy one jointly. Probably this will not be done very often; more than likely such a partnership will not often take in more than two farms. On the other hand, it rather frequently happens that one can buy a machine at second hand for not much over half price; someone else has taken only part of the true value out of it when it is sold half worn out, and a second-hand machine selling for much below the original price may still give a great deal of service. Various machines that are used but a few days on any one farm may be shared by several farmers to cut down the expense appreciably. Actual practice is prevailingly, on the usual farm consisting of a quarter section of land, to work with machines owned by the farmer individually. In calculating expenditure for machinery, by no means all the apparatus has been included that may be and often is used on most farms. Throughout the Middle West there are electric pumps, gasoline engines, milk coolers, devices for elevating grain into bins and cribs, and many other conveniences that the grandfathers of the present farmers never had and probably never saw. Of course an automobile, costing from $800 to $1,200, is found on most substantial farms and is indeed practically indispensable.

Census Figures Report Much Less. We are no doubt showing the cost for farms probably somewhat bigger than the average and better equipped. Throughout the corn belt such farms are numerous, but the census must take in many small farms with little equipment; there are also many farms that are poor in every respect. What has been attempted here is to take a farm about average in size and equip it moderately well with mostly new machinery. The man who buys machinery that is half worn out at a third of the original price may come out better in the long run; the chances are, however, that in both trouble and expense his cost of upkeep will be heavy.

The cost of machinery shown in Table IX is mostly based on figures furnished by a dealer in a Wisconsin city. The implements, made by the

TABLE IX.—VALUE OF AGRICULTURAL IMPLEMENTS

Binder, or a third interest in a combine	$214
Corn cultivator	138
Corn harvester	579*
Corn planter	147
Cultipacker	86
Disk harrow	124
Gang plow	138
Grain drill	258
Grass seeder	18
Harrow	58
Manure spreader	265
Mower	138
Quack digger	148
Tedder	146
Tractor	1,215
Wagon	165
Total	$4,037

* This machine may do the work on several farms.

International Harvester Company, sell for about the same price as those made by other companies. Those on which prices were obtained are given in the table. An automobile, a milking machine for a real dairy farm, stationary engines, feed grinders, and so on would run the total up well above $5,000.

Value of Farm Equipment. According to census reports equipment per farm is worth little. It should be remembered that the value of implements when new is about twice as great as it will be reckoned at any later time; machinery is valued as long as it can be used, but during the final year of use it must obviously approach zero. Considering all implements from the time they are first used until they are about worn out, the average value, honestly appraised, will be about half the value of all at the time of first purchase.

Within the past few years the Wisconsin College of Agriculture has made many farm-management studies. A year or so ago the college finished a study of 265 farms. These farms averaged 150 acres. The average value of equipment was estimated at $2,731. Doubling this to get its approximate cost when new gives $5,462. This is more than was shown in our estimate of probable cost of a new outfit of implements for a quarter-section farm. Of course many items that seem necessary on many farms were not included in that list.

The Federal census submits very much lower figures than are here suggested as reasonable. The trouble, at least much of it, comes from including all farms in the report. In the study just referred to the intention was to represent not average farms, but typical farms—such as belong to the

people who do the main part of the farm work of the country. The farms studied were but little above the average size of all farms of the state concerned. But while there may be occasions to show what is being done by the average man, the more usual plan in such studies is to show clearly what the average man does who is getting along pretty well. Fairly successful people, who are to be found in all neighborhoods, are seldom beginners. They are not just a small number who do something quite beyond the usual, but rather the general run of successful farm people who can be found in every community, but who are no doubt above the average in their accomplishments. For the most part such people are of an age still able to work, as a rule between thirty-five and fifty. Such a selection leaves out of account about three-fourths of the farmers who fail to make any amount of money. Few tenants will be included. Most tenants are near the beginning stage as farmers, or, living in the South, are seldom able to get very far. In the South again, the best operators are landlords, who do little farming themselves but supervise the tenants on their lands. Thus the man who is doing quite well as a farmer is usually an owner who, while young enough to be vigorous, is running a farm with his family's help. About one-third of all the farmers usually take in about five-sixths of all the money made in farming. As a rule the studies made from year to year are concerned with farms that show a fair income. This means that attention is paid to the successful farmers. The much greater number consists of hundreds and thousands who just live.

The reports that show very low incomes for farmers include everybody. On this basis average income is bound to look pretty small. For example, the value of farm equipment, per farm, for the country in 1940 was as shown in Table X.[3]

Alabama shows the lowest figure, California the highest. The amount reported as owned by the average farmer of each state in farm machinery is not enough to equip an ordinary farm with two or three of its best implements, such as grain binder, grain drill, and manure spreader. Even in California, where implements are many, the value of one new tractor and plow would use up the whole amount suggested here. The inclusive basis of the reckoning means that the figure is pulled down by the many little scraps of land, such as a few acres of grapes, asparagus, or any one of a dozen different crops, which may be tended almost wholly by the use of hand tools; the ranch that makes use of tractors, plows, and spraying machines costing many thousands of dollars is comparatively rare in the total of farms.

No doubt we count in so many farms using almost no machinery that when the total value of agricultural machinery is divided by the number

[3] *U. S. Census, 1940,* Vol. III: *Agriculture,* p. 50.

TABLE X.—VALUE OF FARM EQUIPMENT PER FARM, 1940

New England:		Middle Atlantic:	
Maine	$647	New York	$1,037
New Hampshire	544	New Jersey	1,228
Vermont	786	Pennsylvania	907
Massachusetts	724		
Rhode Island	915		
Connecticut	793	West North Central:	
East North Central:		Minnesota	$1,069
Ohio	$637	Iowa	1,238
Indiana	681	Missouri	405
Illinois	991	North Dakota	1,140
Michigan	750	South Dakota	902
Wisconsin	1,007	Nebraska	867
South Atlantic:		Kansas	834
Delaware	$815		
Maryland	631	East South Central:	
Virginia	295	Kentucky	$216
West Virginia	202	Tennessee	262
North Carolina	217	Alabama	159
South Carolina	217	Mississippi	215
Georgia	189		
Florida	459		
West South Central:		Mountain:	
Arkansas	$225	Montana	$1,133
Louisiana	292	Idaho	1,111
Oklahoma	514	Wyoming	1,149
Texas	510	Colorado	870
Pacific:		New Mexico	539
Washington	$821	Arizona	692
Oregon	867	Utah	575
California	1,304	Nevada	1,186

of all farms, it yields a very small average. Thus we hear that $500 to $800 is the average value of total equipment per farm in at least half of the states of the Middle West. At this rate a single tractor, half worn out, might be the full equipment of the average farm in state after state. There must be a great many farms that are getting along with extremely little machinery, possibly getting along quite well, since on about all up-to-date farms complete new equipment appears to cost about ten times the reported average. It seems that the inclusion of all farms down to 3 acres or even less is mainly responsible for equipment averaging so small a figure, but many so-called farms would hardly be recognized as such by a farmer.

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Chapter 9

PROPORTIONING FACTORS OF PRODUCTION

The question why a farmer does not farm a single acre instead of many is sometimes asked. Experience has told farmers about how much they can do or hope to do with success, on a large scale or a small one. Some men are quite successful with large farms, some with small; but no one has made a success with either a single acre or a million.

Law of Increasing and Decreasing Returns. This law may be stated simply as follows: Taking a larger or smaller value for one of the factors of production, which for convenience are supposed to be three in number, and holding two of them constant while varying the third, we can discover an optimum value. One trial will hardly prove anything; many trials may be needed. Variations due to weather might require a man's lifetime of experimentation before any conclusion could be reached, though with many people making the trial, a fair conclusion may be arrived at within a comparatively short time. Furthermore, it is only within rather broad outlines that the best handling of land can be determined. Much is likely to depend on the weather, and the weather is never twice the same. For example, in the upper Mississippi Valley for the summer of 1942 the weather was the best it had been for substantially a hundred years. After a short rainfall for April, a period of at least six months with almost no variation followed; hardly a week passed without normal rainfall. There was almost no extreme of either heat or cold. The result was the greatest yield of corn ever known. The same was true of wheat and oats and, in the South, of cotton. We may get more in the future, but for the present 1942 stands at the top for almost every important crop we grow. We could grow more of practically all crops, but at greater expense, so far as is now known. It does not follow that it would pay to make the land produce regularly as it produced in 1942. The usual rise and fall of yields per acre occur within narrow limits. For example, in the famous yields of 1942, corn averaged but 35.5 bu. per acre; many hundreds of acres produced over 100 bu. per acre, although probably not a single acre in the

whole country produced 200 bu. The heaviest yield of wheat for the nation was just under 20 bu. per acre on an average. Once, on an island in Puget Sound, a little field of 19 acres of wheat produced almost 120 bu. per acre; yet not much over half that amount has been raised per acre on a dozen different farms in the whole nation.

Where a man undertakes to increase his productivity by changing the application of labor to any given process, he may subject the trial to a fatal risk if he concentrates his attention on a single phase. Suppose, for example, he can cultivate corn at the rate of 10 acres a day and that he picks out a 10-acre tract on which to experiment as to the advisability of cultivating corn three times or four times a season. Suppose further that he is testing out the advisability of three cultivations in place of four. Most seasons are variable respecting rainfall. He decides to try out the three cultivations on the field that takes a single day for cultivation, whereas the whole quantity of corn requires a week; he thinks he will cultivate the trial field either first or last. A heavy rain comes right after the small field has been cultivated; the chances are that about the second day after the rain he will decide to cultivate it for the second time. Then, with good weather, this particular field may not need attention for a couple of weeks; so it gets the third cultivation rather late in the season and comes through in first-class condition. After the heavy rain the bigger cornfield, which requires most of a week to get over, was left uncultivated in part for about a week, though it was in much need of attention, and it did not do as well eventually with four cultivations as the little field with its three cultivations, all of which fell at highly advantageous times. What did it all prove? Nothing—certainly not that three cultivations are better than four. One farmer acting by himself simply is not in a good position to run experiments to prove that it is better to farm more or less carefully unless he applies the experiments to his whole farm. If he tries an experiment with a single cow or a few selected cows, the chances are small that successes attained with these small numbers can be repeated with 20 or 40 cows.

The accompanying chart gives an idea of the working of the law of increasing and decreasing returns. It must be kept in mind that almost no one begins at the extreme left-hand side of the chart, and likewise no one carries production to the extreme right-hand limit. He might begin with column *d*, and he might stop anywhere before *j*; somewhere within these half-dozen columns the great body of the world's business is done. In ordinary farming a man can seldom put in his time profitably on a very few acres. Neither can he farm several hundred acres alone. The great majority of our farmers are on cotton farms of 10 to 40 acres, corn farms of 60 to 200 acres, or dairy farms of 40 to 160 acres. They have some fairly clear idea of what they can do before they set out to farm alone;

hence they do not try extremely small or extremely large farms, but find some success within moderate limits.

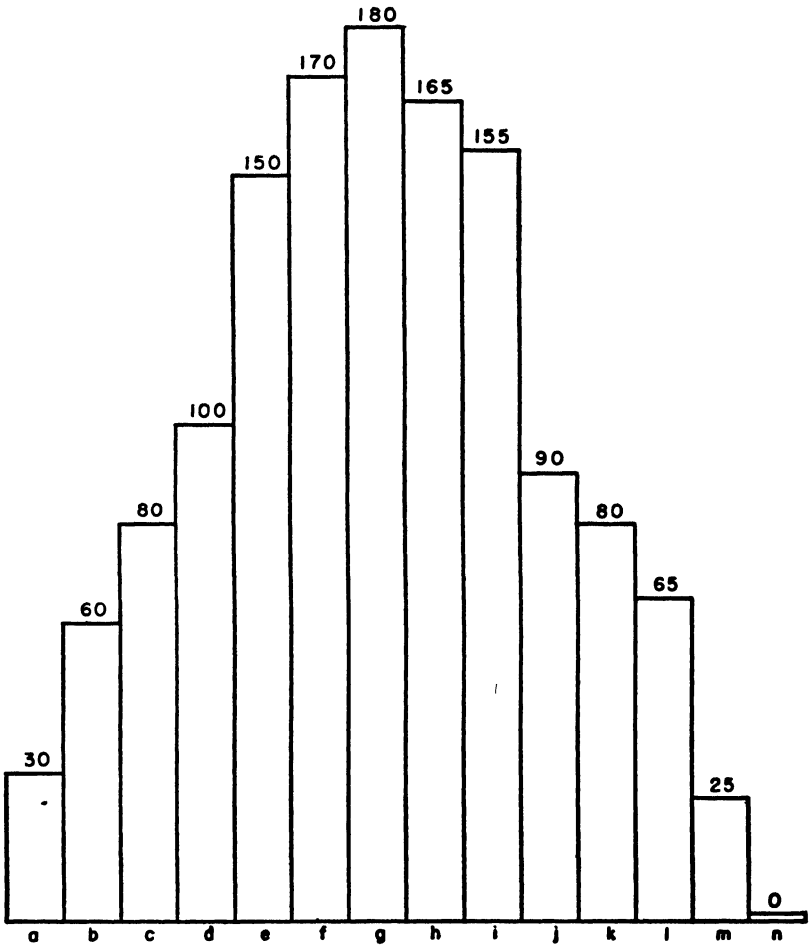


CHART III.—Increasing and decreasing returns.

Theoretically, consideration of the possibilities of success starts with the one man on an immense tract of land, which, of course, he cannot work; then it moves on to two men on such a tract, and the decision is that each might just earn his board. After half a dozen such attempts the student finally arrives at a point at which he believes he might make a living. A man who goes in for intensive farming begins with some reasonable objective, possibly 20 or 40 bu. per acre, depending on what region

he is studying. On Chart III a man might attempt to start his study at column *d*, although *e* would look more reasonable. Next he might increase his yield to *e* and *f* and might try the next two columns. This is as far as a man paying his own way would be likely to go.

Within the limits suggested, there is room to experiment to find the most advantageous amount of labor, to use more or less fertilizer, to plow deep or shallow, all without running through a fortune as Arthur Young did. Within narrow limits, each farmer may make observations on experimentation and may arrive at decisions valuable to him and his neighbors. Most recent experimentation with methods of procedure, with many kinds of new crops, and with animals, has not been done by isolated individuals. Any one farmer's experimenting will pertain primarily to the management of his own farm and household and the size of his own business. Whether he should farm within the limits of columns *f*, *g*, or *h* he will have to decide finally for himself. His decision and the ability to carry it through will determine whether or not he succeeds as a farmer. Some men succeed in a small way quite to the left of the greatest possible income; some go far beyond the excellent men working within the *f* to *h* limits; yet some succeed with big businesses in cheap surroundings.

No man does or can know exactly what results his efforts will yield in one year out of ten. For instance, excellent weather will often give him 25 per cent more income than he can regularly expect. Twice within one generation a world war has given farmers distinctly high prices, resulting in splendid returns to the most mediocre managers. For the years between wars prices were so low that few could make anything. Of course, even during the worst of times, good farmers do better than poor ones.

Farming does not lend itself to slide-rule calculation. Probably few farmers are able to estimate closely what they have cleared within a given year. Figuring farm income involves the value of the farm, which is always rather hard to determine, and that of livestock, which may not be known within 10 per cent. The machinery ordinarily will not sell for as much as it is worth to the man who keeps it to use. If the same man estimates the values year after year, he should, of course, be able to put about the same sort of estimate on the property from year to year; yet he probably cannot estimate within 10 per cent of the figure it would bring if offered for sale. Well-to-do farmers, however, are known as such to themselves and to their neighbors. Such a man will probably get his farm paid for, will have it well improved, and will know definitely that he is making money. But he will hardly have begun his operations with a tiny investment at the left-hand beginning of a curve. Working with some intelligence around the middle register of a long curve, he will have found a point at which he could win fairly good returns. He may spend his

lifetime without knowing whether he might not have done better on a farm two or three times as big.

Law of Diminishing Productivity. Experience has always proved this law to us. Even the small boy on a farm realizes the futility of putting hundreds of loads of manure on a single acre of land. He learns the futility of too much feed for a calf, the folly of too fast driving for a team, the foolishness of overcultivating corn. Before he can discuss these subjects he has learned the wisdom of moderation in a thousand ways and practices it all his later life. We can construct airplanes that will go several hundred miles per hour, but a horse still is tired after one hour at 10 miles. Lightning methods may apply here and there, but it still takes corn 100 or more days to mature. It still requires the best cornland to produce 100 bu. per acre. Each decade exceeds the earlier one in production, but only by a small percentage. A second, third, or sixth 100 lb. of fertilizer always yields a smaller return than preceding applications. After several centuries of careful farming we are still producing crops that are but a few times more prolific than those of our forefathers. For example, England is one of the best wheat-producing countries of the world; yet 50 bu. per acre is about as much as the English farmer can get. Cotton is a wonderful plant; yet with the best of breeding, cultivation, and constant care, we hardly get beyond half a bale per acre on an average and often do not reach that, though on a little choice land we have exceeded 4 bales per acre.

The life experience of mankind leads us all to a firm belief in some definite, final limitations on the production of good things. We positively do not expect an abundance of the things we live on to match the full extent of our desires. Every farmer knows that manure 6 in. deep over land will produce less crop than a half or quarter as much.

Proportioning Factors. One constant job with which the farmer has to concern himself is the balancing of his business. Should he employ more capital, more land, or more labor? Should some or all of these factors be reduced? We cannot afford to apply more and more labor to land indefinitely, since there is always a point beyond which it does not pay to go.

In adding units of one factor to another, shall we proceed as long as there is any return? Shall we, for example, continue to fertilize and cultivate land as long as there is any appreciable return? The most usual way of answering this question is to say that it will be best to make additions as long as they pay; this means that if we are borrowing money at 4 per cent, we will stop when our returns reach a point near 4 per cent. If we are not borrowing, it may be worth while to invest a last dollar that appears to return but 3 per cent. Ordinarily, however, it will not seem sound to

invest money that will return us less than, for example, a neighbor would pay us for the use of it.

The factors are always in a state of instability with respect to their cost and to some extent with respect to their usefulness to us at the moment. One factor often costs much more than the others; in this case we will use the scarce factor with greater care and more sparingly. If labor has become dear all at once, we will be careful as to our use of labor. No doubt we can substitute some machinery for labor. We can even let certain jobs go undone for a time or perhaps indefinitely if they should cost too much.

Something like half a dozen kinds of productive factors that are needed on most farms are likely to be short. Probably the most conspicuous shortage on the majority of farms is labor. This is due to several causes. The farmer usually dislikes the idea of hired labor. To a merchant who hires much labor as a regular thing it is no great matter to take on another man, woman, or boy; such employees usually come to the place of business in the morning when business begins and leave when it is finished in the evening, and hiring is rather impersonal so far as the employer himself is concerned. On the farm the situation is essentially different. The hired man may teach the farm children his own vocabulary and his own morals. To take a new hired man into the household means introducing into the family life new and often undesirable elements ranging from religion to table manners.

Labor itself is often difficult to add to the farm equipment. The difficulty comes from the apparent scarcity of labor, which arises from the fact that most farmers do not want labor for a year or a season, but merely temporarily. As a rule desirable labor is not available for a day, a week, or a month. As farming is usually done, the farmer and his family can do the greater part of the work throughout the year with only occasional hired help. About two-thirds of our farmers hire little help. The farmer and his wife are the main workers on most farms, while children are next in importance in getting the work done.

Are the Good Farmers Always on the Best Land? There had been farmers in some of the low-yielding counties of Iowa for 40 years. Always producing crops somewhat below the normal for the state, they may have been poorer farmers than the average. Better prices during the early part of the century started them at ditching and tilling and improving their yields. The much higher prices following the First World War and the increased yield from hybrid seed corn lifted these farmers, on what had been second-rate farms, at once to the highest level of any farmers in the state. Probably a few of the farmers found the new pace a little beyond them, but very clearly the majority of them rose to the occasion and very promptly became the best corn growers of Iowa.

Do the best farmers, presumably a few only, get the very best land? This would mean that the farmers who are strictly the best should eventually get all the best land. As one becomes acquainted with the farmers of a neighborhood, it seems that those who are on the best land are not all of one class; all the best farmers do not occupy all the choicest acres. In any given neighborhood it will seem that there is something essentially wrong with the doctrine.

For instance, in southern Wisconsin the farms have been occupied and worked for about 100 years. This would ordinarily mean about four full ownerships per farm, and it would furthermore mean that each of the four farmers who had been on each farm had stayed about the full length of time that he owned the land and worked it. This would mean that nobody lost a farm through foreclosure or gave up farming because of inability to continue as an owner. As a matter of fact very few farms were lost because of owners' inability to hold them and without doubt the most frequent sales were occasioned by the old age of the seller, widowhood, or some similar development. During this hundred years of ownership the price of land rose from something like $5 or $10 per acre to $200 or more.[1] After the First World War farm prices fell decidedly, so that the $200 farms sold at less than $100. Yet very few were sold. Prices did not rise much again till after 1940. At the present time very many of these farms belong to members of the same families who held them 40 years ago. The ability, however, of these people to buy land and pay for it outright shows a very great deal of divergence. Some farms have been continuously mortgaged for all of these years throughout two generations at least. On other farms mortgages have been paid off, and the owners have lent money to their neighbors by taking mortgages on their farms. One farmer in southern Wisconsin, with a 160-acre farm that was paid for, had close to $40,000 in loans on neighbors' farms, although he had begun with very little money. Some of the borrowers had borrowed about all they could get; their sons are still in possession of farms that have been in the family more than 50 years, but are still heavily mortgaged. These farms are about as good as the one whose owner had $40,000 out on loan.

How do men manage to hold onto farms for at least two generations when they are so much less efficient than the outstanding individual who, on the same kind of land, makes himself worth three or four times as much? They do it by growing about the same kinds of crops, with about as much yield per acre, and keeping cows that give nearly as much milk per cow, which they sell at the same price as the prosperous farmer. Though they are always a little behind the good farmer, the distance is not very great. Probably there is not a difference of 5 bu. of corn in the amount grown

[1] A few farms sold at $300, but most such sales were not concluded.

or more than a couple of hundred pounds of milk per cow in the yield of the most prosperous dairyman and those who never get their farms paid for. The less well-to-do farmers should not be pitied too much. Some of them are living good lives. They may give their children more schooling than the more prosperous. Their sons may become doctors and lawyers. Though simply as farmers these men would have to be reckoned as second class, their failures are not necessarily failures in any very deep sense. Perhaps they cared more for other things than for money. The man who paid for one farm and acquired the price of another in a comparatively short lifetime had several children, but their schooling extended little beyond eight grades; the men who borrowed some of his money at 6 per cent had children in school twice as long, and their financial failures were by no means absolute.

Many Men Are Imitators. If success is to be judged by production, it must be remembered that no neighborhood gets rid of all of its second-raters at one and the same time. They will stay on for years and generations on the best land or land nearly as good as the best. These men are not rooted out in a year or two because they easily learn to do what their more able neighbors are doing. Methods of growing crops are after all pretty visible. If three men in a township can regularly grow 75 bu. of corn per acre, their neighbors will not all be growing about half as much. Their neighbors will learn the proper methods, and they will learn fast. If better plowing and cultivating are done, these practices will spread over the township within a few years. It will be known at once that the few successful men spend $2 per acre for fertilizer for every acre of corn grown. A certain group of farmers needed no more demonstration than the fertilizing of a single square rod of corn, by a boy who brought the fertilizer from school ready mixed, to teach them the value of fertilizers. As soon as a few men have applied a ton of mixed fertilizer to a cornfield that has been farmed a hundred years or even half of that with only incidental fertilizing, it will be almost no time till nearly everybody is doing the same thing. One man or a very few can revolutionize the farming of a whole neighborhood. The majority are by no means fools. We all learn from our neighbors.

Knowledge spreads by imitation of the few who first get hold of it, and after it is once spread, it becomes the property of the community. For example, the Babcock test took months of hard work on the part of the inventor, but when the perfected method used is once seen, a limitless number of people could reproduce it if necessary. It is not necessary to go to the ends of the earth to find a few geniuses to do good farming. On the contrary, if we have a few thinkers, a few geniuses, a few scientists, at once we find plenty of people who can carry out the program as well as or

better than can the men who invented it, so long as it applies to something as general, as simple, and as obvious as are most of the principles of agriculture.

Will the best farmer always be found on the best land, drive the best horses, or use the best machinery? By no means! Consider the land of any community. Suppose there are 10 farms that appear to be the best and that there are just 12 best farmers within reach. Will 10 of these 12 best farmers eventually occupy the 10 best farms, or will some of them be on land worth nine-tenths as much per acre? Let us assume that these 12 best farms are known as such by all the men in the township, 150 of them. These farms are worth, let us say, $25 per acre more than any other farms. Will these 12 best farmers bid against one another for the 10 best farms? If they do, they will probably pay the owners of these farms prices so high that the sellers will get about all the advantage due to the superior excellence of the land, so that the buyers might be about as well off on second-grade land, which is abundant, let us assume, and sells for what many men can afford to pay. If, for example, the best land is thoroughly known as such and the best farmers are anxious to own it, the whole advantage of this choicest land will be available to those who hold it for sale. But a shrewd buyer will quit bidding on such land before the holders have been offered the last possible dollar for its advantages. On second-grade land the bidding is not so keen, and indeed much second-grade land may be made into first-class land.[2]

A man's good qualities are not all centered on one point in running a farm but are spread over a considerable number. Let us suppose—what is actually common—that the man's best qualities as a farmer pertain to the feeding of cattle and hogs rather than to the simpler problems connected with growing corn, oats, and hay. Rather soon after the bidding on the best land goes above its obvious worth to a large number of men, the long-headed farmer who considers the whole year's operations decides that the best farm available below those that once sold for a $25 premium, but are now going higher, is good enough, and buys such a farm. Of course first-class farmers who are able to make another $25 per acre through their own shrewdness are able eventually to pay for land at $50 per acre above the price of second-grade land and will eventually get their land paid for. They turn over, out of their business ability, another $25 payment above its normal competitive value preceding the time when the added number of best farmers began to raise the prices of land unduly above the regular market prices.

If we assume that the best farmers are plentiful enough so that they

[2] Many farmers put their main energy into the welfare of their families instead of into making more money, as they might do by improving their land.

might bid the best land up above its regular selling value and keep an advantage of $25 per acre over what such land would be worth to farmers of the next class below them, they would be paying out some part of this $25 and approaching a point where the advantage would be lost. Or suppose that part of these men did not care to contribute to the landowners the $25 that was supposedly a bonus to the buyer. This would mean that buyers would be obliged to accept land of second grade, for which, let us assume, buyers were not too plentiful. This being good land, they would find it worth their while to buy it; here their advantage due to skill might be $15 an acre instead of $25 as on the best land. Yet their advantage as cattle and hog feeders would be just as great as if they were on the highest-grade land, since they can feed stock just as well on one piece as on the other. Moreover, such men can usually find methods of increasing the yields of crops on the slightly poorer land, which may need only a little drainage or a little more fertilizer. Land is not to be strictly classified as good, better, or best in any final, definite, unchangeable order. Men with brains can usually hit on some means of making land that is not quite so good naturally into better land by the use of the many devices. But again, it does not follow that the so-called best land is necessarily best as a money-maker. There is no reason why 100 acres of corn on cheaper land may not produce as much as can be grown on 80 acres of the best land. It does not necessarily cost any more to raise a given number of bushels of corn at the rate of 60 bu. per acre than it does to grow the same amount at the rate of 100 bu. per acre. As a matter of fact, the heaviest yields per acre as a rule cost more per unit than on many fields producing somewhat less. It is by no means to be assumed that costs are always lower per unit on the heaviest-yielding tracts. Neither is it to be taken for granted that all the best farmers should be on the best of land. Much land is bid up too high, and in this case slightly inferior land is better worth its price.

Second-grade land is not necessarily subject to any serious disadvantages. It may be easier to work; the soil may be a little sandy. It may regularly produce 60 bu. of corn per acre instead of 80 bu., but with a little less work. To make money on this land, at its price, may be just as easy as to make money on land that will produce a somewhat larger crop and will therefore be called better land.

Do the Best Farmers Want the Best Land? What each intelligent farmer wants is land that is worth most for producing crops according to the cost, and it does not by any means always follow that the highest-priced land is more definitely worth what it costs than somewhat cheaper land. Land often varies from $100 to $150 per acre around a given neighborhood. That the better land is actually worth $50 per acre more than the cheaper land is not necessarily true. Whether it is depends on why the cheaper

land is cheaper, why it sells for less. It may be that the cheaper land simply needs draining or calls for a little more fertilizer; some years ago, more often than now, the primary need might be for lime; or the great lack might be just $10 worth of work per acre in removing stumps or stones. Certain it is that the best land is not the cheapest; that second-grade land may pay as well, counting its cost, as definitely better land; and that the very best land is not always in the hands of the best farmer. One test of the best farmer is his ability to raise about as good crops on whatever land he has, which may be and often is second-class.)

Farming Is Complex. If farming always consisted as it sometimes does of growing merely one crop, such as cotton, tobacco, or wheat, it would be easier to judge farmers as to their skill. But, although we have many one-line farmers, we have many, many more whose undertakings are rather complex. For example, corn is possibly the main crop of the country; yet the usual corn grower is a cattle feeder or hog feeder, milks cows, grows sugar beets or popcorn, sells seed corn, or has any two, three, or six other sources of income. Hence his real income does not depend merely on his corn income or on any one line of effort. A farmer's income depends on his ability to combine, coordinate, and keep all his undertakings up to a high standard.

Land, Labor, Capital, and Management. In the setup of farming the most important factor after labor is land. As a rule a farmer can get about what land he needs either by buying or by renting. In a country like England it does not greatly matter whether a man is an owner or a tenant; many tenants stay on the same farm for a lifetime. In the United States, since the farm is more often bought and sold, land has usually been rather high in price; tenants do not stay permanently on one piece, and the status of the tenant has not been too good. As a rule our improvements have not been too stable or too satisfactory, especially on rented farms.

In America farm management appears more or less incidental. The farmer spends most of his time working. He is seldom at his neighbors' homes. He attends few meetings where farm affairs are talked over. Ordinarily he makes up his own mind about major questions like when to buy or sell or when to change his style of farming. He sees his county agent on rather rare occasions. Thus, while the English farmer is frequently a genuine manager, the American farmer is a genuine laborer, handling occasional management questions. As to money and its use, the American farmer seems usually to be rather short of funds. Nevertheless Wisconsin farmers owned, 25 years ago, millions of dollars' worth of farm mortgages on other farms than their own. Before the First World War, when prices seemed stable, a considerable number apparently preferred putting their money into mortgages rather than into first-class homes or improvements

on their own farms. The latter came with a rush when high prices followed that war. With falling farm prices over a period of nearly 20 years, from the early twenties till the Second World War, farm improvements and to a smaller extent equipment receded to a low level.

Money capital works more or less automatically. When prices are high, money is easy to get hold of, generally speaking. When they are low, money appears to be scarce. At present (1947) farmers have plenty of money. Within a few years they will probably again be short. Lack of money capital is not what ails farmers. Their troubles come from falling prices, from small incomes, and from bad markets with lack of demand at home and abroad. The fact is the world has been a different world for the American farmer for the past 20 years from what he was always used to before then. His main troubles were quite beyond the mere matter of the amount of cash available to the American people.

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Chapter 10

INTENSITY OF CULTIVATION[1]

Subjective Considerations. The question of intensity of cultivation is as old as economics; yet it keeps forever coming up for more definite statement of how the proper degree of intensity is visualized and approached. The most usual way out of the difficulty is to assume the most advantageous combination of land, labor, and capital and let it go at that. No doubt there always is an ideal combination. But it involves judgment and choice, like Whistler's paints, which he said he always mixed with brains. The problem of intensity of culture is never purely objective. It is not so simple as making the proper combination of air and gasoline in a mixture for power, since it makes no difference who adjusts a carburetor; so long as it is properly adjusted, the results are the best obtainable. On the contrary, in the combination of land, labor, and capital for producing the best results, the personality of the man who effects the combination makes all the difference imaginable in the results. A gasoline engine in the hands of a novice may do substantially all it is capable of doing, though it has been planned, adjusted, and repaired by parties not immediately concerned with its work. A farm can hardly be so standardized and managed. The work of the entrepreneur is bound up in agricultural operations almost as though he were a vital part of an organism; he is the active and indeed indispensable agent.

Ability of the Entrepreneur as the Limiting Factor. Whether or not the return to the entrepreneur is regarded as a part of the larger category of wages, it must be recognized that the limiting factor *par excellence* is his ability. The limits may be found in his unwillingness to undergo greater strain, his reaching the point of losing money, or his choosing a certain measure of enjoyment in preference to further work. Any one of these conditions means that he is not in a position or attitude for further

[1] Adapted from an article in *The Quarterly Journal of Economics*, August, 1922, by B. H. Hibbard.

expansion. In other words, the point of diminishing returns has been reached, and individual income is thereby circumscribed; likewise social income, because of this fact, is held within certain positive bounds.

The proper proportioning of the factors of production, which is the means of arriving at the proper degree of intensity of culture, involves four variables. Since no problem can be discussed with four variables, it is necessary to assume metes and bounds for all but one at any given time. For convenience the ability of the entrepreneur, which no doubt is more or less elastic, may be taken as fixed; certainly it is by all means the most definitely fixed of all the factors. There is a limit beyond which an entrepreneur does not care to go in the effort to increase his income. In many cases it is a limit beyond which his banker refuses to carry him. But whether it be the limit set by the banker, by his own courage or lack of courage, by his desire for leisure and avocations, or by sheer managing ability, it must in some manner reach the limit beyond which it will not for the time being go. The entrepreneur's managing ability may be legitimately viewed as fixed.

For convenience it will be desirable to put capital and labor into one category. From the entrepreneur's standpoint they are both reducible to a money unit. This combined factor is subject to variations that affect intensity of culture, but they may be waived for later consideration.

Three Statements of the Problem. The problem of intensity of culture may be stated in three ways, or rather it must be viewed from three standpoints:

1. It may be assumed that entrepreneurship is fixed and that capital and land are applied to it in varying amounts.
2. Land may be viewed as fixed and capital varied, entrepreneurship being taken for granted.
3. Capital may be fixed and land varied, entrepreneurship still being assumed.

A possible fourth view is hardly more than a corollary to the second and third. It may, at least in practice, be necessary for the entrepreneur to treat both land and capital as variables while working out his proportions. This is a comparatively minor consideration, though it may be very difficult to handle.

Concerning the first point of view, it may very safely be reiterated that entrepreneurship is the most definitely limited of all the factors involved. At the same time it is the one that most lacks visible proportions and tangible measurement. But if it were not just as genuinely limited as land or capital, we should have numerous bonanza farms. In fact, so far as a given individual is concerned, the most important limiting factor is his own managing ability, or he could manage equally well the agriculture of a

township, a county, or a state. It may be objected that this is not the issue; entrepreneurship may set the bounds of size of business, but not enter into the question of proportions of factors used. This at once raises the question how such an assumption can be made in view of the necessity of working out, on the part of each entrepreneur, the proportions that for him are best. How this can be done without using both land and capital, varying each alternately, then simultaneously, is, to put it mildly, not obvious. Could the farmer, for example, determine by any possibility that he could do best with any particular amount of capital before discovering the amount of land with which to combine it, the problem would be simple both theoretically and practically. Since there appears to be no means by which this measurement of entrepreneurship can be made in advance of an experiment involving all factors, it will be as well to consider the second and third points of view before undertaking to say the final word respecting the first count.

In accordance with the second point of view, land may be viewed as fixed. Very properly it may be objected that in a theoretical case land is never fixed, but may be varied in either direction, more or less. Even so, land is fixed in quantity for the majority of farmers over appreciable periods of time. Perhaps we are not dealing with the majority of farmers, but only with the few who are alert enough to attempt an intelligent solution of the problem of intensity of culture. But these too will in both theory and practice deal with quantities of land that are fixed during a given experiment. We may have, then, a fixed amount of land, fixed not by inertia, heredity, or passing circumstance, but by the judgment of the entrepreneur. This may be merely a trial judgment, but even so it means that for the time the amount of land is fixed. On this amount of land the entrepreneur expends capital. The question is: How much? The answer is easy. He will continue to expend capital until the last dollar just pays for itself. By so doing, assuming that he can get capital at commercial rates up to the limit of his ability as an entrepreneur, he will increase his income, and it is income he is after, total income, not any given rate on a limited sum.

We may next inquire how this hypothetical farmer is to know that he is using the right amount of land. He will use his judgment, his observation, and his experience and make trials with different amounts. The more vital limitation is in ability to handle capital rather than land, but capital cannot be managed except in connection with land. Moreover, the optimum amount of capital for any entrepreneur cannot be discovered by using wrong proportions, since he could not decide whether the failure to arrive at satisfactory results in a given trial was due to poor management or to a wrong combination. He will find out as he approximates the correct

combination, and in doing so he will of necessity find the proper amount of land to be used with a certain amount of capital for favorable returns on a particular enterprise. For any serious trial the amount of land must be fixed, no matter how much or how often it be varied for subsequent trials. Thus land may be viewed as fixed and capital applied in every trial until the last increment just pays its cost. For a vast number of farmers, land is very firmly fixed in amount for many years or for life. For the adaptable man, it is fixed at different amounts until the most favorable acreage is approximated.

In the third view, capital may be regarded as fixed. No doubt this is the most elastic and possibly the most satisfactory supposition. The real limitation remains managing ability, but the best measure of this ability is the capital that can be advantageously handled. To assume that capital really is fixed by circumstances and not by ability is as crude as to assume that land is inalterably fixed. The able entrepreneur uses capital that he happens to have or can borrow or disposes of a surplus of capital, exactly as in the case of quantities of land. He finds the amount that will yield him the largest income by taxing his entrepreneurship to the limit, and thus he comes to the margin of his powers. He may, as a supermarginal farmer, be able to make his capital earn something well above average commercial returns. For instance, his curve of returns on his $1,000 units may at its highest point rise well above that of his competitors. There is no reason why he might not stop his investments at a point where he was making, say, 20 per cent. He could make a larger absolute (not percentage) income by increasing his investments until the last increment just paid its cost, but if what he wants is to get the highest average, he invests a lesser amount and secures a return above the commercial rate from the last dollar.

Once it is decided to view capital as fixed, all the entrepreneur needs to do in order to find his best proportions is to add or subtract land until the last acre just pays for itself. When this point is discovered, he has his best proportions. This process is not satisfactory simply because the major premise will not bear analysis; it must be taken on faith. Just as with land, capital must be fixed for a given time. A farmer decides on the number of men and teams and the amount of other equipment to be used in farming for a given year, without necessarily deciding in advance the exact acreage of land. He arrives at a decision as to land and after the year is over does his best to decide whether he had too much or too little. If it appears that he was wide of the mark, he will in most cases vary the amount of capital as well as the amount of land in projecting a new trial. To decide that his capital is right in amount, but that the land is wrong, means either that he has approached very nearly to the correct proportion or that he

decides one question independently of the other. To know how much capital is best without trying it out would be to know the solution of the problem in advance of the trial. This could be done only by arriving at a decision based on experiments that gave results short of the optimum or by solving the proportion riddle on a trial plot and carrying the result over to the whole. Neither hypothesis stands scrutiny.

It is, however, beyond all doubt true that so long as capital remains fixed in amount, whether rightly or wrongly, the entrepreneur will, in following his own interests, apply land to it until the last increment just pays for itself. If the land bears a rent, it will mean that the returns cover the expense of operation and the rent charge; if the land is free, it will mean that the returns just cover the outlay for operation. Land will be added only until the margin above cost vanishes.

Finally, managing ability may be taken as fixed and both land and capital as variables. This is the actual situation confronting the operating entrepreneur. In adding increments of land and capital, he may assume the proportions, which constitute the solution of the question at issue. If he add units of first one and then the other, he will show himself very human and adaptable and will stand some chance of approaching the goal eventually; each factor will be fixed for a time, but it will not remain fixed until the proper proportions have been found.

Partial Experiments. An experiment may be made with something less than the whole amount of land or capital to arrive at their optimum apportionment. However logical this procedure may seem, it is open to fairly fundamental question.

For example, does the limitation of the entrepreneur's ability enter into the proportions of land and capital that are found best? It may be contended that whatever the optimum proportion as between land and capital, no changes in this relationship will be contingent on the ability of the entrepreneur to handle more or fewer units. However, it is a matter of common observation that as the size of the enterprise varies up or down, there is a corresponding though not necessarily proportional change in the degree of intensity of culture. For example, suppose a farmer finds the best degree of intensity on 80 acres, but feels able to manage three eighties. Can he carry the same intensity over the additional two eighties? He can if his degree of intensity on the one eighty is adapted to the operation of the full-sized unit. Merely to assume that such is the case is to beg the question. Finding the proper degree of intensity on the three eighties is the problem, and finding the best proportion for the whole enterprise from any one part of it is possible only on paper. This is because the manager has no way of knowing, while running the experiment, that he is giving it any exact proportion of his managing ability; he cannot assume

his proportions, after trying out part of his farm with a corresponding part of his entire equipment and management, and calculate on this basis the size of the enterprise for succeeding years. That a manager may get useful suggestions from an experiment involving part of his farm is beyond argument. But with all possible suggestions garnered, the business must still be tried out as a whole before either proportions or size can be determined.

Difficulties of the Trial Method. If proportions can be determined by the laboratory method, the possibility should be at least theoretically demonstrable; tables and diagrams can be constructed showing how the problem is solved. Suppose, instead, an attempt is made to visualize the operations of a real operator; such a demonstration should be fully as persuasive. If it be supposed that the trial, a laboratory experiment, as it were, is conducted on a small scale, the troubles suggest themselves at once. It is hard to find the right combination on a small area as a gauge for use on a larger area. For that matter, since the experimental operations might just as well be on a large scale, it is hard to adjust the duties of the entrepreneur so as to know how much less to operate or how to operate it.

These generalizations can be illustrated. Suppose a farmer wishes to determine the optimum combination for the cultivation of corn. He tries a 10-acre field and by the correct combination of check plots finds it most profitable to plow 7 in. deep, harrow four times, plant in drills instead of hills, cultivate three times instead of four, and do one day's hand weeding per acre. Can he apply these findings to the area he thinks it best to attempt? It may happen that he plans to grow 80 acres of corn. The number of operations of each kind performed may be done on the larger field the same as on the smaller one. The plowing and harrowing in themselves should occasion no difficulty, but the chances are that it will be relatively harder to plow at the rather unusual depth and to harrow at advantageous times. Theoretically it may be shown that the larger fields are logical multiples of the smaller and that the work could be done in the same manner, but in all probability practice will not bear this out. For instance, the small cornfield was drilled, cultivated three times, and given one day's hand labor per acre. The larger field should be handled in the same manner, but the chances are that it will not. The weather will become more of a factor when the experiment assumes larger proportions; so will such matters as hiring labor in the requisite quality and amount. If the farmer, finding that a given amount of labor and equipment could be used advantageously on 20 acres, should decide to determine the proportion for his larger operations on the same basis, he could easily multiply the labor and capital by four in getting ready for the 80 acres; but actually things hardly ever work this way. An attempt is commonly made to

economize on equipment as the unit is enlarged, and inevitably the ability of the entrepreneur is a constant and therefore not subject to automatic expansion and contraction to fit the different units operated. It will be found that cultivating corn three times does not give the same results under one condition as under others. In the experiment the three cultivations may have been made at the most advantageous times, first as soon as the corn was big enough and afterward when it needed cultivation, not simply when other work permitted cultivation to be done conveniently. Hand labor of a day per acre, though it may have proved profitable on 10 acres, would again and again be found not feasible on 100 acres. Of course hand cultivation could be omitted in both cases. But here is just the point. The experiment should fit the conditions of the full area, but the full area carries its own conditions and thereby determines to a degree its own proper intensity of culture. The trial area will actually work when it is big enough to absorb all the available capital. At this point we have to abandon the idea of predetermining proportions between or among factors.[2]

Equality of Income at the Margin. If the foregoing reasoning is correct, it will follow that all managers, marginal and supermarginal, large and small, will find no stopping place in applying land to capital until the last dollar just balances its cost, until the last acre of land just pays for itself, and until the proportion is such that land and capital costs are alike in returns per value unit. The average returns per dollar will be high for some, low for others. How high they will go depends on the ability of the manager. The lower limit is commercial return so long as a deficit is not made up out of wages. But all from the best to the poorest will be pushed toward investing until the the last increment brings in no added returns above the cost, and at these margins all men are equal. As to proportions there may be no two cases alike, of average incomes no two alike. But in each case there will be a best proportion, and the farmer will find it by using all his ability as an entrepreneur and, alternately fixing capital and land, by proceeding until his income can no longer be augmented by further additions to either or both of those factors. The margin is reached where cost and income are equal.

The discussion thus far has assumed the point of view of a business projected for at least a year in advance. During each year the problem is bound to assume different aspects. After every plan has been made as carefully as possible and the season has advanced to the point where acreages cannot profitably be changed, there will be constant opportunities to invest in a given project more capital or less than was contemplated. The aggregate amount of capital used may be rigidly limited to a sum previously

[2] The effect of fertilizer might well be discussed here.

known. It may be all that is obtainable. The chances, however, are that no such definite bounds are set. Capital is usually obtainable with greater or less ease, depending on the amount wanted. A certain amount is in the possession of the entrepreneur. Another amount can be obtained at commercial rates without trouble. Still more can usually be had at greater cost in both effort and interest; the law of increasing cost operates as truly in the work of getting the use of capital which one does not own as in the creation of more capital in the form of goods.

Social Aspect of Intensity of Culture. The question may very properly be asked whether society is best served by the economic forces that constantly put the ablest farmer in possession of land, usually the best land, and as constantly push the inefficient out. This question becomes especially pertinent when it develops, as well it may, that small farmers are giving place to larger farmers. To the extent that this happens there will be fewer farmers, though perhaps not fewer persons engaged in agriculture, on a given area. From the standpoint of production the case is not open to argument. Society is best served by farmers who get the most out of land, capital, and labor. The only question at issue becomes, then, the relative social advantage of ownership of land as opposed to whatever may displace it if inefficient farmers should give way to more efficient. This brings up other considerations. The intensity of culture that gives the best results to farmers individually will also give the best results socially so far as ownership and use of land are concerned, if we judge by the standards of a healthy society. If from the standpoint of social pathology it should become necessary to use land as a prophylactic, economic considerations will of necessity be subordinated. Until that time comes, the impersonal workings of the law of diminishing returns, of which intensity of culture is a leading manifestation, are in harmony with the social good.

EFFECT OF CHANGE OF PRICE OF PRODUCE ON INTENSITY OF CULTIVATION

Every now and then the farmer is confronted by a situation such as occurred in the spring of 1917. Prices of what he had to sell rose rapidly while costs of production remained relatively constant. Likewise, the rent of land remained about at the old level. What effect does such a situation have on the farmer who is always trying to adjust his land and capital in such a way as to get the most out of it for himself? Before attempting to answer the question it may be well to note the fact that the case is temporary, for the inevitable tendency is always to return to the original proportions. An abnormal relationship may last for a few years, however, and the tendency to return to the former balance may never be more than partially realized; indeed the abnormal situation may persist until it be-

comes a new norm. Disturbances such as that of 1917 occur constantly in varying degrees. This one was extreme. Readjustments may be so slight as to escape observation nine times out of ten; the tenth time they are likely to be conspicuous.

For convenience we will do a little violence to the facts as they confronted the farmer in 1917 and assume that prices of farm produce doubled while costs of labor and capital remained constant, rent also remaining constant. What was the best move for the farmer to make regarding the proportions of capital (including labor) and land used in his enterprise? Table XI will be useful in deciding the matter.

TABLE XI.—EXPENSES PER ACRE, GROSS RETURNS

Expenses per acre other than rent	Rent per acre	Total cost	Value of crop	Increase in	
				Cost	Value of crop
$5	$5	$10	$11		
10	5	15	15	$5	$4
15	5	20	21	5	6
20	5	25	24	5	3
25	5	30	26	5	2

By doubling the value of the produce, the table becomes as follows:

Expenses per acre other than rent	Rent per acre	Total cost	Value of crop	Increase in	
				Cost	Value of crop
$5	$5	$10	$22		
10	5	15	30	$5	$8
15	5	20	42	5	12
20	5	25	48	5	6
25	5	30	52	5	4

Thus as the value of the product was doubled the optimum expenditure per acre, either with or without rent, increased from $15 to $20.

One more hypothesis may be of interest. If the price of produce had fallen 50 per cent, other things remaining the same, Table XI would then appear as follows:

Expenses per acre other than rent	Rent per acre	Total cost	Value of crop	Increase in	
				Cost	Value of crop
$5	$5	$10	$5.50		
10	5	15	7.50	$5	$2 00
15	5	20	10.50	5	3.00
20	5	25	12.00	5	1.50
25	5	30	13 00	5	1.00

As was to be expected, the proportion most favorable is now the least amount applied per acre, or $5 in addition to the rental value of the land. It will be observed that this is the optimum proportion because it is accompanied by the least loss. Actually, the farmer could not afford to grow the crop in these circumstances, because the total value of the product is only 50 cents more than the rent charges, whereas it required $5 capital and labor additional cost to produce this gross value.

Payment of Rent Reflects Intensity of Culture. It may be objected that the above illustrations are based on a particular set of figures and that some other set might fail to show a similar result. This criticism is always in point when a generalization is attempted on the basis of an arbitrary instance. However, it is not necessary to rely on any particular table. It may be assumed that the proposition has been proved, not here but by reasoning generally accepted, that free land will be farmed less intensively than land commanding a rent. Rent may be imposed whenever there is a surplus of income above capital and labor costs. Because of this fact free land ordinarily represents land that is so situated or the production from which is so small that little or no monetary surplus exists. For this reason it follows that when an individual pays rent in addition to other costs of operation, he is presumably justified in this greater per acre cost because of greater per acre returns.

The above discussion has not regarded either capital or land as fixed in amount and has regarded only the proportion as being in question. The objection to this view hinges on the difficulty involved in apportioning the attention of the entrepreneur to a single acre or to any sum of acres short of the number included in his enterprise.

TABLE XII.—INTENSITY OF CULTURE AFFECTED BY COSTS

Expenses per acre			Gross returns	Increase in	
Labor	Capital	Total cost		Costs	Returns
$5.00	$7.50	$12.50	$21		
7.50	8.00	15.50	27	$3	$6
10.00	8.50	18.50	31	3	4
12.50	9.00	21 50	34	3	3
15.00	9.50	24.50	35	3	1

Effect of Change in Wages or Capital Cost. Another question is: What will happen if wages should rise or fall while prices of produce, interest, and rent remain constant? Thus, while we united capital and labor into one term for convenient handling in discussing the degree of intensity in the first instance, it is necessary to separate them when considering the changes that may follow a rise or fall in wages or in capital costs, the two

factors not acting the same in the matter of percentage changes. The occasion for such a discussion is abundantly illustrated in the recent experiences of farmers with the labor question. Table XII will illustrate.

Increasing the rate of wages by 100 per cent, the table becomes:

Expenses per acre			Gross returns	Increase in	
Labor	Capital	Total cost		Costs	Returns
$10	$7 50	$17.50	$21		
15	8.00	23 00	27	$5.50	$6
20	8.50	28.50	31	5.50	4
25	9.00	34.00	34	5.50	3
30	9 50	39 50	35	5.50	1

With the lower rate of wages the use of two or three additional units of labor will be most profitable. With increases in costs of labor the individual farm operator will find it to his advantage to farm less intensively, since only one additional unit of labor will pay for itself.

Intensity will vary inversely with these costs. As shown by the table, the increase in wages results in a movement toward less intensive culture. In actual practice the case would not be so simple. The farmer confronted with higher wages is bound to think of a way to escape the substitution of capital for labor. He will buy a gang plow, a tractor, a milking machine, or more haying tools, with the hope of keeping up his intensity of culture without incurring the added expense resulting from the higher wages.

Changes in prices of produce, wages, and capital cost will always affect desire for the other factors and hence change their price. The result will be a new balance, which is likely to be similar to the previous balance before the disturbance came, though not identical with it. The importance of the immediate effect may be appreciated when it is remembered that more or less occasion for a readjustment no doubt takes place yearly or even oftener.

A change in the cost of capital goods or in interest rates, where wages do not change correspondingly, will bring about changes in intensity of culture similar to those noted in the above discussion of changes due to variation in wages. If capital goods cost more, relatively fewer will be used; if they cost less, more will be used. Thus intensity of culture will vary conversely with these costs.

Whether or not rent is to be counted as a cost is disputed. In any case it is a cost to the individual who buys land as part of his equipment for producing farm crops. The solution of the intensity-of-culture riddle cannot in any case be worked out in practice as a mere arithmetical calculation.

Chapter 11

VALUATION OF FARM LAND AND ITS PRODUCTS

Doubtless as a consequence of land values remaining at so constant a figure for such a long period of years, a powerful feeling developed that land had two main value traits, *viz.*, that it would continue to be valuable and that it would also continue to increase in value. This was due to the conviction that the amount of land available was definitely limited, while mankind was destined to increase in numbers. It was taken for granted that man could not live without land and that more and more land would always be wanted; there would always be more wars and more fighting for land, with a gain on the part of the stronger people and loss on the part of the weaker.

Claims to Land. Since the claim to land is the main basis for making a living, humanity has for a long time made claims to land running into a period of years. For example, nations lay claims to land that run back to the indefinite past. In England the ownership of land is often traced back to the coming of the Normans. In this country we trace ownership back to the first settlement by European peoples something like three hundred years ago. The American Indians who preceded white men in this country conceived of land as belonging to the tribe; private ownership of individual pieces of land was not part of their economy. White men brought the system of private holding and use of individual tracts, and each tract became of value to the individual holder. The value may have been high or low depending on such circumstances as the effort and time required to clear it, the food it would produce in relation to other tracts that might be cleared or purchased, and the personal and economic security a family felt in living on it.

Individuals can do little about land values as extending any great distance into the future. People are always interested in the future, but seldom in the future of the century after next. They want to know what is going to happen within one year or a couple, within 10 years or 40. An active

interest is felt in land values only as people are concerned about what is likely to happen within the fairly immediate future. Undoubtedly it is the concern over what is to happen within the next very few decades that has dictated rates of interest, the length of notes, the safety of securities, and many events and circumstances surrounding and making up the great business affairs of the day. Among these circumstances we are interested primarily in events that begin and end within comparatively short periods of time. We are not much stirred by the thought of what will happen beyond a period of something like 30 years, and few ever think with any vividness about a time more than half a century ahead.

Farm Land Values Determined by Farm Income. Since farms are ordinarily held because of their capacity to produce, the value placed on land is largely determined by this fact. Land values rise when the price of goods produced from land rise; they fall when these prices drop. This is part of the explanation of the fall of farm land prices following war periods. Land values go down then because they had first gone so high that no continuing level of prices could be expected to maintain them. Land values do not move with the ups and downs of crop prices of a single year. They do move fairly rapidly with continued movement of prices in one direction. Prices were low for most of the 20 years following the First World War, and it took that long to get land prices down where they would leave a farmer enough from year to year for payments on the principal. Beginning in 1941, however, and in many states a year or two earlier, land prices began to rise.

Land Value and Rent. The rental charge for money is spoken of as interest. When the investment is in the form of land, it is called rent. If a farm is worth $10,000 and the interest rate is 4 per cent, the owner will get $400 a year from the investment, or $400 rent. It is probably more nearly accurate to determine the rent or yearly income of the land and from this the value of the land for farming. In the above illustration the farm's production resulted in a yearly rental of $400. This would capitalize at $10,000, with an interest rate of 4 per cent.

Until into the twenties it was believed that land rents would always increase; in America at least, from 1890 or thereabout, it seemed that rents were bound to continue to increase in amount per acre. This view was based on the beliefs that land was definitely limited in amount and that population was destined to grow indefinitely. During the early years of the twentieth century this nation began to shut the doors to foreigners who wished to move in and become Americans. About the same time it became evident that our population on the whole was diminishing greatly in its capacity or desire to reproduce; accepted views about the future numbers of the American population had to reckon with distinctly novel ideas.

The numbers of Americans were plainly destined to be much smaller than had long been assumed as probable. With another half century of diminishing numbers America would reach or at least approach a stationary population. This view has now been quite generally accepted.

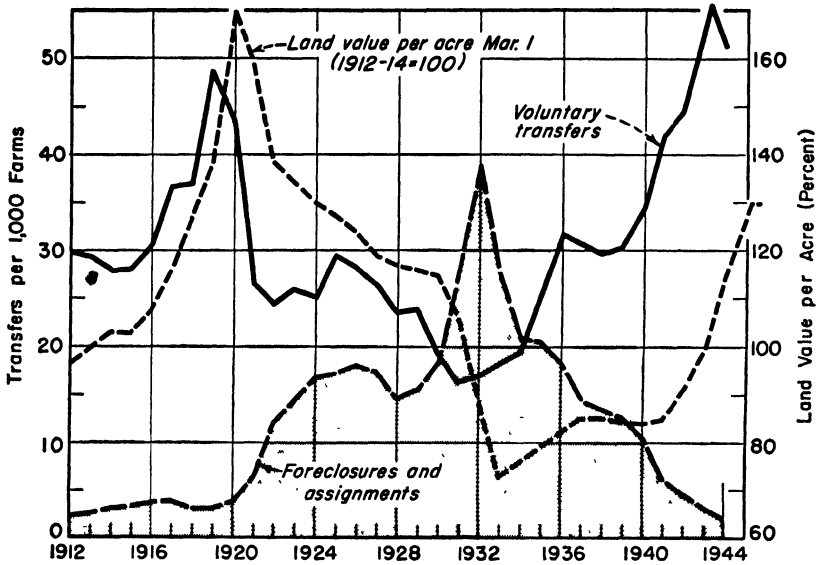


CHART IV.—Volume of foreclosures and assignments, voluntary transfers, and index numbers of value per acre of farm real estate, United States, 1912–1945.

The volume of voluntary sales, during the year ended March 1945, decreased 8 per cent from the record level of the previous year, when a peak almost 15 per cent above that for the boom year 1919 was reached. Foreclosures and assignments reached their peak in 1932 but have now declined to levels comparable to those of the years before 1920. (*The Farm Real Estate Situation, 1944–1945*, p. 16, *U. S. Department of Agriculture, Circ.* 743.)

Trends of Rents. While there were some instances in which the value of land either for sale or for rent showed decreases as well as increases, little attention was paid to the falls; only the increases attracted real attention. From the Civil War for at least 30 years land fell in price for both sale and rent in large parts of New England, the Middle Atlantic states, and occasionally others of the older states of the Union. In general, rough land held in small tracts went down in price. Hilly Eastern farms went down in price steadily, and a lot of such land disappeared from farm use. Even Ohio showed a decline in the average value of farms in the older counties with their rough topography.

Over larger areas, however, where the land was of fairly good quality and smooth enough to permit its being worked by horses driven in good-

sized teams, which reduced the amount of man power required per acre, the value of land rose and the size of farms increased. Farms of smoother surface, better soil, and larger area were developed. During the latter part of the nineteenth and the early part of the twentieth century the farms of the upper Mississippi Valley, together with those farther west and the greater part of the South, came fast to the front as the leading agricultural part of the country, leaving the Eastern states and a few others in second place.

The period of increasing land values, with greatly rising rents, ran from the beginning of the nineteenth century till 1920. From 1920 till 1940 land values were inactive, falling through that period of 20 years, and if it had not been for the Second World War at the close of the fourth decade of the century, we should clearly have seen a further drop in general farm-land values. Thus rents, which fell so violently following 1920, were still falling until revived by the war-stimulated prices of 1940.

Land-value Formulas. Let V equal the value of the land, a the annual returns, r the rate of interest, t the time it runs in years; we may then make the following statements. The expression we wish to explain is that $V = a/r$. This expression, which every real-estate man knows, means that the value of land is equal to the annual amount of interest (reckoned on the full value of the land) divided by the annual rate of interest.

Suppose the annual return of a farm is a dollars per year; then its value would be expressed as follows:

$$(1) \quad V = \frac{a}{1+r} + \frac{a}{(1+r)^2} + \frac{a}{(1+r)^3} \ldots \text{to an infinitely small sum}$$

$$(2) \quad \frac{V}{1+r} = \frac{a}{(1+r)^2} + \frac{a}{(1+r)^3} \ldots \text{to an equally small sum}$$

Equation (1) multiplied by $\frac{1}{1+r}$ gives us Eq. (2). Subtract (2) from (1) and we get

$$V - \frac{V}{1+r} = \frac{a}{1+r}$$

All subsequent terms disappear, giving us

$$V\left(1 - \frac{1}{1+r}\right) = \frac{a}{1+r}$$

$$V = \frac{\frac{a}{1+r}}{1 - \frac{1}{1+r}} \quad \text{or} \quad \frac{\frac{a}{1+r}}{\frac{r}{1+r}} = \frac{a}{r}$$

Thus $V = a/r$ and always must, because everything else cancels out. If a farm is worth $10,000 and the interest is 4 per cent, the owner will get $400 a year from the investment. If he owed the whole value of the farm, with that payment he would just hold his debt at the 100 per cent level. As a rule a man cannot buy on this basis, but is required to pay down well

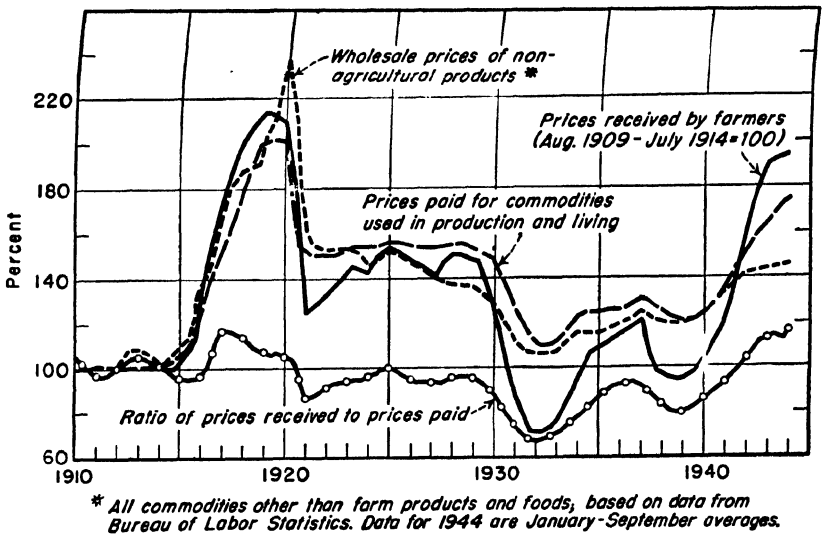


CHART V.—The rise in farm prices. Prices received and paid by farmers and the ratio and wholesale prices of nonagricultural products, United States, 1910–1944 (1910–1914 = 100).

toward half of the principal, or he buys on some basis other than that of titled ownership and on giving a contract becomes some sort of conditional owner.

Prices of Farm Products. Since the yearly income from land is dependent on the prices received for farm products, it is well to know something of the movement of prices of some of the more important farm products. Wheat, corn, and cotton represent the crop production of three of our more extensive agricultural areas, while hogs, beef, and dairy products are representative of livestock production.

The price of cotton to a great extent determines the land values of the cotton-producing South as well as the welfare of its people. The change in the price of this product over the past 100 years emphasizes the importance of price stability if the wide fluctuations in farm incomes and land values are to be averted.

Farm Prices of the New Deal. We had set prices on cotton, corn, and wheat at such levels that they could not be regularly exported, and

our products were so heavy that we could not possibly use them up. Just what this would have led to if a great war had not broken out in 1939 is past finding out. As it is, we found the demand for agricultural products equal to the supply.

We had, for example, an extra supply of a year's crop of cotton on hand and did not know what to do with it. Cotton growers had insisted on having a price about equal to the prices of the years just before 1929.[1] With the exception of the war prices of 1917 and 1918 and for another 10 years following, our cotton prices were high, from 16 to more than 30 cents a pound, until the collapse of prices in 1929. The South could see no reason why it should not get the high prices of the twenties, and Congress voted to pay them, with production held down sufficiently so that most of the new crop would get used up. Each time this was tried the new crop was larger than normal, so that the amount of cotton that remained on hand was the equivalent of a full year's supply. The government not only bought this extra amount of cotton, but bought it at a high price. Then came the Second World War with its unusual demands for cotton, and there was little trouble in disposing of much of the quantity.[2]

The world no longer wanted our cotton at a high price. We had become used to high prices and could hardly get along on such low prices as many other nations were apparently willing to live on. During the war we once more received almost the highest prices ever paid for cotton. When such countries as Russia, Egypt, China, and two or three countries of South America are once more back in the European market, they will again set prices at a level too low for us. Then we will again have to hold our production down and keep our prices twice as high as the other cotton-growing nations of the world can get along on. The only alternative will be for us to try to get along on world prices. Cotton growing is probably in the worst situation of all our lines of agricultural effort, but other crops are not unaffected. In the case of wheat there was also much distress.

Under the urge of the Hoover attempt to stimulate farm prices, wheat was held for a year and a half at somewhere near two-thirds of $1 a bushel; then after being dropped by the board in the early summer of 1931, it fell to the lowest point ever reached and sold in our central markets at 38 and 39 cents. It sold as low as 22 cents locally until taken in charge by the Roosevelt regime in the summer of 1933 and held at a figure about twice as high as the low point, until the fourth largest crop ever produced in the United States, followed by an export of but 11 per cent, left us with an

[1] Of course it was always claimed that these prices were justifiable on the basis of their "parity" relationship to the prices of 1910–1914. However, this claim is not altogether clear and justifiable for all goods for all time.

[2] Even so we had from 10 to 12 million pounds continuously on hand.

average price of only 56 cents per bushel for the year. From that time on, we gave up hope for export disposal of our surplus wheat, although we did sell small quantities later for less than we had paid our farmers for it.

Wheat yielded more per acre during the three years from 1943 to 1946 than was ever previously known. As late as the summer of 1942 the government was selling it to farmers for dairy and sheep feed at several cents a bushel below its sale price for flour. By this means the government got rid of some of its surplus, but at the end of 1943 it still had on hand something like three times as much old wheat as usual. While there was a great plenty of wheat on hand in 1946, now (in 1947) it is not too plentiful and the prospect is that the present price, about $3.00 per bushel, will continue for a time.

Corn has made a very great advance in yield per acre during the past few years, coming up from 25 bu. or less per acre to 35.5 bu. in 1942 and falling just below 30 bu. in 1943. These yields may go down somewhat in the future with bad weather; nevertheless they are apparently definitely up to stay. The Department of Agriculture credits us with a corn crop of 3 billion bushels in four years, the years of 1942 to 1945 inclusive; this, it must be remembered, was done on something like 10 million fewer acres than were planted to corn for many years prior to the reductions made within the past 10 years.

Corn is now (1947) worth more than $1.50 a bushel for feeding purposes, which reduces the influence the government exerted on its price for several years; the payment of several cents a bushel that was formerly made for reduced acreages to growers within the corn belt has been dropped, and farmers make their own decisions respecting the amount to plant. The result is that acreage has risen quite appreciably during the past year or two and in 1943 to 1945 was the highest we had had in about nine years. Now government control and the premium are both off. The quantities had been "sealed" for some years, and the amount on hand tended to keep prices low for several years.

Prices of Farm Products after the War. There is every prospect that prices will stay up for a short time longer, but soon they will probably be down. Just how long this will take no one can tell. It will depend greatly on how long we furnish goods to hungry and half-naked people in other parts of the world. If we made a business of hunting up needy people and furnishing them with food and clothing, we could make them comfortable and keep our own supplies on a scarcity basis for a long time. The chances, however, are that help of this kind will not be kept up for many years; at least it never has lasted long. Goods will be much higher when they are sold in a free market, if they are so sold, and later there will be powerful demands to hold prices up by legislative enactment rather than by letting them find their values in a free world market. If we should again attempt

to produce mainly for ourselves, we shall be obliged to make heavier cuts in production than during the first eight years of the New Deal, which in its time did not move on greased wheels. It is to be hoped that instead we shall be able to stay on trading terms with more of our neighbors than was the case back in the thirties.

Undoubtedly it will be several years before our European neighbors will be ready to offer great quantities of goods in exchange for foodstuff, and it is just as certain that we shall not be at one regarding the acceptance of such goods. Quite possibly we may be able to exchange some of our raw field products for some goods produced in the Orient that we do not produce for ourselves, such as silk, certain handmade goods, and possibly a limited quantity of seafood. We may be able to exchange certain heavy manufactures for still further handmade goods. But, when all is said and done, it will not be too easy for long years to sell our high-priced manufactures in their markets, clever as they are in imitating our manufacturing skill and determined as we are likely to be to hold our prices at high levels. The American struggle to hold prices at a level quite beyond other nations' and at the same time to sell our surplus goods, both manufactured and agricultural, at prices prevailing in other markets looks like a hard matter to settle.

Land prices usually will not rise and fall much with the ups or downs of crop prices for a single year, but after a very few years of ups or downs of such prices, land costs will be found going in the same direction. It is plain that the prices of farm land depend fully and mainly on what its products will bring in the market.

Recent Farm Sales. People were undoubtedly astonished to learn that the volume of voluntary sales of farms during the year ending in March, 1944, was the highest on record; it exceeded the sales made in the same month of 1919 by almost a tenth. Apparently many purchases must have been made speculatively, since a tenth of all sales during the first half of 1944 were of farms that had been purchased within two years. Sales of this sort were especially prevalent in the West, with 16 per cent in the Pacific states and 7 per cent on the Great Plains. One striking fact about the year ending in March, 1944, was that about two-thirds of the sales of farms were made to farmers. These owner-operator purchasers bought farms to live on and to farm. Half the farms bought during more than a year were paid for in cash. Nothing of the sort had happened before, unless at some time when most sales were of raw land purchased from the government. The big down payments made on recent purchases contrast with the circumstances of payments on farms bought during the boom period before 1920. At that time, for example, only one out of every 10 farms sold in Iowa was paid for in cash.

Rise in Farm Prices. Farm prices stood at 206 per cent in July, 1945, with prices from 1909 to 1914 taken as 100. All prices except those for farm products and foods at the same date stood at 147. Thus farm prices were far in the lead. Food grains, cotton, poultry, and eggs were the highest-priced items; fruit, truck crops, and meat animals were all appreciably advanced. While the war lasted, farm prices were higher than all commodities, as is usual in wartime.

Value of Land during the Second World War. In the year ending Mar. 1, 1944, land values rose 15 per cent. The next year the increase was 11 per cent. This rate was exceeded in only one year of our history, 1919–1920. The volume of voluntary sales in the year ending in March, 1944, was the highest ever reached, exceeding by about a tenth the sales made in 1919. Much of the land bought within the period of increased prices was resold within two years. Resales were more frequent in the Pacific states and the northern part of the Great Plains than in other parts of the country. The number of voluntary sales and trades reached 55.9 per thousand for the year ending March 15, 1944, but fell to 51.5 the year following.[3] Although a remarkable portion of the farms were paid for in cash, on half the farms sold the indebtedness incurred ranged mainly from half to three-fourths of the value. On three-fourths of the farms purchased with an indebtedness still to be paid, a third carried 75 per cent of the value under mortgage, while 50 per cent indebtedness or more was carried by three-fourths of the farms mortgaged.

Who Buys and Who Sells? During the year ending March, 1944, active farmers bought two-thirds of all land sold. The farmers notably outdid the buying of any other class of people in the Mountain and the West North Central states, where they bought four-fifths and three-quarters, respectively, of all land sold. In other states farmers bought in smaller proportions, but always more than half of the total land that changed hands. The main purchasers were tenants, who in the North Central states bought more than three-fifths. In most other states tenants bought about half, although in New England and the Pacific states their share was, respectively, two-fifths and one-third. Sales made by owner-operators in the West North Central states were but a quarter of all; in this section a considerable number of sales are still being made (1947) by credit agencies, whereas such people in most other sections are purchasing less.

Active farmers, which of course includes tenants, buy over 50 per cent more land than they sell. This undoubtedly means that they sell small farms and buy bigger ones. Many who are making sales buy other farms at once. In many cases both seller and purchaser are simply moving from

[3] Regan, Johnson, and Clarenbach, *The Farm Real Estate Situation, 1944–1945*, U. S. Department of Agriculture, *Circ.* 743, pp. 12 and 21, October, 1945.

one farm to another that for some reason seems more attractive. The greatest proportion of farm sales, 83 per cent, during recent years were made to local residents, and the buyers in most instances are buying to operate. About 66 per cent of all purchasers are active farmers. That farmers are much better off than they were, for example, in 1933 is seen in the fact that at that time 38.8 per cent of all sales were forced by indebtedness, whereas in 1944 only 1.8 per cent were due to this consideration.

Present Land Prices. Land prices, on the rise since 1940, are now (1947) quite above the levels of that year. It is plain that at present prices the land is worth all it is selling for as yet. If the present trend continues, prices for 1947 will probably be up at least 5 or 10 per cent above 1945 prices. But the less land prices go up from now on, the better. The danger is that every man who wants a farm and does not have one to work at the time will be driven to bid somewhat higher than the preceding buyer.

If our currency is inflated much further than at present, the effect on property prices is likely to be serious, if not disastrous. Success in preventing serious inflation would be the best single development possible in American politics. We repealed a certain tax act. It was by no means necessary for us to do this. Income is still high enough so that we might have paid the tax for another year, and we should by all means have done so. Both Congress and the President, however, agreed to the cut. Within a year or two it will doubtless be difficult to pay the taxes that are still on the books, much more difficult than it was to continue the old taxes through 1947; we shall not be appreciably better off because of paying a little less tax at present, whereas there would have been substantial advantage in getting even a small percentage of our indebtedness paid off. We appear to be well inured to borrowing more money on national credit rather than to making a small payment on what we owe.

Land Values and Sales of 1945. Farm prices were very nearly as high in 1945 as in the year following. Gross income was then about 126 per cent of what it had been in 1912 to 1914. Voluntary sales had made a real advance, going from 85 in 1935 to 152 in 1945. Land values rose over 50 per cent within six years.[4] The boom was much slower in getting started than that following the First World War, and much more cash was used in making the purchases.

Land Earnings and Values. Only about a fourth of tenant farms are rented for cash. More farms are rented nominally, probably at rather low rates, for cash than on shares. Mention has already been made of certain of the peculiarities of cash rent. Out of the relatively small number of farms rented for cash, a considerable proportion are rented to relatives; many near cities, for growing cash crops of vegetables or because of their

[4] U. S. Department of Agriculture, *Circ.* 721, p. 32, January, 1945.

expensive residences, also figure importantly among the cash-rented farms. Cash rents have to be handled with more discrimination than share rents. Cash rents tend to be rigid and do not rise when crops and livestock sell for more than commonly. The best of Iowa cornland was still rented for $8 an acre when corn sold for $2 a bushel during the First World War; on the other hand much more cornland was rented on shares, the landlord frequently getting half of a 50-bu. crop at the highest price ever paid.

Share and Cash Rents Compared. One very noticeable difference between cash and share rent is the almost automatic change in rent payments that occurs when produce prices are rising. During the three years ending in 1944 share rents increased about 85 per cent, while cash rents increased less than 10 per cent. In 1943 and 1944 share rents had increased within four years by more than 100 per cent. As a rule no change is made in the share rent received by the landlord; thus he automatically receives an increased return. It is reported now and then that cash rents are much oftener set in a written contract than share rent is, but not much evidence exists. Plenty of evidence, however, shows that cash contracts are not readily changed to meet increases or decreases in prices of produce. These facts help explain the statement that share rents about doubled their returns to the landlord in three or four years, while cash rents rose less than 10 per cent.

Another important point is that share rents are practically automatic in collection, although in occasional instances the farmer is bound to feed out and eat up more than his own proportional share of a poor crop. When crops are poor, it is hard to collect the full amount of cash rent due; there is no offset for this calamity except bigger payments now and then when yields are good and prices high. Losses on cash rents are considerable in bad years.

Any discussion of the value of farm land thus leads directly and necessarily to a careful study of what is happening to the income on land. With low prices providing low income for years, the value of land is bound to go down. When income rises, land values will rise. Looking ahead, it looks as though the income from land will fall, and we shall once more see land values on the decline.

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Chapter 12

FARM WAGES

Wages are the payments made to people who work for somebody else. Ordinarily a wage worker has little property of his own. To this general statement there are many exceptions. For example, a man in Wisconsin worked out as a janitor all his active life. When he died, most of those who had known him were astonished to learn that he had held some dozen rather small but substantial mortgages on dwelling houses and business buildings in the town where he lived. He had been the head janitor of several rather large buildings and had been able to hire people who would work faithfully; as an employer of a dozen or so people he had accumulated as much as many of the smaller businessmen of his town. A case like this is rare. As a rule the wage earner accumulates little.

On the farms of the United States, at least until the First World War, when farm land rose to a high figure, the great majority of farmers have become farm owners before middle life. Great numbers of these men had been hired help on farms or at some other work that paid little more. The vast majority of people who started out as hired help remained such for the greater part of their lives; hired men on farms, however, except in most of the South, later became owners. A few farmers are still left in the Middle West who worked out for wages for 7 to 10 months through 6 to 8 years; their pay would buy about an acre of land per month. Within a few years they were able to buy a comparatively small farm, with a down payment of close to half the price. Until into the twentieth century the majority of farmers' sons who wished to stay on farms were able to do so. For some years this was not easy, but with lower prices of farms and much higher prices for farm products the possibility of buying again returned.

Thus while it has for some time seemed that the majority of farmers' children might be driven, like the children of the great laboring class, to remain in the status to which they were born, usually hiring out to somebody else, it now looks as though at least a start toward farm ownership is possible for them.

Farm Wages in 1933 and 1945. The lowest wages in many years were paid by farmers for help in the early part of the year 1933. For the month of July, one of the highest for the year, the average wage paid was 82 cents a day with board. Twenty-six states showed less than $1 a day paid for farm help. For the whole month the average was $15.84, with four states, California, Nevada, Utah, and Rhode Island, paying over $30, and Georgia, Tennessee, South Carolina, and Mississippi paying less than $10 a month; in all these cases the workers received their board.[1] Those boarding themselves received 30 cents a day more. These wages were the lowest for nearly a half century.

On July 1, 1945, the average pay for farm help, with board, for the whole country was $85.80 per month; without board, $99. By the day, without board, the three Pacific states were paying, as of Oct. 1, 1945, an average over $8 a day, while Montana, Idaho, and South Dakota paid from $6.80 to $8.50 a day. Six cotton states, however, were paying less than $3 a day.[2] The average for the country was $3.98 with board, $4.39 without. Monthly pay was a little more than three times as much in 1945 as it had been in 1935.

Wage Rates by Sections. In discussing the daily wage rates without board given for October, 1945, it must be noticed that these rates are the highest that were paid and that they applied only to some indeterminate percentage of people hired. In the six Northern and Western groups of states we find the simple average rate to be $6.07 per day per man, an interesting figure if this wage were received steadily throughout the year, but of course it is not. In bad weather the pay stops; in winter the rate of pay is lower than in summer. Income for the wage earner is very much less on the average than any such figure. If the wage cited for the Pacific states, $8, ran throughout the year, it would amount to more than $2,400 annually. In practice the farm hand seldom handles more than $1,000 in a year's time.

In the East South Central states the average rate paid is $2.78 per day, which would make payment for the full year $834. In the cotton section of the country farm labor has an income around $400 per year, little over $1 a day on an average, which means poor living indeed for a family. For the three sections of states in the South, on a simple average, the wage is $3.22 a day.

According to the census of 1940, 21 per cent of farmers in Mississippi worked out at least part of the time. Three-quarters of this group hired out for 25 to 250 days or more. On the other hand 79 per cent of the state's farmers reported no work off the farm, and a quarter of those who

[1] U. S. Department of Agriculture, *Crops and Markets*, October, 1945.
[2] *Ibid.*

did work out worked only a month or less. Not more than 26,000 worked out over a couple of months. So many farmers operate on a very small scale, with more than this 26,000 on farms of 9 acres or less, that they could very easily have plenty of time to work for somebody besides themselves. To a considerable extent it is these very small farmers who work for somebody else for part of the year and, although their wages are low, they probably make fully as much as when they work for themselves.

In Iowa 38,000 farmers out of 213,000, or 18 per cent of the total, worked out during 1939. This is not a notably large number; presumably it was again the very small farmers who were hiring out, at least for the greater part, but some farmers with 50 to 99 acres might also be included. Land reported as farms takes in numerous poor pieces, near cities, on which tourist camps have been established; the land is worked at least a little, though the proprietor may spend most of his mornings and evenings looking after the other business. It is altogether improbable that very many men with real farms of 100 acres put in any considerable part of their time working for someone else unless their own farms were extremely poor or unless they had other businesses that paid them better than farming. Of course occasionally a man might have a son or two who could do the farm work quite acceptably and so free him for some other job.

In New England, for example, where the land is for the most part poor from an agricultural standpoint and where people have been inclined for years to turn from it to anything available from which a little money could be made, between a third and a half of those who call themselves farmers report income from other sources. They live on their farms, but to a considerable extent they work at something else.

Farm Wages Are Low. Farm wages are at or very near the bottom of the wage list. The reason for this is mainly that there has always been a surplus of young men and women scattered over the main part of the agricultural districts. The farm birth rate is possibly the highest in the country. For many years we were able to furnish something like half a million to a million surplus people, nearly all young, to the cities. Farm population has been going down in numbers since 1910, though not at a constant rate. In some years there were, according to the estimates, slight increases, and in 1932, following a near balance in 1931, a real increase appeared in country population, owing to movements from the city. The normal movement toward the city was resumed in 1933, and in 1940 we were again about back to the low mark for country population; by 1946, largely because of the war, we had returned to the lowest figure for country population since before 1910. Only some 19 per cent of the present population are living on farms, in place of the extremely high proportions of country to city and village people in the early years of America, when farmers made up most of the population.

Farmers' Children. For generations preceding the middle of the nineteenth century, almost every son and daughter of American farmers continued in the same sort of work as their parents. After the middle of the century a considerable stream of young farm people began to move in the opposite direction and to enter factory work and other business occupations of the East and Middle West. This meant a real stream of young people leaving their homes in the West and going to cities farther east. Before 1890 a considerable group was leaving such states as Illinois and Iowa to move in opposite directions, some going to cities farther east, others north and west to try farming where there was, as they viewed it, still a good chance. During the eighties and nineties of the past century it seemed that there was at least a hope of making a living whichever way they went. But for many, times were hard whatever direction they took.

During a decade or more of this century a considerable number of writers advised people to stay on the farm. One prominent magazine created a department devoted to this theme. The success of many farmers was portrayed in glowing colors. Of course those who stayed in agriculture included successes, and of course it was wise for certain of the young people to remain in that occupation. Yet from the disappearance of the open frontier, say about 1890, a good number of young people could always hope to do better by going to the city than by staying on the farm. What we needed and did not have to any extent was guidance for those who ought to quit farming, rather than praise and encouragement for the large number who meant to stick to it. We have had too many farmers ever since we learned to break 2 acres of prairie sod per day, the first cause that brought wheat to 50 cents a bushel and corn to 20 cents. Nobody could really prosper during the 40 years while these prices held. From 1883 till 1915 inclusive the average price of wheat, to the American farmer, was less than $1 and as low as 49 cents per bushel. In parts of the country wheat, where there was much for sale, was at least a dime below the figures quoted for the country at large.[3]

Do Farmers Support the City People? They cannot be said to do so in any real sense. Farmers are too numerous and have too much to sell to be able to make as good bargains as many city people. Country people are taken care of by city people as fully and as constantly as city people are taken care of by farmers. Country people could outlive city people if both groups were obliged to live on what they produced themselves. Country people complained about losing their farms back in the twenties and thirties as bitterly as the city people did that their supplies of food were poor and scanty. No, country people do not support city people in any real, genuine sense; what they actually do is to produce too much and then complain that the price offered is too low. Farmers feel that they

[3] See *Agricultural Statistics*, 1943.

cannot offer 50 bu. of wheat for a suit of clothes, a fat cow for a victrola, because they have too few fat cows to be able to spare one for such a purpose; they forget that it takes a cow to pay for a victrola—perhaps two cows—simply because cows are too plentiful, just as truly as because victrolas are too dear. The question as to who gets too low a price is clearly the same question as to who has overproduced. Farmers have overproduced, and as a result they have had to sell at low prices.

Farmers furnish an oversupply of their goods and must exchange them for another supply of goods that are held at relatively higher prices because they are not so plentiful. One year with another, if we leave out war years, we have had more farm goods to offer than city people really wanted, and the result is that they have been getting these products at distressingly low prices. Cotton has been desperately cheap most of the time, and cotton growers in general have been desperately poor. Raw cotton has been too plentiful and cheap, while finished cotton goods have not been so plentiful or cheap. The same situation has been found respecting live hogs, eggs on the farm, and so on. This has been because the farmers have produced too much. On many occasions farmers seem to have supported city people too well. For example, during the decade of the twenties they supplied city people with an abundance of food and clothing material, while city people, charging what those of their own numbers could pay, charged farmers what they could not pay; and many farmers failed.

Steel, clothing, housing, tools, and so on are just as essential to life, safety, and happiness as meat, milk, and clothing. The maker of bread cannot say that he alone is the main supporter of human existence. Wheat begging to be recognized in the market, while manufactured goods sell at good figures, merely means that we have too many producers of wheat and too few producers of manufactured goods.

Except as disturbed by war, farm wages are low. This is because we have too many wanting to work in the country districts. Either farm families are too big, or they do not get a chance to work for somebody else. No census has yet told us how many people want to work on farms. But this much we know, that the everyday farmer who hires help wants it only a week, a month, six months, or some other limited period; in general he does not want it for a year, and as a rule no one else wants to hire the unwanted farm hand for his idle time. In the South the Negroes and for that matter many whites have very little to do for a quarter or even almost half of the year. Their income is so small that it is hard to see how they can live through the year, and they do not live at all well. They are desperately short of clothing, short of food, short of everything that, from a material standpoint, makes life worth living; yet the years come and go, and they

produce more children. The houses in which most of the tenants live are wretched. They are small and dilapidated, though a new one costs only one or two hundred dollars. When they are nearly worn out, a matter of only a few years, these houses are not promptly rebuilt, but the family must live on in shacks that keep out neither wind nor water. In summer they are frightfully hot, in winter frightfully cold. Until the war raised the wages of these people, they earned about 10 cents an hour, sometimes less, when they were able to find anything to do besides raising their few yearly bales of cotton. These people are afflicted with tuberculosis, pellagra, pneumonia, hookworm, frequent colds, and in fact any and every ill to which flesh is heir, oftener than those who are well housed, fed, and clothed. No nation can afford to maintain any system that promotes so many bad traits, physical and moral, as the meager income of the cotton and tobacco growing population of the South.

Farm labor conditions also leave much to be hoped for in the North. In the nineties conditions were not bad. The hired man was usually a neighbor boy who, after working somewhere from three or four to six years, could either buy or rent a farm. This system, with modifications, lasted until after the First World War. The change that followed came because of a slackening off of demand for help in many lines of city work. The result was a considerable surplus of young people, often married, who wanted farms to work. At times they got them, but for some reason were obliged to move after a year or two. Then came the tragedy. There was no vacant farm for them to move onto. It was a little late for such people to go to the city; good jobs were no longer plentiful there. Machines that required fewer people, not more, had been invented, and in consequence farm unemployment had risen; tenants who could find no farms for themselves always knew where there were larger farms that were being worked by fewer hands than formerly.

Farms definitely require fewer people on them than formerly. There are fewer men per farm doing the work than a few years ago. That is the reason for an increase in the number of those who want to become tenants. Such men have not been able to rent farms in recent years; they are not attracted to the cities; they are married and want establishments of their own. There is not much chance for them at present to find work by the month, because with the new machinery the families already on the farms can do most of the work themselves. Anyone who hires farm help is unlikely to want a married man; few farms are equipped with a second house for a hired man to live in.

Are Farms Too Big? Farms are not big enough to require the full time of a hired man throughout the year. Having help but part of the year, farm operators prefer a single man; they will get along without hiring a

man with a family if possible, and it was possible up to the beginning of the war. The fact, therefore, is that until 1941 the people who normally should have left the farm territory and surroundings and become established somewhere else, were left over in the country districts, where they were not keenly wanted—and are not wanted even now. These people have not been really needed in the farming business since the twenties of this century. Only the war has given them any lift; many are now farming and will no doubt continue to do so, which will make it all the harder for those now about twenty years old to get started.

The number of men earning wages on farms is much smaller than before the First World War. Though wages are high for the time being at least, not many men can be found to do the work. Farmers will do anything possible to avoid hiring men. In general, farms drift into the hands of men whose families can farm the land and tend the stock, and the chances for a hired farm hand to get wages good enough to enable him to bring up a family properly are poor indeed.

Farm Labor. In 1940 there were 1,925,000 people working for the farmers of the country, including foremen, on a wage basis. If there had never been more than one person working out on any farm, this figure would have meant that somewhat less than a third of all farmers had hired help. Since there are actually numerous farms with many hired men and another considerable number with two or three, it at once becomes evident that many more than two-thirds of our farms have no hired man at all. Of course these farms may have a considerable amount of help by the day, which for one reason or another may fail to show up in the record; yet we may assume on the whole that the records are fairly good.

On the assumption that one-third of the farmers hire all the farm help employed during the year, it is evident that these farmers hire just about a man apiece, but not for the full year. According to the census the men who work out on farms for less than a year lack just over a million months of working full time. They may, of course, have worked at something else during part of the year.[4] This means that the part-time people worked just a little over half time. Those who worked for the full 12 months were just under a million men. The amount of slack time in manufacturing was appreciably less, as also in all other occupations considered in the table referred to. Although we cannot say for how long farmers hire, the evidence is quite clear that the reason so many people work for only part of the year is very largely that great numbers of farmers will not hire except for the short periods when their work is pressing. This is the main reason that farm help so often seems scarce. In general, farmers pay low wages

[4] *U. S. Census, 1940*, Vol. III: *Population*, Part I, *The Labor Force* (*U. S. Summary*), Table 89, p. 274.

and hire less help than they really need. Many cannot afford to pay the wages asked. Another leading reason that holds down the amount of labor hired by farmers is the fact that many of them do not want to offer room and board along with cash payment.

Pay for Farm Help. The census report is not so exact as might be wished. For example, the difference between boarding and not boarding hired hands is ignored. Thus for more than half of those hired to work on farms the amount of expenditure represented by board is ignored. It is a rather striking fact that the highest amount paid in wages, as reported, is the same for every section of the United States; it is between $200 and $399 per year.

The money paid to laborers who spade a garden, work on a farm, do the digging in the mines, and all the multitude of things for which people are ordinarily paid for the actual time worked is ordinarily called wages. As the word is ordinarily used, wages is pay up to $100 a month or possibly about twice that sum, but when a person is hired for $400 a month, his pay is almost certain to be referred to as a salary. The type of work done also seems to have something to do with the word applied to the pay received. Whether a man gets $60 or $600 a month as a preacher, his pay is usually spoken of as a salary. Few salary receivers are held to a count of hours when paid, whereas the wage earner is seldom allowed much time off without a deduction. No exact definition can be cited for any exact distinction between wages and salaries, but it would be hard to find a reference to the President's wages or a farm hand's salary.

Labor, Both Physical and Mental. If wages and salary are hardly distinguishable, what shall we say about wages and profit? Here the difficulty is whether to regard a quick decision to sell or not to sell as a labor act. No doubt the majority of people think first of the physical exertion involved in labor and therefore in wages. But it is indisputable that in some kinds of work, the reward of which is always referred to as wages, such as that of overseeing workmen in a field of sugar beets, the entire day will not require a single bit of physical labor. All the overseer, for instance, needs to do is to count the laborers, report absences, and see that the day's work goes off as usual. He may sit all day on a horse or ride in a leisurely manner on a bicycle and do nothing that can properly be counted as physical labor. Yet what he is paid is wages, without question. He has used his mind in seeing that everyone worked properly. Has he done the work of a laborer? By all means he has.

Now suppose that a worker holds a clerical job in a speculating company and is under orders to sell a million dollars' worth of a given stock if it should rise a half dollar during the day. If this remarkable circumstance occurs, has the clerk performed labor in watching the ticker and being lucky enough to make the sale during the only minute that the stock was

at that high point? Has he been a laborer? Suppose some of the stock was his own and the sale made a good deal of money for him. Was the gain wages or profit? It will undoubtedly be called profit by many people. Yet it can also be regarded as an upper register in the class of income known as wages. On every farm a good deal of money may be made now and then, or even a single dollar, that belongs in the profit class as well as a figure of five digits. The process involved the good mental judgment of the operator, and although it may seem that we are right, in the case of the small sum made by a farmer, in including it in wage income and wrong in calling a shrewd deal involving a $10,000 profit on the part of an importer of English woolen goods by the same term, the fact is that they are more alike than unlike in character. In popular language we shall continue to call the returns from big transactions profit, and returns to small operators will continue likewise to be counted in with his wage. At the same time, as economists, we shall not be able to distinguish between profits and wages. Both are returns for personal effort, physical or mental.

We have tried rather successfully to estimate the amounts made in the form of rent and of interest. As to wages we have been pretty vague. We have known clearly enough that there was a vast sum corresponding exactly to what we have called profits that could not even be estimated as such. For example, a farmer buys a team of horses in 1942 for $100. In 1943 he sells them for $200, after getting a good year's work out of them. Is the $100 cleared to be counted as wages? The farmer himself, if he uses any accounting, will probably call it wages, because he knows it is not rent or interest. If he calls it profit, it probably will not interfere with his accounts. On the other hand, he is rather likely to enter in his book a figure for this $100 under some such heading as "income," since income in the form of interest will be recognized for what it really is, and if he has a piece of land rented to a neighbor at $5 per acre he will undoubtedly call the money received rent.

When we learn that wages are the reward for personal acts, for work done, when we come to understand that what we have for many years called profits is not at all unlike much of the labor performed from day to day, we shall not object to calling the larger items returns for the personal effort put forth by the earner. It must be remembered that as pay reaches the higher registers, it goes quite beyond the mere everyday acts for which we have for long years paid wages, but at the same time the one who is paid is simply directing affairs in a larger way than the farmer who has made up his mind to sell his hogs in January instead of in March or who has decided to quit growing wheat and is disposed to grow flax because the one was making him poorer and the other may make him appreciably richer. In farm accounting it may not be necessary to use the term

"profits," although it can be done. The nature of the effort, the work, demanded in changing from wheat to flax is very much indeed like the nature of the decision that leads a man to sell or buy another $100,000 worth of stock on the market; yet the former would be put down as ordinary farming and needs no allusion to profits in its bookkeeping. The other has, illogically, been split off from the terms we can all understand and which logically cover all cases. The concept of wages is unlikely to be applied to transactions in the stock market, but will primarily apply to pay by the hour, day, or month, agreed upon in advance; and for the most part it is reserved for small incomes.

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Chapter 13

RENT

By "rent" we mean the price paid for the use of land or the income that comes to the owner of land by virtue of his ownership. It is assumed that the land in question possesses a value above the cost of operating it so that the temporary holder of it can pay to an owner, or himself enjoy, if he is the owner, a return properly attributable to the fact of ownership. For example, the owner of a tract of land may at the end of a year find himself in possession of a net $5 per acre for a farm that he has been operating during this time. This means that all expenses have been paid, such as taxes, seed, feed, and wages to himself as well as to his hired help. If he is to claim any sum as rent, he must first be assured of returns on his machinery, pay for the work done by himself and the members of his family, and all other expenses incurred during the year; if he then still has $5 per acre left, he may claim it as return on his ownership of the land in his farm. Such money he may properly regard as rent.

It is quite correct to use the word "rent" to cover all such receipts or payments as have been made for the use of a house or a chattel; for example, a woman may pay $5 a month rent for a sewing machine. As indicating payment for the use of land, however, the word has been in use for a long, long time and is well understood by all economists. For the sake of exactness we speak of "economic rent," which means payment made for the use of land. Thus we say we rented a room for a week, but economists and many others as well use "rent" to mean income from land, with all other concepts excluded.

Rent No Part of Price. The economist as a rule argues that rent does not enter into price. In his view prices are fixed by supply and demand, by tariffs, by wages, and by high or low interest payments, and when all these expenses are counted in, possibly a tenth of a given price consists indisputably of rent. Trade gets a little slack, and the tailor feels that something must be done about it. In looking about he finds that immediately

above his rooms is the same amount of space for rent at $50 a month, while downstairs he pays $100. As a rule he makes 10 suits a month. He moves upstairs and puts out a new advertisement: "Come upstairs and save $10 in rent," for he is now going to charge $10 less on a suit of clothes. This tailor may actually furnish his customers with suits for $10 less apiece over a period of years. Does rent, then, not enter into price? It did clearly in this case. Is it then true that rent does enter into price and that reducing rent may legitimately operate to reduce the price of merchandise sold? The example of the tailor is a case in which the rent was probably too high at $100. It must never be taken for granted that a rent as actually paid may never enter into price.

The rent the economist discusses is the exact price that competition sets on a piece of land. It is the amount that the right man may receive, and can therefore pay, for the use of a given piece of land. The amount of rent charged by the owner of a store may be anywhere above or below the real figure that economic forces would set if they could work freely. Probably over a period of years actual rents paid in a city for different stores come to a figure not far from the theoretically right amount. Nevertheless, prices are not stable. Trade is not stable, but goes up and down with the days. Then, too, the storekeeper may not be a genius at getting trade. He may have to quit because of his mediocre ability and let his place be taken by some abler man to whom the rent payment may not be a burden. It must always be kept in mind that it is difficult to say what amount of rent a landlord may ask. As a rule the man who has it to do will figure his costs of the property, but this is no real criterion. Too much or too little may have been put into the property. Every ordinary rental price is an estimate, an approximation, even a guess. When a rental figure has once been set, it is likely to be held to for some time, probably longer than market conditions would warrant. Landlords are reluctant to reduce rents, while raising them will be resisted by the tenant. Just what a store is really worth on the basis of competitive rent is a question for which there is no exact answer. It must be remembered that rent, which is the price of land, probably by the year, is subject to many changes even during that minimum period. The probability of prices rising or falling is one factor that has made share renting of farm land so much more prevalent than cash renting. In all share renting the fortunes of the two parties stay approximately together.[1] Whenever prices rise, both parties are wel off; when they go down, the grief is shared. The landlord is rather likel

[1] In England during the latter part of the nineteenth century many farmers failed because they were paying cash rent on long-time contracts, while American wheat was selling in England at low prices. This circumstance resulted in eliminating most long-time contracts.

to help his tenant out, at least in incidentals, when prices are at their low points.

As a rule share rents are higher than cash rents. This is due to the fact that cash rents are hard to pay in bad years. Then again many cash-rent landlords, in America, do not know much about agriculture and do not want to give any considerable amount of time to farm matters. They are willing to let the tenant decide many matters as he pleases.

Quality and Location of Land. These are the two primary considerations on which rent depends. Certain conditions are inseparable from land quality; these are primarily such qualities as are irremovable, and in this list no one can include fertility. But climate, topography, direction of slope, and extent of good surface are among irremovable qualities. Then, for the land to be valuable, there must be fertility, which under some circumstances may be almost wholly artificial. For agriculture such artificial soils can hardly be created. Thus far the building of soils is almost unknown in America. In the cotton belt we have become quite dependent on applied fertilizer. In fact on many acres much fertilizer must be applied for each crop grown. On the best of the cotton acres, in the Mississippi delta, there is land with almost no slope and with soil of wonderful fertility, at least a hundred feet deep, that will produce good crops without fertilizer over a long period of years.

If we should undertake to separate land from capital and keep it separate, we should find it hard to do and hardly logical. For example, tiles should be considered as capital when they are hauled from the factory to the farm, but when they are put into the ground for drainage purposes, they become logically a part of the land. Of course they are never actually a part of the land, but could be removed if anyone thought it worth the effort. Fertilizer that has been bought and left in the sack is clearly capital, but as soon as it is mingled with the soil it becomes part of the land; yet probably about three crops will recover the bulk of it, and it is again capital.

We should next consider location. The first consideration here is probably distance. It has, for example, been claimed for years that there is some excellent land in Alaska. This land, however, was substantially without value for at least 50 years after its qualities were quite well known. The main drawback was the great distance from population centers. Unless there was some very special reason for going to Alaska to cultivate this soil, the objections to doing so were great enough to keep almost all farmers away. In connection with such land as is to be found in Alaska the distance from the old home is a formidable consideration, for the cost of going back and forth is practically prohibitive to people of small means,

who make up most of the settlers of out-of-the-way places. The same is true of sparsely populated eastern Asia.

On the other hand, in such accessible areas as northwestern Massachusetts, New Hampshire, and portions of several other states in that part of the country the purely rural districts have smaller populations than they had before the Civil War, and the prospect is for still fewer people in many of these all but soilless tracts.

Bigger Crops. It was the teaching of early economists that as the years passed we would, of necessity, find it harder and harder to produce as good crops as formerly. In certain spots this is true; yet the Mississippi Valley is a big territory, and taking it all together, we produce more in it now than ever before. Of course it takes better farmers to do it. To begin with, we have better seed for all manner of crops. We fight down the enemies of crops; we have developed hybrid corn; we have better cotton than we used to grow. We are using, especially for corn, more fertilizer at the very small cost of a dollar or two per acre and are getting on much of the better land crops bigger than we grew years ago when, as we thought, the land was at its best. Not only was the corn crop of 1942 bigger per acre than any other crop ever grown in the United States, but several crops before and since were greater than had ever been known years ago.

The prospect now is for such states as Iowa, Illinois, and certain others to continue, with very small applications of fertilizers, to grow greater crops not alone of corn but likewise of oats and hay than were ever before produced. For many years to come, farmers can easily produce more foodstuff than the country will consume. The rest of the world is unlikely to pay a high price for it. Till far into the future a surplus of foodstuff is in sight.

When will we reach a stationary stage in agriculture? This question will sometime be answered, but not while any people now living are interested in it. There is still so much excellent land that needs better drainage, so many acres that can be greatly improved by clearing them of stumps and stones, that it is safe to say that added yields from such improvements will supply all the food and clothing that added millions of people will need.

We have been operating our agriculture under conditions of diminishing returns so far as a considerable part of America is concerned, but nitrates are available through crops which it pays to raise, and the other two fertilizers that we are likely to need appear to be abundant and cost no more as the years go by. Thus the specter of diminishing returns need not frighten this generation. So far as the main part of the Mississippi Valley is concerned, we have not yet reached any dangerously stationary stage. Over the great stretches of the corn belt we can still produce more corn

per acre than was being produced 50 or 100 years ago. Our stationary stage appears to be so high that it simply does not pay to push beyond it; the land is not worn out. For ordinary production it probably never pays to produce the ultimate bushel that physically can be produced. There seems to be no discernible, predictable stationary stage. Prices will at times go higher or lower. They are forever subject to change.

Economic Rent Never an Exact Sum. On very few occasions in America is land value kept separate from other closely related values, and likewise it cannot as a rule be separated from managerial factors. For example, a young man of rare ability may rent a farm for $5 per acre. He may keep it for 10 years, during which he always makes his payments promptly. Perhaps three-quarters of the rental value was a full price for the land; yet neither tenant nor landlord would necessarily know this to be a fact. This would be a divergence of but $200 from the correct amount on a quarter-section farm, an amount that might be made up several times during the year by good management. There is no known means of separating economic rent of land from value of buildings, fences, attractive plantings, and the like, which are not land. Too much weight may be attached to the yield of land for a year or two because of an unusual application of fertilizer. The fact that the soil is of such a character as to allow fertilizer to mingle with it and is able to hold moisture well may mean that its value is high if properly used with fertilizers, whereas most of the farms of the neighborhood will not respond so well to a high degree of fertilization. Thus if the farm is bought by a man of real intelligence it is worth what it sold for, while to more ordinary buyers it is not worth so much. The value of many a farm depends on the intelligence of the owner, and a man of such qualities can ordinarily buy land for less than it is worth to him.

Economic Rent. There is, in the case of every farm rented, especially for cash, the question of how much of the rental figure is economic rent and how much represents some other kind of rent, such as for visible improvements, for an especially good house, for convenient facilities for feeding and caring for livestock, for good fences, and the like. Then suppose the farm has been heavily treated with commercial fertilizer so that it yielded heavy crops. Commercial fertilizers will not last long. In a year or two, at least in twice that length of time, the major part of such fertility will be exhausted. If the farm is at its best, worth $6 per acre cash rent, it may not be worth half that when these fertilizers are mostly used up. A tenant who did not know the facts might under these circumstances be entirely unable to continue a contract such as he had signed. On the other hand it is usual to consider the soil fertility of a farm as the main consideration in the payment of rent. Now, if the fertility is substantially permanent, as in the better parts of Illinois, Iowa, or Mississippi,

and the rent is based on the crop that can be produced with little additional fertility, that is one thing; but in most of South Carolina fertilizers are required, or the land will produce little indeed.

What, then, is the real economic rent that land will produce, and what is the rent to be called on land that has been heavily fertilized? If a bag of fertilizer is required to induce an acre of land to produce a decent crop, it is still true that the bag of fertilizer is capital while it remains in the bag. An hour later—after the fertilizer has been applied to the ground—it is logically a part of the land and cannot for any reasonable sum of money be recovered and again put into a bag; the only way to recover it is to raise a crop of cotton, corn, or potatoes, by means of which it may be recovered from the land in different form, undoubtedly worth more than when it was spread. The fertilizer became land and was subject to rent rather than to interest payments; although it was likely to be exhausted within two or three years and lasted a much shorter time than a horse or a cow, it was nevertheless land rather than a chattel when it became mingled with the soil. At the same time an element of land may be short-lived and must therefore be treated as transient, good while it lasts but exhaustible and bound in the natural course of events to pass into nothingness within a year or two.

In view of these facts it is necessary in revaluating land to consider land elements as capable of lasting for a year or a century as the case may be. While fertilizers are parts of the land, they may yield a rent; before being applied to the land and after they enter into a crop and are harvested, they are capital. During these two different phases they partake of the nature of land or of capital as fully as though it had been impossible for a change from one to the other to occur.

What Land Brings Highest Rent? In 1889 several counties in Iowa were in need of drainage. Taking 10 of these, mostly in the northwestern quarter of the state, but reaching somewhat toward the northeast, we have picked out the counties where the need was most serious. Table XIII shows that these counties were producing from 29 to 39 bu. of corn per acre, with an average of 32.6, although the average for the state at that time was 41 bu.; thus these counties were 8.5 bu. below the general Iowa average. Acreage in these counties was rather small as a rule, probably because of the wetness of the ground. Thanks to high prices during and immediately following the First World War, this wet land was very largely tile-drained; most of the work was done between 1918 and 1921. It is not an overstatement to say that most of the land in need of drainage was drained during this period. Most of the counties included in this study were thoroughly treated. On the whole the effect was revolutionary. Table XIII shows the results. For the state the corn yield in 1939

TABLE XIII.—CORN YIELDS IN 10 IOWA COUNTIES BEFORE AND AFTER DRAINING

Counties	Yield in 1939, bu.	Yield in 1889, bu.	Gain, bu.
Buena Vista	58	39	19
Calhoun	61	39	22
Cerro Gordo	50	33	17
Clay	61	30	31
Floyd	52	31	21
Hancock	53	29	24
Kossuth	61	31	30
Palo Alto	55	23	32
Pocahontas	59	36	23
Wright	60	35	25
Average yield	57	32 6	24.4

was 53 bu. For these 10 counties it was 57 bu.; at the earlier date the specified counties had been 8.4 bu. below the average, on a rather small selected acreage. Now their corn acreage was about as big as any in the state, and the yield for these 10 counties averaged 4 bu. above the state average. Thus the rental value of land in these counties rose to the level of the good counties of the state, and the people who held the land, no doubt with a little shifting, came up to or somewhat surpassed the full level for the people of Iowa, although they had for many years been on land selling well below the better-drained counties. So far as is known, due to the fact that there was no considerable sale of land in these counties to actual farmers and no noticeable moving away from them, it hardly seems that the very best farmers of the state were on this somewhat wet land. Surely the owners had not bought it with the intention of immediate drainage. Some of the wet land had been farmed for more than 20 years before 1889, though of course in substantially all of these wet counties there was some fairly dry land, which undoubtedly was settled first.

Yields of Corn in the Wet Counties. The yields of corn in these wet counties were higher than one might expect. The ordinary county in Iowa, 24 miles square, contains over half a thousand square miles. Even the flattest county has some little streams, and if it lacks hills, there are at least rises of ground from which the water will run off naturally. Therefore a few thousand acres in the flattest county in the state are rolling enough to allow the safe cultivation of many acres of corn. It must be remembered that a county of this size contains over a third of a million acres. During the earlier years of Iowa agriculture less than 1 acre in 4 for the whole state was put into corn, while at the close of the nineteenth century the 11 million acres grown were nearly equal to a third of the state. Then came the high prices of the war, and all of these badly drained

counties were tiled, as it seemed, thoroughly; it was this work that made the wet counties yield above the average for the state as a whole.

Rent of Urban Land. Urban and farm rents are much alike in principle, the main difference being that, within limits, fertility is the main consideration with farm land, while location is by all means primary respecting urban land. In Illinois and Iowa farm-land values depend primarily on fertility, while the values of land in New York City, Boston, and Philadelphia rest primarily on location. These cities have advantages in location, especially in their harbor facilities; they are on the East Coast, from which shipments to Europe can be made most conveniently. Their harbor facilities for many years appeared ample, but pressure on them has become great enough so that harbor space has become precious. At the same time there is a great demand for space for storing goods, for railroad tracks, for offices. The result is that these cities have grown so big that buildings reach 40 stories in height and often go several stories below ground. Ground space is therefore at a great premium. In New York City there are many acres worth some such figure as 20 million dollars each. Can anyone set a rental value on land worth such a figure? Of course where the land is used for substantially the same figure over a considerable period of years, there is no reason why the rental value may not be as well known as in connection with tracts worth much less, but obviously mistakes on land of this sort may easily run into very substantial sums. These high figures were reached during a long period of years, not overnight; therefore a considerable number of men are acquainted with each piece of land and the business to be done on it. The shift from low to high figures was effected by men who were acquainted with the uses to be made of land of this kind. The majority of the buildings are subdivided into small parts for rental, and hence in general the task of raising the money for rent payment is not so enormous as it may be, for example, in the case of a hotel. Manufacturing plants often demand extremely high prices because of location near a water-power site or a strategic shipping point.

In general, agriculture produces crops used for food and clothing. The city produces every sort of goods imaginable and performs an enormous variety of manufacturing processes; everything in the way of dividing, assembling, storing, shipping, and reshipping is done. A hundred and fifty years ago upward of 90 per cent of Americans lived on farms.[2] Now the proportion has become 20 per cent or less on farms and 80 per cent or more in cities and villages. In the country the rent attributed to land is part of the literal product of land, though land unattended cannot supply

[2] In 1790 there were 96.7 per cent farm and village people, including places below 8,000. See Leon E. Truesdell, *Farm Population of the United States*, Bureau of the Census, Washington, 1926.

it. In the city land does not produce anything; it merely gives standing room.[3] In the city there can hardly be an attempt to divide the product between landlord and tenant on any basis of what each produces in any visible, literal sense. Nevertheless a clear-cut problem appears as to what income a man can make by doing business on one piece of urban land as compared with another, and one may work back from land commanding the highest rents to land worth nothing at all. It is ability to earn income on one piece of land rather than another that leads us to regard land in New York City as worth somewhere near a million dollars an acre per year; from that we can calculate back and down until we may find ourselves comparing these advantageous acres with certain other acres, such as exist in every state of the Union, on which no one can earn a living and which are therefore worth nothing per acre per year. From these many places that are presumably just below a nominal value per acre we come step by step to better tracts with better and better chances to do business till on lower Broadway we find the highest of all rents. We might more logically reckon in reverse order and assume that successively higher bidding for such desirable sites is what finally pushed many out and down to land of low value or none, since it is rents actually paid that force the poor and incompetent out to dig and perhaps beg for a living on the outer rim of existence.

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[3] The lawn grass and garden products of cities and towns are not taken into account.

Chapter 14

FARM CREDIT AND INTEREST CHARGES

Until the last decade of the nineteenth century or thereabout there was little settlement to the west of the hundredth meridian. To the east of this line weather conditions such as drought were not troublesome; consequently until after the First World War mortgages were collected with little difficulty. In such states as Iowa or Illinois or in the better parts of Indiana mortgages were seldom foreclosed until after the collapse of land prices in the twenties. Land was always increasing in value, so that no matter what the relation was between the actual value and the mortgage when the instrument was drawn, it would be better as the years passed if the interest were collected. The amounts for which mortgages were written were for many years well below the supposed value of the land concerned. In such states as Kansas, Colorado, the Dakotas, and farther west, where the weather is decidedly uncertain and rain often infrequent, many years have seen decidedly small crop yields. When poor crops coincided with times of low prices, the farmer could make no considerable payment and often did nothing toward mortgage reduction. A series of such bad years was distressing indeed for a buyer who had gone heavily into debt for his land.

Before the Civil War indebtedness did not cause widespread distress. Indebtedness did become heavy and possibly should have caused some alarm, but it was not very serious in general. Land was cheap, and the amount of money that could be borrowed on it was small. Most farms were not all cleared, and the 10 to 40 acres were not heavily mortgaged, as they were later out on the prairies. A young man buying 40 acres of land covered with timber could not go heavily into debt for it, because it was worth little to start with. His first job was to build a house and barn. It took many days to clear an acre of woodland. By the time he had a large

part of his forty cleared he was getting along in years, and his ambition to borrow money was probably less keen than it would have been 30 years earlier if he could have had a lot more tilled land then. Throughout the whole North farms were mostly quite small so far as cultivated area was concerned; they were used as homes and places on which to make a living from year to year. The amount of machinery used was small. Family wardrobes were very small and mainly homemade. Little traveling was done.

Changes in the Seventies and Later. When we began to break up the prairies in central Illinois and from there west to central Nebraska the size of farms increased. Land began to be worth more per acre. Farmers began to buy what they needed for their living at the stores, as earlier Americans had never done. Goods bought at stores were quite high-priced, and sales of grain and livestock were distinctly low. During the years from shortly after the Civil War till near the end of the century, farmers in general were distinctly poor. It used to be said during the eighties that they bought their spring seats in 1879 out of an exceptionally good crop. Some occasional farmer would provide a pleasant exception. As a rule he was one who raised beef cattle on what corn he could grow himself or buy from his poorer neighbors; in this way he often made more money, even counting the poor years for his sort of business, than all his grain-selling neighbors put together. Such a man's family often made a good living. They usually bought out several poor neighbors and added their holdings to the home farm. Once in a while they sent their children to college. But the occasional exception does not qualify the over-all rule that the farmers who settled the best farming land of the United States were poor.

After free or nearly free land disappeared, land that had cost about $40 per acre began to rise. This change started about 1898. There was little feeling of prosperity until after 1900. Then the good farms of the Middle West rose to $100 and within a few years to $150 per acre. We should probably have had a slump in agricultural prices about the time the First World War started in Europe, but actually prices went up rather than down. Land had been rising substantially all the time, and it was said, with a little exaggeration, that American land values doubled in each of the first two decades of 1900.

Mortgages Rise Rapidly. Mortgages on owner-operated farms rose from $1,086,000,000 in 1890 to $1,726,000,000 in 1910 and to $4,004,000,000 in 1920. The greatest amount of mortgage indebtedness was reported for 1925, when it was given as $4,517,000,000 on owned farms only. In 1890 the East and West Central states showed close to two-thirds of the country's mortgage indebtedness; in 1920 these two sections reported a slightly

smaller proportion of all mortgages, but they still had more than half of the total.

By 1910 the 50 per cent down payment usually required on the sale of a farm was involving more money than could very well be raised by the buyer. For example, a half section of land, which was the size of many farms, would have cost around $48,000 before the First World War, with a down payment of $24,000. Quarter-section farms, about the average size in Iowa, went for half as much and required down payments of $12,000. Not many young men could lay hands on so much money, plus the cost of equipment needed. Tenancy therefore became more and more frequent.

It will be remembered that all farm property rose in value from 1900 to 1910 by 100.5 per cent, from 1910 to 1920 by 90.1 per cent. These were amazing percentages. They were by no means evenly distributed over the country, as seen in the fact that the 12 Middle Western states had more than half the total amount of indebtedness in 1920.

Ratio of Debt to Value. In 1920 it was believed that indebtedness was not too high, and if land had been worth what it was selling for in 1920, there would have been little trouble; at that time indebtedness was 29.1 per cent of the reported value of land. Presumably this was not too much, although it was undoubtedly more than could ever have been paid by a great many farmers. The average interest rate at that time was 6.1 per cent, which does not sound at all impossible. It must be remembered, however, that about 50,000 farmers out of 1,170,000 were trying to pay 10 per cent or more on these borrowings, while still larger numbers were trying to pay 7 or 8 per cent interest.

The real pinch naturally came when the selling value of the land fell on account of reduced income. This left very many in an impossible situation, with debts greater than the selling value of their land. Such a ratio of debt to value, which could not be met by any known means, led to the forced sale of some 4 per cent of farms per year for a number of years at a figure below the amount of the mortgage debt for the sake of reaching some sort of settlement. The story began in the early twenties and ran on till after 1935. During those years a small proportion of farms appeared worth less than the indebtedness on them. From just before 1940 the price of land made a considerable rise, until mortgages seldom covered selling values.

Federal Farm Loan Board, 1916. This board was appointed to implement the law just passed authorizing it and prescribing that the country be divided into 12 districts. One of the main requirements of the law was that loans should be made at not more than 6 per cent interest, or less if possible. In the South and West interest had often stood at 10 or 12 per cent, with commission charges frequently carrying it higher. Offering

at least part of the money at not more than 6 per cent was a great achievement. Of course the new act could not take care of all borrowers. Titles to some farms were defective, and the government would have nothing to do with them. Farmers who wanted more than 50 per cent loans could not borrow from the Federal Land Bank—and there were many of them. In the better parts of the country the Federal Land Bank lent money at 4½ per cent; at less than 5 per cent it was a novel offering.

Joint-stock Land Banks. The same legislative act that provided for the organization of the Federal Land Banks provided for the creation of Joint-stock Land Banks, the first of which was started about a year later than the Federal Land Banks. These banks were strictly private, financed by the issuance of bonds at 4¼ to 5½ per cent, with the rates going higher steadily. The bonds grew in amount until 1928, after which they decreased, at first slowly, then rapidly after 1931. The bonds were tax-exempt, and eventually they reached 812 million dollars in amount of money loaned. By 1933 the banks were in real trouble. Their bonds at 4¼ per cent left a pretty good margin for the banks, which increased in number to 88. They did not do well, however, even in the early years; after 1923 only 8 new ones were started, and 10 had disappeared, several of them joining with others of the same kind. Few more than half the number that started were still running in 1933. Their troubles began early.

They could not charge over 6 per cent interest, although the interest they paid continued to rise until they were paying 6 per cent on two-thirds of their money, so that nothing was left with which to meet expenses. Besides being allowed to charge but 6 per cent, they were expected to lend not more than 50 per cent on land alone and 20 per cent on buildings. This really meant that usually they could not lend more than some 40 per cent on the value of an improved farm, while numerous other lenders could allow 50 per cent. In order to do business at all a liberal valuation of land was necessary. As a matter of fact the selling value of land was continually on the decline, but these bankers were optimists as to land values. Thus many of them had to sell out at a loss during the twenties, and when the thirties came, they all had to quit and take heavy losses. So during the financially dreary early thirties these banks quit business one after another. They had lent over 900 million dollars (654 millions the most at any one time), with interest rates as high on their borrowings as on their lendings—within 0.2 per cent. The appraisals on which the loans were made were submitted by men chosen by the Federal Farm Board and should not have been too high; nevertheless they were. The loans were to run from 5 to 40 years. Most of them were made to run for a long rather than a short period, since the borrower could pay up as rapidly as he wished. The Joint-stock Land Banks are now almost all about closed up

and are therefore no longer part of our banking system. Yet in the middle twenties they held about 7 per cent of all the country's farm loans.

Sources of Funds. Up to the time we entered the First World War the money for farm mortgages was furnished in practically two-thirds of all cases by individuals, with nearly a sixth each supplied by commercial banks and life-insurance companies. The Federal Land Banks, which were started at that time, exceeded the life-insurance companies in the amount of money lent by 1935, and at present are lending close to twice as much money on farms as life-insurance companies. The "individuals and others," called "miscellaneous" instead of "others" for the past few years, have held first place in furnishing money for this purpose. In 1940 these people were down to 41 per cent of their 1923 loans. The amount of money borrowed on farm mortgages from every source has fallen appreciably during the past few years. It was about 60 per cent as great in 1940 as it had been at the highest point, in 1923. Individuals have always been the greatest source of farm loans. As a rule the money is in the form of a farm value transferred from seller to buyer at the time of making a sale. This is and has probably always been the greatest source of farm indebtedness. Thus the sellers of farms, by selling on time, become the greatest source of farm credit.

The sources of funds no longer seem strange or unusual. From 1940 to the present (1947) the sources of funds for farm loans were about what was usual before the various upsets that followed the financial setback of 1929. In general less money is lent by individuals than was the case 20 or more years ago, while the life-insurance companies and banks are not doing very differently from the years 1920 to 1929. The Federal Land Banks have receded recently to fourth place as a source of funds, while from 1933 to 1936 they furnished at least two-thirds of all money lent on farms and more recently supplied some 10 to 13 per cent of it.

Interest Rates Lower. In the mid-twenties average rates of interest charged, by states, ranged from 5.3 per cent to 7.8 per cent, while actual rates sometimes ran as high as 10 or 12 per cent. During the first few years after the passage of the act providing for the creation of the Federal Land Bank, which set interest charges at 6 per cent or below, no great difference in rates was noticeable generally; yet over a longer period, say 20 years, the change was remarkable. By 1939 a map of the Bureau of Agricultural Economics[1] showed that everything was under two rates, 5.3 and 5.7 per cent. The rates on Federal farm loans, beginning with July, 1935, were at 3.5 per cent until July, 1944, when they were brought

[1] *Farm Mortgage Credit Facilities in the United States,* Misc. Pub. No. 478, U. S. Department of Agriculture, 1942.

back to 4 per cent, except on loans by the Land Bank Commissioner,[2] which were higher.

Size of Farm Mortgages. In 1932, 42 per cent of owner-operated farms were mortgaged to an average amount of $3,561; many farms were of course mortgaged for much more than this. The mortgages on the poorest 5 per cent amounted to 105 per cent of estimated value, and this element was not evenly distributed over the country. In the West North Central states farms mortgaged for more than they were worth made up 7.6 per cent of the total. Here practically every twelfth man had less than nothing as his equity. It seems astonishing that so many should want to hold farms on which more was owed than they were worth until it is recalled that any one of these farmers might be honestly convinced that his holding was undervalued. A few years earlier the man had bought his farm, say in 1920, at 205 per cent of its value as of 1910–1914; or late in the twenties he might have acquired it at 147 per cent of the value of the same base period. By 1932 values were down to an index of 117. Thus for a period of years we had always somewhere from 3 to 5 per cent of mortgaged farms carrying an indebtedness of several per cent more than their full value. Creditors were not too cheerful over the ultimate outcome of such cases, and something like 1½ to over 5 per cent of farms actually were foreclosed each year for nearly two decades. Many of the debtors who were deeply in debt, but still not among the 5 per cent whose mortgages exceeded 100 per cent, were quite subject to foreclosure. Foreclosures began soon after the fall of agricultural prices in 1920 and were quite prevalent until the latter part of the thirties. Land began to rise in some states and especially within the corn belt just a few years before 1940, and when land is rising in price, creditors are likely to be more leniently inclined.

Farm Credit Policy. When the New Deal came into power in 1933, one of its first efforts to help the farmers was to put a partial stop to foreclosure sales of mortgaged farms. Within a few years they raised the amount of loans held by the Federal Land Banks from 12 to 40 per cent of all farm mortgages. Owing mainly to action of the Federal Farm Land Bank interest charges were reduced from 550 to 350 million dollars a year. This was due in part to the wiping out of many mortgages through foreclosure, but the main reduction came through the rewriting of many mortgages. The usual rate in 1933 was 5 per cent, well below the rates that had been charged in many sections. In 1935 the rate on regular mortgages was reduced to 3½ per cent; though temporary, this lasted for nine years, or practically a decade. The rate paid on bonds was too high to permit the

[2] The Land Bank Commissioner was empowered to make loans at a higher rate to farmers who could not qualify for loans under the regular provision.

government to lend the money at 3½ per cent; so it had to make up the difference to the Land Banks. Times were better and only about an eighth of the farmers were affected by the low rate, but even so, to raise the interest again was not easy. In fairness to all farmers the interest should have been raised to the more usual rate of 4 per cent, and this rate should have been made much more general.

The New Deal and Prices. Professor Myers, governor of the Farm Credit Administration, attempted to define "normal value" as "the value that can be sustained by earning power with normal prices." If it had been possible to define normal prices, then normal values might have been handled moderately well. What would advocates of this definition have called a normal price for corn? It was worth not far from 60 cents a bushel in Chicago in December, 1936; a year earlier it had been 70 cents or a little more; in 1934 the usual farm price to farmers, in December, was about 39 cents, which meant that half the farmers, in the western part of the corn belt, for example, could not get over half of 39 cents. Which price was normal? Then came prices that showed the effect of holding a considerable portion of our surplus goods off the market. For example, cotton commanded not more than 10 cents and hung at that figure for several years. It was down to 5 cents a pound when Roosevelt was elected in 1932. This of course was abnormal. After playing along with pretty low prices for a few years the South put up a fight for doubling the normal price that the world would pay for its cotton; it got Congress to set a price not so far from double the world price. It was believed that the government could hold production down to about the amount demanded at, say, 19 cents. We had a distressing amount left over, which became no smaller from year to year. Holding cotton down in amount was difficult. The Second World War came to the rescue. Was the 19 cents paid for cotton for home use a normal price or a normal value? No one can claim for a moment that it was. A similar situation was created with respect to wheat. We were obliged to sell a quantity of wheat for stock feed in order to avoid realizing a normal price for it in view of the excess quantity held.

What we do when our farmers are threatened with bankruptcy is to raise the price to a perfectly abnormal level in view of the quantity on hand and hope that through legislation we can keep the quantities small enough to dispose of. When the Second World War began, we were greatly worried over what to do with two of our leading crops, while a considerable number of lesser crops were large enough to make trouble. What term should be used to define the prices that coaxed more crop than was wanted out of the ground, and what we should have done to dispose of such crops remains left unanswered. How to define normal

values and normal prices and how to keep them balanced has not been determined. What we did was to struggle along with some embarrassing surpluses until the war created new demands; we did not dispose of all our surpluses, but the situation was eased so that we are not likely to have great trouble for a few years. Many men still living who were terribly stung by the fantastic prices to which farm land went at the close of the First World War will probably be active in preventing a recurrence of the griefs of the period from 1920 to 1940.

No sound reason exists for holding fiercely to prices that obtained at some former time, such as the prices of leading farm products in 1909 to 1914, as a norm. Some of these prices were distinctly high, others not so high. In any case no group of prices rises and falls as a unit.

Normal Value. It is undoubtedly reasonable for the Farm Credit Administration to believe that land is usually worth more than ordinary institutional lenders will appraise it for. Of course land will not always go back to the highest figure of any and every boom, but as a rule it will return to something like its previous long-time average. Undoubtedly certain conditions must be taken into account in connection with the question whether or not this will happen. But land does not go to lower and lower levels of value under normal conditions. If the country is still on the upgrade in business conditions and if the trading situation is still not appreciably different, then it may be expected that the values that have prevailed at a given level will most likely return. If, however, something has happened that will probably change the general course of events, then there is reason to expect that the old times will not return. For example, we had for a rather long period a situation in which cotton was furnished by the United States to Europe in such quantities that our crop usually determined the supply. When we had a short crop, prices rose; when we had a big crop, prices fell. With wheat the situation was much the same.

We owed the people of Europe a good deal of money, and the years passed without our getting it paid; then came the First World War, and we not only paid the indebtedness, but sold to the Europeans on time. This gave us a new relationship to them as well as to nations elsewhere. They began to owe us. Enough wheat was grown in Canada, Australia, and South America so that no country really had to buy wheat of us. This was indeed a new and discouraging situation. It was much the same respecting cereals and other annual products. This was the situation under which we undertook to set things right by enacting the Smoot-Hawley tariff. All this must be kept in mind in connection with the question of international trade and international credit. Our land got up to $150 an acre and from that down to a quarter as much while we were greatly dependent on selling to Europeans. Then during the 20 years following the

First World War we discovered that we could not sell to the world at the going prices; with a change in politics we entered a new regime, and farm credit assumed a new aspect. Our main farm prices were no longer dependent on what sales we could make abroad, and we undertook to set prices in Congress and to hold our production down to correspond to our own appetites. Troubles piled up. We developed better tractors, better cultivators, better milkers, better weeders; in fact we learned how to get along without a hired man, or we got bigger farms.

The 4 per cent rate on farm mortgages, which is now widespread, will undoubtedly be a real factor in the selling price of farms. Since it was mainly the offer of money at this figure that brought us down from the neighborhood of 5 per cent for the entire country, done primarily by the government, it follows that we shall have a price on land not far from 20 per cent higher, probably permanently. Prices may be even higher.

The Farmers' Debt Reduced. The reduction was effected in just over 20 years, from 1923 to 1944. In 1923 the amount of mortgage debt was close to 11 billion dollars. Twenty-one years later it was only about half as much, just over 5.6 billion dollars. Between 1923 and 1938 the total amount of farm indebtedness decreased by about 242 million dollars a year. This was due mainly to reductions of indebtedness by forced sales or compromises of one sort or another; in general only small payments were made out of income. Beginning about 1938, however, farmers were in a position to make payments on their mortgages. The annual reductions in indebtedness rose a little, to 292 million dollars per year; enforced reductions were by that time relatively few. Farmers were doing well enough to make actual payments on their debts.

A very noticeable change occurred respecting the use made of funds at their command by farmers during the Second World War as well as during the First. While the earlier war was on, farm indebtedness grew. During the period from 1915 through 1918 American farm land incurred heavier indebtedness by something like a half billion dollars a year. From 1941 to 1944 the indebtedness of American farmers on their real estate dropped 600 million dollars. This appears to represent a decided change in the feeling of farmers about their welfare and big mortgages. While land rose moderately in value, they used their increased income in paying off their indebtedness rather than in greatly bidding up selling values of land. They paid somewhat larger prices for farms, but up to 1947 they have clearly gone into debt less than on new purchases made 25 years ago; if farmers keep their heads during the next few years, they are likely to be in a very strong position financially for a good while to come.

Farm Values in 1944. Land was sold in 1944 in greater quantity than in 1919. A striking fact in connection with recent sales is that about two-

thirds of farms changing hands were bought by farmers. This was indeed a change from the prevailing trend since the First World War, when most farms were taken over by others than farmers. Many men who had been tenants for years now became owners.

Another striking fact about farm transactions is that about half the farms were paid for wholly in cash.[3] This was true for a year and a half, through 1943 and into the middle of 1944. On the other half of the sales, payments covered about two-fifths of the selling price. The farms on which mortgages were given were mostly mortgaged for 50 to 75 per cent of the selling price. The high prices at which farm produce was selling made it seem that buyers could soon reduce their indebtedness. As we look back over the years, the circumstances seemed good. Prices were about double those received in 1910 to 1914, and what probably seemed of more consequence at the time, going prices were within a tenth of double the prices of the 5 years preceding the Second World War. Another very encouraging circumstance in recent years is the fact of the highest yields ever known. More liberal use of fertilizer, great improvement in the seed used, more careful cultivation—all have contributed greatly to increased yields. Of course a year will come when the weather will be so bad as to give us a low yield, but the chances are that improvements made during comparatively few years mean that we have reached a sustained period of distinctly higher yields than were ever before known; yields in money, so long as prices remain high, are likely to be better than were ever known before. It is no doubt a comprehension of these facts that is now leading farmers to bid so cheerfully for land.

Thus the value of farms is distinctly high at present, and a stage has been reached where many farms are apparently withheld from the first offer made. Yet sales are frequent. Sales for cash are hardly likely to stay very long at their present high level.

Voluntary Sales of Land. Voluntary sales of farm land were the highest in frequency in 1943 to 1945 that they have ever been. For nearly a quarter century 1919 had been at the top, especially in prices paid. In 1919 sales had reached 48.8 per 1,000; in 1944 they stood at 72; in 1945 they were 74 per cent of all transfers.

Each line shown in Chart IV is striking. Note that the line showing land transfers in 1943 is well above the point reached in 1920, a point that for over 20 years seemed unattainable. Land values in 1920 stood at 165 on the basis of 1912 to 1914. After staying low for about 20 years they sud-

[3] Since parts of farms were counted as full transactions, it may be true that whole-farm purchases might be reduced, say to two-fifths instead of half that were wholly paid for at the time of purchase. Even so, during the first half of 1944, 53 per cent of all farm or partial-farm sales were for cash.

denly turned upward, but they are still a long, long way from their 1920 height. They may continue to climb. Fear of currency inflation would cause a rise. If returning soldiers can find little but farming to do, they may become a real element in raising values. It is too soon after the war to predict that land values may not go to high figures, but in 1947 increases are not very alarming. The abruptness of the increase is, however, about as great as in 1916 to 1920.

Voluntary sales have increased greatly as compared with other types of transfers. For example, they reached 74 per cent of all disposals in 1945, whereas they stood at 18 per cent in 1933. Foreclosures and assignments, which stood about 2½ per cent in 1912 and at 38.8 per cent in 1933, were again down to approximately 2 per cent in 1945. Thus normal times were back so far as frequency of foreclosure was concerned. During the past few years private individuals have furnished the money required to finance purchases somewhat oftener than was the case for some years before. Thus the Federal Land Bank, the life-insurance companies, and banks in general have taken a somewhat smaller part in mortgage assumption than previously. Notwithstanding the remarkable fact that cash sales have been heavier than usual, among the farms bought on time are many with mortgages up to three-fourths of their value. If such sales should continue to increase, it is possible that such purchasers will find much trouble in meeting the demands on them, and foreclosures may again become more frequent.

Interest Rates. Interest rates in 1947 are down somewhat in spite of the change from 3½ back to 4 per cent. Almost all sales in the northwestern region were at 5 per cent or less. All farm loan associations, with many loans at 4½ to 6 per cent, were now reduced to 4 per cent. The relatively low interest rates are undoubtedly a factor in raising land values.

Outstanding Mortgage Debt. Notwithstanding the fact that prices have risen appreciably and that much more land has been sold, the outstanding indebtedness recorded has shrunk. This merely means that farmers have been taking in a lot of money and have been paying off their debts. The farmers of the nation owed 482 million dollars less on mortgages on Jan. 1, 1944, than a year earlier, or 7.9 per cent less. The debt that we now owe against our real estate is indeed rather small, but it is an eighth of the total value of real estate. We owe little more than half as much as in 1923. This means that our indebtedness is a lower proportion of the value of our real estate than it has been since 1920, when we reported our real estate at twice what it was worth a few years later.

Our real-estate value was reported in 1944 at 45,592 million dollars. Farmers have not had so large a portion of the value of their farms in their

own hands as now since before the First World War, except that for a brief time following that war they appeared to be in as good circumstances.

TABLE XIV.—FARM MORTGAGE DEBT. TOTAL OUTSTANDING AND AMOUNTS HELD BY SELECTED LENDING AGENCIES, UNITED STATES, JAN. 1, 1910, 1915, 1920, 1925, 1930–1944*

Beginning of year	Total farm mortgage debt, 000 omitted	Amounts held by selected lending agencies					
		Federal Land Banks and Land Bank Commissioner, 000 omitted	Joint-stock Land Banks, 000 omitted	Life-insurance companies, 000 omitted	Commercial banks, 000 omitted	Three state credit agencies, 000 omitted	Farm Security Administration, 000 omitted
1910	$3,207,863			$ 386,961	$ 406,248		
1915	4,990,785			669,984	746,111		
1920	8,448,772	$ 296,386	$ 60,038	974,826	1,204,383		
1925	9,912,650	923,077	446,429	1,942,624	1,200,456		
1930	9,630,768	1,201,732	637,789	2,118,439	997,468	$96,360	
1931	9,398,088	1,197,063	605,858	2,087,047	946,876	95,685	
1932	9,093,983	1,180,992	552,180	2,036,614	940,135	96,331	
1933	8,466,418	1,147,014	474,954	1,898,318	889,083	87,290	
1934	7,685,203	1,328,563	412,346	1,697,787	710,863	82,840	
1935	7,584,459	2,564,179	274,988	1,301,562	498,842	66,096	
1936	7,422,701	2,907,649	198,187	1,112,289	487,505	53,705	
1937	7,153,963	2,989,019	160,013	1,015,615	487,534	39,969	
1938	6,954,884	2,950,761	133,554	988,557	501,450	35,362	
1939	6,779,318	2,862,855	114,992	982,939	519,276	31,872	$ 15,220
1940	6,586,399	2,723,110	91,726	984,290	534,170	30,294	38,566
1941	6,534,487	2,642,333	73,455	1,016,479	543,408	29,317	73,093
1942	6,483,847	2,515,669	55,919	1,063,166	535,212	30,406	122,104
1943	6,117,168	2,262,135	37,015	1,042,939	476,676	28,794	163,681
1944	5,634,772	1,882,637	10,097	986,661	448,433	24,082	176,595

* *The Farm Real Estate Situation, 1943–1944*, p. 22, U. S. Department of Agriculture, *Circ.* 721.

Farm Credits. Just at present (1947) farmers are prosperous. Our surpluses of wheat and cotton are not alarming, while about all other farm products, such as meats, dairy products, tobacco, and vegetables are relatively scarce. We may again be struggling with the problem of surpluses. If this should happen, we shall again be confronted with the question that plunged us into so much trouble a few years ago. Probably no one feels

that we handled it too well at that time. The real danger is that the prices of farm products will fall within just a few years. We at least hope that they will not be maintained by inflating the currency. Yet there appears to be little prospect that farm prices at the present level will last for a period of years with dollars worth about what they are at present. Farm credits are still remarkably sane, because of their small bulk. It is amazing that the total amount of farm indebtedness was still growing little if any in the middle of 1944. If, however, there should be a fear of inflation or a great growth in the numbers of people wanting farms, there might be an amazing growth of farm indebtedness within a few months.

Interest Payments. It is often said that interest is payment for the use of money. This may be a good definition, since we usually reckon values in terms of money, but it is usual to pay interest on debts that, while reckoned in money, are actually loans on quantities of goods at any given time, such as those held by a merchant or such as a farm worth possibly $20,000. The interest is paid, often on the amount of money that would discharge the debt. It has been reckoned at times that the actual amount of money at any given date is equal to some 2 per cent of the amount of valuable goods in existence. We pay interest, then, not so much on money as on money's worth of usable goods. Interest may be anywhere from 1 to 100 per cent, more or less. Interest paid by farmers on values of their farms not yet paid for has ranged during recent years from 4 to 10 or 12 per cent. When the Federal Land Bank began to do business, it charged 5 to 6 per cent interest.

The payment made by the borrower to the lender for a sum of money or goods varies greatly because of the risks, the amount of care and supervision involved, and also the length of time for which the loan is made. The cheapest loan is probably one made by an individual to the government. The time involved may be long. With us in the United States, bonds run for 20 or more years; in England it may be forever. Where, for example, the loan will run for 20 years and is safe, several matters are taken care of for a long time; it will probably require little or no supervision; since it is exchanged for a promise that is looked upon as the best in the world, it requires no care and no worry. An ordinary farm loan is generally looked upon as safe. Yet 20 years ago many of them were found to be too large, and their values fell. Again, a loan may not appear to be too high when it is made, but some farms may become worth less and less as the years pass. If the loan is not looked after by someone who can exercise some authority, and if it is made for a long time, it may be found worth less from year to year. A good farm well handled is an excellent piece of property and can be relied upon as real security under ordinary circumstances. It is clear that a mortgage on an Iowa farm, except such as

those made soon after the First World War, is likely to be a good document.

Interest may properly be quite low where the security is good, where the borrower is reasonably reliable, and where the land is such that it cannot be easily hurt. In case of risky loans the interest may very properly be high. A government loan may carry a rate around 2 per cent nowadays. A first-class farm loan may be held at 4 per cent or even less. But a loan made to a stranger who enters a pawnshop with a watch or a violin is likely to be at 10 per cent a month, and frequently such a borrower soon loses his claim to the property.

Interest Rates. The commonest rate charged on farm loans is 4 per cent. Probably the next most common rate is 5 per cent; 8 and 10 per cent rates are rather hard to find. The high rates are usually covered up in the price. A similar example is bacon at retail, generally sold, for example, at 40 cents, which may be 5 cents too much; if the charge should run a year, the extra cost would amount to 20 per cent; if half a year, 40 per cent. Such charges as this are frequent. Rates on farm loans can be raised very much, especially if they are for short lengths of time, by commission or some sort of additional charge that very appreciably raises the rate mentioned in the written document. The Federal Farm Bank loans, however, have brought rates down very greatly. These reductions appear especially in the Southern and Mountain states. While there are still many instances of high rates in these districts, the low Federal rates are slowly dragging down general interest charges.

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Chapter 15

MARKETING

Development of Markets. Markets started so long ago, probably back when no one could read or write, that all information about their earliest phases is lost. We may infer that the first trading of importance was done in foodstuffs. Undoubtedly people tried through trade to gain possession of many things they had not been able to get directly for themselves. They would trade off something that they had in abundance for something else that they lacked. Many people were hungry for salt and traveled great distances to get it; salt must early have become subject to exchange. It is said that a man would at times trade his wife for a handful of salt. Among the North American Indians trade of a primitive type had progressed far enough to require something on the order of money, and an idea of value had developed; the Indians often made long trips to effect trades.

Well-to-do groups, probably large families, are said to have got along in the early years of settlement in this country with little or no exchange of goods. These groups, probably consisting of large families, boasted that they could live by themselves, presumably as well as though they traded with others. Within the large family there was relatively much wealth. In general, families took care of their own wants to a very great extent, at times trading wool for cloth, fresh skins for leather, occasionally foodstuff for some bit of finery.

For several centuries trade was quite generally concerned with articles of luxury such as silks, diamonds, tea, and other rarities, while the goods involved in the living of the common people seldom moved far from their point of origin. In early times grain was shipped mainly by water, which means that the most of it was not shipped at all for any great number of miles. Breadstuffs were not great articles of commerce until Americans began in rather a small way to send them to England. Europeans, by far the most advanced people of the world for some centuries before America came to the front, were the best buyers of grain for food, but even Europe

would not buy great quantities of such imports. For many years a country that could not feed itself was looked upon at home and abroad as overpopulated. Our agriculture was hardly on a commercial basis until after the Civil War; before 1860 it was for the most part a local matter, with most farms small and the family consuming the bulk of their produce at home. Of course here and there agriculture was commercial from an early time. Such was the case in many favored spots along waterways, though not for many miles back into the country. The South became considerably commercialized by selling tobacco, cotton, and a little rice overseas and at the same time buying grain, meat, and manufactured goods from the North. Before the railroad was well developed, there was little opportunity to ship fresh vegetables or fresh meat across the country. Little farm produce raised 50 or 100 miles back from rivers, lakes, or the seashore was salable.

Industrial Revolution. The Industrial Revolution began in England as early as 1760 and soon after that was making pretty rapid progress. It was, however, around 1800 before it had got very far in America, and even then it moved much more slowly than in England. It was not easy to hire people to work in our shops until choice new land for farming was less accessible or higher-priced than formerly. Our having so much free land within easy reach made it hard to force people into the factories and make them work for well under a dollar a day, as was done in England. English laborers for some years had no choice but to accept the low wages offered by factories; it was no longer easy to find even the low wages that had so long been offered in the country, since farmers were still being "enclosed," and with better agricultural machinery it became possible to discharge large numbers of hands or to crowd many small tenants off the land and so send them to the cities and villages where the only living they could make was a pittance in the mills. We were better off. Until after 1890 we had land where almost anyone could at least escape such terrible conditions as prevailed in the English factory towns.

Manufacturing grew up slowly in America. Conditions in our cities, not so bad as in Europe, did not reach their worst stages till much later. In this country extreme factory conditions did not develop quickly; compared with England's, our factories were small, but still bad enough. We had cases of children, who should have been in school, working 10 or 12 hours a day in factories, women working long days for small wages, and discreditable sanitary conditions. Only within recent years our laws have prevented most child labor, such as grew up during the middle of the nineteenth century, and housing conditions are still quite distressing in many of our crowded cities.

Money. We had some marketing as soon as villages grew to any size at all. For many years little money was used, but farmers brought in

produce and traded it for the goods furnished by merchants. The shortage of money continued throughout the colonial period, and we used money not only from England but also from many other countries. The "dollar" was a Spanish coin that came to this country in such quantity as to become familiar. The Spanish dollar was easily made the basis of our own decimal currency. During the colonial period people were hard put to it for money. Massachusetts did well in devising a silver shilling, and while it was probably illegal, it passed; the worst trouble was that much of the amount issued was shipped to England. The different colonies used tobacco, corn, fish, lumber, bullets, livestock, skins, pitch, tar, or even wampum for money. Often these commodities had almost no value. No real market could exist without money. We had tried to adopt the Spanish dollar before and during the Revolutionary War, but it was not done, although we used many of them for some years. We had no real money of our own issue until after the adoption of the Constitution, when we adopted the system still in use.[1]

Market Defined. The word "market" is not altogether easy to define, largely because it is used in many senses. A market is a place where buying and selling are done. In fact it is the buying and selling that constitute the marketing. This has led to the very old saying that two women and a goose may constitute a market. They probably do on many occasions. Then we have a stock market where millions of dollars' worth of stock may be sold in a minute, with men listening in from San Francisco to London and changing their bids every second or two. The infinite variety of marketing, involving anywhere from two people to thousands, one dollar or a hundred million, is what makes a market hard to describe. For every deal concluded there must be at least a momentary meeting of minds. A definition is required that will reach all the way from two women and a goose to the sale of Louisiana for 15 million dollars or the sale of a great railroad.

The simplest type of marketing consists of exchanging goods for goods. For example, a farmer may trade 10 bu. of corn for a pig. Money may enter the transaction in reckoning the value of each commodity. In the most primitive cases there may be no careful calculation about money, and one good may be exchanged for another. In America during early years money was so scarce that much trading was done without use of it; prices entered only vaguely into the deals made. Not over a century ago country-school teachers were not infrequently paid in farm produce instead of in cash, although the price of the produce was pretty well known,

[1] J. Lawrence Laughlin, *The Principles of Money*, Chap. XIII, Scribner's, New York, 1903.

and the teacher was satisfied to take from 2 to 4 bu. of corn for a week's work, in addition to her board.

A market is the sphere within which price-making forces act. Many attempts have been made to define a market. Some sort of definition may be found in almost any book dealing with the general subject.[2] Marketing is clearly a productive process. No doubt when we think of production as a physical operation, marketing may be looked upon as a quite separate later undertaking. On the other hand, when we come to concern ourselves with values, it is plain that additions are made to them through the marketing process; and the production of a good continues as long as values are added.

Middlemen. The feeling is widespread that we have too many middlemen; many are believed to exist merely for the sake of collecting margins without contributing a service. As a matter of fact the middleman does perform a service. Probably the sorest point among the lines of middlemen between farmer and wholesaler occurs at the station to which the farmer delivers his produce. In many of the stations to which grain, for example, is hauled, there are three to five elevators. As a rule the majority of the men who do the work do not make any more money than men doing such an amount of business should make. The fact is that they do not, however, have a full-time job; there are too many of them. In many of these stations during the past 40 years the cooperative movement has reduced the number of dealers buying and shipping grain. At the outset a farmers' company probably seems just to add one more to a list already too big. But if the farmers' undertaking prospers at all, the chances are that it may become the largest dealer of all and that eventually the others will be reduced in numbers. Thus a cooperative company, with a reasonably good manager, may do the business formerly done by two or three buyers and do it with but one buyer, with younger helpers who can be hired at moderate salaries. A cooperative company does not need competition. Usually a competitive group lacking a cooperative competitor takes 6 or 7 cents a bushel margin, whereas a cooperative group could get along on half as much. Margins required vary a great deal with quantity of grain shipped, amount of dockage needed, and so on, but out of the experience of the past half century it is plain that cooperatives have been able to make distinct savings. They hold out in numbers and in strength and pay the wages needed to get fairly good help. It appears that receiving grain from their members, cleaning it, drying it, shipping it, and possibly putting it through a "hospital" elevator at a central market is a piece of work that farmers are capable of doing well, with some saving.

[2] See B. H. Hibbard, *Marketing Agricultural Products,* pp. 13, 14, D. Appleton-Century Company, Inc., New York, 1921.

Grading, Packing, Assembling, and Processing. These are services that must one or all be performed on most goods made ready for the market. Apples as a rule must be graded according to quality, perfection, size, and possibly color. Eggs must be assembled according to size, freshness, and possibly color. Wheat should be graded and perhaps put into packages, such as sacks, though much more is sold in bulk. Hogs may be of all sizes, fat and lean, as they are brought into a local market for a day, and it may be impossible to assemble them in like sizes and quality at the buying station; yet before a price is put on them at the wholesale buying establishment, the chances are that they must be reassembled so that the packers may bid separately on carloads of pigs, light hogs, medium heavy, and heavy hogs. Reassembling animals requires someone interested in the producer if the shipper is to get what the various grades, sizes, and the like are worth. The earlier this sorting can be done, the better for the man who hauled them to town. At some yards the necessary sorting is done to the advantage of the first seller.

The sooner produce can be properly graded, packed, assembled, and processed so that the number required to make a desired unit is reached, such as a carload of hogs, a car of oranges, or a boatload of wheat, the better off the producer will be. So long as the goods in question are mixed, big and little, old and young, tough and tender, so long the produce fails to appeal strongly to people whose tastes are well developed and whose pocketbooks are well filled. Miscellaneous packages are always cheap; well-graded, uniform, attractive lots always bring the best prices. For the above reasons large groups of farmers who can have uniform products really ready for sale have an advantage over the ungraded, miscellaneous goods.

The Middleman Problem. A middleman is a man or a company acting as an agent between two parties in any line of business. A middleman is a dealer. He buys of one person or company and sells to another. Wheat is often sold by the farmer to a local elevator, which ships and sells to a wholesale buyer in Minneapolis, Chicago, or New York, who sells to a buyer in Liverpool, who may sell to a miller, who finally sells to a retail seller of flour. These are all typical middlemen except the miller, who is more than a mere middleman, since he combines different purchases and makes them into flour of different grades and feeds such as shorts and bran. The miller is both a middleman and a manufacturer. He buys wheat, but he sells several grades of flour and several kinds of feed. Probably many would call the miller a middleman but, although he buys and sells, he does so much more that we need another name for him. He is a manufacturer fully as clearly as he is a buyer and seller.

Probably a middleman may be conceded to do something to his produce

such as to dry or clean grain, to sort potatoes, or to put small fruit into boxes and crates. Appreciable amounts may be added to values by doing such things as these, and no doubt at times there would arise many instances when it would be rather difficult to decide whether a given man is merely a middleman or something more. The middleman does not, however, do much more than to buy, sort, classify, and label. He does not spend great sums of money in grinding, polishing, and cutting until he becomes a manufacturer; if we call anyone whom we find doing all of these many things, which often cost big sums of money, a middleman, we shall get far away from the original meaning of the word.

The farmer is clearly the residual claimant respecting the pay that comes to him from his product. A residual claimant may come out pretty well. Quite possibly the man who mines some diamonds may be the residual claimant respecting the receipts from them. He hires the work done at the mines and sells the polished or perhaps unpolished stones. The farmer buys the land, works it, and similarly sells the product. But he has too many competitors. The real reason why the farmer's income is so limited is that there are too many farmers for any one man or thousand men to have any appreciable influence on price. The farmer can do little or nothing about price. The price is made on a big market, possibly involving the greatest part of the product from all over the world. And all that can be done by anyone in selling this product is to establish a market in London or possibly Chicago and from day to day offer a bit of this product and take the highest amount offered. The farmer who grew the cotton, wheat, or corn can only take what the last, hungriest buyer will pay, which is often a price capable of hardly more than paying him back the cash he had put into the product. When the New Deal in desperation undertook to handle our great cotton, corn, and wheat crops, it knew little about how to do it, and it had not learned very well when the Second World War came along and took the matter out of its hands for a few years.

A single elevator may actually hold a monopoly in buying grain, but again it may have nothing of the sort. Suppose all the farmers have telephones and that they phone to the one buyer and ask what he is paying for grain; they can come near enough to understanding his prices so that he can take no appreciable advantage of them. On the other hand, if the lone elevator is located in a neighborhood where there are no telephones, if the grain raised is not well graded, is dirty, and so on, a single elevator may occasionally have a wonderful chance to take advantage of the sellers. Probably a case of this kind will be hard to locate.

Effect of a Cooperative. The first effect will be a somewhat higher price to the producers. Following this, there may be a sufficient increase in the quantity produced to lower the price. This will be discouraging to the

producers, and some will probably decrease their output because of it. On the other hand, it may take a long time to bring this to pass. There are other considerations governing the amount produced besides differences of a few cents in price. No doubt some few farmers would be inclined to produce less if the price were held down, but the question of the rotation of crops has a tendency to hold acreage pretty steady in many instances in spite of a little discouragement in price. Again the increase in cooperation may not spread around the world very rapidly, and perhaps our prices are set on a world market in which another hundred million bushels might not show a great change in price. Population has been increasing rather rapidly for many years, and this always calls for more produce. Thus another nickel per bushel on wheat may not increase the amount put on the market so rapidly as to cause a discouraging drop in prices. In this country the prices of many crops do not govern at all directly and immediately the acreages grown, partly because cost of production has been going down rapidly, due to improvements in machinery, lower prices on fertilizer, and the like.

Real Competition. Six elevators, each privately owned, do not insure genuine competition. The six elevators may agree on how to present an appearance of competing without in reality competing at all. For example, dealer number five may make the first bid; number six may raise the bid by a cent, and number one may raise it another cent and get the grain. The next load may be started at the lowest bid by number one, raised by number two, and bought by number three. On another day the order of bidding may be changed. So long as they can agree, there is no danger that the method used will be discovered.

Future Trading. This practice has at least at times been condemned by every existing farmers' national organization, such as the Grange and the Alliance. This means that such sale or purchase of farm produce is condemned by the majority of farmers. The reason the wheat buyer speculates, that is, sells wheat to match his purchases, is that he has bought actual wheat at, let us say, $1.50 a bushel in August. But he ships this wheat to England or farther, and it will not arrive for a month. Not feeling able to carry this risk for a month, he sells wheat in the future market, probably December, at a figure corresponding closely to his purchase. Later, possibly in September, his wheat arrives and is sold at once. He then buys wheat in the same future market in which he sold. He had agreed on the occasion of selling wheat for December delivery to furnish an amount of wheat at a designated city in December. Now having sold his real wheat, he at once buys a quantity of future wheat, approximately the same quantity as he had just sold and exactly corresponding to the amount that he had previously sold in the future market. Thus he has bought real wheat

and sold futures in the first place and then sold his real wheat and bought the corresponding future, which was a claim for real wheat; the transactions cancel. What he has done is virtually to sell his wheat the day he ships it, and then the day his actual wheat is sold he cancels his contract on the future market by buying back the quantity that he sold at the time of making the shipment.

In the transaction just described it makes little difference to the wheat shipper whether wheat goes up or down, the reason being that he sells the day he ships, that is, buys, and again buys the same amount back the day he sells his actual wheat. The wheat shipper then normally makes a small margin only on the wheat he ships, but he buys his wheat from the farmer at a price low enough so that if he could make the sale a thousand miles away instantly, he would have a margin for his trouble.

The Real Speculator. Possibly the speculator's main chance for making anything on the transaction lies in the fact that he is right on the job every minute; he sells whenever wheat goes up a quarter of a cent a bushel, and he buys on very slight turns downward. The country buyer is likely to hold for an increase of 5 cents a bushel, which may not come in a long time, but the man who operates on small turns in either direction is forever buying and selling. Buyers and sellers on the Board—generally called Board of Trade—are known as bulls and bears, because they appear to be working to get prices up or down.

Farmers and the Board of Trade. For many years farmers have believed that the work of the Board of Trade is quite against their own interest. They are impressed by the fact that there is a vast amount of buying and selling of "phantom" wheat and also by the fact that many men make a great deal of money on the Board of Trade. They do not stop to think that about as much money must be lost on the same deals. Also they do not appear to understand that these big dealers are, as a rule, handling no wheat at all; the dealers are not looked on as men who know wheat at all, but as outsiders who put prices up and down at will. It is believed that these men who hardly know wheat when they see it are the enemies of the farmers, though as a matter of fact they may be the keenest buyers and sellers of the product they are interested in of all who buy and sell.

Objections to Futures. The general claim is that the Board sells wheat freely in the "short" selling, which means that selling wheat, for example, when one has none to sell has a tendency to depress prices. But at the same moment someone bought wheat without receiving or seeing it; so the tendency might be to hold the price higher. The supposition is that the deal was initiated by the short seller and that nonexistent wheat was dragged out of nowhere to depress the market. Just why a group of men

would buy, hoping and expecting that the price would rise above what they were paying, is never explained.[8]

Probably any selling tends to hold prices down, just as any buying tends to hold them up. Very naturally the offerings of wheat, real quantities as well as fictitious, mean that prices will be held lower than if they were not offered. Wheat is always more plentiful new than later in the season. The later supply has to be stored; much of it has to be cleaned and blended with other grades. Since it costs an appreciable sum to hold this wheat for months, it will naturally rise in price. As a rule wheat and other crops harvested within a short time and marketed throughout the year rise in price as the months pass. The man who sells wheat short in September and holds it for a few months is often a nervous bidder for supplies—very likely supplies of "phantom" wheat—when prices rise. But, to repeat, the wheat speculator is much more likely to offer it for sale within a day or a week, so that the rises and falls are likely to be spread rather thin among a lot of buyers and sellers.

Quite likely speculators, who probably know more about the world market than anybody else, do at times overestimate the forces tending to put prices up or down and must therefore soon move to the other side of the market. The laws recently passed require buying and selling to cease whenever a price has changed 5 cents, either up or down, on any day; thus a real runaway price cannot develop on any given day. Just how any group of men can hold prices down by selling short in the fall cannot be explained. Probably when there is real occasion for prices to go either up or down, the speculators are the first to understand it and so the first to act. It is true that prices are likely to be lower in most fall months than during the remainder of the year. But just how any set of men can first hold prices down by selling at a low price and then make money by buying the wheat back after it has gone up has never yet been explained.

The public has for years declaimed against "squeezes" and "corners." The government tried in 1923 to put a stop to these practices, and apparently the law against them really has been effective. It may be remarked that a "squeeze" means making it difficult for a man to buy something like wheat with which to meet an obligation that he has contracted. A man may have sold a thousand bushels of wheat for October delivery, and having waited until the very last of the month to fulfill his contract, he may find himself "squeezed," which means that he has to pay distinctly high prices in order to fulfill his contract. To be "cornered" means about the same thing. He cannot find wheat with which to fulfill his contract

[8] It is claimed that farmers will buy wheat on the market in the fall, but no one ever knows one who does this to any extent.

except at prices that are now higher than he can afford to pay. These conditions are brought about by a man or a few men who buy up all or most of the available contracts, which are as a rule easily found, and so compel a few who are caught short to buy everything available in the way of contracts for wheat and probably also all available wheat. The few caught short may have to pay double the regular prices. Such troubles as these were always rare and have not occurred now for many years.

Marketing Situation after 1930. We were long on grain for years because of the failure of the European market to take our goods offered at any sort of price. In 1932 wheat was lower in London than it had been since the sixteenth century; in the United States it was lower in the central markets than it had ever been. Wheat sold in Kansas as low as 22 cents a bushel, and farmers did not care much whether they sold it or kept it. The price did not go up much until the New Deal came to the rescue with the plan of putting into storage about all that we did not consume. We had somewhat more than one full crop of cotton on hand as a presumably permanent surplus. Our wheat surplus was also large, but it was cut down to practically nothing by the short crops of 1934 and 1936. After 1936 wheat surpluses piled up again.

In 1943 we had on hand, on July 1, 1,594 million bushels of wheat. We sold a relatively small proportion of this to farmers for feeding cows and chickens, at a small loss per bushel. England buys the most of her wheat from Canada. Thus our own marketing problem is not altogether solved. We kept our wheat up to about $1.40 per bushel in 1944 in spite of the fact that we had a heavy surplus and that there was not much foreign demand. We allowed an increase in planting, from 55 million in 1943 to nearly 66 million acres in 1944. In the latter year we had the heaviest crop ever grown; per acre it was one of the four heaviest the country has had at any time. Thus, while there were more hungry people in the world than ever before, we had a price of $1.75 or thereabouts on our wheat and held about twice as much wheat as we needed; in 1945 we harvested a little more than in 1944. Apparently with a smaller amount on hand (1947) wheat dealers are expecting prices to remain high.

The New Deal and Prices. Farmers had lost faith in the ability of their own organizations, their cooperatives, to handle their produce in view of the collapse of the export business. This means, of course, the business of handling such kinds of produce as depended on an export market for much of their movement, say cotton, wheat, tobacco, pork, and rice. The feeling was that cooperatives could do little in these cases. Both in the North and in the South there was fear of free trade; with a low tariff, it was believed, we would surely get from many countries quantities of goods at figures so low that they would force our farmers' prices to a distress

level. During the early thirties the prospect of heavy importation of many farm commodities was not very alarming. Our own prices at that time appeared too low for many such imports to be attracted here. We were afraid that any increase in prices, such as might at times come to dairy products or meats, might be dependent on the tariff for support, since these products were frightfully cheap in almost any country that had a surplus.

Thus the New Deal, in fumbling around for a remedy, could see no hope in lowering tariffs at once and without very specific agreements with other nations for reciprocity. We were probably the only nation that could not do better than slice 50 per cent from our tariff as it stood, but the feeling prevailed that that was as low as schedules could be brought without repealing the tariff act outright. Half of our outstanding rates were such that some charges were still pretty high. At any rate 50 per cent reduction was the action we took, and even Democrats insisted that under the circumstances that was as much as could be done. No hope could be entertained of exporting much in the way of agricultural products for years to come, since within a few months after the inauguration of the Democratic regime in 1933 we had arranged for prices for ourselves that were in excess of world prices. Our agricultural exports fell to almost nothing. Limitation of production was at least a partial success, though without the Second World War the device might have been more sharply criticized and protested against. Our mounting crop surpluses were disquieting. Farmers felt that they should be allowed to produce more rather than less. It is doubtful that we would have continued to produce such large quantities for many years at such high prices.

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Chapter 16

FARMER COOPERATION

We have in the United States a large number of farmer cooperatives. Probably a third of all farmers belong to some sort of company organized and run by farmers. Membership in such companies runs to some 3 million, but since one farmer may and often does belong to two or more companies, the actual number of farmer members is more probably about 2 million. This is a pretty good showing numerically. But coverage of tenants does not amount to much. Among all our farmers we have about 2⅓ million tenants. These people are not regular, constant occupants of the same farms for any considerable number of years, as they would be in England; most of them do not stay in one neighborhood long enough to become members of cooperative companies. Of our more than 700,000 colored farmers, few are members of cooperatives. As long as the present status of farm ownership and tenancy persists, we shall not have many prospective new members for farm cooperatives.

Most of the farmers who belong to cooperatives are associated with such companies as the leading fruit growers of the West; producers of grain to be sold, such as wheat, oats, and barley; milk, butter, and cheese producers; and tobacco, cotton, and livestock producers. There are besides a considerable number of cooperative stores and many miscellaneous undertakings, but more than 90 per cent of the business of all cooperatives is done by the grain, dairy, and fruit and produce companies.

FIRST CONSIDERATIONS

Origin. Few such undertakings were launched up to the middle of the nineteenth century. For example, it was hard work to make butter in a small farmhouse, especially during the summer months, and the job usually fell to the women; a single farmer did not as a rule have enough milk for cheese. These conditions spurred the development of creameries and cheese factories, with a few unincorporated cooperatives among them.

Accounts have been found of a very small number of such undertakings before 1860. There was something in the nature of a creamery in Connecticut in 1810; one was started in the state of New York in 1856 or 1857. In Wisconsin a cheese factory or more probably a cheese "circle" was started in 1841; the enterprise consisted merely of assembling the milk of a few neighbors and passing the job of making cheese from it around the ring of these people so as to provide milk enough for a really good-sized cheese. There were at least a few such organizations about the country before the Civil War, but cooperatives were started in a more businesslike manner later on by the Grange, which began the organization of cooperative creameries and cheese factories in the Middle West in the early seventies.

If the Grange had prospered, it is more than likely that the cooperatives would have flourished. But the Grange went pretty much to pieces during the later seventies and eighties, and no other similar organization existed that would keep the cooperatives going. Such enterprises needed a guiding hand. If they were incorporated, they were likely to lose their cooperative character; the law gave no help in preserving it, but allowed stock to be bought by anyone who cared to invest, with the result that the great majority of farmers' companies were bought up by small groups who were or soon became strictly businessmen. In such cases the cooperative features were soon dropped. In 1883 very few cooperatives were running. The Grange had practically ceased to promote or encourage such undertakings, and there was none to take its place. There were only a very few cheese factories and fewer cooperative creameries, possibly a dozen altogether, rather less than more.[1]

Through the years a few general principles have emerged that seem useful as a guide to the development of cooperative undertakings.

Grounds for Improvement. If markets are good, if producers are being well treated, and if profit margins are reasonable, there is little chance for improvement. Sometimes a market is poor because of too little competition among the buyers. Possibly one buyer has everything his own way and takes advantage of the situation to a great degree. The business involved in handling the goods may or may not require much skill on the part of the buyer; regardless of this, if competition does not develop, the farmers will probably try running the business themselves, sooner or later.

[1] E. G. Nourse, *Fifty Years of Farmers' Elevators in Iowa*, Bull. 211. Iowa Agricultural Experiment Station, March, 1923. H. C. Taylor, *Outlines of Agricultural Economics*, Chap. XXXIV, The Macmillan Company, New York, 1931. F. R. Yoder, *Introduction to Agricultural Economics*, Chap. XIX, The Thomas Y. Crowell Company, New York, 1929.

The chances that farmers can succeed in a pharmacy, for example, are not very great. But let us notice a different case.

In a village in southern Wisconsin were three leading buyers of livestock. The main sales from the surrounding territory were largely in the form of cows, old or not milking, and dairy calves. The cows came in in ones or twos for the most part, though the calves were more numerous. It was a big job for any one of the three buyers to find enough animals for a shipment. The result was that nobody made much; yet the margins were wide. The farmers organized, crowded out the three buyers, and kept the business running well for some years. A farmer manager of the new company could ship a carload of cattle every week or two and get the sellers probably 50 cents more per hundredweight than the former buyers had been able or willing to pay. The farmer who took care of this little business spent a day or two at it each week, for which he was paid a few dollars. He found that considerable care would be taken at the central market to make returns on several groups of cattle shipped in one car. Competition among the former buyers had not been on a good business basis; there were too many of them. Here cooperation paid well. Under such circumstances cooperation was much better for the sellers than competition, as competition works in such cases. As in connection with livestock, so too in grain shipping the full time of a man of considerable skill may be needed to make things run right. The occasion for improvement in marketing that opens the way for a farmers' cooperative may take any of several forms.

Cooperative Activities. It has often been said that a cooperative should handle only one sort of product, and in this idea there is much truth. Undoubtedly such a company should at least be built around similar commodities. On the other hand, grain and livestock appear to go together very well. Eggs are often handled in connection with something else, such as dairy products or livestock. No doubt as a rule the second commodity is less crucial than the first; it may not even be handled as well. Or again the second commodity may be handled to real advantage and add appreciably to income. It may be no harder to make something on eggs handled at an elevator than it is to make something on oats or barley handled at an elevator dealing mainly in wheat. Of course the decision whether eggs shall be handled at an elevator will depend primarily on whether the eggs can make substantial business and therefore whether egg sellers want first-class treatment or merely somewhat better treatment than at a grocery store. Weighty considerations operate against trying to handle all the many complex products of a single farm in one company, but it may be definitely profitable to handle eggs at a creamery or livestock at an elevator.

Amount of Business Available. Many a business has failed because it was not big enough. Very likely it was originally part of a much larger and more complex enterprise, which meant that too little attention was given the particular line to make it yield as much as it should have. In a cooperative this line might have received more attention than it could support, and even though the product sold at a higher price, the net return to the producer may have been less because expenses were high. This misfortune has often overtaken such a commodity cooperative as wool, scattered out thinly throughout the Middle West. This country is not in general a sheep country. The result is that wool cannot be graded and classed in a manner attractive to buyers. Four kinds of wool of varying cleanness may be found in a quantity weighing only half a ton. Compare this with many thousands of pounds offered by a Montana producer or seller who has graded his wool so carefully for years that buyers know it requires little inspection. The difference in selling prices in the two cases will be substantial. In Wisconsin, for some unknown reason, one may quite often see an advertisement offering to purchase "old iron and wool." As a rule such a buyer pays small prices for wool, and no matter how honest he may be, wool is bound to be cheap while it is in his hands. In order to get a good price for almost anything of a bulky nature it must be sorted and graded to attract the attention of competent buyers. No efficient cooperative can afford to put in the time trying to sell small unclassified quantities. It takes a respectable quantity of goods to attract buyers who will pay good prices.

A Good Manager Required. One of the weakest features of farmers' cooperatives for many years past has been poor, inefficient management. Back in the early days the companies of the Grange were nearly always weak, because the Grange simply would not pay the price of good management. With cheap managers the failure of the undertakings was assured. Probably most of these enterprises were destined from the first to fail, but in any case the feeling in the Grange that twice a hired man's wages was enough for the manager of one of their business was fatal.

The work of a manager of a store, an elevator, or a farmers' buying or selling company of any kind calls for ability. A man in a managerial position with a cooperative must get along with a good number of the members. He must be able to collect money from them without offense; he must win their liking; he must run the business so that he will be able to pay bills when they are due. It takes a man of good presence and skill to make deductions from a farmer's price for dirt and for mustiness, to pay what the produce is worth to each and all, as he understands it, no matter who offers it. The manager who can meet all these questions and problems promptly, fairly, and firmly is rare and is worth real money.

It takes an unusual man to deal with a hundred different farmers, with many views and prejudices, yet keep them all good-humored and reasonably satisfied. A man worth a high salary is probably cheaper than a man worth but half as much.

Contracts. Probably a contract is helpful, although one that is annoying to either party is worse than none. The most pressing requirement for most contracts is probably the provision that the members shall deliver all their produce to the cooperative. In a recent potato growers' contract such a clause was conspicuous. When it came time to sell the crop, the price was outrageously low, and it was soon found that this particular company had unusually high expenses, absorbing about all that could be got for the potatoes. Growers started to pull out, though they were supposed to stay with the cooperative. They had been organized by townships, the growers in each township acting as separate units in the direction of the business; now these groups held meetings and withdrew until hardly any remained. To hold them they would have to be handled by township groups. But just how could one of these groups be arrested as a whole and perhaps be brought before a justice, with jail sentences to follow? The difficulties of the case, involving hundreds of farmers, looked forbidding; therefore it was not handled at all. The manager's high salary was stopped suddenly, accounts were met as best they could be met, and the company abruptly ceased to function. In general, a contract is no doubt a good thing, but it must not be carried too far, or it will fail completely. There is little or no possibility of making a farmer deliver produce to a company if he does not want to. A contract is a poor substitute for loyalty.

No association can drive its members to do what they do not want to do. Of course they may stay in line for a year or so, but not long enough to make much difference. If a member does not want to do what the majority are doing, he had better drop out entirely, for the good of the organization as well as himself. The attempt to hold unwilling members in a cooperative company is of doubtful advantage to either side.[2] A company that is obliged to resort to the law in order to compel action that is to the group's interest is probably on the way toward dissolution.

Liquidating Damages. A distinction between this and a penalty is usually made. A penalty, for example, as a rule involves a punishment, while the liquidated damage case implies something less serious. As a rule the term is invoked in connection with a sale of goods to some agency other than the company that held a contract for the purchase of all such goods as the seller could offer. For example, a farmer might be under contract

[2] See the first two chapters of G. Harold Powell's *Cooperation in Agriculture*, The Macmillan Company, New York, 1918.

to sell his corn to a cooperative elevator. He could not well agree to deliver 1,000 bu., because he could not know in advance how much corn he would raise or how much of what he did raise would have to be fed out on his own farm. The amount he could deliver would vary, on the same acreage, by hundreds of bushels from year to year. But however much he had to sell he was committed to pass on to the cooperative. To sell a single load elsewhere would be to violate his contract.

The penalty for selling anywhere but to the cooperative is usually agreed on in advance, for some amount that will cover the advantage the seller had in making such a sale plus a few cents over per bushel or pound. He might be asked, in case his contract called for corn, to pay 10 cents a bushel on any corn sold elsewhere. The intention of the cooperative in such a case is to collect some cents per bushel more than the amount probably realized on the irregular sale. The farmer's misdeed is generally viewed as a mild type of misdemeanor, not as of a criminal character. Very heavy liquidated damages are not easy to secure, since a jury or court will hesitate to enforce any that seem out of proportion to the misdemeanor.

One Man, One Vote. This principle was perhaps first used by the cooperators at Rochdale, England, in 1844. Giving one man one vote was perhaps one of the wisest of the half dozen principles they adopted. These few principles were as follows: (1) capital for operating the business to come from subscriptions of about £1 or £2 (a pound equaled about $4.86); (2) number of shares of stock in the company per member strictly limited; (3) one man, one vote, regardless of the number of shares held; (4) nominal dividend paid on stock held; (5) patronage dividends paid to members on basis of business done; (6) produce handled at prevailing prices, out of the receipts from which patronage dividends might be paid.

Well over the Western world these few principles are followed by cooperatives. Variations are frequently tried, sometimes even of "one man, one vote." At times it seems best to base the vote on the amount of business done by each member. As a rule business is done on a cash basis, although limited credit is sometimes used. Since a very large part of our cooperatives do a buying rather than a selling business, credit does not become an issue. Companies that deal in feeds, seeds, and the like usually do not give great amounts of credit; so troubles arising from large accounts with members are rare. Where it is handled carefully, considerable variation in voting may be used. For instance, in such a case as raising strawberries for sale one big grower associating with a large number of small growers may very reasonably be given something like a tenth or possibly a third of the voting power. Otherwise he may feel safer to sell alone.

Even so, the weight of actual practice is substantially on the side of one man, one vote.

A cooperative that succeeds is usually born of necessity. Unless there is genuine need for a given company it will probably not be given the attention required to make it succeed. It has been said a great many times that necessity is absolutely necessary for the success of a cooperative. This is not true to the extent suggested; there may be any number of successes among cooperatives that were not positively required in order to keep the farmers in question going. For instance, there may be a degree of success among farmers who sell milk, cream, or butter to private companies. They can at least get along and deal with the men who offer to buy and do buy their products. The degree of success reached by men selling to private concerns that deal in these products is not far short of the returns they would gain through cooperation. Undoubtedly higher returns have as a rule been made through farmers' companies than under the arrangements that preceded them. It is also possible for expenses to absorb all the gains of a cooperative because of the small amount of business done and the high expenses incurred. In most of our Western fruit growers' companies complete bankruptcy was in sight for substantially all groups engaged in the business under the original setup.

Necessity does not and should not mean that all farmers starting a cooperative enterprise should always start in desperation after failing to get along satisfactorily under their previous arrangements. Farmers as a rule are not making a great deal of money, and if there is a means of making any part of the farm pay 8 per cent in place of 3, there is good enough reason to work for the higher percentage. All degrees of success and failure are found in agriculture, as well as in other walks of life. Often farm produce is worth twice as much a few days after the farmer sells it as it was in his hands. Very often it is possible for the seller, by making a bit of stir, to hit on some means of pulling up his receipts closer to the prices paid by the consumer. It is the need for larger income that should arouse farmers to try for larger prices. Means of getting more for their products or of buying their supplies for less have been hit on often and often by farmers' buying and selling groups.

FARMER LIMITED IN HIS OUTLOOK

Mainly a Producer. It must never be forgotten that the farmer is primarily a producer. He can never give any but incidental time to other phases of his work. Of course he may join a cooperative company. He may attend meetings of the company once a year or possibly once a month, but it is a very exceptional farmer who becomes familiar with the workings of a company or group that he meets with so seldom. Most of his

time and of his thought is given to the care of his stock, his fields, and the many things pertaining to them. It is out of the question for him to pay close, careful attention to the ins and outs of a creamery, a milk-handling company, or a cooperative grain-marketing company. In the daytime he is busy; in the evening he is tired. Only occasionally do we find a man who can meet marketing problems successfully so as to be able to contribute any constructive thought to the many phases of the work on which these problems bear. The usual farmer does well if he can help select the business manager of a company who can handle its work from day to day.

Not one farmer in 1,000 has enough ability, information, and energy left over from his work to contribute very much toward the operation of a company that is either much more complex or much more distant than a neighborhood creamery or elevator. Farmers are not in a position and cannot be in the right frame of mind to cope with problems of manufacturing or transportation, which touch the purely business side of their work. Manufacturers deal with matters that call for information covering thousands of miles and months of time. Many a farmer could do this sort of work as well as what he is now doing, but no one can do much of both kinds of task. If the farmer is to become much of a businessman, he will cease to be a farmer. Some years ago a farmer living near a great Middle Western city was milking 10 cows and selling his milk to a dealer in the city. He got a small price; so he decided to start a one-horse route and sell his milk to consumers. Soon his city trade outgrew his farm, and he became a businessman and wealthy. His methods were copied in many a city of America. But he soon ceased to be a farmer. Late in life he remarked that his 80-acre farm took up the main part of his time and energy; so he sold it.

Not many men have the strength and energy to run a farm of moderate size and at the same time devote a considerable part of their time to business that reaches well beyond it. For this reason someone else is needed to look after the business affairs of the cooperative elevator, the creamery, or the fruit-selling company. The superior farmer may make a good man on the board that manages such a business, but his main function in business management is to find someone to devote himself to the mass of details involved.

The farmer himself, usually belonging to one or two of these comparatively small companies that do the work of preparing and selling farm produce, can give the work some hours perhaps each week, while the major portion of his work is still done in connection with his own farm. Farmers may very properly study marketing with care and may ship their produce to a processing plant and send it hundreds of miles to a market,

but seldom do they put their produce through intricate or long-time processes of manufacture, which might, of course, increase its value many times. On the contrary the farmer, after putting his produce through a few simple processes, sells it to companies that can risk much time and money in carrying it to markets far away and put the product into the shape that is presumably most wanted and for which good prices will be paid. The population in general needs the men who anticipate our wants and who take real risks in doing so. Cooperation will carry the farmer to and through the first simple processes of manufacture, but to go very far along this line involves great risks and takes him into lines of work and thinking quite beyond his scope.

Nature of Cooperative Work. As a rule the work of the cooperative is small in scale. It is the task of collecting grain at the elevator and shipping it to a grain center; collecting cream, making the butter, and selling to some company in a city; or collecting livestock and shipping it to some center where a group of shippers maintain a company at the central market to sell the stock to the packers. The farmer himself disposes of the stock before it is killed. Butter may be sold through agents to buyers in distant cities, but nothing is usually done to the butter after it leaves the Western factory, and the second sale is probably to the consumer. There is no reason why vegetables may not be sold within a few days to city buyers at a distance and by this means go a little more directly to the retail trade. Cheese presents a more difficult case.

Some cheese must be kept a year for curing. Farmers do not often wish to hold it so long; they want their money promptly, and if they do undertake to hold their cheese for a while, they must find a way to have its price advanced to them. A few years ago this was being done for the makers of "foreign" type cheese, which soon, however, became worth much less than what had been advanced on it. Then came any amount of trouble. The buying company, a cooperative, was bankrupt. The cheese was desperately low in price and was presumably deteriorating in quality each day. The government came to the rescue by lending the cooperative company money with which to pay its obligation to the farmers, and eventually the farmers met most of their obligations. The farmers had wanted their money before it was due from the final buyers; the price had fallen below the advances made by the buying cooperative, and money had to come from some outside source to straighten matters out. If the government had not furnished the immediate cash required, the group of farmers would have gone bankrupt as cheese dealers.

Cooperative work is usually on a cash basis. Where there is an occasional normal fall in prices, someone has to stand a loss. The farmer does not do this easily or willingly. Companies that have already made con-

siderable money can stand such a shock better than the farmer. Thus the cheese cooperative dealing with the foreign type of cheese was practically bankrupt around 1932, when the prices on cheese that had been held a few extra months in hopes that prices would recover went as low as 4 cents a pound. With money advances from the government the cooperative was able to spread losses over a period of months and so straighten out its affairs in the long run.

Vital Interest Served. As a rule it is his main crop that a farmer sells through a cooperative. This means grain, livestock, butter, cheese, or possibly tobacco or cotton. These are the main sources of farm income. On such produce as cheese, which needs a year for curing, someone else who has a little more money than the farmer steps in as middleman and buys the cheese speculatively, holding it a year before selling it to consumers. Money made by dealers of this kind is what makes the farmer feel that he himself is not getting his fair share from the whole deal between himself and the consumer. Probably there is enough margin on such produce to pay the farmer very well for the cost and trouble of holding the cheese. But the task is one for which the farmer is not prepared. Some years there are losses on account of falling prices. Considerable skill is required in handling the cheese. Unpleasant flavors may sometimes develop, which means lower prices; where these can be anticipated or detected in advance, sales may be somewhat hastened and losses saved. The farmer himself cannot know all about such matters as well as a cheese dealer can. It is a dealer who should make the decision as to when and perhaps to whom the cheese should be sold. A group of farmers, clubbing together, may hire a salesman who will act for them skillfully in such matters, but it takes a fairly high wage to satisfy a man who can act to the best interests of all. Undoubtedly a cooperative might be formed that could take care of sales requiring the delay of a year between delivery of the goods and the final sale, but thus far such transactions have as a rule been taken care of by men other than farm cooperators. The vital affairs of farmers that lend themselves to cooperative action are those for which settlements can be made rather promptly, such as the sale of grain, after which it may go into speculators' hands; butter, sold in June to be resold in January; or tobacco, which may be held three years after the first sale before it is used by manufacturers. Farmers in general do not want to be dragged into these long-time speculative ventures.

There are some undertakings other than the most vital that seem to lend themselves quite well to cooperative action by farmers. For example, fire insurance is handled to a large extent by farmers' cooperative companies. Probably few farmers really worry much about their fire insurance. The bill is not very big. A cooperative can handle it for half or

two-thirds of what a private company would charge, but even the private company's charge would not be a very serious item to a farmer of reasonable prosperity. Cooperative insurance companies have been running for most of a century in this country, and most of them are conducted quite satisfactorily. Such companies can be organized on a rather small territorial basis. Even a town or township may be large enough, but usually at least four or six township mutuals unite. In Iowa the insurance cooperatives are usually organized on a county basis. Fires are very seldom of such size or frequency as to cause very heavy losses among the members of the cooperative.

Closed-shop Idea. At times farmers have used the closed-shop idea in their cooperatives. As a rule it will not work successfully. A group of farmers, for example, may keep other farmers out of a milk market and for a time may get a higher price for their milk by so doing. But soon either the city dealers decide to let in some more milk, which they can probably do, or some man or group of men on the outside decides to break in with slightly lower prices. At the same time there may be some real advantage to one group of farmers in selling to a given city trade and not to another group, though such an advantage is not obtained without expense. The farmers who sell to the city find that they must carefully follow certain practices in the interest of sanitation. They must keep their milk absolutely sweet, which may require a new milkhouse; one thing after another is called for that costs money, though the more general trade does not have to meet such demand. When all accounts are considered, there may be some real advantage in belonging to the group selling to buyers of city milk over belonging to the group catering to the butter trade. But farmers selling to buttermakers have their skim milk left for feed, which is a substantial item, and escape many small expenses and some larger ones. There is no easy method of figuring out the exact gain or loss connected with each of two markets available, which in any case do not remain fixed at exact, unvarying points; but also there is no great, closed-shop advantage connected with any given farmer market for long-range results.

Types of Associations. Associations are of several quite different types. To begin with, farmers may associate in making sales or purchases with no formal organization whatever. They do this for making special important purchases. When it seems time to make purchases of the higher-priced feeds for cows in the summer or fall, one man may propose that a few neighbors buy a carload of bran and divide it up according to needs; likewise a carload of oil meal or soybean meal. They may know where such orders may be placed, and within a few days or weeks they may get what they want, divide it up as they wish, and among them figure all costs and each man's share. Then by making the required payments to the man

who placed the order the deal may be closed. This is probably the simplest kind of cooperation, in which farmers may often take part. Not all cooperation can be handled without any place of doing business, storing grain, or doing anything at all complicated.

The usual cooperation in which farmers often take part is likely to lead to the organization of local associations, centralized associations, or federated associations. We have all three of these represented in most states of the Union. Local, single associations have been with us from the first and are still plentiful. Probably creameries, cheese factories, and elevators have furnished the best examples of the operation of a single company. Many of these single companies have succeeded and have lasted over a long period of years. A few very important developments, however, have carried us far beyond the possibilities of a single company in many cases.

The Single Cooperative Company. Many cooperative creameries are independent of all other cooperatives, and what is more they often get along pretty well and sell their butter for good prices. The greater number of cooperative creameries and cheese factories within the districts where they are plentiful belong to good-sized central companies, by far the largest of which is the "Land o' Lakes Incorporated" of Minneapolis. When all studies are made, it appears that the wider margins have occurred near home; there have, in general, been too many local buyers. For example, four elevators in one village where one or two could easily handle all the grain usually mean margins that are too wide. Often shipping margins on grain have been 5 or 6 cents a bushel, whereas in one cooperative the grain could all be handled on a 3-cent margin and the farmers get the difference. Where private companies cannot do better than this, it is time to replace them with some more efficient organization.

The Federated Company. Aside from the small single cooperative, the one that lends itself most easily to description is the federation. This works best where the work reaches over many miles, involving but few kinds of goods, which may not keep too long and therefore require quick work in handling. Probably the best example of a federated company run by farmers is the California Fruit Growers Exchange. The fruit, consisting of oranges and lemons only, is grown within a few counties of southern California and is sold in substantially every county of the United States. The second state in which a real quantity of oranges is grown is Florida. In 1939 California produced 1,548,000 tons, Florida 1,185,000 tons. Thus Florida produced almost 77 per cent as many oranges by weight as California. Seven other states reported oranges, but the two leading states produced over 95 per cent of all the oranges grown. The California Fruit Growers Exchange consists of 13,300 growers organized into a couple of hundred local packing associations and divided into 26 district groups,

with five to seven directors over each group. The groups elect one member each to serve on the final board, and these 26 men manage all purchases and sales for the entire body. The different members join the local association, usually for a five-year period, with the privilege of withdrawing at the end of any given year. The local companies sign long-time contracts with the district exchanges, and the districts sign contracts for a period of years with the central exchange. Anyone is free to revoke his contract and get out within a comparatively short time, but the chance is not taken. The local company supervises all matters pertaining to sorting, grading, and packing fruit. Orchard owners may become graders and packers of fruit if they wish, and the pay is pretty good, but they are never allowed to grade or pack their own fruit.

The Centralized Association. Although this sort of cooperation had been in existence for some years earlier, it grew with special rapidity in the early twenties. Prominent among the groups starting such organizations were the tobacco companies, mainly in the South, but with one of good size in Wisconsin. Perhaps the real origin of such companies was on the Pacific Coast, where there were such examples as the Sun Maid Raisin Growers of California and the Washington Cooperative Egg and Poultry Association, which started in 1917.

The plan followed some years ago by the centralized associations was to withhold from the market such part of the produce as would not bring what the selling agents believed it to be worth. This at times appeared to be a wise procedure when a crop was gathered once per year, when the amount available was known at the time of harvest, and especially when the crop was mainly in the hands of a group that could sell or withhold at will. For a time the raisin growers appeared to be powerful; they got their prices; but did not sell all their product. Very soon they were left with quantities on their hands that they must dispose of at some price, and their 15-cent price fell to a nickel. It was evident that under some circumstances and probably for a short time a centralized group might put prices up. But the raisin growers found themselves in sorry circumstances; so did certain tobacco growers and egg producers. With the lesson that few farmer companies, if any, could afford to be left holding over a surplus from one year to the next, it developed that the manner of making sales was not so different in the two methods of procedure; that is, in selling all crops annually or holding over a surplus. Raisin growers have not been in any such difficulties recently as they were 20 years ago. Egg dealers of the far Northwest have not made the same mistakes. Orange growers have learned how to dispose of their surpluses rather wisely. So, after learning about what the market will stand as approached from two different angles, the differences in the two types of market year after year

seem to be less than was believed 20 years ago. No grand holdover seems to be a bonanza. The failure of several tobacco companies was not due by any means to the type of company through which the business was being done, but was rather the result of certain circumstances with which marketing methods were unable to cope. Too much enthusiasm in growing raisins was disastrous, and no marketing methods could save the growers. In the case of wheat the prices were down in the early thirties because of other low prices; the wheat situation was one of the worst, because we had no means of lessening the amount offered or keeping the demand strong when we were trying to sell great excesses to people whose buying power had collapsed.

Growth of Marketing Associations. According to Table XV, 25 per cent of the cooperative business of the country is done by the dairy group,

TABLE XV.—FARMERS' MARKETING AND PURCHASING ASSOCIATIONS

	Percentage of Estimated Business by Commodity Groups, 1942–1943*
Dairy products	25.1
Grains, dry beans, and rice	18.5
Livestock	15.8
Fruits and vegetables	11.9
Cotton and cotton products	4.4
Poultry and products	3.8
Nuts	2.0
Wool and mohair	.9
Tobacco	.5
Miscellaneous products	1.2
Total	84.1
Other marketing and purchasing	15.9
Total	100.0
Number of associations	10,450

* Farm Credit Administration, U. S. Department of Agriculture, *Misc. Report* 70, p. 7

followed by 18.5 per cent by the grain, beans, and rice group, with 15.8 per cent coming next for livestock. These three groups, therefore, account for almost three-fifths of all cooperative work done. The rest is made up of six smaller branches, with a 15.9 per cent item for other marketing and purchasing. The total number of associations, 10,450, is much larger than in 1913, when it was less than a third as large, with 3,099. The number in 1943 was, however, 1,500 smaller than in 1931. This was apparently due to the fact that during the period of low prices throughout the early thirties a real study was made as to what companies actually were cooperatives, in consequence of which a good many were dropped out of the

count. Next a considerable number of poor little cooperatives were allowed to die because the work of reviving them hardly seemed justified; this gave a somewhat smaller number than for a few years before the period of low prices.

The figures of Table XVI show that the bulk of the business is done by the first four groups. These four show almost eight times as great business

TABLE XVI.—FARMERS' MARKETING ASSOCIATIONS: NUMBER, MEMBERSHIP, ESTIMATED BUSINESS, WITH PERCENTAGES, 1942–1943 MARKETING SEASON*

Group	Associations listed		Estimated members		Estimated business	
	Number	Per cent	Number	Per cent	$1,000	Per cent
Dairy products	2,369	30 7	710,000	27 5	$950,000	29.9
Grain, dry beans, and rice	2,358	30 6	400,000	15.5	700,000	22 0
Livestock	700	9 1	600,000	23 3	595,000	18.7
Fruits, vegetables, and nuts	990	12 8	213,000	8.2	525,000	16.5
Cotton and cotton products	539	7 0	235,000	9 1	167,000	5.2
Poultry and eggs	166	2.2	111,000	4 3	145,000	4.6
Wool and mohair	134	1.7	85,000	3 3	34,000	1.1
Miscellaneous	452	5.9	226,000	8 8	64,000	2 0
Total marketing	7,708	100.0	2,580,000	100 0	$3,180,000	100 0

* Farm Credit Administration, U. S. Department of Agriculture, *Misc. Report* 70, p. 15.

done as for the last four items. The first two items supply more than half of the whole amount of business included in the eight items. The amount of business done by these companies has been strongly on the increase. In 1915 the average for a year's work was $117,000, while in 1942–1943 it was $412,500, or about three and a half times as much.

One of the most remarkable advances in the work of farmers' cooperatives is seen in the purchasing arrangements. In 1913 the number of such undertakings was but 1.9 per cent of the work of all cooperatives; in 1942–1943 it was almost 16 per cent. In 1920 a wholesale cooperative was started in Ithaca, N.Y., which was successful from the first, a combined enterprise of all the leading farm movement people, the Grange, the Dairyman's League, and the Farm Bureau. This subject is treated in the chapter on the Farm Bureau.

Terminal Marketing. Farmers for many years have wanted to get control of terminal markets. The experience of a considerable number of years has proved that in this line of work it is much more difficult to get started in the wholesale, terminal marketing business than to control a local village elevator. In elevators such as are found in great numbers through-

out the grain-selling districts of the country, it was found that competition was overdone, which meant that in order for all to live the margins had to be high. Then came the cooperatives, which reduced somewhat the local buying companies and cut the local margins by 3 to 5 cents a bushel. American farmers for many years hardly went beyond the control of local buying of grain. They did, through much effort, succeed in getting fairly good treatment at the terminal markets, but even up to date they have not done much in actually getting into the terminal markets themselves. They have handled some grain on these markets, especially in Omaha. In recent years they have acquired pretty good control of a large quantity of grain shipped out from Duluth and Superior, making the sales primarily from this side of the Atlantic. As a matter of fact there was little grain shipped out of the country during the war. So far as a terminal market is concerned, we have had quite good control of this part of the work for several years. Chicago is the great terminal market of the country, and here the farmers have never gone very far.

The Canadians conquered their Winnipeg market years ago and at once began to conquer the foreign market. They set up ample and excellent terminals for handling grain at the ports on Lake Superior and at the same time established agencies in the main European ports. The result was that they have had their grain business well in hand for years. The Canadians agree that, although it was worth while to take over the exporting business, after all the main gains were made at the country buying points near home.

One of the best instances of success in terminal marketing is that for livestock. In 1943 there were 31 companies handling from 1 to 5 million dollars' worth of livestock a year; 18 handling from 5 to 10 million dollars' worth; 11 handling from 10 to 20 million dollars' worth; and 5 as a group doing a business of over 20 million dollars. These companies are scattered from Buffalo to San Francisco, from St. Paul to Dallas, Tex. It is not many years since this sort of work was begun, but it has grown from year to year, with very few failures. Not only have these farmer companies lived; they have improved the handling of stock at the markets. For example, it was a farmer company that first kept a man at the yards all night to unload stock as soon as it arrived instead of leaving it another night in the car or truck.

Cooperative Marketing Here to Stay. Looking back over the cooperative experience of the past few decades, it appears that cooperative marketing has come to stay. The growth of cooperative marketing during the past 20 years has been remarkable. The worst thing that farmers have had to contend against in this line of work has been the professional organizer. In one form or another we have had some sort of promoter at work most of the time during the past 40 years. The first important professional or-

ganizer worked mostly in promoting cooperative creameries. These were for the most part plain swindles. They set up organizations of this sort all over Nebraska, but soon about all of them had disappeared. More than a hundred had been organized, but they passed back into private ownership. Herds of cows were too small and too far apart. When the Nebraska cooperative creameries were started, the main facilities for gathering cream consisted of horse-drawn wagons on unimproved roads. In the South cooperatives were started here and there; substantially all failed, mainly because there was not enough milk.

Cooperation in the Plains States and to the West. Cooperation has had a hard time to exist west of the hundredth meridian. This district includes a large part of the short-grass country and feeds the great numbers of range cattle and sheep. It includes, especially to the west of the Cascade Mountains, several small districts in which there is ample rainfall or ample water for irrigation; here dairying has reached perhaps the highest point anywhere in the country. Over the great stretches of the high, dry plains, dairying of course does not flourish.

It is up and down the hundredth-meridian states that the greatest attempt is being made to find a market for a considerable amount of dairy products. Within this stretch of country there are many milk cows and considerable dairy products. The country was wide open for exploitation by promoters of cooperation in butter making. Such promoters were usually private groups of men, who under some type of leadership went about the country to establish cooperative creameries by selling stock to anyone who would buy, largely to townspeople, and to plant their companies wherever they could find a sufficient number of stock buyers, with little reference to the amount of available cream. Most of the new cooperative companies were badly located, usually without sufficient available cream within reach of the new plant. Early in this century, for example, promoters usually established twice too many creameries within districts where there were a considerable number of cows; costs to the first stock buyers were something like double what they should have been.

Cooperatives in Nebraska. Undoubtedly more cooperatives started in the state of Nebraska have been destined to fail within a few years than in any other state. The hundred-odd such companies started early in this century fell off almost to nothing. In the latter part of the twenties the cooperatives again rose to nearly 50; they were badly located, overcapitalized little plants. These have recently been slowly decreasing, with the big centralizers always furnishing constant and severe competition. If the cooperative ventures had been made by some disinterested party who would have established creameries where they should have been started, the situation might have been happy, but the promoters who started most

of the cooperative companies of Nebraska put them in the wrong places and at prices twice too high. This sort of competition cannot stand the strain of the fight for business put up by the big centralizers. The big companies may not make the highest type of butter, but it will sell, and people eat it with little complaint. The other hundredth-meridian states, as well as the Mountain states, while they have some cooperative creameries, have not had sufficient dairy business to tempt them into so much cooperative effort. Many areas are in fact unable to furnish sufficient dairy products for local use.

Land o' Lakes Company. For some years, mainly in Minnesota, cooperative creameries did remarkably. The movement was promoted by one man in the Agricultural College.[3] He was able to keep professional promoters almost entirely out of the state; he saved the farmers a lot of money and helped to organize creameries where they were needed. It was in the early days of cooperation that this work was done. Minnesota has always had substantially the largest number of cooperative creameries of any state in the Union. They were started so sensibly and so cheaply that the farmers ran them from the start with almost no trouble and with very small investments. Having this type of creamery to deal with made it remarkably easy to develop, mainly out of the cooperatives, the Land o' Lakes, which became almost at once by far the greatest farmer butter-marketing company in the country. Without such a well-schooled number of farmers to deal with it it is doubtful that the makers of such a large amount of first-class butter could have been assembled. For years these men had been getting about all that their butter was worth. Then back in the twenties the new group was able almost without effort to devise a way to sell many times as much first-class butter as the market appeared to want and at several cents per pound above the general price received.

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[3] T. L. Haecker.

Chapter 17

LANDLORD AND TENANT

Size of the Individual Farm. If a man decides on renting a farm for a few years, how big a farm should he take? If he has had no experience with hired men, he will probably find it necessary to do a good deal of experimenting before he finds out whether he can handle one, two, or three hired men or none at all. As a matter of fact American farmers outside of the cotton belt, gardening districts, and Western stock ranches appear to get along better with one man than with more. This may be due in part to the fact that, considering what wages are and indeed what wages can be paid on the usual American farm, no great number of high-grade men are looking for work as farm help. Farmers hardly ever want to hire men by the year but usually only from April through November, no more than two-thirds of the year. In exclusively wheat-growing states help is more likely to be wanted for several months less than that length of time.

Of course the beginning farmer may need a few years before he is quite sure how many men he can handle. His learning period may be passed on an 80-acre or a quarter-section farm or one of still different size. Probably most of our farmers start on a comparatively small farm where they do most of the work themselves. If they are ambitious to operate farms of much greater size, the second step is likely to consist of hiring one man and trying a farm about twice the size of the first. From this they may pass on to a farm requiring two or three men. It is at this point that trouble usually begins. Must farmers who hire several men have houses for them to live in? If so, must they keep the men for the whole year? The average American farmer shrinks from running a farm that requires so much help. Wages are not high enough for a hired man with a family. For this or similar reasons connected with the hiring of three or more men with families of perhaps a dozen members all told, a farmer as a rule struggles along through life on his small farm, with most of the work done by him-

self and just a neighbor boy's help for a few heavy months. Very few farmers experiment with any considerable quantity of labor.

Most farm work is done by the farmer and his family. Probably few farmers are capable of hiring and managing a number of the kind of men who are willing to work for them. Occasionally a young farmer is glad to handle a farm employing four or five men, but such an undertaking is likely to be rare. Farms are mostly run with one or two hired men, still oftener with none, and the chances of finding a farm adapted to twice the usual amount of help are small. Throughout the Middle West farmers are not often found employing so many, and any young man who would really like to undertake a big farm has probably seen very few such undertakings or had an opportunity to try himself out in any way. The chances are small that any big landholder would give him a chance as a manager. The corn belt is not run on any such basis. A farm manager is characteristically engaged in something rather specialized. The manager is a truck grower or a grower of sugar beets or some other product for which can be used such cheaper labor as is wanted by spells.

Again, how many acres shall a man operate, and how intensely shall he operate them? It may definitely pay a man better to employ another pair of hands on the acres he is operating. But he will not hire a second man for many months because his house will not accommodate him; his wife has plenty of work to get meals for one man, and he is not sure that he can manage as well with two men as with one. A houseful of hired help does not appeal to the ordinary farmer, certainly not to his wife. A given farmer will probably hire no more than one man, and then only for part of the year. It might pay him to hire twice as many if they would board themselves, room in some other house, but be on hand for a full day's work whenever wanted. But a chance to hire a man under such circumstances is something a farmer may dream about; he is most unlikely to experience it.

The Law of Increasing and Diminishing Returns. On very few farms is this great principle actually tested out. The average farmer does not usually know whether he should have 10 per cent more land or 20 per cent more labor. His main purpose is to come out, if possible, somewhat ahead at the end of each year. Furthermore, he is anxious to get through the year comfortably, without too many things to worry over. It is no small undertaking to change the size of the farm by 10 or 20 per cent; keeping a hired man is considerable of a stretch, and keeping two is an alarming prospect. Thus the average American farmer gets along with no hired man or with one for just part of the year. How well it would pay him to enlarge his acreage, hire two or three men, and do a business two or three times as big as he is doing, he surely does not know and is not overanxious to try to find out. The difficulty of reaching any conclusion by experi-

menting with the necessary changes that would be involved is alarming to the average farmer. Hence what we find over a large part of the country is farms varying relatively little in size, managed and operated with one hired man or none.

Probably if studies could be made of the whole matter of the amount of labor employed as well as the possibility of borrowing more money and thereby increasing equipment, they might open up the chance for farmers to increase their income. But farmers are not ready for this venture. They prefer the quieter, easier method of getting along in their own little homes, with their own families. For the average farmer no solution of the question about increasing and diminishing returns is ever reached except a very rough one. It is by no means difficult to draw a diagram showing the point at which a man should stop his operations. Most men have stopped at an earlier point, primarily on account of hired help.

Experimenting Respecting Intensity of Cultivation. It is almost necessary for each man to experiment for himself. He will hardly be able to follow successfully plans recommended by others. This whole matter has been well worked out and the main facts represented in two "figures," which are easily understood.[1] However, a real farmer would have hard work to prove to himself that he was above or below the best quantity of land, labor, or capital in his operations at any given time. The question is not at all easy to settle by an experiment or two; hence, few tackle it at all, except to work gradually one way or the other, always in the hope of arriving at a solution a little nearer the theoretical best.

No attempt has as yet been made to learn definitely, for example, how much fertilizer is applied to the corn crop. If the trial were made, it would undoubtedly be found that there was a great sameness in the amount applied by the great mass of farmers, made up of landowners, part owners, and tenants, both share and cash. The fertilizer is almost always dropped by the planter near the hill of corn. It is taken for granted that substantially all of the fertilizer is used up the year it is bought. Throughout the Middle West common practice is to apply from 100 to 150 lb. of fertilizer with each planting. The tenant is very willing to use the amount that is usual in his community. Similar amounts of fertilizer are used in connection with small-grain crops. The tenant is willing to provide whatever quantity of fertilizer corresponds to his share of the crop grown. This willingness is readily explained by the fact that the return is so direct and so good. As a matter of fact $2 spent for fertilizer often brings in $4 return.

How Intensively, Then, Shall We Cultivate? The degree of success as measured by the profit made on any land by any farmer will depend pri-

[1] H. C. Taylor, *Outlines of Agricultural Economics*, Chap. XII, The Macmillan Company, New York, 1931.

marily on the ability of the farmer and then on quality and character of the land used. Because of the part played by increasing and decreasing returns, it may be assumed that the first unit, say a month's work on a farm during the season, applied to the whole farm, will produce little or nothing. A moderate amount more will produce a small return. Then perhaps the work of one man throughout the year, on a farm needing two or three men, will produce an appreciable amount of income. Assuming that the rent is to be paid in cash, it will follow, where the contract can be enforced to the letter, that the landlord will get the whole of the income until the rent is paid. As a matter of fact, on an ordinary farm, the tenant will be receiving free house rent, use of a garden, and probably milk, eggs, and feed for his horses right from the start, and in case he fails to produce a pretty good crop it will be hard to collect for these items. Presumably the tenant gets nothing from the first part of his product, needed for the payment of the rent, since this is the first claim. After the rent is paid, the tenant gets the rest of the income. It has been supposed that, because of this fact, a cash tenant will farm more intensively than a share tenant. No study has been made of this matter, and superficially the evidence does not seem to support the belief.

Share Tenants and Cash Tenants. It has been said many times that a share tenant will not farm as well as a cash tenant. If this were the case, cash tenants, being rather numerous, could be made to pay more for land than share tenants. But apparently share tenants on the whole pay higher rents than cash tenants. Share tenants are much more like partners in the landlord's business than cash renters. The census does not discuss the type of people who rent on the two different bases. A study of tenancy in Wisconsin a few years ago showed that, of landlords getting respectively share or cash rent, our Wisconsin cash-rent landlords were largely a somewhat different class of people from share-rent landlords. They were not as close to the land and knew less about it. Many such landlords were women; many were new possessors of their farms; on occasions the farms were for sale; on other occasions the farms were suited for the growing of some specialty, such as truck crops, or something else requiring an unusually great amount of work. Again cash rent is common where the desired dwelling house is out of proportion to the value of the land, perhaps a home near a city. It is quite usual also that the owner of the farm lives at a considerable distance and has little knowledge of or concern about the farm. As a rule farms rented for cash are smaller, their desirability as homes is considerable, or the farm work is specialized, and usually the farm owner is but slightly or casually interested in farming. For these reasons the cash rent is usually smaller per farm than the share rent that the same farms would bring with a little interest and attention.

It has been said that the share tenant will farm no more intensively on the better land, after it has been found desirable to resort to poorer land, than was the case earlier on the better land. On this subject it is not easy to collect much data, but a few generalizations may be brought to bear. Consider the use of hybrid seed corn during the past 10 years. It is reported that upwards of three-fourths or four-fifths of the corn in most of the states of the corn belt is of one or another kind of hybrid. Yet this seed must be bought from special growers who get several dollars a bushel for it, at least two or three times the price of ordinary seed corn. Tenants by the thousand buy this sort of seed every spring, share tenants as much as cash tenants. It is just as sure that, especially during the past 10 years, between 100 and 200 lb. of commercial fertilizer have been applied to practically every acre of newly planted corn throughout the corn belt. Since the majority of the tenants in this part of the country are on a share basis, it follows that these tenants are paying their proportional share of the bills for these fertilizers. Over wide areas of the corn belt it is pretty difficult to find a corn planter without a fertilizer attachment. All tenants on the good corn farms are thoroughly convinced that the best of fertilizers must be used on about all of the land put into crops on the farms they rent. It has been argued that share tenants will not farm as well as cash tenants because they will, for example, get but half of any added income. Yet in Iowa, where the yield is sometimes the highest anywhere in the nation, and where more than half the corn in some years has been raised by tenants (mostly on shares), these producing their full proportion, it would seem that they had not been laggards respecting intensity of culture.

Efforts Compared. Taking the 20 heaviest corn-producing counties of Iowa for 1940, it was found that they were quite above the average counties in tenancy. They produced not only the heaviest corn crops but almost everything else in like proportion. The great majority of the tenants in these counties were on either the share or the share-cash basis. As compared with cash tenants, did they produce more or less? To begin with they had larger farms and in all reason better farms. They worked in close cooperation with the farm owners, while their landlords paid much attention to their farms. In all reason the share-rent-paying farmers paid more rent than the cash tenants. Are these tenants then induced to lag as rent payers? In all reason they hardly have a chance to. Most of them are pretty close partners of the owners and are willing to invest in machinery and fertilizer whenever it will pay and as far as it will pay. A considerable percentage of our young tenants are relatives of their landlords. These men are always ready to do their best with the farms they operate.

Payments Compared. Taking the six divisions covering the Mississippi Valley and adding the mountains to the west and the South Atlantic states—

altogether a large part of the agriculture of the country—we arrive at the following conclusions respecting tenants and how they farm. Within these states we find there are 388,000 cash tenants and 1,568,000 share and share-cash tenants.[2] This shows that there are four times as many share and share-cash as there are cash tenants. Does this mean that the share tenants, who predominate so far as numbers go, are laggards with respect to the amount of rent they will pay? Share rents to the owners of farms so rented are higher, year by year, than cash rents of the same communities. This cannot be easily proved. It is evident in the growth of the number of share-rented farms in such territories as the corn belt, the highest-priced land of the country outside of more highly specialized districts. Share tenants in the good corn districts give the owner half of the corn and other grain. They pay cash, particularly in Illinois, for the pasture and often for the hay land, with a dollar or two an acre in cash on the cornland. For years there has been an excess of tenants for land of this kind; if one tenant doesn't care to pay these cash extras, someone else will. Year in, year out, the share tenant pays more than the cash tenant.

If the rent is raised on the share tenant, can he help himself by paying the added sum? Of course if he has had something to divide with the owner, it would seem evident that he has previously been making something. If on the contrary he has had all he could do to keep even with the board, circumstances remaining constant, it would seem that he must now reduce his standard of living or give the farm up. That he will farm better than before is unlikely. However, if he knows clearly what can be done in order to make more money from the place, he may now rise to the occasion and make the added sum. More likely he would go on farming about as usual, in the hope that his crops would be enough better than usual to help him out. If they were not, his income would be reduced by the rent rise for the current year and would continue at the lower rate so long as circumstances changed no further. Probably no large number of tenants would meet a rise of rent in an identical predictable manner.[3]

What does a tenant do when his rent is raised? How did the tenants meet the case in 1920, when rents rose very abruptly? In Iowa there were cases of farmers agreeing to pay as high as $25 per acre cash rent for a few Iowa farms. When the year came to a close, their whole income would not have paid the rent. The result was that the rent was not paid. With the years 1943 to 1945 cash tenants who agreed to pay a dollar an acre additional cash rent no doubt paid it. Share rent seems inherently more reasonable than cash rent. With rising prices the cash tenant seems to have

[2] Adding the other three sections of the country in makes almost no difference to the results.

[3] Taylor, *op. cit.*, Chap. XII. Note his handling of this question.

some advantage, but substantially always his expenses rise sharply when prices increase rapidly, and at a time of falling prices he will receive the advantage of lessened expenses. When nothing has happened to prices and the landlord nevertheless raises a rent that is already up to the regular going amount, it is time for the tenant to see what he can do for himself by moving. If the tenant should be obliged to change his method of farming because of the rise in rent, either he has been previously negligent and slack, or it is altogether likely that the oncoming situation is one that he is not capable of mastering. On the other hand, if some good fortune has come to the tenant in the nature of lower interest or wages, the quicker he can change his method and expand his operations the better off he will be.[4]

Share-tenant Crops vs. Cash-tenant Crops. On paper it may be made to appear that the cash tenant will farm more industriously than the share tenant. He will farm more intensively, because he gets all the last pounds and bushels without further division with his landlord. This seems to be good logic, but it has very little statistical support. The census of 1900 is the only one that gives the yields of crops grown respectively by cash and share tenants. Between the two there is substantially no difference. For example, in the case of corn the share tenants raised 27.5 bu. per acre, the cash tenants 27.6; for oats, cash tenants, 34 bu., share tenants, 32 bu.; for wheat, cash tenants, 12.7 bu., share tenants, 12 bu. These differences are not big enough to matter. Yields of cash tenants were a little higher, per acre, than share tenants'; the amount was trifling, but it showed up in every case. On the basis of census reports one may say that the yield on cash-rented land is barely higher than on share-rented land.

One may conclude that a cash tenant will carry his cultivation to a much higher point than a share tenant. Presumably the cash rent is less in value than the share. Hence, theoretically, there is an opportunity to carry intensity beyond the point at which the cash rent is paid and get the whole income for a time before it completely fails, while the fact that the share tenant can get but half or so throughout the whole effort will stop all action at an earlier point. That this does not happen is probably largely due to the relationship between landlord and tenant. In the case of share renting the two parties usually meet and discuss the amount of fertilizer to be used and possibly the type of cultivation to be followed. The result is that the amount of fertilizer used is about the maximum applied to such fields in the particular community.

The share-rented farm, for Iowa, is worth nearly $4,000 more than the cash-rented farm. One of the most noticeable features of the renting contract, more especially of the share-renting contract, is the relationship be-

[4] Taylor, *op. cit.*, p. 161.

tween the two parties, landlord and tenant. In the case of the cash rent, as before noticed, it is usual for the cash landlord to be a woman, a group of children, a man living at a distance, or very frequently a man who knows little about farming. On the other hand the owner who rents his farm on shares is perhaps most frequently one who has retired as a farmer himself

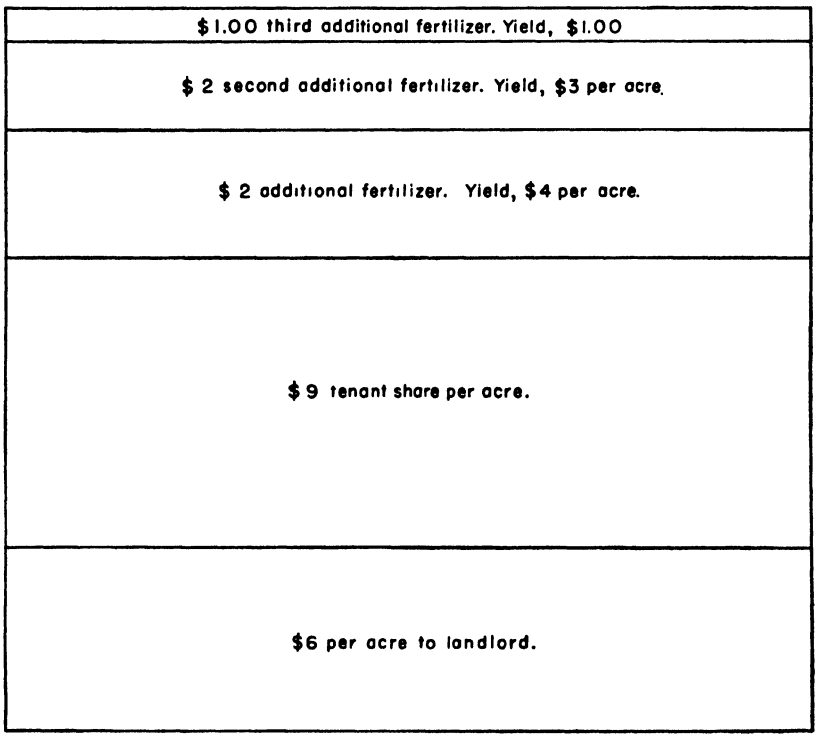


CHART VI.– Tenant increases fertilizer.

or a younger man who has left farming for some other line of business. The owner of the rented farm who rents for a share usually knows farming. A considerable portion of these tenants and landlords belong to the same families. An owner who is also a relative cannot be argued down easily when he suggests better farming, especially better culture, more fertilizer, and the like to a share renter who is disposed to be slack.

Fertilizer Application. In the case of cash rent let us notice the method by which the amount of fertilizer to be used is divided.

According to Chart VI the landlord gets $6 per acre, the tenant $9, which it is estimated the land will produce without more fertilizer than the farm affords. But the tenant decides to use some additional fertilizer and within

the first three years applies first $2 worth, then another like amount, then $1 worth, with no returns on the last application. Thus for his first two expenditures he paid out $4; for them he got back $7. This was pretty good farming. When will the landlord decide to make him pay a considerable part of his first gains in additional returns as rent? Probably not too promptly, since a person renting out a farm for cash usually does not know in detail how the land is producing.

How about the case of the share renter? Suppose the landlord proposes trying some further application of fertilizer. Will the tenant object? He can hardly do so, and soon $4 worth additional is being applied, just as it is by the cash tenant. The tenant pays $2 for his half, the landlord the same. They get $7 more product, which is evenly divided between them. The tenant has the same return for what he put into the new fertilizer as the landlord has. He lacked the chance of investing a second $2 and making a corresponding $1.50 additional. In Iowa, it must be remembered, the cash-rented farm consists of 129 acres, while the share-rented farm has 187 acres, or 58 acres more. So the tenant gets for himself the added returns on the 58 acres as well as on the 129 acres. Thus with his larger acreage he may easily be doing as well as the cash tenant on the smaller farm.

Chapter 18

TENANCY IN THE NORTH ATLANTIC STATES[1]

North Atlantic and North Central States Contrasted. "The North Atlantic states, nine in number, consist of the six New England states together with New York, Pennsylvania, and New Jersey. In area they are little more than one-fifth as large as the North Central group, while the acreage of farm land is below one-fifth, and improved land is only one-seventh. The North Atlantic states have less than one-third as many farms as the North Central states. The East is characterized by a hilly, broken surface and comparatively thin soil, in contrast to the great level or rolling stretches, with deep soil, of the Middle West. The difference in topography and the poorer quality of the soil from the standpoint of grain production help to determine the size of the farm, which in the North Atlantic states averages 96 acres and in the North Central group 155 acres. During the past decade this difference has increased, the average size of farms of the former group growing smaller by 1 acre, that of the latter group larger by 13 acres. At the same time the number of farms in the Eastern group decreased 3.5 per cent, while that in the Middle Western increased 1.4 per cent.[2]

"In value the Eastern farms increased during the past 10 years 31.9 per cent, the Middle Western 113.8 per cent. At present the land alone in the North Central states is valued about the same as land and buildings in the North Atlantic states, $49.30 and $49.95 respectively. In production of cereals and livestock the Eastern group shows not only small but lessening production as compared to the Middle West. For example, there was a decrease in the wheat acreage of both sections from 1900 to 1910, but the decrease was relatively four times as great in the North Atlantic states, which are now producing a smaller proportion of the breadstuffs of the nation than ever before. In corn acreage the North Atlantic states show

[1] Pages 195 to 203 are adapted from an article in *The Quarterly Journal of Economics*, November, 1911, pp. 105–117, by B. H. Hibbard. The date of this chapter must be kept in mind.

[2] By "North" the New England, Middle Atlantic, and North Central states are meant.

for the past decade a decrease of 12.5 per cent and the North Central an increase of 1.1 per cent. The movement in the production of oats is similar. With respect to livestock the North Atlantic states show from decade to decade a continually decreasing proportion of the livestock of the country. For the census years 1900 and 1910 respectively, they reported 9.3 and 9.1 per cent of the cattle, 9.3 and 8.0 per cent of the horses, 6.9 and 4.4 per cent of the sheep, and 3.7 and 3.8 per cent of the swine.

"There are, however, some important particulars in which the North Atlantic states rank high. The denser population encourages a more intensive type of agriculture, and in dairying, vegetable growing, and fruit growing this section holds an important place. Distinctively dairy farms are relatively more than five times as prevalent in this section as in the Middle West; vegetable and fruit farms are three times as prevalent; and in addition twice as great a proportion are classed as miscellaneous. Owing to the more intensive types of farming and the more careful adaptation of the crop to the particular soil best fitted to its production, yields per acre in the East compare very favorably with those of the West.

"All the foregoing facts affect the tenancy question. The predominating conditions point to a high percentage of ownership as compared to tenancy. The value of the land is not very high on an average; in several states it is decidedly low. The percentage of tenancy follows very closely the value of land, with tenancy more prevalent where land is dearer. It is true that exceptions to the rule occur in a few instances in New England, but New England is no larger than the state of Michigan, and with so many cities and with highly specialized types of agriculture here and there, it is no wonder that local exceptions to the general trend of tenancy should occur. If we treat New England as a unit, the North Atlantic states take exactly the same rank in value of land and in tenancy, as the figures in Table XVII show.

TABLE XVII.—VALUE OF LAND AND PERCENTAGE OF TENANCY, 1910

	Value per acre	Percentage of tenancy	Rank in value	Rank in tenancy
New Jersey	$47.76	24.8	1	1
Pennsylvania	33.80	22.9	2	2
New York	31.97	20.8	3	3
New England	19.27	7.9	4	4

Relation between Value of Land and Percentage of Tenancy. "The relation of rate of tenancy to value of land may be illustrated by groups of counties within different states. Dividing the counties of Pennsylvania into three groups on the basis of land value, it is found that in the group

with the highest value 29 per cent of the farms are in the hands of tenants; in the group next below, the percentage of tenancy is 21; and in that with the lowest value, the percentage of tenancy is 16. The same condition prevails in New York, where by the process of dividing the state into three groups of counties on the basis of value of land, the percentages obtained are for the first group 24.5, for the second 23.9, and for the third 18.5. It will be noticed that in New York the range in tenancy percentage is narrow, the difference between the first and the second group being especially slight. This is due in large measure to a large number of suburban homes in the vicinity of New York City and along the Hudson River that are reported as farms, though in many instances not a great deal of agriculture is carried on in connection with them. Their values are, however, high.

"In New Jersey the greatest proportion of tenancy is not in the counties with the highest land values. These counties, clustered around New York City and other large cities near by, contain a very great number of suburban homes of the kind just mentioned, and this fact, together with the influence of a considerable amount of specialized agriculture of the type coupled with ownership, has prevented the increase of tenancy.

Value of Land and Rate of Tenancy in New England. "In New England the lowest proportion of tenancy on any considerable area within the older states of the Union is to be found; and nowhere else is the correspondence of low-priced land and low rate of tenancy more conspicuous. The average value of farm land in New England is $19.27 per acre, and the percentage of tenancy is 7.9. The variation of this percentage from county to county is not great and does not follow the price of land very closely. The remarkable thing is the relative scarcity of rented farms. Not only the low value of land but also the smaller number of acres per farm is an important factor in the value of the farm as a unit. This value in the North Central states averages $9,172 and in the North Atlantic states $4,805. Thus for the purchase of a farm in the latter section, little over half as much money is required as in the former. However important the value per acre of land and the number of acres included in a farm may be in determining the line of cleavage between ownership and tenancy, it is certain that some types of farming lend themselves much more readily to the tenancy system than others. And while it is not so easy to trace the connection between price of land and tenancy in the East as in the Middle West, on account of the greater number of additional influences affecting the result, it is easier to identify some of these latter forces.

Relation of Type of Agriculture to Tenancy. "The contrast between the tenant farm of the East and that of the Middle West is striking. In the Middle West it is a little smaller than the owned farm; the buildings are decidedly inferior. In the East the tenant farm is larger by a few acres

than the owned farm, and the buildings are correspondingly more valuable. These striking differences are due to the fact that the greater proportion of tenants in the East, as in the Middle West, gravitate toward the more extensive type of farming. But in the latter section this means less livestock and therefore fewer barns; the grain farming that the tenant practices calls for relatively few and inexpensive buildings. In the East the same motives and circumstances induce many tenants, in addition to growing grain, to keep a large number of dairy cows, and dairies require good buildings. Therefore the rented farm in the Eastern states has a better or at least a more expensive set of buildings than the owned farm. And this is one reason why the rented farm is worth appreciably more than the owned farm.

Percentage of Selected Crops Grown by Tenants in Different States. "As in the Middle West, so in the East, the tenant raises more than his proportional share of the cereals, and this is especially true where the acreages are considerable. In New York the tenants grow 50 per cent more than their share of the wheat; in Pennsylvania 75 per cent more; in New Jersey 76 per cent more. Corn and oats are grown in similar though somewhat smaller proportions by the tenants, and the same may be said of hay and forage. The important wheat-growing districts of the North Atlantic states comprise about 21 counties in Pennsylvania, 12 in New York, and 8 in New Jersey. These counties for the most part show high land values; yet in no case are they the highest of the state. The percentages of tenancy, however, are higher than for the highest groups on the basis of value, being 30.6 per cent in Pennsylvania, 27.4 in New Jersey, and 25.2 in New York. With very few exceptions the greatest acreages of other cereals are found in the same counties in which the greatest acreages of wheat are grown, but the farms growing the major part of the wheat are larger than those producing the major part of the other cereals, indicating that the most extensive type of farming practiced in this section is wheat growing. Thus again the coincidence of tenancy with farming of an extensive sort is emphasized.

Dairy Farming and Tenancy. "The best agricultural showing made by the North Atlantic states is in dairy farming, and therefore the relation of this industry to tenancy is of particular interest. It may sound a little strange to call dairying an extensive type of agriculture, but the term is a relative one; and, speaking relatively, dairying as usually carried on in the North Atlantic states may be so designated. It is at least a much more extensive type of agriculture than fruit and vegetable growing, both of which are very prevalent in these states. In the North Central states dairying is carried on mainly by owners, but in contrast to this the tenants of the North Atlantic states have charge of many more than their propor-

tional number of dairy farms. The force of this, however, is not so evident in the number of farms reporting as in the number of dairy cows; of these the tenants reported in 1900 more than 25 per cent in excess of their proportional allotment. The prevalence of tenancy among dairy farmers is further emphasized within the districts where dairying predominates. In the 10 leading dairy counties of New York, the average percentage of tenancy is 21, the same as for the whole state; but the tenants in these counties report 38 per cent more than their proportional number of cows. The question at once arises how these tenant dairymen accommodate themselves to the short and uncertain tenure by which they hold the farms, since it is not an easy matter to move the dairy equipment from one farm to another without considerable loss in the process of moving and readjusting. The answer is that these tenants do not move as frequently as other classes of tenants, and (which is not the case in the greater part of the Middle West) when they do move they have a reasonably good chance to find another farm with accommodations for dairying. In many instances the relation of landlord to tenant is much closer in this than in other types of farming, the landlord frequently owning a share in the equipment and paying part of the regular expenses; the relation is analogous to a partnership. The higher percentage of tenancy in the dairy business than in general farming is found in all the states of this group in which dairying is a leading business, but not, for example, to a noticeable degree in Maine and New Hampshire, where large dairies are few.

Livestock and Tenancy. "With regard to livestock other than cows and hogs, the tenant in the North Atlantic states has less than his proportional share. As in the North Central states, tenants here raise relatively more hogs than do owners. It is in dairying alone that an important exception in relation to tenancy is apparent. Actually a large proportion, probably 75 per cent, of dairies are in the hands of land-owning farmers, but the general low rate of tenancy in other lines gives the dairy tenant prominence.

Fruit Growing and Tenancy. "More important than in any other part of the United States except the extreme West is the fruit farming of the North Atlantic states, and in this fact lies a considerable part of the explanation of the low rate of tenancy in this section. In the 1900 census about 1 farm in 16 in this group was classified as a fruit farm, but this hardly gives an adequate picture of the situation, since a very great deal of fruit must have been produced on other farms, where it was a very important source of income, even though not the leading one. The tenants are in charge of about four-fifths of their proportional number of distinctively fruit farms, but in quantity of fruit produced they rank much lower. Of small fruits the tenant grows comparatively little, and the same is true of grapes to an even greater degree and hardly less so of peaches and pears. Apples are

more generally grown and are found to some extent on almost all farms in the East, thus bringing the proportion grown by the tenant a little above that of the other fruits. Fruit growing and tenant farming are not compatible. The best results in fruit growing demand continuous and consistent plans extending over a period of years, a condition necessarily absent in the usual case of tenancy. Something more than the moderate extension of period of occupancy noted in connection with the dairy tenants would be required to make it feasible for the tenant to become a successful fruit grower. The tenant can leave the ordinary farm in a sufficiently discouraging condition after his own interest in it has ceased, but a fruit farm under such circumstances would suffer vastly greater deterioration. For example, a vineyard left unpruned or a strawberry bed neglected is not likely to be a source of profit during the first year following. Even orchard trees are the object of constant solicitude if good results are to be obtained. It is therefore not a matter of surprise to find ownership high and tenancy low in districts where fruit is a leading crop.

"It must be remembered, of course, that the price of land in census reports includes the value of all perennial plants growing on it. Hence these reported values may cover up the fact that land not already planted to fruit but suitable for such use may be had at a comparatively low price. In this possibility of buying land, usually in small tracts and at a low price, lies a great part of the explanation of ownership as opposed to tenancy. It is possible under such conditions for a man of small means to acquire ownership. But after developing such a farm he hesitates to lease it to a tenant, well knowing the difficulties and care involved in keeping it in running order. And the tenant on his part is seldom ambitious to undertake the management of such a farm. If he were, he would more likely start in a small way as the owner of a few acres out of which to make a fruit farm of his own.

"Good examples of the low proportion of tenancy among fruit growers are found in New Jersey, where tenancy, in spite of a relatively high price of land, is decidedly low, being in some instances under half the average rate for the state. In the state of New York there is some confusion of evidence, since of the 10 counties leading in fruit production 5 lie within and 5 without the main grain-growing district. For those within this district the low rate of tenancy for fruit farms is covered up by the high rate for the grain-producing farms—very thoroughly covered on account of the greater number of farms of the latter type. In the 5 fruit-growing counties outside the grain district the percentage of tenancy is in every instance well below the general average for the state. In the other states of the group the fruit-growing areas are not sufficiently separate from the general farming areas to admit of separate analysis based on the general

statistics. Within these states, however, the proportion of fruit grown by tenants is low, as it is elsewhere.

"Another special type of farming of much importance in the North Atlantic states is vegetable growing. Unlike fruit farming, much of this is in the hands of tenants. Many such farms are in the vicinity of cities, on land high in price, often high because of possible uses other than agricultural. Land used for growing vegetables must be so thoroughly tilled that the danger of deterioration is small. The frequent moving of tenants on and off farms of this character is not so serious a drawback as in many other instances. The buildings are of a simple character and not unusually high in value. The crops are almost without exception annuals. The equipment needed for running the farm is not elaborate. Under these conditions the tenant may even come and go within the year, raise a good crop, and yet suffer but the minimum loss due to the difficulties of moving and adjusting himself to a new environment. Of the number of farms in 1900 on which vegetables were the main source of income the tenants held about 14 per cent more than their proportional share. Yet, as in the case of fruit, the proportion of vegetables produced by tenants for the market is still higher. For example, they grow about 25 per cent more than their proportion of potatoes and almost double their proportion of sweet potatoes. Tomatoes and melons are likewise favorite crops among tenants, and in certain districts especially adapted to their growth, as southwestern New Jersey, about half the total crop is grown by tenants. In making a considerable number of tests on this subject not an exception was found; the vegetable-growing business seems to be especially adapted to tenant farming.

Recent General Tenancy Trends, 1880–1910. "Since 1880, the date when tenancy statistics were first gathered, the percentage of tenancy for the North Atlantic states has been low in comparison with that for the whole country, in fact lower than for any other group except the extreme West. In the Western division conditions may properly be considered abnormal on account of the presence of many newly developed farms and especially because so many of these have been taken recently from the public domain. In the North Atlantic states, however, the term "abnormal" hardly applies, since farm land was long ago brought into use, and the readjustments that have been in progress are no greater than may be expected at any time. Especially is this true in view of the fact that the free land of the West was pretty well gone by the year 1880. For 20 years following 1880 the proportion of tenancy not only increased, but the increase was shared by every one of the five geographical divisions and by almost every state. In New England the proportion of tenancy has been low throughout, but in 1900 it could be said that there had been an important increase during each of

the preceding two decades. In the North Atlantic group during that time about 1 farm in 20 had been taken from the category of ownership and added to that of tenancy. The portents were ominous. It was freely predicted that the fifth act of the play would represent the farmer divorced from his land. A very few states, three New England states, for example, had shown for one or both of the decades preceding a slight tendency downward in the rate of tenancy, but only one of them had a smaller proportion than at the beginning of the period, and that an unimportant amount. Now, at the end of another 10 years, every one of the nine states of the North Atlantic division shows a positive though not a great gain in ownership and corresponding decline in tenancy (see Table XVIII).

TABLE XVIII.—PERCENTAGE OF TENANCY, 1880–1910

	1910	1900	1890	1880
North Atlantic states	18 1	20.8	18 4	16 0
Maine	4 3	4 7	5 4	4 3
New Hampshire	6 9	7 5	8 0	8 1
Vermont	12 3	14 6	14 6	13 4
Massachusetts	8 1	9.6	9 3	8 2
Rhode Island	18 0	20 1	18 7	19 9
Connecticut	9 8	12.9	11 5	10 2
New York	20 8	23 9	20 2	16 5
New Jersey	24 8	29.9	27 2	24 6
Pennsylvania	22 9	26 0	23 3	21 2

Nearly 3 farms in 100 passed over from one class to the other. This amounts to a decrease of 16 per cent in the number of farms operated by tenants, in the face of an increase of 16 per cent in the number so operated for the country as a whole. In 1900 the rate of tenancy in the North Atlantic states was nearly 60 per cent as great as that for the United States; now it is less than 50 per cent. It cannot be an accident that has brought about such a striking change in tenancy in the Eastern states, including, in addition to the North Atlantic group, four more states immediately to the south. Neither is this decline in tenancy a symptom of declining agriculture; for these states, notwithstanding a falling off in certain particulars, make a good showing, all things counted.

Occasion for the Decrease. "The low proportion of tenancy in the North Atlantic states is the result of a combination of causes. The most important of these are, first, the low price of land per acre; second, a set of circumstances resulting in comparatively small farms, these two facts combining to give a low value to the farm as a unit; third, the relatively small amount of such farming as lends itself easily to a system of tenancy, and in its stead a type requiring ownership of the land in order to ensure good

results. That other factors are involved cannot be doubted, but these statistics seem to indicate which factors are decisive."

Tenancy from 1910 to 1940. In the group of states including the New England and the Middle Atlantic states the changes in tenancy were indeed small during this period. Throughout New England tenancy declined for 20 years; then all the New England states but Rhode Island increased, 1930–1940, but by no means at an alarming rate. These five states are still below 10 per cent, although Vermont is a mere 0.1 per cent below. Maine went up from 4.5 per cent to 6.5. The Middle states change very little indeed. After decreasing from 7 to 9 per cent from 1910 to 1930 the three states made no change of more than 0.4 per cent in the next decade and as a group managed to fall a trifle. The changes in the size of farms in these states are so small that very little can be said about them. It would be surprising should any important change develop in the next few decades.

Leading Crops and Products in These States. The leading output is livestock and its products, such as milk, eggs, and wool. These products reach such figures that there is no close second. Most of the field crops are used as a means of supporting the livestock. For instance, in New England most crops, both grass and grain, are used for feeding livestock, principally cows. New York plants about 680,000 acres to corn, Pennsylvania about 1⅓ million. In Iowa, by contrast, we find 7 to 10 million acres in corn, and in Illinois perhaps four-fifths as much. In New York, however, we find hay to the extent of 3½ to 5 million acres, while in Illinois there will be somewhat less than 3 million acres, in Iowa 3½ million. In the Middle West an acre of land is worth more than in the East, and fewer acres will support a cow. Then in the Eastern states decidedly more attention is given to the growing of fruit, and much of the cheap land will produce more fruit than can be grown on the better soils of the Middle West. Labor is more easily hired in the East, and therefore undertakings can be carried out that require more work per acre than is usually put on the lands of the Mississippi Valley.

Thus in the East we find people producing, first, dairy products. The land is cheap, grass grows well, and cattle are likely to be well fed during a summer rather shorter than is usual in the country farther west. In the East, due mainly to higher prices of milk but also to higher prices of feed, cows are often purchased from farmers farther west, instead of being locally raised from calves to cows. During the past half century it has become more and more usual for Eastern farmers to buy grain from the Dakotas or somewhere in that general region rather than try to grow their own dairy-feed grain at home. Year by year competition has grown slacker with the Mississippi Valley in raising corn, oats, and wheat, and

more effort has been put on higher-priced crops such as small fruits, tree fruits, and grapes. Primary effort has been concentrated on dairying, fruit growing, and a few such specialties as the big-leaf tobacco, grown largely under canvas.

Dairying Far in the Lead. In New Jersey sales of vegetables, fruits and nuts, and horticultural specialties rise to the highest point, relatively, yet even so, were but a little over half as great as sales of livestock and livestock products in 1939. In this state alone these products make a good second to dairying. Throughout the Eastern states dairying so far outranks all else as to give this branch of agriculture first place (with no exception). Livestock and field crops are so closely related that they can hardly be looked on as separate products, especially where, as happens in the Eastern states that grow grains as feeds, they are sold, if at all, to neighbors who feed them directly to their livestock. Some cream produced in the West is shipped to the East, but thus far the amount of milk shipped a thousand miles to market is small.

Cash or Share Tenancy. In 1940 we had in the United States 31 states in which the larger number of rented farms were on a share basis and 17 states in which rent for cash predominated. Cash-rented farms prevailed in New England, the Middle Atlantic states, the Pacific states, and West Virginia, Wisconsin, Florida, Arizona, and Nevada. Of these 17 states only 3 have over 20 per cent tenancy, or about half the average percentage of tenancy for the country. Most of these states, moreover, have been going down in tenancy for 30 years. The majority of these states do not have land from which it is easy to collect rents in the nature of shares. Ten states, New England, the Middle Atlantic states, and West Virginia, making up somewhat more than half the whole group of cash-renting states, are all in the northeastern part of the country where the topography is rough and where there are not great stretches of small-grain and corn land. All of these states, furthermore, produce great quantities of vegetables and small fruit, both of which can somewhat readily be produced by tenants, but the division of the crop on a share basis is not so easy. Then Florida and the Western states that produce great quantities of miscellaneous fruits and vegetables undoubtedly find a cash-rental rather easier than a share basis. This takes care of all but a couple of states, which cannot be accounted for so briefly. These are Arizona and Wisconsin. Both these states were in the share-renting list in 1920. Arizona has low tenancy, only 11.6 per cent in 1940, and might easily change in character as it develops more fruit and vegetable business. One might properly expect tenancy to increase somewhat in the districts that have developed irrigation. At least it is true that irrigation and higher tenancy appear to go together and, although the census gives no facts directly on the subject,

it is altogether likely that tenants are more numerous where there is irrigation than where there is not. Further, where the country is dry and where rentals are part of a dollar an acre, they are usually on a cash basis, whereas in a good, irrigated district, growing cereals, hay, and the like, tenancy tends to be on a share basis. In the Eastern states, while tenancy is low in amount, it is more often on a cash basis because of its more miscellaneous character. It is not so simple to divide crops of many kinds, small fruits and vegetables, into shares on the basis of small sales of unlike commodities. Hence the small number of farms with such products that are rented in sections are more often put on a cash basis. Wisconsin is pulled into the cash-rent column by her northern counties.[3]

[3] References for the four chapters on tenancy follow Chap. 21.

Chapter 19

TENANCY IN THE NORTH CENTRAL STATES[1]

Tenancy Problem. "The United States is far too large and too varied to be considered as a unit in regard to tenancy. In fact any one of the recognized geographical divisions is so large and varied that even a statistical treatment of tenancy for one section is sure to leave out of account many local and minor influences that, taken together, may be significant. It would be irrational to speak of tenancy in the abstract and include within the scope of the term the 20-acre cotton farm of Georgia and the 1,000-acre farm of North Dakota. The Georgia tenant is usually under the eye and the domination of the owner of the land, in debt for equipment and dependent for subsistence, and in charge of $1,000 worth of property, himself the owner of no more than a couple of hundred dollars' worth. The North Dakota tenant, frequently as independent as the owner of the land, decides what crops he shall plant, plans his field operations, owns his livestock and implements free of encumbrance, buys and sells entirely at will, owns property worth from one to several thousand dollars, and is in charge of a farm worth perhaps $25,000. Such is the contrast as between North and South. Though the contrast between East and West is less pronounced, it is by no means negligible. In the East the farm is small by comparison; it no longer responds to cultivation alone and is not so well adapted to the use of draft animals and even less to the use of mechanical power, so that diversified farming and highly specialized intensive farming are the only types that can succeed. The Far West, with its enormous expanse of country, has the greatest diversity of soil and climate, with a range of crops from the durum wheat and alfalfa of the plains to the irrigated gardens of the valleys. Some of the land is worn out from the standpoint of present

[1] Pages 206 to 209 are adapted from an article in *The Quarterly Journal of Economics*, Vol. XXV, August, 1911, pp. 710–729, by B. H. Hibbard. The date of this chapter must be kept in mind.

methods of farming; there is other land so rich that those farming it believe it will last forever.

"The North Central division is a large block of country. It comprises 12 states, the smallest of which is Indiana, the largest Minnesota. Taken together they have an area of over three-quarters of a million square miles, 22 per cent of the area of the continental United States. They have a population of about 40 million, about 30 per cent of the total. From the agricultural point of view this section has striking features. Here are over one-third of all the farms and farm land of the country, with a higher value than the other two-thirds. Here are found over half the cattle, about half the horses and mules, and, in value, just over half the agricultural implements and machinery. Within this section is grown two-thirds of the wheat crop of the whole country, almost three-quarters of the corn crop, eight-tenths of the oats crop, and six-tenths of the hay and forage crop. In short, the great bulk of the breadstuffs and the meat and no inconsiderable part of the dairy products and the fruit come from these states.

Characterization of the North Central States. "The North Central division is often spoken of as if it were uniform in character and quality, but such is far from the case. For example, the price of land in Illinois in 1939 was reported at $81.76 per acre and in South Dakota at $12.80, the other 10 states ranging between these extremes. Even within any one state there are great variations. For example, in Illinois and Iowa there is much land selling for more than $200 an acre, while at the same time a whole county in Illinois is reported at $18 an acre for land and buildings. Nebraska has land selling for $150 in the eastern part of the state, while in the western part there are abundant examples of the economist's no-rent land. Moreover, both Ohio and North Dakota contain land that has not been farmed at all. The topography, the nature of the soil, and the length of time it has been cultivated all help to determine the size of the farm, which in Ohio averages nearly 94 acres and in North Dakota 513 acres. The density of population is correspondingly unlike, ranging from 4.66 per farm in Ohio and 4.24 in South Dakota. In parts of Ohio the density is several times the average for the state, while in South Dakota it falls below one per square mile for some counties.

"There is great diversity in the character of the soil and its primary condition. The greatest prairies of North America were in these states, as well as some of the best of the pine forests and extensive hardwood forests. Swamps are extensive in the northern part, though irrigation is essential to good crops in the western part. As a result the character of the farming varies very greatly. Certain states may be characterized by the leading type of agriculture within them. Ohio has long been known as a sheep-growing state, Illinois as a cereal-producing state, Wisconsin as a dairy

state, Iowa as a cattle- and swine-producing state. Minnesota and the two Dakotas are known far and wide as producers of wheat, barley, and flax; Michigan is noted for fruit and sugar beets; and so on through the list. It is not necessary, however, to go from one state to another to find changing conditions. There is much dissimilarity within any given state, with consequent variety in the agriculture. In Wisconsin, for example, there is the regular grain growing—corn, oats, and barley; there are cattle for beef and for the dairy, there are sheep and swine; but in addition to these more ordinary kinds of farming we find tobacco, truck, canning crops, and fruit. In Illinois the crop range is wide. Some parts of the state grow as much corn per square mile as is grown anywhere; some counties are outside the main corn belt. In parts of the state alfalfa, clover, and timothy are found on almost every farm; in other parts these crops are almost unknown.

Relation of Tenancy to Value of Land by States. "With all these conditions varying so widely it would be strange if tenancy were a constant factor, and it is not. Indeed, it would hardly be possible for it to run through a wider range, since it now varies by individual counties from no percentage of all farms in one county to 94.2 per cent in another. Just about 40 per cent of the Middle West is rented, and rented land is worth just a little less per acre on an average than the rest.

"The first fact to be noticed is the close parallel between value of land and proportion of tenancy in many instances. Table XIX shows value of

TABLE XIX.—VALUE OF LAND AND PERCENTAGE OF TENANCY, 1910

	Value per acre	Percentage of tenancy	Rank in value	Rank in tenancy
Illinois	$94.90	41.4	1	1
Iowa	83.00	37.8	2	3
Indiana	62.00	30.0	3	5
Ohio	53.30	28.4	4	7
Wisconsin	43.30	13.9	5	12
Nebraska	41.84	38.2	6	2
Missouri	41.76	29.9	7	6
Minnesota	37.00	21.0	8	9
Kansas	35.50	36.8	9	4
South Dakota	34.70	24.6	10	8
Michigan	32.00	16.0	11	10
North Dakota	25.70	14.3	12	11

land per acre and percentage of tenancy as reported in the *Thirteenth Census, 1910,* together with the rank in each. Ranks in value and in tenancy correspond closely in about two-thirds of the states and differ materially in the other instances. Must it be inferred, then, that the correspondence

is mere coincidence? Before dismissing it as such let us drop three states from the list and re-rank the remaining nine. Dropping Wisconsin, Kansas, and Nebraska, the ranking in value and tenancy, respectively, is shown in Table XX.

TABLE XX.—RANK IN VALUE AND IN TENANCY, SELECTED STATES, 1910

	Rank in value	Rank in tenancy
Illinois	1	1
Iowa	2	2
Indiana	3	3
Ohio	4	5
Missouri	5	4
Minnesota	6	7
South Dakota	7	6
Michigan	8	8
North Dakota	9	9

"If this is a mere coincidence, it is surely a very striking one. But how can we justify dropping Wisconsin, Kansas, and Nebraska? In partial answer it may be said that Wisconsin has always been remarkably low in tenancy, for reasons that will be discussed later, while Kansas and Nebraska have come up rapidly in tenancy, owing to the unusual adaptability of their land to extensive farming and to the further fact that in them no considerable amount of available unoccupied land remains to be taken up by homeseekers and so for a time balance the tendency toward the purchase of land for speculation. Land held for speculation is always for rent, and the time has arrived in these states when tenants are plentiful enough to take most of it. On the other hand, much land in Minnesota and the Dakotas goes begging for occupants and must be worked by its owner or not at all; hence a very low rate of tenancy in the newer sections of these states, which holds the general average of tenancy down, in spite of a high rate in the older sections, where speculators and tenants are both plentiful. It is in the older states that conditions are more uniform and apparently more stable, and it is in these states that values and tenancy seem unmistakably to be traveling the same road and at a somewhat similar speed."

The trend of tenancy for the group during the past 60 years is shown in Table XXI.

Throughout this period the relation between value of land and rate of tenancy has been substantially as shown above for 1910. The slight decline in tenancy for Missouri during the 10 years from 1900 to 1910 and recurring in 1920 is the only instance of the kind occurring in the group during the first 30 or 40 years of the period.

TABLE XXI.—PERCENTAGE OF TENANCY, 1880–1940

	1940	1930	1920	1910	1900	1890	1880
Illinois	43.1	43.1	42.7	41.4	39.3	34.0	31.4
Iowa	47.6	47.3	41.7	37.8	34.9	28.1	23.8
Indiana	28.3	30.1	32.0	30.0	28.6	25.4	23.7
Ohio	26.3	26.3	29.5	28.4	27.5	22.9	19.3
Wisconsin	23.0	15.5	14.4	13.9	13.5	11.4	9.1
Nebraska	52.8	47.1	42.9	38.2	36.9	24.7	18.0
Missouri	35.6	34.8	28.8	29.9	30.5	26.8	27.3
Minnesota	32.3	31.1	24 7	21.0	17.3	12.9	9.2
Kansas	44 9	42.4	40.4	36.8	35.2	28.2	16.3
South Dakota	53.0	44.6	34 9	24.6	21 8	13.2	3.9*
Michigan	17.0	15 5	17.7	16.0	15 9	14.0	10.0
North Dakota	45.1	35.1	25.6	14 3	8.5	6 9	3.9*

* For Dakota Territory.

Relation of Tenancy to Value of Land by Groups of Counties. The close relationship between value of land and rate of tenancy is even more strikingly brought out by a comparison of groups of counties within a state than by a comparison of one state with another. Within the state of Illinois, in a block of 14 counties where farms were reported at $150 or more per acre, there was in 1900 50.6 per cent of tenancy. In these counties at the 1940 census there was 58.3 per cent of tenancy. Not only is the amount of tenancy high, but it is increasing more than in other parts of the state. In another block of 19 counties, in which the value of farms was the lowest per acre, in 1900 there was 27.8 per cent of tenancy, while in 1940 there was 24.3 per cent. This is but little over half the proportion of tenancy for the whole state, and the rate of increase is below that for the state. The same general conditions prevail in Ohio, which we may view from a little different standpoint so as to include all the farms of the state. It is found that in 43 counties in the eastern and southern parts, having an average valuation for farms of $60 or less per acre, the percentage of tenancy in 1900 was 19.5 and in 1940 was 19 per cent; this was a low proportion in each case, with little change through the period. In the remaining two-thirds of the state, the percentage of tenancy in 1900 was 30.9, while in 1940 it was 37 per cent. It is just here, roughly the middle of Ohio from east to west, that we find the pronounced break in the tendency of farms to slip out of the hands of the owners and into the possession of tenants; east from this line tenancy declines, while to the west, at least to the Rocky Mountains, ownership declines.

The same relationship between values and tenancy may be seen in Missouri, where in 16 counties in the northwestern part of the state with values of $60 and over per acre there was 33.5 per cent tenancy in 1910 and 43.9

per cent in 1940. This is well above the general average for the state and is slightly above the percentage for the same counties 10 years earlier. In the northeastern part of the state a like number of counties with values below $60 stood at 27 per cent tenancy in 1900, but had risen to 43.9 per cent in 1940. In the northeastern corner of the state a group of 16 counties in 1940 averaged $4,232 per farm.

In Indiana the 19 counties in which farms were worth $100 and up per acre in 1910 had 36 per cent tenancy. In 1940 there were but eight counties with farms worth over $100 per acre; these counties reported values of $178.24. Two of them showed distinctly high values on account of nearness to cities. Very curiously, these counties with high-priced land showed a tenancy of only 19.8 per cent. The 25 counties with values at $50 and below had 21 per cent tenancy in 1910. In 1940 there were 18 counties below $50 in value, with a tenancy of 29 per cent, thus showing some increase.

So far as the writer has made a test, the general relationship usually holds good. That it will hold where other conditions are equal seems beyond controversy. It does not always hold good from one state to another nor even within a given state, because of varying conditions; yet exceptions are rather infrequent.[2]

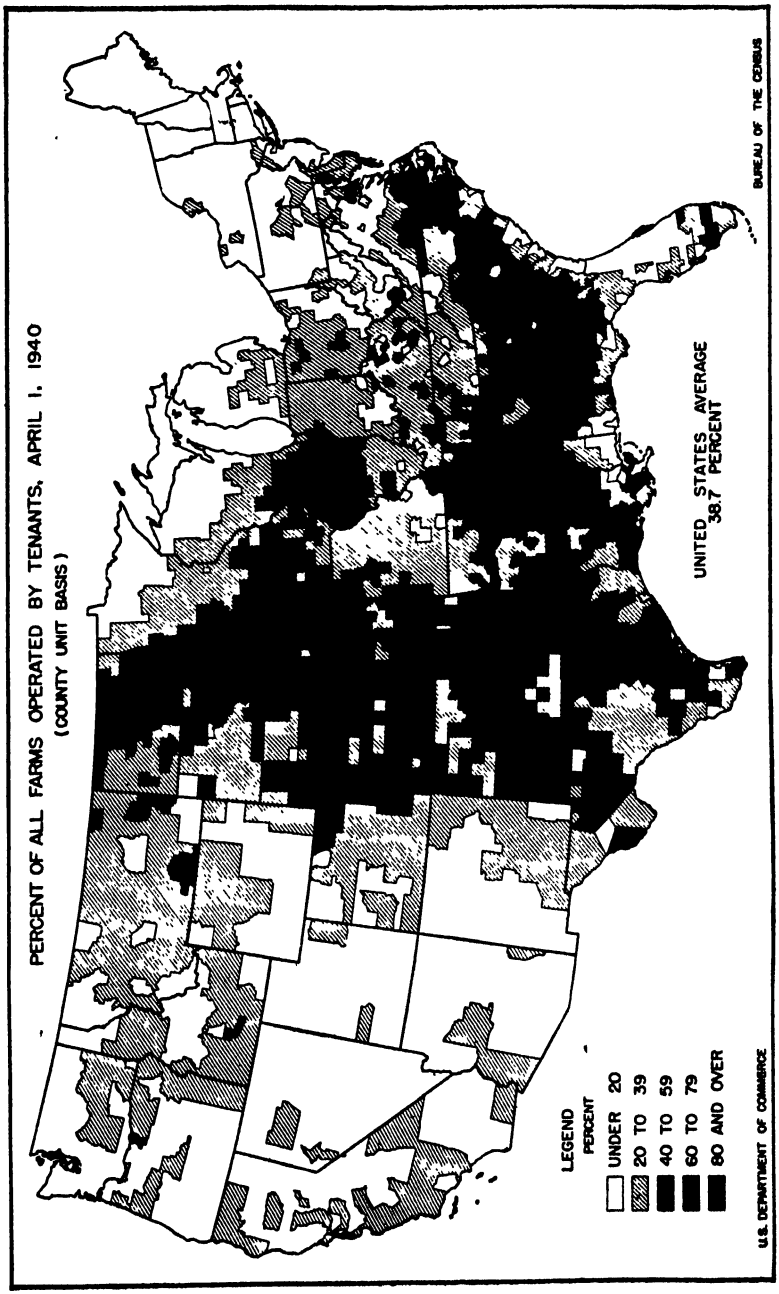
Values Influenced by Size of Farms. Values of land and size of holdings are by no means the only factors in the tenancy problem. Among others it may be mentioned that the character of the farming done is not the same in the case of the tenant and the landowning farmer. In this North Central group of states, according to the census of 1900, the tenants had charge of more than their proportional number of farms, on which hay and grain were the principal products. On the other hand, they had little more than half their proportion of livestock farms. These two classes of farms constitute the greater part of all farms in this section; hence in the proportional distribution of these farms between owners and tenants is seen the leading characteristic of tenant and landowning farmer, so far as general type of agriculture adopted is concerned. The tenant raises grain to sell; the owner more often raises it to feed to livestock. The tenant produces but three-fourths of his proportional share of hay and forage, and this corresponds almost exactly to the proportion of cattle that he owns. In the ownership of sheep he is even farther behind the landowning farmer. Yet in the case of swine he has his full quota, and here is an exception to the generalization that the tenant raises grain to sell; though he does this to a great degree, he feeds a great many hogs.

[2] See article on Tenancy in Iowa, quarterly publications of the American Statistical Society, March, 1911.

By Type of Farming. The leading cereals of the North Central states are corn and wheat, which together make up about four-fifths the value of all cereals. The tenants grow only two-thirds of their share of wheat; yet they exceed by one-third their proportional share of corn. Conditions in relation to wheat vary widely from state to state. In several of the distinctively wheat-growing states tenants are growing more than their proportional share. With corn the conditions are more uniform, the tenant raising throughout proportionally more than the landowner. The less usual crops, such as vegetables, fruit, and tobacco, are grown mainly by the landowning farmer. Couple with these facts of tenancy—the prevalence of grain growing in general and of corn growing in particular and the scarcity of cattle and sheep—the characteristics of the tenant farm itself. There is the same value in land per acre and not far from the same number of acres, but the buildings are worth but five-sixths as much as on the farm occupied by its owner. In implements and machinery the tenant has a little less than his proportional share, though this is due in the main to the fact that he is less in need of such things as haying tools, corn binders, or milk apparatus than the landowner. Tenants are seldom handicapped by lack of implements. The tenant farmer himself is younger than the owner; he stays on the same farm generally not more than a third as long as the owner. These facts are all significant. They picture a farmer with a poor outfit of buildings, with comparatively little grass land, and with little livestock, who gives his attention to the growing of grain to be hauled immediately to market. The one exception to this condition is the feeding of much of his corn to hogs.

If these conditions are accurately outlined, they present a reason other than the high price of land for the concentration of tenancy on superior land. The tenant is not equipped for doing the more exacting work of stock farming. He lacks the capital with which to begin. He wishes to engage in a business that will yield returns during a year, not after a period of years. Again, he is not encouraged by his landlord to go into livestock to any extent; the landlord is not anxious to put a great deal of money into the necessary barns, silos, and fences. Even should he have the opportunity to raise stock on a given farm, the probability that he will be obliged to move within a short time is a discouragement against doing so, since the next farm he takes will in all likelihood not be so well equipped. In one respect landlord and tenant seem to be agreed; they want prompt returns on the outlay. These conditions cause the tenant to gravitate toward the section where the type of farming for which he is fitted and which meets his needs can best be done. This means a district adapted to the growing of grain, especially corn.

CHART VII


PERCENT OF ALL FARMS OPERATED BY TENANTS, APRIL 1, 1940
(COUNTY UNIT BASIS)
UNITED STATES AVERAGE
38.7 PERCENT
LEGEND
PERCENT
UNDER 20
20 TO 39
40 TO 59
60 TO 79
80 AND OVER
U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

Tenancy and the Leading Farm Crops. That tenants are prevalent in the heart of the grain-growing section may be seen from the map on page 213. The striking similarity of a tenancy map and a cotton-area map for the South has often been noted. The relation of the corn belt to the density of tenancy in the North has not attracted so much attention. It is, nevertheless, close, while the three leading farm crops together show the main location of the tenant areas. If we were to indicate on one map the areas given to the growing of corn, wheat, and cotton, we should at the same time cover the main areas showing the tenancy.

Extensive and Intensive Farming. It is not intended to suggest that there is any magical connection between tenancy and the growing of corn. The connection is very much unlike the relation of tenancy to cotton growing. It would seem to be due more to the failure, perhaps the inability, of the tenant to enter the more profitable business of stock raising than to any other cause. In some cases the landlord requires the tenant to grow corn and deliver it to him at market price, in order that he may have a supply for feeding stock and also in order to keep his land in better condition than it would be with small-grain growing; but these cases are surely not very common. The tenant is the type of farmer to prefer the extensive to the intensive system of farming. In the northwestern part of this section, where corn has not proved a profitable crop, and yet where land has advanced rapidly in price, the tenant farmer is a wheat grower. This may be seen on the map if the wheat sections of Kansas and North Dakota are kept in mind, for over a considerable portion of these states the tenancy shading is noticeably dark. These are the three sections in which a simple exploitative system of farming is possible—corn, wheat, and cotton areas blending into each other. Here tenancy is not only high but on the increase in general. Westward around the outside of this great area there is no opportunity to plant and reap on a wholesale plan.

North Central States. There is a great difference between the eastern and southern parts of Ohio and the rest of the state in respect to soil and topography, and the line of the division shows plainly on the tenancy map. In the southern and eastern portion, with its hilly land, wheat and corn are not grown in great quantities. It is here that sheep raising and dairying are common; neither of these businesses predominates among tenants. These businesses are not adapted to the ability of the tenant; the soil is not adapted to the crops that he prefers. It seems that a diversified type of farming is all but inevitable in a district of this kind. Again, this land is not the sort to rise in price as the richer and smoother land does, and so it does not get beyond the reach of the farmer in price per acre. The advantage of the large holding is less than in the case of land adapted to the growing of grain, and this contributes another factor tending to keep the value

of the farm unit from rising too high for the farmer of moderate fortune. In Michigan, where tenancy is low, farming is diversified. Fruit growing is prevalent; in some counties great quantities of potatoes are raised; dairying and sheep raising predominate in others. All these facts apply to Wisconsin, which among the older states has a lower rate of tenancy than any other in the Middle West. Wisconsin is preeminent in the dairy business, but ranks comparatively low in grain. Unquestionably there are still other factors that should receive attention in a treatise on tenancy. Among these is the matter of the farmer's national origin; the affinity of Germans and Norwegians, so numerous in Wisconsin, for the land is proverbial.

In Minnesota the chances for long furrows and a smaller variety of operations for a given farm increase greatly. And immediately tenancy is more frequently found. In a few of the choicest counties 45 per cent and more of the farmers are tenants. Why, it may be asked, since wheat farming is even more definitely extensive than corn raising, does not the same amount of tenancy develop in connection with it? The answer is not difficult. Up to the present time wheat has been a pioneer crop. It has been raised for comparatively few years, 10, 20, or 30, after which its yield falls off, and it is succeeded by a more diversified system of agriculture. While it is devoted to wheat, the value of the land is low. Other land, not very different, can be homesteaded or bought at government price or on long time from a railroad company. While these conditions obtain, there are indeed always a great many speculators, nonresident landholders, who would be glad to let their land on almost any terms. The farmer can buy for himself and does, but no one can be found to take the speculator's land.

In 1900 there was very little tenancy in North Dakota. At present there is a great deal in the eastern part of the state, but land in the western half rouses no lively competition among tenants. The same is true to a much smaller degree of western Nebraska and Kansas. These states, with land lower in price than that of Iowa, have about the same proportion of tenancy. Here again is the contrast between more and less diversified farming. It is not certain that diversified agriculture cannot develop in these states, as in those to the east of them; but it is certain that for the present they lend themselves more readily to exploitation under a one-crop or two-crop system. Here especially the tenant keeps few cattle or sheep, produces far less than his proportional part of the hay, and gives his attention primarily to producing corn and hogs. Everything is favorable for a high rate of tenancy. The land is too dear in price for the poor man's pocketbook. It is level, uniform, and easy to till. Moreover, it is held in large tracts, which makes it easy for the tenant to get in one block all he can cultivate. Under the system of farming here practiced these large units are more efficient than smaller ones, but the great size is in itself a factor, in addition

to the high price per acre, precluding ownership by a man of small means. In these states as in the others previously noticed high prices of land and high tenancy go together, and low prices and low tenancy together. In Kansas, where the land values are fairly uniform over a considerable part of the state, tenancy shows a similar uniformity. In Nebraska, where the range of prices is much greater, there are many more counties in each of the extreme groups; all the conditions for high tenancy are present in the eastern part of the state, while low values exclude it from the western part.

In Missouri conditions are essentially different. The whole south central part of the state is broken and hilly. Thus it is quite well adapted to fruit growing and diversified farming, but poorly adapted to the cultivation of cereals on a large scale. Hence tenancy here corresponds to that of Wisconsin, Michigan, or eastern Ohio, in contrast to that of the leading grain-growing districts. Southern Illinois and Indiana are likewise not well adapted to grain farming. Here again, with the smaller farms and the still smaller fields, combined with low land prices, the conditions are favorable for ownership, which is relatively high.

Recent Land Value and Tenancy in the Middle West, 1920–1940. Table XXII seems to be a little hard to explain; yet a few states are responsible for

TABLE XXII.—RANK IN LAND VALUE AND TENANCY

	Value per acre			Rank in value			Rank in tenancy		
	1940	1920	1910	1940	1920	1910	1940	1920	1910
Illinois.	$81 76	$187 60	$94.90	1	2	1	6	2	1
Iowa....	78.79	227 14	83 00	2	1	2	3	3	3
Ohio..	65.91	113.19	53.30	3	4	4	10	7	7
Indiana	63.20	125.97	62 00	4	3	3	9	6	5
Wisconsin. .	56 96	98.79	43.30	5	6	5	11	12	12
Michigan..	50.59	75.40	32.00	6	9	11	12	11	10
Minnesota.	44.26	109.25	37 00	7	5	8	8	10	9
Missouri..	31.87	88.09	41.76	8	7	7	7	8	6
Kansas...	29.51	62.31	35.50	9	11	9	5	4	4
Nebraska.	24.03	87.91	41.84	10	8	6	2	1	2
North Dakota	12.92	41.11	25.70	11	12	12	4	9	11
South Dakota....	12.80	71.39	34.70	12	10	10	1	5	8

all the difficulty. In land values, there are but three instances of states that show a change of more than two points in rank, up or down, within the period of 30 years. These are Michigan, which shows a spectacular rise from eleventh place to sixth; Minnesota, with a fall of three points and a rise of two; and Nebraska, which goes down from sixth position to tenth. Dropping these three states out would leave nine of them without a great change in rank. It will be admitted that although the case may be thrown

somewhat out of order by peculiar circumstances, it is in general a simple one; the rank of states respecting land values seems quite stable. The matter of rank in tenancy is noted above.

TENANCY IN THE EAST NORTH CENTRAL STATES

Considering the five East North Central states first, it may be noticed that they made no spectacular advances during the two decades preceding the high points reached in 1920. The greatest advance was in Indiana and Illinois, each of which rose only 3.4 per cent during the 20 years. Of course Illinois was well ahead of Indiana, over 10 per cent, and had many counties quite beyond anything found in this state, in any other part of the whole group of states, or anywhere in the two groups under consideration. Illinois showed in 1920 23 counties with over 50 per cent of farm tenancy; 5 counties showed over 60 per cent of tenancy, and 1 over 70 per cent. Thus about a quarter of the state had 50 per cent of farm tenancy, and a full half-dozen counties had close to 66 per cent tenancy.

As a matter of fact the amount of tenancy did not appear very high in the other states. For example, in Indiana there were but four counties with over 50 per cent, and none had reached 60 per cent, while in Ohio but one county had reached the 50 per cent mark. Thus among these divisions of states Illinois alone showed farm tenancy at an alarming height in 1920.

Peculiarities of Wisconsin Tenancy. Wisconsin for many years had a tenancy rate of only 10 to 15 per cent. Then during the last 20 years the state gained from 14.4 percent to 23 per cent and during the last decade swung over from share to cash tenancy by a few counties. The largest number of counties of either of the two classes are the cash-rented counties of the northern part of the state coming down to Jackson, Wood, and Brown, making nearly a straight line across the state, north of which there is no county with share rent predominant in it. Aside from this, there is an unbroken group running north and south, several counties wide along the east side, all of which are in the cash class. The north part of this group can be accounted for by the peculiar traits of the settlers. It is covered mainly by Germans from the southern part of Germany, where few farms are rented and where tenancy is of a peculiar type, the parents retiring from active farming rather young and one of the children taking charge of the farm, with certain payments to brothers and sisters and specified payments to the parents. The payments to the parents are frequently made in stated quantities of milk, butter, eggs, and vegetables, those to the brothers and sisters in cash. The sum total of payments is spoken of as cash, and as a matter of fact there are no shares, but specified quantities of money or foodstuff. Certain other national groups follow some similar plan; Belgians and Bohemians may be especially mentioned. In Wisconsin there

are some six or seven counties low in tenancy and all on the cash basis. In the southwestern part of the state, the single county of Sauk is on the cash-paying side by about half a dozen farms.

In the northern part of the state as a whole there is much cutover land with a rather small amount of plow land per farm, so that there is really little land from which to make payments to the landlord in kind. The result is that in something over half of such farms the payment, rather low in this part of the state, is in cash. In a considerable number of counties there are, in fact, hardly over a hundred farms rented on a cash payment and very many less on shares. In the southeastern part of the state a considerable number of counties show cash tenancy predominating because the quantities of garden truck make sharing the product somewhat difficult. If dairying should develop to any considerable extent in the northern part of the state, it is altogether likely that share tenancy would increase.

TENANCY IN THE WEST NORTH CENTRAL STATES

In the West North Central states the case was assuming different proportions. Starting with 1920, figures representing what seemed like high points rose from nearly 25 per cent to 32. Iowa rose about 6 per cent within 20 years. Missouri rose nearly 7 per cent, but the greatest gain among these three states was hardly over 1 per cent at the most for the 10 years from 1930 to 1940. Now let us notice what happened in the four hundredth-meridian states to the west.

In North Dakota the tenancy rise was small until after 1900; since then it has risen about 8 per cent each decade, from 14 per cent to 45 per cent. The census of 1940 shows 15 counties in this state with more than 50 per cent of farms rented, while three are above 60 per cent each. In South Dakota tenancy got an early start, with almost 22 per cent in 1900. From 1910 to 1940 the jumps were about 10 per cent a decade and reached 53 per cent. When tenancy gets over the middle mark it is high. No such number of tenants as this can hope to rise to ownership within a few years within the same territory. Whenever tenancy gets to the one-third mark, it means that many tenants will remain in that status for a considerable part of their farming lifetime. Where a quarter of the farmers are tenants, they may expect to become owners within a decade or a little more; but hope shrinks when more than half are trying to become owners within a few years.

Nebraska has reached the same point in respect to farm tenancy, about 53 per cent. In Nebraska there are somewhat over a dozen rather large counties with ranches averaging from 1,460 to 2,900 acres, mainly cattle-grazing territory. A remarkable thing about Nebraska as a whole is that there are few counties with low proportions of tenancy. Not many people

in Nebraska are hanging onto a little land while they work at some other job. There is little in this state, as in the others near it, to keep people there except the land itself. In these states most people outside the small cities and towns farm, and as a rule they have farms of fair size or larger. Thus farms have grown to sizes quite beyond the amounts of land received in government grants. If they stay at all, tenants, like owners of land, have farms of considerable size.

Kansas has not developed quite as much tenancy as the rest of the hundredth-meridian states. Nevertheless 45 per cent is by no means low tenancy, especially since it was rising about 2½ per cent annually throughout 40 years. One rather curious fact is found in Kansas tenancy. Among nearly all states of the Union ever since the collection of tenancy statistics began there has been a close relationship between the price of land and tenancy, high-priced land showing, in general, the high rates of tenancy and vice versa. Now, in Kansas for the 1940 census we find that in the seven lowest priced counties of the state, averaging but $7.43 per acre, there is a tenancy average of 43.9 per cent, while for the state the average tenancy is just 1 per cent more, or 44.9 per cent. This land is worth about 39 per cent as much as the average land of the state; yet it has a tenancy figure just about as big as that for the state. A corresponding fact develops. In Kansas there are seven counties with farms averaging 1,000 acres or more. Six of these belong to the list of counties showing the lowest value of land per acre in the state. Thus the counties with the largest farms are substantially the same as those with the lowest priced land. What has happened is that tenancy has been adapted to the herding of cattle on the plains.

Variations in West North Central. In the West North Central states the change in the percentage of tenancy from 1930 to 1940 was quite pronounced in the western row of states on the hundredth meridian, but quite small in the three states to the east. In Minnesota there was an increase of just over 1 per cent, from 31.1 to 32.3, in Iowa and Missouri an advance in each of less than 1 per cent. In the western states of this division, however, we find North Dakota up a full 10 per cent, South Dakota over 8, Nebraska nearly 6, and Kansas 2½.

Realizing that these states vary greatly from the best to the poorest land, the variation with respect to tenancy based on excellence of land was noticeable. Some years ago it was so usual for high tenancy to be found in connection with high-priced land and vice versa that we took it for granted. Now we find in the hundredth-meridian states almost a reversal. In these four states of the West North Central division the cheap farm land is almost on a level with the good farm land respecting percentage of tenancy. In North Dakota, for example, 15 counties with the lowest land

prices, ranging from $5.11 to $8.80 per acre, have an average tenancy of 42.3 per cent. This was less than 3 per cent below the tenancy for the state as a whole.

For 10 counties each in Iowa and Illinois, taken as samples, with the percentage of tenancy almost the same as in the 15 low-priced counties of North Dakota, worth $6.92 per acre, a value of $64 per acre was found in Iowa and $69 in Illinois, with tenancy almost the same in both. While in these states the old principle prevails that land values correspond closely with tenancy rates, in the hundredth-meridian states a new principle obtains.

In South Dakota tenancy in the 15 lowest counties stood at 35.6 per cent. This is not so high in relation to the state average as in North Dakota; yet it is genuinely high for land listed at an average of $3.50 per acre. For example, in Illinois in the distinctly cheap southern counties, worth perhaps a little over $20 per acre, the proportion of tenancy is much lower, somewhat over half as high as for the state as a whole. By working big pieces of land in these western states a tenant may hope for an occasional full crop that will bring his income up to a considerable figure. On the little farms in southern Illinois, for example, there is no hope for anything remarkable in the way of income; the acreage that can be handled by one man is too small.

But in Nebraska we have a pronounced case of high tenancy on low-priced land. The land is worth little, and the rent is distinctly low, so that there is a possibility of an unusual income for the effort. This remark applies to all of these Western states. Thus on the lowest priced land of Nebraska tenancy has risen in recent years to 39.5 per cent, about three-quarters as high as for the state as a whole. This means that tenancy on the poor land is not very different in percentage from that of the states to the east where land is worth many times as much. For example, the lowest 10 counties of Illinois have land worth nearly 20 times as much as the lowest group of counties discussed for several of the states of the hundredth-meridian group. Where rainfall is reliable, the price of land rises. Where rainfall varies much but is sometimes ideal, men will take long chances on striking it rich once in a while, provided the annual outlay is within their reach.

Kansas has a few points of interest respecting the size of farms, values, and amount of tenancy. The 15 counties having the highest values per farm had an average tenancy of 46.5 per cent in 1940. These 15 counties contain two that, with low values per acre, rate high in value per farm because of having over a thousand acres of land. Probably no state in the Union with any considerable number of counties has so uniform a rating of percentage of tenancy. Kansas has eight counties with an average value

of $9.13 per acre, yet with a tenancy of 43.9 per cent, just 1 per cent below the average for the state. This means that a large number of tenants are doing all they can to make something in the fairly good years by putting big acreages into crops. The nature of the land is such that they can, with comparatively little hired help, put in a thousand or more acres, not running into very heavy expense and paying a share, a small one in good years, of what they produce for rent. Of the 15 counties with the highest priced farms of the state, three are above the 50 per cent mark in tenancy, one down to 41.9, the average being 46.5 per cent, just the same as in 1930. Thus the 10 counties with the highest priced farms have a tenancy but 1.6 per cent above that for the whole number. Tenancy rose by 2½ per cent during the preceding decade. Some points stand out about the counties in which there was considerable recent gain in tenancy. About a third of these gains were in the counties rather close together in the northeastern part of the state. This is the best part of the state for raising corn and the products usually associated with it. The gains in percentage of rented land were in the main not heavy. The other part of the state that saw gains in rented land was the southwest quarter. Here gains were both heavy and numerous. Out of the 35 counties with gains of over 4 per cent in 10 years, 12 were in the southwest corner of the state. These had the highest percentages of gains in tenancy for the state, with 48.1 per cent, over three points above the tenancy average. This is a new turn of events, since only a few years ago there was not another case like it in the country. Apparently the coming of the tractor, with implements for it to handle, gave men disposed to rent land a chance to try for wide margins. Thus have the western ends of the hundredth-meridian states, with their stretches of comparatively smooth land, costing but little, tempted many to try their luck on cheap land that occasionally yields big returns.

Tenancy Change in Twenty Years. Respecting tenancy it must be admitted that the rank in this group of states has been greatly upset during the past 20 years. The lower half of these 12 states, as to land values, quite outranks their status respecting tenancy. Such is not the case in other parts of the country. The ease of getting hold of the cheaper, drier land has given men who can buy big machinery for working it a chance to try their luck in getting an occasional big crop. Thus great wheat fields, on rented land, have for some years been tried in the western half of the hundredth meridian states and have made South Dakota and Nebraska first and second in rank respecting the proportion of rented to owned farms in this group of states.

Chapter 20

TENANCY IN THE SOUTHERN STATES[1]

"To the south of Mason and Dixon's line are 16 states that constitute that portion of the Union familiarly referred to as the South. Here are, then, one-third of the states of the country. These states fall a little short of a third of the total area and also a little short of a third of the area of improved land. But in the number of farms the proportion is high, with 49 per cent of the total number of farms of the United States. This means that the average size of farms in the South is much smaller than in the North. Before the First World War the reverse was true, but at the present time the average size of the Southern farm is 120 acres, while the average of the Northern farm is 169 acres. During the decade from 1930 to 1940 the average size of farms in the North has increased 3 acres, while in the South it has increased 10 acres. A movement toward smaller farms in Texas and Oklahoma does not mean so frequently an increase in tenancy, since a considerable immigration from other states brings in a large number of land-owning farmers.

Value of the Southern Farm and Its Equipment. "The value of the Southern farm with its equipment is well below the average for the country, owing partly to its smaller size but also to the lower value of land per acre, the lower value of buildings, and the smaller equipment in the form of machinery and livestock. For example, the average value of land and buildings in the South is above $30 per acre in but two states, while in five states it is below $15 per acre. In the North Central states, in which is the greatest body of farm land in the country, we find in contrast but three states in which the average value is below $40, while the upper limit is almost $95 for Illinois. The average for the South is $16.72, for the North $46.26. In buildings the contrast is still greater, the average value of buildings for each acre being in the North $10.93, in the South $4.03. In imple-

[1] Pages 222 to 229 adapted from an article in *The Quarterly Journal of Economics*, Vol. XXVII, No. 3, May, 1913, pp. 482–496, by B. H. Hibbard.

ments and machinery the North has an investment per acre two and one-half times as great as the South, in livestock an investment about twice as great. All told, a Northern farm with its equipment was valued in 1910 at $9,500, a Southern farm at $2,900. It is to be noted, however, that the recent gains in value are more rapid in the South, standing at 110.1 per cent during the past decade for the South, and 90.1 per cent for the North. For 1940 it appears that a Northern farm (for the Middle Atlantic states, East North Central, and West North Central states) had about $8,854 worth of property, a Southern farm about $3,934 worth.

"Thus it is plain that the farm of the North represents a much higher investment than the farm of the South. It has been shown in the previous chapters that with comparatively few exceptions, a high rate of tenancy is found in connection with land high in price, and a low rate where land is low in price. Since land is decidedly higher in price in the North than in the South and the rate of tenancy in the South is nevertheless nearly twice as great as in the North, there must be some influence at work other than the value of land. But it was also shown in the chapters above referred to that a considerable number of forces were at work in determining the proportion of tenancy; only if other things are equal do the value of land and the rate of tenancy appear to bear a close relationship. In the South the greatest factor in the tenancy problem is the Negro, and in proportion to the numbers of Negroes the rate of tenancy rises or falls. Along with this primary factor, however, the other factors seem to bring about in the South the same relative results as in the North.

Tenancy Conditions Affected by the Negro. "The war left the Southern planter with no reliable farm labor. The Negroes were at hand, but authority could no longer be exercised over them, and wages had too weak an appeal. The economic reconstruction of the South involved the development of a system of farming for which there were no precedents, at least none in America; for it meant the employment of a million farm hands in a way to which they were not accustomed. Half a million planters who had lost most of their property were compelled, as the possessors of the plantations, to make a bargain with the freedmen on such terms that both parties would find it tolerable to proceed with the work of tilling the soil. Information on the early experiments is meager, but it is stated on good authority that the first attempts were made on the basis of wages, without satisfactory results. It became necessary to put more responsibility on the Negro. This responsibility took the form of an interest in the crop, thus postponing the former field hand's reward in large part to the time of harvest. In other words, the Negro became a tenant of the planter, but not a tenant in the same sense as that implied by the term in the North.

Terminology on Tenancy in South. "In the North we speak mainly of two classes of tenants, cash and share. The same words are in use in the South, but by 'cash' is meant not alone a money payment, but any form of fixed payment. For example, cash rent in the cotton district ordinarily means the delivery of a specified quantity of cotton at the end of the season. Hence if the landlord receives 50 or 100 lb. of cotton for each acre as the payment, he is secure so far as returns in cotton are concerned, though he runs a risk as to what the crop will be worth per pound. The tenant views the payment as cash in the sense that it is a stipulated fixed payment, beyond which the whole remaining portion of the crop is his. Another form of cash rent is found where a stipulated amount of labor is to be performed by the tenant under the direction of the landlord as agreed upon. These 'cash' tenants, whether paying in money, in product, or in labor, are known as 'renters' or 'standing renters,' in distinction from 'croppers' or 'halvers,' who work the land on shares. Share tenants fall principally into two classes: (1) those who furnish little or nothing in the way of equipment and who get a proportionally smaller share of the crops, usually half, and (2) those who furnish a considerable part of the equipment, usually including one or two mules, and who therefore receive a larger share of the crop, up to two-thirds or three-fourths. A well-defined caste system exists among the tenants. The lowest class consists of those who furnish little equipment and receive half of the crop or less; next comes the group whose independence is measured by the possession of a mule and a plow and the means of subsistence till harvest time; the highest class comprises those who can be trusted to deliver a certain quantity of crop or possibly a sum of money and who are largely emancipated by that fact from the directing authority of the landlord.

Tenancy by States, 1880–1910. "The percentages of tenancy for each of the 16 Southern states for four census dates are shown in Table XXIII. Over the 30-year period there was an increase in tenancy in all but four states, Delaware, Maryland, Virginia, and Florida. Likewise in Kentucky and Tennessee there was no pronounced increase in the proportion of tenancy during the period. In the last decade covered a decided decrease in the proportion of tenancy occurred in the four states farthest north, Delaware, Maryland, Virginia, and West Virginia. These four states are thus in a class with the North Atlantic states so far as changes in this regard are concerned. As in the North Atlantic states the character of farming is miscellaneous; there are many fruit and vegetable farms; the land is not extremely high in price, and it does not lend itself especially well to a landlord-tenant system. It is to the south of these states that tenancy is high. Between Virginia and the great cotton-growing states lie North Carolina and Tennessee, both of which have, for the South, but a moderate

TABLE XXIII.—PERCENTAGE OF TENANCY, 1880–1910

	1910	1900	1890	1880
Delaware	41.9	50.3	46.9	42.4
Maryland	29.5	33.6	31.0	30.9
Virginia	26.5	30.7	26.9	29.5
West Virginia	20.5	21.8	17.7	19.1
North Carolina	42 3	41.4	34.1	33.5
South Carolina	63.0	61.1	55.3	50.3
Georgia	65 6	59.9	53.6	44.9
Florida	26.7	26.5	23.6	30.9
Kentucky	33 9	32.8	25.0	26.5
Tennessee	41.1	40.6	30.8	34.5
Alabama	60.2	57.7	48.6	46.8
Mississippi	66.1	62.4	52 8	43.8
Arkansas	50.0	45.4	32.1	30.9
Louisiana	55.3	58.0	44.4	35.2
Oklahoma	54 8	43 8		
Texas	52 6	49.7	41.9	37.6

amount of tenancy. Beyond, there are four with upward of 60 per cent of their farms in the hands of tenants, and four more, all to the west of the Mississippi, with over half their farms rented. Lumping together this row of states from South Carolina to Texas, with Arkansas and Oklahoma to the north, about three farms out of every five are operated by tenants, a proportion far beyond what is found in any other group of states in the country.

Tenancy and Land Value. "The relation of value of land to tenancy in the South, as elsewhere, is vital. It may be viewed from two points: (1) that of the average value per acre of all owned land as compared to the average value of all tenant land, (2) that of counties in which land is high in price in comparison with counties in which the price is low. It is by counties rather than by states that conditions sufficiently similar to be comparable are found. In state after state the land held by tenants is higher in price, usually much higher, than owned land. The difference in the leading cotton states in this respect is from 16 per cent in South Carolina to 60 per cent in Texas. In Virginia, with many kinds of agricultural undertakings, but without any one crop by which a great portion of the farm area can be exploited, and with ownership increasing, the value of owned land is above that of tenant land by about 10 per cent. In Florida also the situation is reversed, owing to the high values of fruit and truck farms, which are mainly operated by owners.

"The above comparison is made by taking owned and tenant land without regard to the district in which it may lie. Quite another viewpoint is gained by selecting a considerable area within which comparatively good

land predominates and a similar area where cheap land predominates. Comparisons as to tenure may then be tried. No results appreciably different, however, are obtained. The conclusion is that the same forces are at work whether farms high in price are intermingled with those low in price or whether they are separated. In the 10 counties having the highest priced land of Georgia the percentage of tenancy is 71.3 as compared to 65.6 per cent for the state. In Texas the 10 counties with land highest in price show 63.3 per cent of tenancy as compared to 52.6 per cent for the state. In North Carolina the figures are 50 per cent as against 42.3. The counties with low land prices are in nearly all cases below average in tenancy. The exceptions to this general rule are, as appears elsewhere, the instances of special crop production, such as fruit, where the land is above average in value, but where tenants are relatively few.

Relations to Crops, Livestock, and Buildings. "The relation of tenancy to the character of the crop grown is close. Here as elsewhere the tenant grows mainly the money crops that can be planted and harvested within a single season. The most notable of such crops in the South is cotton, 60 per cent of which is grown by tenants. Tobacco is another crop popular among tenants, although they produce only about their proportional share. The great contrast between the farming done by tenants and that done by owners is seen in the figures for livestock, the crops fed to livestock, and the value of buildings and machinery. The situation is about the same throughout. The tenant grows much less than his proportional share of corn and oats and about half his proportional share of hay and other forage crops, and he owns less than half his proportion of the livestock.

"In buildings the tenant is still further short, having hardly more than one-fourth the value of such equipment as is found on the farms of owners. In machinery the proportion is not quite so low as in buildings. In the North the tenant farm does not differ greatly from the owned farm in size, while in the South it is decidedly smaller. In the cotton states the tenant farm is only about a third as large as the owned farm, in the other Southern states approximately half as large. It is plain that the Southern tenant has under his charge very much less property than has the Northern tenant. In the North the tenant manages not far from $9,000 worth of land and equipment. In the South he has the management, with much less independence, of a farm with its equipment worth not over one-fifth as much. The Northern tenant is substantially an independent farmer; the Southern tenant is not.

The Negro Tenant in the White Districts. "The Census Bureau in 1900 made a very interesting study of Negro tenancy for selected counties, taking for certain states the 15 counties with the largest proportion of colored

farmers and the 15 counties with the smallest proportion. It was found that unmistakably the proportion of owned farms was higher where Negroes were few than where they were many. The conclusion was that 'the Negro, at least, makes the better progress the more closely he is asso-

TABLE XXIV.—PERCENTAGE OF FARMS OF SPECIFIED TENURE, OPERATED BY WHITE AND NEGRO FARMERS, 1910 AND 1900, IN SELECTED COUNTIES OF ALABAMA, GEORGIA, MISSISSIPPI, AND TEXAS

State	Date	Farms operated by white		Farms operated by Negro	
		Owners	Tenants	Owners	Tenants
a. In 15 counties in each state with largest percentage of Negro farmers					
Alabama	1910	59.2	40 8	8.8	91.2
	1900	61.2	38.8	8.5	91.5
Texas	1910	57.5	42.5	28.3	71.7
	1900	60.9	39.1	28.9	71.1
Georgia	1910	56.5	43.5	14.6	85.4
	1900	59 5	40.5	17.4	82.6
Mississippi	1910	50.2	49.8	7.2	92.8
	1900	58 7	41.3	8 1	91.9
b. In 15 counties in each state with smallest percentage of Negro farmers					
Alabama	1910	59.2	40.8	32.2	67.8
	1900	64.8	35.2	39.2	60.8
Texas	1910	51.3	48.7	20.6	79.4
	1900	57.1	42.9	33.3	66.7
Georgia	1910	54.8	45.2	24.5	75.5
	1900	59.4	40.6	27.3	72.7
Mississippi	1910	61.7	38.3	31.7	68.3
	1900	70.0	30.0	38.6	61.4

ciated with the white man and the more he is enabled to see in the example of the white man an incentive for becoming a landowner. Take away this example by segregating the colored man from the white, as in the black belt of the South, repeats Haiti in a lesser degree, and some of the Haitian conditions are reproduced.'[2] A similar study of the 1910 data for four of these states, Georgia, Alabama, Mississippi, and Texas, fails to reveal a further development in the direction indicated by the investigation of 1900 (see Table XXIV). In the blackest counties there was, it is true,

[2] *U.S. Census, 1900,* Vol. V, Chap. XII.

a decrease in the percentage of Negro owners, likewise of white owners. But unfortunately for the theory that the scattering of Negroes among whites would inspire the former to greater efforts and greater achievements, Negro owners under these conditions also decreased. They decreased at even a greater rate than in the black belt, as may be seen in the table.

Renters' Union of America. "On very few occasions have renters in any part of the United States acted in a concerted manner on economic problems. There have seldom been any recognized tenant issues. In the state of Texas, however, a little over a year ago an organization of tenants was formed for the purpose of bettering the conditions of renting land, and if possible, doing away with it. The organization is called the Renters' Union of America. The resolutions passed at a meeting of this body savor strongly of single-tax doctrine. This is interesting, especially in that it recognizes the undoubted fact that speculation and tenancy are intimately related. When men buy land with a view to sale at a higher figure within a comparatively few years, even though the income in the form of rent be of secondary consideration, a large portion of such land will be for rent. Except in a new country it is seldom profitable to hold land out of use while waiting for a rise in price. Therefore, the land of the speculator is for rent, and in most such instances the landlord prefers to rent for cash and worries very little about the welfare of the farm or of the tenant. Against these conditions the Renters' Union of America passed a series of long and drastic resolutions, among which was one favoring a tax 'to the limit on all land held for speculation or exploitation.' They declared that 'use and occupancy' was the only just basis for title to land.

"At its meeting in 1911 the Union took a strong stand against cash rent and voted that share rent should not exceed one-third of the crop in grain or one-fourth in cotton. At the 1912 meeting, however, this action was rescinded and the matter left to the discretion of the county organizations. The success of a tenant movement in the South will find its greatest obstacle in the high proportion of Negro tenants, who are not capable of effective organization. Where the majority of the farmers of a state are tenants and at the same time voters, it would seem possible that political action might be taken by which the speculative value of land would be reduced. That this would reduce rents is another question, though it might result in larger ownership of land by farmers.[3]

Length of Lease. "Unquestionably the greatest evils of tenancy center about the fact of frequent, almost constant moving from farm to farm. About half the tenants in the South move every year. The average period

[3] The Renters' Union has not flourished in recent years.

of occupancy by tenants is therefore but a very few years. In the North the same condition exists, though not in such marked form. Home and neighborhood ties and interest in schools, in organizations, or in any community affairs can hardly be expected of people who are almost destined to sever their connections with a given community and move to another within a year or two. For these undesirable conditions a favorite remedy is the long lease. No doubt the longer lease would carry with it certain desirable results. It is, however, not easy to comprehend how the long lease is to be put into effect where landowners stand ever ready to sell their land. Again, if landlord and tenant cannot agree to continue from year to year the arrangements of a short lease, it is questionable whether or not they would be able to enter into an agreement for five or eight years and carry out the contract in a way satisfactory to both. England is pointed out frequently as the shining example of a land of long leases. It is true that the tenure of the tenant is usually secure, but, contrary to the prevalent notion, the lease is in most instances short. The landlord finds a suitable tenant and keeps him almost indefinitely, often a lifetime. But in England very little land is for sale, and few tenants hope to become landowners. In America the greater number of farms are for sale, and the majority of tenants acquire land ownership sooner or later. During this stage of frequent sales of farms, the long lease will not be viewed with favor by the landowner. Neither must it be taken for granted that the tenant will always take kindly to the longer contract.

Forces Counteracting Tenancy. "An impoverished soil and an impoverished people will result from a continuation of the present unstable conditions in the matter of tenancy. There are, no doubt, counteracting forces. A slackening in the advance in land values will make for stability in ownership and a better landowner class. Education concerning the nature of soil and crops will improve the tenants as well as other farmers. Better organizations through which to effect the marketing of farm products will encourage farmers, including tenants. A better system of farm credit will make the acquisition of land easier; this seems to be the effect in Europe, notwithstanding the tendency of better credit to raise land prices. Better schools and better roads, in fact, better rural conditions of every sort, will stimulate a desire to own land and keep farm people on the farms. The need for a plan by which the young farmer can become a landowner and also a plan under which the tenant system can be made tolerable are beyond doubt among the greatest needs of American agriculture, especially in the South. No ready-made program suggests itself; the remedy will undoubtedly be one of many ingredients. Thus far we are just beginning to gain a sufficient knowledge of the case to admit an intelligent diagnosis."

TENANCY IN RECENT YEARS

So far the whole South has been considered as a unit. We will now note the changes within the two most important cotton-growing parts of the South, the East South Central states and the West South Central states. The eastern section is made up of Kentucky, Tennessee, Alabama, and Mississippi. This is not an ideal grouping, since Kentucky raises very little cotton and has few Negro farmers. Tennessee has more cotton, therefore more tenants, and appreciably more Negroes. Alabama has almost two white farmers to one Negro, while Mississippi has about 55 Negroes to 45 white farmers. In the shrinkage of tenants in 1940, Kentucky, not being a cotton state to any extent, showed a drop of only 1 per cent in the amount of tenancy for her 15 counties with the most cotton, while Tennessee showed a decline of 6 per cent, Alabama 3½, and Mississippi, with much more cotton per county, a falling off of over 5 per cent in the number of tenants in her leading cotton counties. The exact report of tenancy for the four states for the two decades since the former report is shown in Table XXV. Although these drops in tenancy may not be

TABLE XXV.—TENANCY IN THE EAST SOUTH CENTRAL STATES, 1920 TO 1940

	Kentucky	Tennessee	Alabama	Mississippi
1940	46.2	40.3	75 9	86.7
1930	47.4	46.2	79.4	91.9
1920	42.2	41.1	77.1	90.0

very impressive, it must be remembered that changes of this sort usually show up slowly and that such changes as we report have happened within a comparatively short length of time. It is of interest to note among the figures for these states that there are some in which the changes are much greater than the average drop in tenancy. The occasion for the change to a lower level of tenancy is plain. It was clearly the recent unusual raising of cotton prices by the government. When cotton was shared by landlord and tenant, it meant that each party got his share of the higher price due to the increases brought to pass by action of the government. Many landlords, however, having matters pretty much in their own hands, put such men as had been working on a "cropper" basis onto a wage basis at something like $2 to $3.85 a day and were thus able to collect for themselves the additional 18 cents or more on all cotton raised instead of allowing their share croppers to gain the added income from the high prices.

West South Central Section. Table XXVI shows the tenancy for the four states in this group from 1920 to 1940. Almost never have we had

such decreases to report as are shown by the comparisons of the figures for 1930 and 1940, ranging as these do from a spread of 7 to 12 per cent for this single decade.

Arkansas. We note, to begin with, that tenancy is not quite so high in Arkansas as in some other Southern states; it is nevertheless up to 90 per cent and above in certain counties. Tenancy fell about 10 per cent during the decade from 1930 to 1940, which is more than occurred in any other state of the Union except Texas.

The high, rough counties are nearly all low in tenancy. People have moved into Arkansas, mostly with little money, bought a cheap piece of land, not many acres; and for the most part have made a pretty good living out of such fruit as they can raise, but they do not develop farms that can easily and properly be rented out at any profit. Thus to a little greater extent than in all other rough sections of the country, the farms are worked mainly by the owners, with tenancy at 15 to 35 per cent. Some of the people living in these sections are old-timers, while more have come in, many from the North, and planted fruit. These plantings cannot, as a rule, be trusted to the usual type of tenant, such as is available in that section, and of course that kind of agriculture is not, as a rule, turned over

TABLE XXVI.—TENANCY IN THE WEST SOUTH CENTRAL STATES, 1920 TO 1940

	Arkansas	Louisiana	Oklahoma	Texas
1940	53.3	59.4	54.4	48.9
1930	63.0	66.6	61.5	60.9
1920	51.3	57.1	51.0	53.3

to tenants. The fact is that in the high, rough block of the Ozarks, which cover a considerable portion of northwestern Arkansas, very little cotton is grown. While cotton is somewhat scattered over about three-quarters of the state, it is grown much more heavily in the northeastern portion than anywhere else.

Louisiana. Louisiana is a curious state. Since it lies in a group of cotton states, one might expect cotton land here to be high in price, as in most Southern states. But such is not the case. The highest priced land of Louisiana is in the low southeastern and southern sections. Here attention is paid mainly to sugar, rice, small fruits, and things of a miscellaneous nature, which together bring the income quite above that of the cotton growers found farther north and especially toward the northwest and northeast corners of the state. The surface of the state, with a lack of drainage, is such that most of the land has not yet been used fully, with the result that there are usually only some 4 million acres of land put into crop, out of almost 29 million acres.

Few states were hit harder than Louisiana by the boll weevil. In 1909 its cotton acreage was 70 per cent of what it had been 10 years before. For the next 15 years the weevil did all manner of damage, after which time it was kept pretty well in control. In 1929 the acreage was again high, reaching nearly 2 million acres, but under the production control program it dropped to a little over 1 million acres, down below where it was taken by the boll weevil during the twenties. The leading cotton counties are mostly found in the eastern part of the state; they reach somewhat to the south of the middle, with three near the northwest corner. It may be said that, in general, the acreage is not heavy. These remarks are based on the heaviest cotton-growing counties. Several counties with lighter production of cotton show heavier tenancy. The difference is not great, however, and the percentage showing would not be materially different if the highest percentage of tenancy were traced instead of the greatest cotton production.

Oklahoma. It seems better to treat several cotton states under two different headings with respect to changes in tenancy, since such states split into two parts that appear quite different. Oklahoma has cotton counties and wheat counties; so we notice the tenancy in each district. Rather curiously, two counties have each so much cotton and so much wheat as to put them into both groups. The wheat counties of Oklahoma were up close to the 50 per cent mark in 1930 in tenancy, but fell more than 3 per cent during the following decade. For a grain-growing state 46 per cent seems rather high; yet if the price of wheat should continue to rise during the next few years, the chances are that men will be tempted to continue renting land as tenants, and the owners will be satisfied to rent it out. If the prices at which wheat lands are held should seem a little too high to the prospective farmers, they will be willing to pay rent, especially since it is usually on a share basis. So long as over half the farmers are owners, it means that no very large part of them remain tenants for life, though many may become owners pretty late in life.

Tenancy has a somewhat different aspect among the cotton growers. In these counties about two-thirds were tenants in 1930. A decade later tenants had been reduced by 9½ per cent of all farmers. This hardly means that there had been a gain in ownership in these counties. It merely means that the men who owned the land, somewhat fewer in numbers, still own it. They no longer lease it out, however, to some poor tenant or to 2 or 10 tenants. They did not like to see such big payments made by the government, something like 10 cents a pound to these people on their shares of the cotton; so the landowner paid the "hands" $2 or $3 a day for the days they were needed in the field, and the employer sold the cotton at the higher prices.

The Situation, 1930 to 1940, in Oklahoma. Table XXVII shows much of interest. The first thing to be noticed is that the number of white

TABLE XXVII.—TENANCY AND LAND INFORMATION IN OKLAHOMA, 1940 AND 1930

	1940	1930
Operators:		
White	166,000	181,000
Colored	14,000	23,000
Land:		
In white farms, acres	33,573,000	23,823,000
In colored farms, acres	1,230,000	1,966,000
Tenants:		
White	90,000	111,000
Colored	14,000	15,000
Croppers:		
White	4,000	16,000
Colored	1,000	5,000

farmers in the state of Oklahoma went down by 8.3 per cent during the decade. The number of colored operators went down 39.1 per cent, close to five times as much. Respecting the amount of land held, the whites gained by 41 per cent; the colored people lost by 37 per cent. White tenants decreased in number by 19 per cent, or by 21,000 out of 111,000; colored by 6⅔ per cent, which is 1,000 out of 15,000. The white croppers fell in numbers from 16,000 to 4,000, or 75 per cent; colored croppers from 5,000 to 1,000, or 80 per cent.

Whatever comes in the years ahead, it is certain that during the thirties Oklahoma land was drifting very rapidly into the hands of white operators and for the most part owners, with size of farms increasing from 165.8 acres to 193.7, or about 28 acres; this accounts for a loss of 23,000 farms in 10 years. Twenty-three thousand families were obliged to find some other way of making a living. In Texas 77,000 fewer farm families have a hold on the land.

Texas. Texas has cotton country and cattle country. The cattle are on large farms of 6,000 to 56,000 acres. The value of this land is low, averaging for the 15 cattle counties $7.55 per acre, with a range from $2.66 to $11.70 per acre. The farms are so large, however, that the value per farm is over $72,000 on an average.[4] As farms go, this is a lot of money. The big farm of Kennedy County is valued at $254,000. This farm is, of course, one of the biggest show farms of the country. The cattle raised in western Texas are largely shipped north to the corn belt

[4] The figure is merely an average of the average county values per farm per county given in the census.

to be fed for the final beef market. In these distinctively grazing counties farms or ranches are large, averaging nearly 13,000 acres. The reported crops raised are close to the zero line in many of these counties. Tenancy has increased a little on the majority of these farms since the twenties. For example, in 1920 tenancy averaged 19.2 per cent; in 1930 it stood at 33.4, and in 1940 it was 35.2 per cent.[5]

Turning to cotton tenancy, we find a difference, in fact a considerable list of differences. The first noticeable change was in the number of tenants. In the 15 counties studied the number was down from 49,466 to 30,710, a decline of 18,756.

The cotton farm of Texas, taking the leading 15 counties as a sample, increased 38.1 per cent in size.[6] At the same time the number of tenants went down 37.7 per cent. This was almost revolutionary and would have created much more trouble not alone in Texas but throughout the South if the war had not come along, absorbing so many of the men thrown out of employment within this section of the country. Those who were eliminated from the tenant class were often given work by the day, but the use of big tractors for plowing and cultivating cut out many jobs. Many men moved away, going to the small towns first and probably getting on relief. Later they went into the Army or got work in the cities, often the manufacturing cities of the North. The result was that during the past decade the proportion of colored people grew smaller in most Southern states. The rapid part of this movement occurred during the last few years of the thirties, when cotton rose so high that farm owners wanted the whole price for themselves rather than just a share of it. A regular method of getting help for picking cotton consists in sending a truck into the villages and bringing out 20, 30, or more Negroes to a cotton plantation, possibly 25 or more miles away, to work through the season.

White and Colored Situation Analyzed. During the 10 years from 1930 to 1940 colored farmers decreased by 197,000; white farmers gained by 5,000. White farmers showed an increase of 0.1 per cent, colored a decrease of 21.5 per cent. Thus white farmers showed in effect no increase at all; colored showed a decrease of appreciably more than a fifth. Ten years earlier there had been a decrease of 2 per cent of white farmers and 3.6 per cent of colored. Neither of these changes attracted much attention. The corresponding figures for 1940, however, are very noticeable. All these figures relate to all classes of farm operations. Tenants, of course, suffered most. White tenants decreased by 5.6 per cent, colored tenants

[5] Thus the increase in tenancy was less than 2 per cent during the past 10 years. Up to date tenancy in cattle country has not gone high.

[6] Of course not all farms in a county are producing cotton, but the cotton farms are by far the most numerous.

by 27.2 per cent, so that more than a quarter of the Negro tenants of 1930 were without land to work. During the first few years of this situation wages were low and intermittent. Previously tenants had been able to get a living of a sort. Now many of them had nothing to do and no one on whom they had any real claim.

White and Colored Tenants in the Cotton Belt. In the leading cotton states Negroes have been losing out as tenant farmers. This is due mainly to their weak hold on the land and to their large numbers with respect to what need there is for their work on the land. It is perfectly evident that the colored people have to an appreciable degree lost their hold on the land. Table XXVIII shows that tenants in general are growing fewer,

TABLE XXVIII.—DECREASES IN TENANTS IN 11 COTTON STATES, 1930–1940

	White tenants		Colored tenants	
	Number	Per cent	Number	Per cent
North Carolina	1,500	1 2	−15,000	−26.5
South Carolina	−8,000	−20 0	−17,000	−28.0
Georgia	−18,000	−18.2	−16,000	−35.2
Kentucky	−3,000	−2 5	−2,500	−51.0
Tennessee	−9,000	−8 8	−6,000	−22 3
Alabama	−10,000	−11 3	−20,000	−26.0
Mississippi	−7,000	−13 3	−24,000	−15.0
Arkansas	−16,000	−18 4	−22,000	−31.9
Louisiana	−4,000	−8 0	−15,000	−23.5
Oklahoma	−21,000	−19 0	−7,000	−50.0
Texas	−64,000	−27.1	−32,000	−49.0

but that colored tenants especially are decreasing much faster than white.[7] In Oklahoma and Texas croppers fared badly, losing out their hold on the land in 77.9 and 59.0 per cent, respectively, of the cases involved. In other states they stayed on rather oftener than other colored tenants. Apparently there was some very important difference in treatment given different types of tenants.

The Negroes lost their hold on the farms during the thirties. The effect may be temporary.[8] For example, in Georgia, where white tenants are much more numerous than Negro, the former went down nearly 18,000 out of 99,000, or 18.2 per cent, from 1930 to 1940, while the Negroes lost out by 26,600 out of 76,000, or 35.2 per cent. In Alabama white tenants lost by 11.3 per cent of their holdings, while colored people lost by 26 per cent of theirs. In Mississippi there was little difference. In Oklahoma

[7] Kentucky and Tennessee hardly belong in this list of states.

[8] It appears, however, much more like a permanent tendency.

white tenants lost out by 19 per cent, while Negroes lost by 50 per cent. In Texas white tenants lost by 27.1 per cent, colored by 49 per cent. All this means that the Negroes were pushed out of tenancy in pretty large numbers and put on a wage basis. This happened less often in the more northerly states such as Maryland and Virginia, although the condition was about as bad in the Carolinas. The development could probably have been easily foreseen, if anyone had thought to give the matter a little attention, when the high price was offered for cotton during the later thirties. It was a very easy matter for the landowner to get the major part of the bonus merely by putting his help mainly on a cash instead of a share basis, and for some reason the colored people lost their hold on the land more completely than the whites. Taking Oklahoma as an example, it was found that 24 counties with the highest tenancy in 1940 had fallen from 76.2 per cent to 64.2 per cent, a decline of 12 per cent. Almost all of these were strong cotton-growing counties. Taking 15 of the leading wheat-growing counties of the state, it was found that tenancy rose from 42.6 per cent in 1930 to 46.8 per cent in 1940, a gain of over 4 per cent. Cases of this kind may be found over and over. For example, in practically all the leading wheat-growing states of the Union tenancy has been on the increase for several decades, as in Kansas, North Dakota, and Montana.

The thirties were a strange time in cotton growing. Tenancy was distinctly increasing in amount in all the leading cotton-producing states until the additional price to the grower was offered in 1933, when all at once cotton croppers grew scarce and cotton tenancy declined very pronouncedly and suddenly. White croppers went down 35.5 per cent, colored 62.5 per cent. When a farmer wishes to get rid of his tenants, croppers offer little resistance and are unlikely to make trouble; the colored cropper is the most amenable. Hence the colored cropper lost out almost twice as often as the white; the colored, in general, about one and a half times as frequently as the white. A sudden change in numbers of all classes of tenants certainly shows clearly the ability of the different classes of tenants to hold their places, since on the occasion of the tenants' losing their positions it was perfectly clear, during the later thirties, that the great majority left because the land was taken away from them. They did not leave voluntarily. Of about 300,000 croppers 23.9 per cent of the colored croppers were dropped in 1930, while out of an appreciably smaller number of white croppers 36.8 per cent were dropped. The number varied greatly from state to state. For instance, there were in Mississippi only 23,000 white croppers, of whom 27.6 per cent were dropped, while in the same state there were about 100,000 colored croppers, of whom a mere 0.9 per cent were dropped. The number of share croppers had declined very little, less than 1 per cent. In Oklahoma the cropper class

declined by 77.9 per cent, in Texas by 59 per cent. Thus there appears to be a wide difference in the way the lowest group of tenants is treated in the cotton-growing states. Unless we find a foreign market for a lot of cotton instead of a little, it is not at all clear how we shall be able to employ again these people who have been forced out of cotton growing.

Chapter 21

TENANCY IN THE WESTERN STATES AND NATIONAL SUMMARY[1]

Characteristics of the Western States. "The Western division of states, or in the terms of the census of 1910 the Mountain and Pacific divisions combined, comprise 11 states, occupying the Rocky Mountain region and extending westward to the Pacific Ocean. In area these states are large; they equal two-fifths of the land surface of the United States. From the standpoint of agriculture, however, they are somewhat less impressive. Within this vast extent of territory are found only one-seventeenth of the whole number of farms of the United States, one-eighth of the acres of farm land, and one-ninth of the total value of farm land and buildings. In comparison with the North Central states there are but one-fifth as many farms, three-tenths as many acres of farm land, and less than one-fifth as great a value of farm land and buildings.

"As to their products, the Western states make a good showing, whether in proportion to number of farms or to acres of farm land. Of wheat these states, with 9.1 per cent of the total acreage, report 13 per cent of the total product. Of barley they report 23 per cent of acreage and 27 per cent of product. In acreage of oats they report 5.5 per cent of the total, and in bushels produced, 6.8 per cent. A showing no less good is made in respect to hay and forage, the division reporting one-eighth of the acreage and one-sixth of the yield of this crop. A still better showing is made in fruit production, although comparisons with other divisions are not altogether easy to make. Of the total number of the country's cattle these states contribute about 15 per cent, and of the sheep, 59 per cent.

Low Percentage of Tenancy and Low Price of Land. "It is thus apparent that the Western states are characterized by a low average price of land, with most acreage occupied by livestock and grain-growing industries. There are, however, a great number of instances of agriculture as highly

[1] Pages 238 to 244 adapted from an article by B. H. Hibbard in *The Quarterly Journal of Economics*, February, 1912, pp. 363–376.

specialized as is found anywhere in the United States. This, for the most part, is devoted to fruit and vegetable farming. Where general and specialized farming occur within the same county, it is not a simple matter to trace the characteristics of each in relation to tenure. Fairly often, however, the types of farming are fairly well set apart.

"Another prominent characteristic of the Western country is its newness. Of the acreage of farm land added to the total within the United States in 1900 to 1910, nearly half was within this division of states. More homesteads were taken during that decade than for any other since the passage of the Homestead Act. During the same time a few thousand Carey Act entries were made, and in addition large numbers of farms have been granted under various other acts. Within the past seven years entries of public land in the Western states have equaled in extent the entire state of New Mexico. Nearly all of the farms recently acquired from the government are counted as owned farms and so tend to reduce the proportion of rented farms within the states in which they are located.

"Of the 373,000 farms in the Western division in 1910, 52,000 or 14.1 per cent were in the hands of tenants. This is a smaller percentage than for any other of the geographic divisions of states except New England and less than two-fifths that for the United States as a whole. Moreover, the price of land is lower in the Western states than in any other division of Northern states outside of New England. Taking the Northern and Western states by divisions, as now recognized by the Census Bureau, the relation of tenancy to value of land may be viewed in the large. It would hardly be instructive to include the Southern states in this comparison since the tenant question there is so essentially different from that of the North.

"The relationship between values and rate of tenancy may seem at first glance to be very uncertain and therefore worthy of little attention. But the absence of correlation in these particulars is due mainly to the high rate of tenancy in the West North Central division and to the low rate in the Pacific division; aside from these two divisions the rankings on the two bases are similar indeed (see Table XXIX). It will be remembered that in the West North Central division conditions are especially favorable for the development of the type of farming to which the American system of leasing is adapted, and this fact accounts for the relatively high percentage of tenancy in this division. The table given below shows the Pacific division ranking second in value per acre, although this and the West North Central division, which ranks third in that respect, are less than $1 an acre apart. It cannot be doubted that if we consider only the characteristic part of the West North Central division—exclusive, that is, of the great

body of very cheap land in the extreme western and northern portions—then the North Central and Pacific divisions change place as to rank in value per acre; and this single shift brings the rank in value and the rank in tenancy very close together for all divisions. But value per acre is only one factor affecting the proportion of tenancy. As will be pointed out presently, other factors figure with unusual prominence in the Western states to hold the percentage of tenant farms below what it would be if only the more general type of farms were found. It remains true, however, so far as regards farming of the more usual sort, that the proportion of tenant farms rises with the rise in land values.

TABLE XXIX.—VALUE OF LAND AND PERCENTAGE OF TENANCY, 1910

	Value per acre	Percentage of tenancy	Rank in value	Rank in tenancy
East North Central	$61.32	27.0	1	2
Pacific	43.76	17.2	2	4
West North Central	43.20	30.9	3	1
Middle Atlantic	33.85	22 3	4	3
Mountain	19.72	10.7	5	5
New England	19.27	8.0	6	6

Tenancy in Grain Farming. "The proportion of farms in the hands of tenants has increased simultaneously with the growth of the small-grain industry and has decreased where small-grain farming has declined. For the Western division as a whole tenants have been raising about 50 per cent more than their proportional share of oats and wheat and more than double their share of barley. Wheat growing was carried on in California on a considerable scale for many years until within the past decade and was located mainly in the great central valleys of the state. With hardly an exception the counties having great acreages of wheat show a higher percentage of tenancy than the average for the state. Since 1900 the wheat-growing industry has declined greatly throughout these valleys, and during the same time the percentage of tenancy, from being higher than for the whole state, has fallen quite below that mark. The same situation is found in Oregon, where with the decline of the wheat industry in the western part of the state the proportion of tenant farms has decreased to a marked degree. On the other hand, the acreage of wheat has increased rapidly in the northeastern part of the state and at the same time the proportion of tenant farms has gained rapidly. So in the state of Washington; while the percentage of tenant farms decreased for the state as a whole, there was a sharp increase in the southwestern part of the state, where also the acreage of wheat rose very greatly—in fact more than doubled. Within the 12 counties leading in wheat, which produce 95 percent of the wheat

grown in the state, 24.2 per cent of the acreage of this grain is reported by tenants.

Tenancy on Fruit Farms. "In contrast to the high percentage of grain-producing farms in the hands of tenants is the very low percentage of fruit farms so operated. The situation found in the Eastern states is repeated in the West with emphasis, the more pronounced condition being due to the more highly specialized character of Western fruit farming. The more valuable the fruit farm, either per acre or as a whole, the less likely is it to be leased out. The oranges, lemons, grapes, and apples are produced mainly by men who own the land on which they are grown. Of the great orange crop of California less than 2 per cent is grown by tenants, and of the lemon crop little over 4 per cent. Vineyards are not so high in price per acre as orange and lemon groves, nor does it take so long to bring them to bearing age; hence a somewhat larger percentage is in the hands of tenants. Yet in the 14 leading grape-growing counties of California the proportion of grapes produced by tenants is only 9.2 per cent, while in the same counties the proportion of tenant farms is 21 per cent, more than twice as great. Apples are not grown so exclusively by special farmers; they are reported in considerable quantities from farms on which grain is the leading source of income. Hence the grain farms in the hands of tenants frequently produce substantial amounts of apples. In the seven leading apple-growing counties of Washington a sixth of the farms are operated by tenants, but they report only 13 per cent of the apples grown. This, however, does not give an accurate picture of the situation, since several of these counties are among the greatest in the production of wheat, a fact that accounts for the relatively high percentage of tenancy. Within these counties apple growing is a subordinate industry. It is in such counties as Chelan, Wash., or Hood River, Ore., that the characteristics of the apple farm can be found well isolated. In both of these counties the proportion of tenancy is low, in Chelan County 6.6 per cent, in Hood River 5.5 per cent. In Chelan County tenants report only 4.5 per cent of the apple trees, in Hood River only 5.6 per cent. For each of these counties the tenants report a higher percentage of the total quantity of apples than of the total number of trees; evidently in a few instances bearing orchards are rented.

"Unlike fruit growing, the raising of vegetables is very frequently done by tenants. In 1900 the tenants of the Western states operated more than double their proportional number of vegetable farms, and although the same classification is not made for the census of 1910, the situation is apparently unchanged. The most important vegetable-growing districts of the West are in the vicinity of Los Angeles and Seattle. In Los Angeles County 52 per cent of the vegetable acreage is reported by tenants, and

about the same in King County, Washington, in which Seattle is located. These vegetable farms are small, consisting usually of a few acres of land rented for cash to Japanese or Chinese gardeners.

"As in other parts of the United States, tenants in the Western division own comparatively little livestock. In 1900 they had not much over half their proportional share; in 1910 the situation was not greatly changed. In a few states, however, the tenants have their full quota of dairy cows, while they undoubtedly have in all cases their full share of draft animals, although it is difficult to distinguish them from range animals in the statistics available.

Changes in Tenancy Since 1880. "Since 1880 tenancy in the Western states has fluctuated considerably, as Table XXX shows. Beginning with

TABLE XXX.—PERCENTAGE OF TENANCY IN WESTERN STATES, 1880–1910

	1910	1900	1890	1880
Western states	14.1	16.6	12.1	14.0
Montana	8.9	9.2	4.8	5.3
Idaho	10 3	8.7	4 6	4.7
Wyoming	8.2	7 6	4 2	2.8
Colorado	18.2	22.6	11.2	13.0
New Mexico	5.5	9 4	4.5	8.1
Arizona	9.3	8.4	7.9	13.2
Utah	7 9	8 8	5.2	4.6
Nevada	12 4	11 4	7.5	9.7
Washington	13.7	14 4	8.5	7.2
Oregon	15.1	17.8	12 5	14.1
California	20 6	23.1	17 8	19.8

14 per cent in that year, it fell to 12.1 per cent in 1890, rose to 16.6 per cent in 1900, and decreased again in 1910 to a figure just barely above that of 30 years before. Notwithstanding the decrease in tenancy in the North Atlantic states during the decade before 1910, there was in general an appreciable advance in the proportion of tenant farms for the 30-year period between 1880 and 1910. But the Western states show no such tendency. Of the 11 states in the Western group only one, Wyoming, shows for the whole period an uninterrupted increase in proportion of tenancy, and as it happens, it has had throughout nearly the lowest proportion of all these states. With hardly an exception the states in which the most extensive systems of farming have predominated—the older states in point of agricultural development—are the ones in which the percentage of tenancy is highest.

Tenancy in the United States at Large. "For the United States outside of the South, 25.6 per cent of farms in 1910 were operated by tenants as

compared to 25.5 per cent in 1900. The difference is virtually nil. To say, however, that tenancy has stopped advancing would be unwarranted. The tendency is still apparently upward in the greater portion of the upper Mississippi Valley, by far the most important agricultural area of the North. The tendency toward slow but certain increase is offset for the time being, partly by decreases in the East, where cheaper land and specialized farming promote ownership, and partly by the peculiar conditions of the Western division of states, where both specialized agriculture and the public domain help to keep ownership high and tenancy low. No type of farm is immune from the infection of tenancy, though a few types are nearly so, and on the other hand certain types are especially susceptible. A change is imminent in relation to the great body of farms in the North, notwithstanding the apparent slackening in the advance. But the increase in the proportion of rented farms for the United States as a whole, from 35.3 per cent in 1900 to 37 per cent in 1910, is due chiefly to the relative increase of farms of this class in the South, where the problem is distinctive.

"Although there are many tenants in the United States, we have no tenant class aside from the colored tenants of the South. The tenants are young men who hope in this way to get a start in the business of farming. Almost all entertain a vision of becoming farm owners within a comparatively few years, and though the hope must frequently be long deferred, it is eventually realized in most cases. For example, the census of 1900 shows that between the ages of twenty-five and thirty-four more farmers were tenants than farm owners. But the change in form of ownership begins at once after the age of thirty-four, and for the higher age groups owners are more numerous than tenants. At sixty-five or over, owners are more than five and a half times as numerous. There has been much dispute as to whether or not tenancy is a step toward ownership, but it seems established past dispute that tenancy is a means of getting a foothold and makes possible the ultimate ownership of land. The only open question is whether it is the best means of accomplishing the result.

No Tenant Class. "Though we have many tenants, we do not have a tenant system except in some few isolated instances. The relation of tenant to landlord is uncertain, very frequently unsatisfactory to both parties, and such it must remain until the landlord contents himself with a reasonable rate of income on investment rather than hoping for something more than ordinary income, something in the nature of speculative gain, which can be properly realized only by selling the land. The tenant must be given some assurance that he may stay, if he wishes, more than a year or two on the same farm. Men fail to become landowners or postpone ownership for years because farming as they pursue it does not pay well enough to enable them to buy land. The reason it fails to pay better is

doubtless that the tenant as a rule is not a good farmer, but the fault is not altogether his. The owner of the land leases it under such terms that the tenant is not encouraged in the use of scientific methods. Furthermore, society is concerned with the relation of every individual to the community; but the tenant is little disposed to assume community responsibilities.

Relation between Tenants and Owners. "To complain of the growth of tenancy is useless. The serious question is that of a remedy. A remedy, if there be one, must be in the nature of a plan by which a young farmer can buy land. With the land values high, the purchase must be mainly on credit. True, the products of the farms also bring high prices, but our bungling system of distribution returns to the farmer but half or two-thirds of the price the consumer shortly pays. If the farmer could short-circuit this expensive way of getting his wares to market, he could more easily own the land on which they grow. Another great problem is that of agricultural credit. It has been well handled in several European countries; in America the farmer pays a high rate of interest on what he borrows and is frequently short of ready capital for the year's operations. A good system of marketing and a good system of credit would retard the drift toward tenancy. But even so, an equitable system of leasing land is needed, one which in itself will make tenancy more tolerable and possibly less frequent. The arrangement under which one man owns the land and another tills it is not necessarily bad; it may conceivably be advantageous. Yet it must be recognized that land ownership on the part of the farmer is one of the best assets he can have both as a producer and as a citizen."

TENANCY, 1920 TO 1940

Tenancy Situation in the Mountain and Pacific States. In 1920 only one state, Nevada, had less than 10 per cent tenancy, and the figure rose, presumably to stay, 10 years later. The Mountain states got a start as farming states some years later than the three Pacific states; so they have outranked them in tenancy only in the last two censuses. The laws respecting the last range land were modified; it had been homesteaded to a great extent, and a living could not be made on such little pieces. The land was later put into larger holdings, some of which were rented for grazing purposes. The result was that something approaching a quarter of it was held under lease. For the main part of the period since we have been taking a census of tenancy Colorado has been quite high. Lately it has been within 1½ per cent of the average for the whole country, while Arizona, which was the highest of the Mountain states in 1880, was the lowest in 1940.

Of the three Pacific states, California rates highest with 19.1 per cent,

but Washington, the lowest, is only slightly more than 1 per cent below it. California shows the highest tenancy in the vicinity of its two great cities, with much more around Los Angeles than near San Francisco. Tenancy is held down very much by the fact that it is naturally very low in connection with both oranges and lemons and not very high in grape growing. In general all tree fruits show a high degree of ownership and low tenancy.

Tenancy in Washington. Tenancy, although appreciably higher than in 1910, has still gone up only 4 per cent. To the west of the high mountains crossing the state from north to south, the Cascades, the two predominant kinds of agriculture are fruit growing and dairying. Neither of these runs into extremely heavy investment. Taking the nine counties that lead in these undertakings, it is found that the farms are worth $71.75 per acre, and the average value of the farms is just about $4,765, with an average size of 66.4 acres per farm. The value of the land in the wheat area is $22 per acre, less than a third as much as an acre over in the moist climate of the Pacific Coast. Yet a farm in the drier region east of the mountains, where winter wheat can be grown, will be 1,000 acres and worth over $22,000. Probably the farmer east of the mountains, in the Palouse country, does many less long days' work per year than the man in the mild climate west of the mountains, where work of some sort is likely to require attention pretty much the year round.

Tenancy in California. In picking out California's high-priced farms we first looked over the state geographically; we included in the list a dense orange-producing county of 35 acres per farm worth $608 per acre and also a county among the northern mountains with land and buildings worth but $17 per acre, with no outstanding production reported in the census, yet with close to 1,000 acres per farm, mostly for cattle. These 20 counties have an average of 484 acres per farm. It is hard to characterize their production; yet in one way or another they make a pretty good showing and are able to report, for these 20 widely scattered counties, an average value of $21,000 per farm.

There are few high-tenancy counties in the state and just one that is above the average for the whole United States. A study of the few counties with more than 30 per cent tenancy indicates that it is rather lack of peculiarities than the presence of them that gives California a comparatively low percentage of tenancy on the whole. For example, it is apparently absence of fruit growing that means high tenancy. Also, it would appear that the counties with the highest tenancy have the highest production of wheat, are rather high in milk, possibly in beef or wool, but as a rule are not especially high in the produce for which California is noted. In these counties with high tenancy there are occasionally a considerable amount of sugar beets grown or occasionally cotton. More often a considerable

amount of barley, flax, or wheat appears. It hardly looks as though the Pacific states would soon rise to a high degree of tenancy. Fruit, both small fruit and tree fruit, and vegetables grown in a large way do not furnish the best basis for an extreme development of tenancy. The careful mixed farming required in producing fruits, vegetables, dairy products, and so on, means that tenancy will not go very high, and only now and then will a county that combines grain growing or sugar production with dairying show a fairly high figure. But the three Pacific Coast states, all counted, show comparatively low tenancy.

The Mountain states go higher, though not very high.

Tenancy in Colorado. In 1920 the farms of Colorado were worth $35.40 per acre, but 20 years later they were reported at $12.32. At this latter date, 1940, out of the 63 counties of the state 23 were below $10 per acre, 39 above. For such low-priced land the tenancy appears pretty high. For the whole state the percentage of tenancy was 37.2 per cent. Of the 18 counties with the highest percentage of tenancy, almost a third of the counties of the state, the simple average was 49.9 per cent; about half the farms were rented. By no means were these the high-priced counties of the state. On the contrary, of these 18 counties 10 were below $10 per acre in value. Neither were the low-priced counties associated with the lowest tenancy percentage of the group. The county with the highest percentage in the state, Crowley, showed 58.8 per cent, incidentally with a value of $7.51 per acre. We have noticed that the hundredth-meridian states showed distinctly high tenancy figures as we got toward the dry, smooth western end. Here we discover that such a matter as tenancy pays no attention to state lines, but behaves the same when conditions remain the same. Here in Colorado the topography is such that a tenant is willing to take his chances on wheat or sugar beets on a farm of perhaps 1,000 acres, under agreement to give the landlord a certain share of the crop. The tenant owns a big quantity of machinery, works long days, and puts in a big acreage of grain on land which is by no means sure to bring returns, but which occasionally does produce a big crop at comparatively small outlay. Thus again we find the tenant with very big acreages on the plains where there is a chance to win as well as to lose. In Colorado the tenant is a wheat farmer, a suggar-beet farmer, occasionally a cattleman.

Montana, Somewhat like Colorado. Land and buildings in Montana in 1920 were reported worth $35 per acre; in 1940, $7.54. Very few states in the Union showed such a drop. This means that farms had fallen to 21.5 per cent of their reported value of 20 years earlier. The price of wheat had fallen from $2 or more a bushel to a mere 68 cents or so in the year of the 1940 census. Other things also were low. The former owners of land had lost it, and there were few who were eager to buy. Several very dry years

TABLE XXXI.—TENANCY TABLES FOR THE UNITED STATES, 1880 TO 1940

	1940	1930	1920	1910	1900	1890	1880
United States	38 7	42 4	38.1	37.0	35.3	28.4	25.6
Geographic divisions:							
New England	7 4	6.3	7.4	8.0	9.4	9.5	8.5
Middle Atlantic	14 6	14.7	20.7	22.3	25.3	22.1	19.2
East North Central	27 9	27 3	28 1	27 0	26.3	22.8	20.5
West North Central	42.4	39 9	34.2	30 9	29.6	24.0	20.5
South Atlantic	42.2	48.1	46.8	45.9	44.2	38 5	36.1
East South Central	50 1	55.9	49 7	50.7	48.1	38.3	36.8
West South Central	52 6	62 3	52 9	52 8	49.1	38.6	35.2
Mountain	24 6	24.4	15.4	10.7	12.2	7.1	7.4
Pacific	18 5	17.7	20.1	17.2	19.7	14.7	16.8
New England:							
Maine	6 5	4 5	4 2	4 3	4 7	5.4	4.3
New Hampshire	6.4	5.3	6.7	6.9	7.5	8.0	8.1
Vermont	9.9	9.7	11.6	12.3	14.6	14 6	13.4
Massachusetts	7.1	5.6	7.1	8.1	9.6	9.3	8.2
Rhode Island	10.3	12.5	15.5	18 0	20.2	18.7	19.9
Connecticut	7 2	6.2	8.5	9.8	12.9	11.5	10.2
Middle Atlantic:							
New York	12 8	13.2	19 2	20 8	13.2	11.5	9.0
New Jersey	15 6	15.6	23 0	24 8	29 9	27.2	24.6
Pennsylvania	16 0	15 9	21 9	23.3	26.0	23.3	21.2
East North Central:							
Ohio	26 3	26 3	29.5	28.4	27 4	22.9	19.3
Indiana	28 3	30 1	32 0	30 0	28 6	25 4	23 7
Illinois	43.1	43 1	42.7	41 4	39 3	34 0	31 4
Michigan	17 0	15 5	17.7	15.8	15.8	14.0	10 0
Wisconsin	23 0	18.2	14 4	13.9	13.5	11.4	9.1
West North Central:							
Minnesota	32 3	31 1	24 7	21.0	17.3	12.9	9 1
Iowa	47 6	47 3	41.7	37.8	34 9	28.1	23 8
Missouri	35 6	34 8	28 8	29.9	30 5	26 8	27 3
North Dakota	45 1	35 1	25 6	14.3	8.5	6.9	2 1
South Dakota	53 0	44 6	34 9	24 8	21 8	13.2	4 4
Nebraska	52 8	47.1	42 9	38.1	36.9	24 7	18 0
Kansas	44 9	42 4	40 0	36.8	35.2	28.2	16.3
South Atlantic:							
Delaware	32 6	32 8	39.3	41.9	50 3	46.9	42.4
Maryland	26 1	26 5	28 9	29.5	33 6	31 0	30.9
Virginia	26 9	28 1	25 6	26.5	30.7	26.9	29.5
West Virginia	22 7	18 6	16.2	20 5	21 8	17.7	19.1
North Carolina	44 4	49 2	43.5	42 3	41.4	34 1	33.5
South Carolina	56 1	65.1	64.5	63.0	61 1	55.3	50.3
Georgia	60 1	68 2	66 6	65.6	59.9	53.5	44.9
Florida	25.2	28 4	25 3	26 7	26.5	23.6	30.9

TABLE XXXI.—TENANCY TABLES FOR THE UNITED STATES, 1880 TO 1940—*Continued*

	1940	1930	1920	1910	1900	1890	1880
East South Central:							
Kentucky	33 1	35.9	33 4	23 9	32.8	25.0	26 5
Tennessee	40.3	46 2	41.1	41.1	40 6	30 8	34.5
Alabama	58.8	64 7	57.9	60 2	57.7	48.6	46 8
Mississippi	66 2	72 2	66.1	66.1	62.4	52.8	43.8
West South Central:							
Arkansas	53.3	63.0	51.3	50 0	45.4	32.1	30.9
Louisiana	59.4	66.6	57.1	55 3	58.0	44 4	35.2
Oklahoma	54 4	61.5	51.0	54.8	54.8	43.8	0 7
Texas	48.9	60 9	53.3	52.6	49.7	41.9	37.6
Mountain:							
Montana	27.8	24.5	11 3	8.9	9.2	4.8	5.3
Idaho	25.5	25.3	15.9	10.3	8 8	4 6	4 7
Wyoming	24.2	22.0	12.6	8.2	7.6	4 2	2 8
Colorado	37 2	34.5	23.0	18.2	22.6	11.2	13 0
New Mexico	17.0	20.2	12.2	5 5	9.4	4 5	8 1
Arizona	11.6	16.4	18.1	9.3	8 4	7.9	13.2
Utah	13 3	12.2	10.9	7.9	8.8	5.2	4.6
Nevada	14 4	12.9	9.4	12.4	11.4	7.5	9.7
Pacific:							
Washington	17 7	17 0	18.7	13 7	14 4	8.5	7 2
Oregon	18.2	17.8	18.8	15 1	17.8	12 6	14 1
California	19.1	18.0	21.4	20 6	23.1	17.8	19.8

had occurred during the preceding decade, and the price of land had fallen to its lowest point in a long time. Nearly 6,000 farmers, over an eighth of the total, had given up farming.

Taking the lowest priced land of the state, 19 counties rated at less than $6 per acre, it is found that tenancy for this group is just 1 per cent above the average for the state. In all states of the Central and Eastern part of the country the lowest priced land would be associated with the lowest tenancy;[2] here, on the contrary, it is with the highest. The reason appears to be that having very little capital need not keep a man from handling a big lot of this comparatively smooth, dry land, and so he undertakes it. The owner can see his way clear to lease the land out for a very small consideration in cash to a stockman who wants it for grazing, or he can afford to take a small share of a grain crop as rent, since he has little money in the land; for many years the place cannot justify more than a small rent. A large number of owners are willing to lease such doubtful land out to tenants who are willing to buy a lot of machinery and try for a few years to gather in a good crop or two.

Thirty years ago there was not enough tenancy of this sort to attract

[2] This means to the east of the hundredth meridian.

attention. It is now found rather frequently in the districts where a man and his boy may work 1,000 acres with at least some chance of making it pay. Another type of tenant is willing to try occasionally to handle a considerable number of sheep or cattle on land that can be rented for a few cents per acre.

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Chapter 22

UPS AND DOWNS OF THE TARIFF

WHAT SHOULD A NATION PRODUCE, AND HOW MUCH?

Many nations' foodstuff production has been closely related to the character of the land they hold. If their land is well toward the poles, they produce such things as wheat, barley, meat animals, and furs; if near the equator, coffee, spices, timber, rubber, and bananas. In the intermediate regions are raised the cereals and most of the meat animals; here too most of the world's manufacturing is done. Both big countries and little countries exist in all sections. Some are thickly populated, some thinly. Some could put up strong resistance to aggression—Switzerland, for example—others very little, such as Norway, Finland, or even Poland, which has considerable population and some wealth but which was in no sense ready to withstand the brutal attack of Germany.

We have in the world something like half a hundred little countries almost wholly unable to protect themselves against the aggression of any one of the half dozen powerful countries that hold dominant central positions. Many people had talked rather casually about what would happen to these little countries sometime if one or another of them should get in the way of the big countries during a war. Probably none of the talkers ever even guessed that some one country, Germany, for example, would ever jump onto the majority of the small countries of Europe and subdue them all within a few weeks. Certainly no one believed that any country would ever enslave and starve all these people for a period of years. Yet so it happened.

Our Production before 1789. Before the adoption of our Constitution and the passage of the first tariff act we were exporting many different American products, mostly to England. There were some 20 such commodities: principally wheat and flour; next tobacco, rice, livestock, pitch tar and turpentine; whale oil and codfish were important. It will be

noticed that these goods were mostly raw products. Until after the Revolutionary War we manufactured almost nothing for sale. We did make a great deal of cloth, but on hand looms, and a great deal of household furniture, fashioned either by members of the family or by some traveling craftsman. We had nothing in America that could be called a factory until 1789, when Samuel Slater set up a mill for weaving cloth. This was the beginning of the factory system in America, as applied to fabrics.

Did England succeed in preventing us from introducing machinery? She tried to, and she had done much at home ahead of our beginnings in manufacturing. The main reason we made a start so much later than England was probably that wages were much higher over the main part of our territory and that it was not so easy to induce people to leave their own work for a mill or shop owned by someone else.

Beginning of Mill and Factory Work in America. The first tariff was too small to have much effect on the importation of manufactured goods into the United States. Rates were very low to begin with, and prices for some years after the Revolutionary War were distinctly low, so that the 5 per cent tariff was hardly effective. The real impetus of the spurt that finally came in our making goods for home use, such as a real increase in cloth for clothing, leather goods, and other articles, was not given by the tariff, but by the trouble we got into with England on the seas. England was desperately in need of seamen. So she began to overhaul our unarmed vessels, pretend to find many of her own citizens among the sailors, and take them off for her navy. These difficulties reached a climax under President Jefferson. The best way Jefferson could see to meet this situation was to call all American vessels home, tie them up, and by this means quit the seas. For some years we were cut off from the better goods that we had previously bought of England. This condition was far more effective than a few cents in the way of tariff. Our manufacturers of cloth were spurred to do better than ever before. People who made small tools, such as we had ordinarily been buying of England, found their market unlimited; their production was immensely stimulated. Every sort of manufacturing that could be done in small shops found trade quite on the increase, and many manufactures began that have never stopped. This situation was quite beyond Alexander Hamilton, who had plans and ideas enough for an effective tariff, but the embargo beat a tariff all to pieces. It was homemade goods or none for us, and 4 million people could spare plenty of men and women from the everyday work of house and farm to turn out such articles as were now scarce in the stores and much in demand.

Jefferson's action was soon followed by nonintercourse acts and by one means and another trade with England and France was practically closed

until after the War of 1812. Our factories got a real start, and we were using local products of every sort. Thus the question of what the nation should produce was given a long and vigorous test by what it almost had to produce. A withdrawal of seven years from world trade simply drove us to find means of doing for ourselves things that others were, aside from war troubles, much better placed to do for us. What military accident did for us could not have been done by tariffs without rates higher than had at any time proved workable.

Hamilton's Influence on Tariff Rates. Why Hamilton did not try to set tariff rates higher is questionable. He had had almost no experience with tariffs, and probably his imagination did not help him out very much in understanding how 5 and 10 per cent tariffs would work in real practice. The goods brought in were valued so low that revenues, at small tariff rates, were hardly significant, and selling prices could easily be jacked up to cover these charges. Rates in general were two to five times as high in the tariff of 1816; but again it seemed simple for the English importer to get about what he wanted for his goods in spite of the charges added by the tariff. In connection with tariffs there was still a great deal for us to learn about prices at which goods could be invoiced and later sold.

Early Tariff Acts to Promote Manufactures. The early tariff acts, from 1846 to 1860, were modest in their demands, especially the last two acts before 1860. This was about the best time for farmers that had occurred since the Revolution. Our tariff, which was often called a free-trade tariff, was only somewhat low after all. Rates on agricultural products in general ranged from 15 to 30 per cent. On butter, wheat, oats, and barley they were 20 per cent and probably almost entirely ineffective. Wool carried a rate of 30 per cent, but it did not apply to the bulk of wool bought after 1857. Our manufactured goods rates were much higher. Thus the tariff was definitely not very low. On agricultural products it was of little moment anyhow, since these products were shipped out of the country for the most part, not in.

The tariff of 1857 reduced rates in many cases from 30 per cent or thereabouts down to 24 per cent. On wool this was nearly the same as no tariff, since tariff disappeared on wool worth less than 20 cents at the place of exportation,[1] and most wool was actually admitted free of duty. The price of wool in this country showed little variation after the 1857 tariff reduction. We had twice as much capital invested in factories in 1860 as in 1840 and twice as many hands employed, with triple the products in volume.[2]

[1] F. W. Taussig, *Tariff History of the United States*, 8th ed., pp. 149–150, The Macmillan Company, New York, 1920.

[2] *Ibid.*, p. 146.

Protection and Production after the Civil War. Starting with a mild increase in tariffs just before the beginning of the Civil War, we raised the tariff several times for the sake of increasing our revenues. It was done with very little debate and a minimum of opposition. The last real war tariff was passed the year before the close of hostilities and was the greatest single increase up to that time. In 1862 we had raised the tariff to 37 per cent, certainly a high point, but in 1864 we made a further raise to 47 per cent. The House passed this act within three days. The Senate passed the bill during the second day of consideration, apparently with little debate. Passed as it was as an emergency measure, solely as a means of increasing revenue, it seems strange that it was left virtually unchanged for so many years. Even so, this act remained on the books with very minor alterations for almost 20 years and even then was not radically changed until the Democrats undertook the job in 1894.

The Tariff in 1872. When Congress was considering the proposals made in 1872, it developed that the interests asking for protective duties were more than willing to give up tariffs on tea, coffee, and other articles on which revenue was sure and steady rather than take any chances on protective duties, the revenues from which were not so sure. This is a matter that can be easily understood by anyone who is at all acquainted with the feelings and efforts of protectionists. Everything political is subordinated to their interests in protection—protection of their own manufactured goods. It was clearly the Civil War tariffs that brought these extreme views to the front and established them to stay for at least two-thirds of a century. The Republicans were possibly lucky beyond all precedent when, as against the strong sentiment for general tariff revision, which was particularly strong in the Middle West, they compromised in 1872 on a general drop of 10 per cent. In addition all charges on tea, coffee, and cocoa were wiped out, while duties on whisky and tobacco were lowered. When economic conditions changed sharply with the depression of 1873 and after, it was very easy to restore the 10 per cent tariff cut. In fact tariffs were returned in 1875 to what they had been, except where they were nonprotective. This very brief cut seemed to satisfy nearly everybody. Tariff receipts were soon bettered, and the old high rates of Civil War days were restored; what looked like a very simple and rather harmless act reestablished the highest rates of the century. Had the lowering of the tariff been done carefully, with attention to each schedule, it would have been less easy to restore all the tariffs afterward. Objections would have been raised to very many and reasons demanded. As it was, little attention was paid to the raising of a series of important tariffs by 10 per cent. Thus the depression of 1873 served a great purpose in helping the firmest advocates of the tariff at a time when help was no doubt greatly

needed in order to return to the highest level ever achieved up to that time. It was clearly the war that put rates up so high, and now people were rather accustomed to the treatment.

Duties Higher than War Duties. The tariff on wool and woolens in 1867 was appreciably raised. The tariff of 1860 had been distinctly protective. We charged 3 cents a pound on wool costing from 18 to 24 cents a pound; wool costing more than 24 cents was to pay 9 cents a pound. On importation of woolens a specific charge of 12 cents a pound, on cloth, was to be paid as a compensating duty. Above this specific charge another ad valorem charge of 25 per cent was added as a protection. With all kinds of duties, specific and ad valorem, it seems that the American people paid for years somewhere between 50 and 100 per cent tariff on most of their woolen clothing. Woolens are among the main articles on which we collect duties and provide genuine protection. Very few countries collect tariffs on wool or woolen goods. We have virtually always done it. We have so many senators from sparsely settled states in the West that it is just about impossible to get bills through the Senate that do not require the votes of these Western senators, who thus can substantially always get what they want in the way of wool tariffs.

The Tariff Act of 1883. Republicans had been in power for close to 23 years when this act was passed. The party had carried the elections six times. It is not unlikely that the party took it for granted that they could carry the elections quite indefinitely. Things were going well politically, and there seemed little to worry about. During the Civil War the party had raised the tariff several times and, as noted above, passed a general law with almost no debate. Probably most of the public regarded this act as a clear-cut war act and expected that as soon as the war was over a new measure would be brought forward. Nothing of the sort happened.

In 1882 we had a Tariff Commission for the first time; it was indeed only provided for that very year. The President, as well as the whole Congress, was strongly Republican. Most of the newly appointed members of the Tariff Commission were genuine protectionists; in fact the chairman was John L. Haynes, secretary of the Wool Manufacturers' Association. For some curious reason the House was not in a mood to take up the tariff question, and revenue bills of course must come from the House. It happened, however, that the House had passed a bill for reducing internal revenue and sent it to the Senate. It came back to the House with a tariff bill attached. Instead of impugning the impropriety of this procedure the House referred it to a conference committee, which went ahead and made the Senate bill over into a bill that soon passed both houses and became the Tariff Act of 1883.

Increase of Many Tariff Rates. The new bill provided for lowering rates in many instances, which were mostly ineffective or insignificant. But on practically every article coming into the country in any important quantity the rate was raised. One important change had to do with women's dress goods. Such materials had been for some years at 8 cents a yard plus 40 per cent; now they were set at 9 cents a yard plus 40 per cent. Since they had been almost wholly imported under the old tariff, it was hardly likely that they could now be manufactured with an increase of merely 1 cent a yard. This cloth remained almost exclusively an import. If manufacturers wanted to make such goods themselves, they should have raised the duty substantially. A cent a yard won't do much on goods worth a considerable part of a dollar.

The story about cotton goods was much the same. For example, on ordinary low-priced cotton cloth like ordinary calico and common white goods or any kind of cotton cloth costing but a few cents a yard, no one could undersell to us. The protection of quantities of choice cotton near by with efficient mills for making the cloth could not be overcome, and whatever tariff rates we put on such goods were of little or no effect. However, on cotton goods on which a real amount of labor was expended, such as hosiery, laces, and the like, Europe could compete and did. On these things we raised the duty from 35 to 40 per cent. Apparently nothing kept us from asking still more but sheer lack of nerve.

A small reduction had been made in the tariff on wool, and to match this several reductions were made on woolens. The charge on such goods as blankets and other more or less similar things was reduced from 20 cents to some 10 or 12 cents a pound. These changes seem to have been made by men who knew what they were doing, since the lower rates were effective in keeping out the goods as fully as the higher rates had been.

Duty on Steel Rails. Steel rails had been at $28 a ton. Just how any person with good sense could favor such a rate, when costly roads must mean costly railroad hauls, is past explanation. Now, in 1883, after the greatest rush into railroad building was over, the members of Congress saw fit to bring the tariff on steel rails down from $28 a ton to $17. The price of rails was down so low that $17 was fully as effective as the $28 charge had for some time been. No rails were or could be shipped in. It had been so easy to make money by the millions during the years of the most rapid railroad building that the number of competing rail manufacturers had increased until rails were worth but a little more in this country than in England; thus the $17 tariff was more than enough to be safe.

Duties on Agricultural Products. All that was done with agricultural tariffs was so little that it might as well have been nothing. To please the

brewers something was shaved off the barley tariff as requested by the brewers, and there were no farmers to make any considerable objection. Likewise there was no serious objection to a small reduction on the rice tariff. No agricultural products of any importance would come into the United States anyhow. We were making heavy exports, for we were the leading nation with an excess of such products. The tariffs that the farmers had had for years were all but worthless to them except on wheat, when we were short of hard spring wheat and Canada had a fair crop. The fact is the farmers for years had been willing to trade tariff schedules on their exports for duties on their purchases from abroad.

1883 Tariff on Sugar. The tariff on sugar, which was 2¼ cents under this act, was almost wholly a matter of revenue, although it was coming to be a matter of protection at the same time, since Louisiana was producing not far from a tenth of what we needed, and apparently it could not do so without at least a couple of cents' tariff. There was little argument on this particular item until later, the tariff being considered desirable as a source of revenue. It is interesting to note that the Republicans in 1890, in passing the McKinley Bill, repealed the tariff on sugar. The Democrats restored the tariff in 1894, and by the time of the passage of the tariff by the Republicans in 1897 the rate on sugar was one of the most important in the whole act, for its relation to the building up of the sugar trust. The sugar tariff of 1883 attracted almost no attention at the time. If there had been any inclination to cut the rate, which there was not, Louisiana would have been heard from at once.

The Tariff Act of 1890. The political parties were not so clearly divided on the tariff issue before the eighties, or perhaps rather following the passage of the Act of 1883, as they have been since then. The Republican party had been more clearly an antislavery party than a high-tariff party. During the later eighties, however, certain members of the Democratic party when called upon to vote for or against cutting down the tariff on various raw products seem to have voted against letting them do so. These sentiments defeated proposals to lower protective duties on agricultural products.

In fact Cleveland, in his message to Congress in 1887–1888, proposing a reduction of the tariff, could not carry all of his own party for the proposed measure. Some three years before, 41 Democrats had voted against Morrison's bill for reducing the tariff. It was, in fact, Cleveland's own party that prevented him from bringing the tariff issue to a real trial during his first term. Both parties took a more definite stand as time passed, but since the Senate was a Republican body, no bill could pass both houses. At the same time the Democrats put their views into a House measure, the Mills bill, while the Republican majority of the Senate made out a higher

tariff bill. These bills were intended to represent the two different views prevalent within the country. The campaign was fought out in the election on the issues so presented, and the Republicans won. They introduced the McKinley bill.

McKinley Bill. The McKinley tariff act was a bold effort to assert a principle without carrying it too far. Starting with tariffs as they were, on the whole the highest we had ever had, it stepped them up, if not much, at least a little. One point that was quite encouraging to the Republicans was that a certain group of Democrats in Congress were practically certain to support higher duties. Probably there has never been a clearer-cut contest over a tariff issue. Only four years earlier the Republican party had passed, rather cautiously and doubtfully, a new tariff bill that was apparently reasonably popular. Now after the opposition party had been given a handhold on power, the time seemed ripe for a much bolder support by the Grand Old Party. The campaign had been fought strictly on the tariff issue, and the Republicans had won; they were obligated to attack the tariff at once and raise the rates.

Even though the actual increase might be trifling, in many important cases it was a matter of principle to get the rate up; later it could be raised a little more. Still, not every member of Congress who had been elected as a Republican voted happily for all increases. As to wool, for example, two classes were defined, "clothing" and "combing," which were set at 11 and 12 cents respectively in 1890. Yet the distinction either as to appearance or as to adaptability to use was never clear. The classes could be interchanged with no trouble, and indeed the rates on the two kinds were so close as to make it a matter of indifference. The tariff was high enough to shut out much foreign-made cloth, and by raising the rates later we increased still more the amount of such goods manufactured at home. For the latter privilege we paid a real price. On steel rails we again lowered duties instead of raising them. The figure was set at $13.44 per ton, which was still prohibitory.

Agricultural Tariffs under the 1890 Act. Without doubt the most striking change made in this act related to sugar. We had had a 2-cent tariff on sugar. Now we put sugar on the free list, but paid the domestic producer the same 2 cents he had been getting through the tariff. The duty on sugar had been bringing in 50 or 60 million dollars a year; the bounty cost us some 6 or 8 millions. The people, buying sugar tax-free, had to make up in other taxes about 50 million dollars lost in sugar tax. We also were paying a half cent tariff on imported refined sugar, a small item, as a protection to the refiners.

A considerable number of other changes were made on agricultural products. Possibly the most important were as follows. On wheat the

duty was raised from 20 to 25 cents a bushel, on corn from 10 to 15 cents a bushel; these increases of course were insignificant. There was also an increase from 10 to 30 cents on barley, and since Canada raised a lot of good barley, this may have been a considerable item in some years. Just why we made a small reduction in the rate on rice is not clear. It was possible that the raise in the tariff on wheat might bring in a little revenue under unusual circumstances, as, for instance, when we had some quantity of hard spring wheat, but not more than our millers needed, and the tariff would raise our price instead of admitting Canadian hard wheat at a lower price. Such a combination of circumstances is rare.

The act of 1890 boldly faced the whole tariff issue and raised the rates all along the line almost without exception. It was at least a bold announcement that tariff rates were to be retained or raised whenever the chance came to reconsider them. The East was doing its best to coax the Middle West along toward a more liberal view of higher duties.

Democratic Tariff Following the Tariff of 1890. After the Democrats had held the Presidency for a term, the Republicans might well have been a bit cautious as they began to resume power. But the act of 1890 was anything but cautious. It had the appearance of being the work of a party that felt all but certain it would ride the wave. The Republicans had control of both houses, but actually it was by a narrow margin. The Democrats had attempted to write a bill with lower rates, and this, though it got nowhere in the Senate, did pass the House. However great a man Cleveland may have been, he was never a popular leader; in his second attempt at the presidency he was defeated by a small majority. In the election in November, 1890, just after the passage of the 1890 act, the Democrats carried Massachusetts as well as Ohio, Illinois, and Michigan. In the presidential election two years later, 1892, the Democrats voted in almost two members to every Republican, and a little later the election of senators by the state legislatures gave them a safe control of the Senate. The Republicans had put across the greatest piece of legislation ever passed in the interest of high tariffs. But they had lost the next two elections completely.

Economic Disaster of 1893. By midsummer of 1893 it was plain that the monetary situation was such that within a few more months the Treasury was likely to be out of gold. The fact is that to please the silver producers we had to provide for the purchase of a large amount of silver. The "hard times" that started early in 1893 caused heavy demands for gold in exchange for greenbacks and silver, and something had to be done to stop it. What we did was to stop the exchange of silver for gold, much to the disgust of the West and especially of the silver-producing states. The Senate particularly disliked to break down parity between the two metals.

The Tariff Act of 1894. It took Congress all the summer of 1893 to struggle through its work respecting money. Committees on the tariff question had been arranged, however, with the regular committees such as Ways and Means in the House and the Finance Committee in the Senate. In the House where the Democrats had such a large majority that a little disaffection was of slight consequence, the bill was considered and passed within less than two months after the regular session of Congress was convened. But the Senate was a very different body. It took almost every Democratic Senator to pass a bill, and Democratic senators were wholly agreed as to what they wanted. Two from Louisiana usually voted with the Republicans; two or three Populists usually voted with the Democrats, but could not be counted on. The safe majority was down to something like four, a slim margin. When the bill finally got through the committee something like three months after Congress had met, it had a sorry time to pass the Senate, which it finally did on July 3, seven months after formal consideration began. Everybody had an amendment, and all of these were alike; they all meant at least a step nearer to the Republican bill of 1890. In the conference between the two houses it soon developed that the senators would make no concessions, and as a result the Senate version of the bill became the law of the land. Cleveland refused to sign the bill, and it became law without his signature.

Duty on Wool Repealed. It is still a question what the sheep and wool business of the country would have come to without the tariff. While we would not have had such a group of wool millionaires, it is altogether probable that the number of sheep in the country might have been about the same as it has been with the tariff. Certainly there would have been but little difference in the number of sheep in such states as Ohio, Michigan, and Vermont. Next it must be noticed that our very high tariffs on wool have not been wholly effective much of the time.

The duty on wool and woolens that had been in force since 1861 was extremely complex and were not understood perfectly and fully. Wool tariffs, which had been so potent in governing a major industry of the country, were at the same time so involved that few or none really understood them. It was, for example, practically impossible to tell just what effect any given tariff rate had on the whole clothing trade. For example, we had a very high tariff for years on all better woolen goods. Just what did these high tariffs, all counted up to a full 100 per cent, do to the trade—the actual purchases made by the wearers of the clothes? Possibly a large number of people wore cheaper, coarser clothes than they would have if the tariff had not been so high and the clothing could have been cheaper. When it is remembered that every sparsely settled Western state is the home of half a million to three million sheep and that each state has two

votes in the Senate of the United States, it is quite easy to understand why the sheep-raising states can get about what they all want in the way of Federal legislation. Twice it has been possible to refuse them what they wanted on such goods as wool or sugar. In the Senate the three states of Arizona, Nevada, and Wyoming can tie New York, Pennsylvania, and Illinois. For this reason more than any other, tariffs on sugar or wool are pretty hard to reduce, since our sparsely populated states are heavy producers of both products.

While we let wool in free, we provided a 50 per cent tariff on the bulk of woolen goods for clothing and 40 per cent for carpet. On ready-made clothing we provided also a protection of 50 per cent. Thus manufacturers were just about where they had been before the act was passed.

Sugar. It may be noticed first that the House put (or left) sugar on the free list and at the same time provided for an income tax—very plainly as a means of raising revenue that would be lost by the repeal of the sugar tariff. The Supreme Court, however, declared the income tax unconstitutional. Hence there was a measure of good luck in the retention of a sugar tax about half as big as it had been. The duty as passed by the Senate provided for an ad valorem tariff of 40 per cent on imports of raw sugar, with an addition of another duty of an eighth of a cent on refined sugar. Beyond these charges there was a provision for an additional tenth of a cent on sugar sent us from such countries as paid a bounty to their own exporters. For the most part this meant sugar from Germany, which paid an export tax on its sugar.

It was supposed that in the Senate, where every vote possible was required to get the act through, there was a good deal of near crookedness. Many unsavory deals were believed to have been made between a few susceptible senators and the influential lobbyists from the sugar companies. Be this as it may, the Sugar Trust came out for a full 40 per cent tariff in place of free trade in sugar as the House had provided for. The Sugar Trust got enough tariff to sustain its power;[3] it had clearly won the battle. The Democrats had surrendered.

Cottons, Jutes, Flax, and Hemp. America, during the latter part of the nineteenth century, was so dominant that so far as the great bulk of goods was concerned, the tariff was of no importance. With some special products, for which more skill was needed in their manufacture, the case was different. There was in the manufacture of some goods a possibility of an effective tariff, but on the kinds of goods reckoned by millions of yards America was so far in the lead in manufacturing that the tariff was of no importance.

Of some other goods, very small in bulk or value, little need be said. The

[3] Taussig, *op. cit.*, pp. 313–314.

price could no doubt be held a little lower without a tariff. The importance of these was not and is not great.

The Attempt to Revise the Tariff. This attempt can be called a failure, though not a complete one perhaps. The House, with its bill submitted to the Senate, had done very little. Of course it must not be forgotten that they provided for the repeal of all tariffs on wool and on sugar. The wool duties were indeed removed; had they lasted for something more than three years, one might have been able to see something of their effect. But we were only just getting out of the depression of 1893 when the next tariff act went into effect. Times were getting better anyhow, no matter what had been done to the tariff. The preceding depression came in almost with the Democrats, and of course they were blamed for the results. We have never recovered from a major depression in less than two to four or more years. The national election of 1896 came two years after the passage of the Wilson Bill. This was too soon to pass good judgment on its effect. The act itself was half-hearted at best. Duties in general were as high as they had been for a considerable period of years. The higher rates of the tariff passed in 1890 had not had really time to show what they could do for the country when disaster overtook us in the form of a depression about as bad as anything of the sort that had ever struck us. That the country was displeased by the bold attempt of the Republicans to restore prosperity through the passage of the unprecedented high tariff of 1890 was clear; two years later we reelected Cleveland and both houses of Congress. It must not, however, be forgotten that the Senate was by no means safely Democratic; the majority was no better than nominal. There was endless accusation of crookedness—literally of selling out, on the part of senators, to the sugar trust. It is certain that nearly all important tariff items were made over in the Senate to fit the wishes of protectionists, with the exception of the wool tariff, while within less than two years after the passage of the act and the real taking off of the tariff on wool the high-tariff party was again in power.

What is more and worse than free wool, it has to be admitted that all that the Democrats in the House had themselves proposed was a mere toning down of tariff rates; their bill was a real tariff measure even before the Senate made its original character more pronounced. Again the Republicans were in control after 1896, but it happened that the election expressed no clear-cut attitude toward the tariff, as under some circumstances it might have done.

Political Campaign of 1896. It was the intention of the Republicans in 1896 to fight the campaign on the tariff question. This was shown in the nomination of McKinley. However, there was a new idea at work within the Democratic mind. It must not be forgotten that the Democrats

had in 1893 repealed the act providing for the purchase of silver, which, in turn, was to be coined. In 1896 they came out fully and clearly for the free coinage of silver without limit. This meant of course that instead of bimetallism we would have, at 16 to 1, monometallism, so far as circulation was concerned; we would be on a silver basis, and gold would have been melted up. The campaign was exciting.

Tariff after Election. The campaign had been made almost wholly on the question of bimetallism, but the immediate subject before the special session of Congress that was called at once after the inauguration was the tariff. In the first place the campaign, so far as the Republicans were concerned, should have centered around the tariff. Here was a real issue. With the money question the Democrats had posited an issue that the country had already definitely voted down. This meant to the President that at least for the moment the money question was settled, while the tariff question, which had hardly been discussed, was directly before the public. So Congress went to work at once and exclusively on the tariff issue. It had the new bill ready when the special session of Congress was convened in March, 1896. About two months after the bill was taken up by the Senate it was ready for the conference committee, and on July 24, 1897, it became the law of the land.

Wool Tariff of 1897. The new act restored the duty on wool; this was the most popular of its provisions. Of course manufacturers had not lost their heavy duty on manufactured goods, and to them this was the duty they wanted, not the duty on wool. The fact is they did not dare undertake to get along without some support from farmers and did not usually feel safe in leaving the wool grower out of consideration. On this point we have always agreed, except twice when, under Democratic free wool, we were without wool protection. The new tariff duties on wool were very much like those of the act of 1890. Real interest in the wool duty had moved to the west of the Missouri. The farmers of the Middle West, although they kept a few sheep, were now much more interested in dairies and general farming. The Republican party had made a real appeal to the farmers, and the best the Republicans could do in helping agriculture was to protect sugar and wool.

On wool the farmer gets about what the politician tells him he gets. As a matter of fact it is only about 6 to 10 per cent of the farmers of the country who get enough to amount to anything out of the wool tariff. Even so, the wool tariff is one of the strongest points of American politics.

Sugar Tariff of 1897. It should be noticed that the Louisiana people had been lucky rather than shrewd as regards the tariff on sugar almost from the beginning. The country as a whole had favored the tariff on sugar because of the revenue that it yielded, one of the most certain and one of

the easiest to collect of the whole list. With the arrival of 1897 there were many beginnings of sugar-beet culture in the West. Thus the old party, now back in power, feeling that its strength had now certainly returned, sent its Secretary of Agriculture, James Wilson, out through the West to promote, especially throughout the corn belt, the culture of the sugar beet. The farmers of the Middle West were told that they might as well learn to grow $100 worth of crops per acre in place of $10 worth in the form of corn. He did not point out to the farmers who listened that they could not grow more than 8 acres of beets per man, even if they took a large part of the season. The Secretary, in his enthusiasm, remarked that he expected to see this crop succeed so well that sugar would soon be selling at 2 cents a pound. A farmer in one of his audiences asked him if he thought a man could grow this crop for only 2 cents. "Yes," said the old gentleman, "you can well afford to grow a crop such as this for 2 cents, and if you are left with nothing but the pulp for growing it you are well off." Yet these same farmers are still complaining if they cannot get the pulp plus 4 cents a pound for the sugar they produce. We are obliged to pay more than 2 cents a pound in tariff on all sugar produced, primarily because we have not only Louisiana with its contribution, but a dozen other states producing at least a small quantity of sugar beets. We also pay the same tariff on all sugar imported.

Reciprocity in Tariff Relations. In the tariff of 1890 arrangements had been made whereby reciprocity was allowed under certain conditions. In the tariff act of that year we had on the free list several important articles that previously had been subject to duty, raw sugar, molasses, tea, coffee, and hides. The new plan was to give our president the right to put duties on these goods against any country that had, in his estimation, treated our agricultural exports unfairly. Under such circumstances he might restore duties against such countries up to 3 cents on coffee, 10 cents on tea, 1½ cents on hides, and a little over 1 cent a pound on sugar. Substantially nothing of importance was done under these provisions until, in 1894, the privileges were done away with by our act of 1894, which contained nothing pertaining to reciprocity.

In the act of 1897 the Republicans made a feeble attempt at reciprocity. It was provided that tea might be taxed at 10 cents, coffee at 3 cents, hides at 1½ cents, and sugar at just over 1 cent in case any country should exact unfair duties of us. But the device was never used.

In 1897 we put tariffs on sugar and hides, leaving only such articles as tea, coffee, tonka beans, and the like on the free list, on which we might put tariffs as a reprisal against such countries as we were displeased with. The President alone might make these arrangements.[4] We next made provision

[4] See Tariff Act of 1897.

for the reduction of duties up to 20 per cent on all goods. But the treaties had to be made within two years, to run not over five years, and had to be approved by both House and Senate. To revise the tariff under such restrictions as these was next to impossible, and it was not done.

Tariff on Woolens. The duties on woolen goods were raised in almost every tariff following the Civil War. For example, not only were woolen goods high in the charges made on their entry into the United States in 1883 and 1890, but in the latter year they were much higher than the former. The fact is that woolen goods were taxed at the port of entry around 92 per cent of their value, while part of them were taxed between 140 and 150 per cent. These rates may be taken as fair samples. In general our wool growers got, in 1890, something like 33 to 40 cents per pound on woolen cloth, plus 40 or 50 per cent on the value. This varied from around 60 to 90 cents or even over a dollar per yard. Dress goods varied in weight, and the duty varied from 7 to 12 cents per yard plus 40 or 50 per cent, making not less than 60 or 80 cents per yard. On men's clothing the rate was 49 cents a pound plus 60 per cent, making something like $1 a yard on not very expensive clothing. On better goods it would run to a higher figure, perhaps $2.

Tariff on Cotton Goods and Clothing. Although we could not import bolts of cloth since our prices were too low to permit it either in the form of prints or white goods, it was quite possible to import manufactured goods like stockings and other more or less similar articles. Where a fair amount of labor was involved, there was a chance for the English and possibly for certain other nations to produce the goods for a little less than we could. Where the goods were calico or factory cloth, they were likely to be cheaper here than elsewhere, but where there was a considerable amount of labor expended, as in the creation of finished garments, other countries were satisfied with less on account of their cheaper labor.

Duties on Iron and Steel. Rates remained high. During the early seventies we had had a tariff of $28, which soon was more than the cost of rails in England. While the railroad-building era was on and use of rails was very heavy, our rail builders amassed enormous wealth. The tariff on rails was left at this high figure for more than a decade. In 1883 the rate was set at $17, high enough to keep all foreign rails out; in 1890 it became $13.44 per ton, still a prohibitory rate, and this was left unchanged in 1897.

The Act of 1909. In the early years of the twentieth century there was a strong feeling that the tariff had been a great aid to many big industries that were growing up. An uneasy feeling that the tariff was a great aid to many trusts and should therefore be reduced was also prevalent throughout a large part of the country. In the 1908 Presidential campaign, which was unexciting, since the country had been prosperous for eight or ten

years, the Republican candidate, Taft, had the easiest going for both nomination and election. The platform called for tariff revision, which in nearly everyone's mind meant reduction, most assuredly so to Taft himself. The feeling against such fortunes as Andrew Carnegie's was strong. Without doubt Taft fully expected an honest downward revision of the tariff, with the party following a principle that would result in a tariff just high enough to cover the difference in cost of production at home and abroad. If we were fortunate enough to discover this exact amount and use it in drawing up tariff legislation, we would have protection, even if it took an enormous tariff to do it. The Republicans pretended to believe that a tariff so carefully set in amount as to cover this difference would be exactly fair and just high enough to protect American interests. However, with "reasonable profit" allowed to Americans, whether 10, 5, or 1 per cent, the tariff certainly would have to be high enough to prevent all influx of goods. The leader of the debate in the Senate was willing to carry protection to 300 per cent.[5]

Republicans in 1909. For a dozen years the tariff act of 1897 was left on the books. The Republicans had been in power. The country had been prosperous and still was. There had been talk of a tariff revision under Theodore Roosevelt's administration, but he knew too much about the criticism that often overtakes the President who engineers a move of this sort, so he managed to leave it for his successor to struggle with. The revision was, therefore, promised in the campaign of 1908, and the subject came up promptly in 1909. Probably one reason we had left the tariff untouched for so long was that the country was quite concerned over monopolies and trusts, including railroads. There can be no doubt that the size and power of great companies are so great as to endanger the political and economic safety of the country at large. Eight or ten years earlier we had organized within the country our first billion-dollar concern. It seemed that others, probably many of them, were soon to follow. There was a strong feeling that the big companies, as, for example, in steel, sugar, woolens, and boots and shoes, were altogether too well protected and that the common people paid the costs. Companies grew bigger as never before, and all big companies asked for heavier tariffs.

The Tariff of 1909. During the summer and fall of 1908 very many people assumed that the forthcoming tariff revision was to be real and rates were to be reduced. The House, in fact, in its original bill made a good many reductions, which, however, were not followed very closely by the Senate. It was during those days that the Senate was so often re-

[5] Taussig, *op. cit.*, p. 364, footnote; that is to say a tariff just high enough to cover the difference between costs in the importing country as compared with costs in the exporting country.

ferred to as the Millionaire Club. Our Senators have so often been millionaires—indeed three out of five recent Presidents have been so rated—we can hardly understand the sensation this title created 35 or 40 years ago. In any case our Senators early in this century attracted attention on account of their wealth, and their political influence seemed to be tied to it. It was quite easy to persuade men of this sort that whatever multimillionaire manufacturers wanted was all right. Besides, almost continuously, men of this general stamp had been getting what they wanted in the way of legislation. Furthermore, we had substantially arrived at the point of giving almost every man the major portion of whatever he asked for, provided he was influential enough to get some fairly well-known Senator to put it into a bill.

The House committee had not done a major job in asking for a reduction in tariffs; yet they had asked for a fair amount of free trade. In the debates in the House a large part of the articles on which the committee proposed free trade were kept under tariffs. The duty on lumber was set at half the previous rate. Taft, at the finish, undertook to use his influence, if he had any, on the tariff. About all he accomplished was a repeal of the 15 per cent duty on cattle hides. Probably this particular change had been effective from 1897 to 1909 in raising the cost of boots and shoes. Taft put up the fight of his life on this point. Throughout his campaign for the Presidency, he had reiterated his belief in the lower tariffs that were then being promised. To come out just with the defeat of a 15 per cent tariff on hides from among something like 400 tariffs that had been put forward by Congress—mostly the Senate—in deliberations lasting well over half a year, was letting Congress down tenderly. Nobody had anything to say as to why hides should be protected, except that some Western ranchmen would have liked another $1.50 apiece for them. If Taft had fought equally well on 10 more items of equal or greater importance, he might have been a memorable statesman.

The tariff of 1909 was neither hot nor cold. A pretty strong popular sentiment remained to the effect that some important tariffs should have been lowered in 1909. The Presidential campaign had been conducted on the expectation that this would be done. The Presidential candidate had fully expected it. The House bill on the tariff, while mild, did provide for several important reductions. The Senate, undoubtedly largely under the influence of Senator Aldrich of Rhode Island, raised the tariff on several important items and allowed reductions in almost no important item except hides. Taft and his confident Presidential campaign, with much support in the House, were ignored in the Senate, except for the one item of dropping the tariff on hides.

The act of 1909 cannot be called, like the two preceding acts by the

same party, a triumph for protection. Neither was it a defeat. It was an act that just managed to hold its own. It might, indeed, have been vetoed by the President, if he had had sufficient nerve, which apparently he did not have. A considerable group of states, in the northwestern part of the Middle West, were not satisfied with the tariff legislation of 1909. Apparently Congress had gone as far as it could as a high-tariff body. The election of 1910 showed very clearly that the people were not too well pleased with the action of Congress.

The Democratic Tariff of 1913. A year after the passage of the high tariff of 1909 came the election of 1910. Just what the Republicans had expected after virtually promising a reduction of the tariff during the 1908 campaign and then arrogantly reenacting a genuinely high tariff in 1909 probably cannot be determined. In any case the act was a great surprise to the people who had elected them, and at the first opportunity, in 1910, the Democrats showed such strength at the polls as to make it all but certain that they would soon elect both the President and most members of Congress. The Democrats gained strongly, even powerfully, in 1910 and again in 1912. This gave them full control, and they began working on a new tariff act as soon as the 1912 election was over. In the House the Democrats had complete control, and being largely newly elected, they not only were in favor of free and freer trade, but did not care for much discussion.

Within a month or so the bill passed the House and was sent to the Senate, where, surprisingly, more free-trade provisions were wanted than in the House. Prices were fairly high, owing largely to the great supplies of gold on hand. The trusts, always or nearly always in favor of high and rising tariffs, were quite alarmed, and their Republican advocates in the Senate were, if anything, even more alarmed; they wanted more, not less, tariff. The Republicans were ready for a 300 per cent tariff if it was needed to give the American producer a fair chance for competition. What the Democrats appeared to ask for, where they provided for a tariff, was a "competitive" tariff, one that would admit part of the goods wanted within the country.

Trusts are characteristically keen for tariffs. Our greatest trusts include those organized around sugar, tobacco, and iron and steel products, all heavily protected goods. Undoubtedly the most important tariff acts were on sugar and wool. The latter was made free at once. The former was to have been free on May 1, 1916, with an immediate rate of 1¼ cents a pound on refined (1 cent from Cuba on raw); the rate on sugar was never any lower. The fact was we needed some Federal income from sugar. As the months passed it was evident that the Democrats were losing. They lost in the 1914 election, which meant that they were no longer strong enough

to try anything quite as radical as the removal of the remaining tariff on imported sugar. Many Democrats in at least a half dozen states were interested in a tariff on sugar. With a Presidential election again approaching they did not have the courage to reduce the duty on sugar. An amendment prolonged the duty indefinitely.

The duty on wool was taken off at once. It was not as productive as was the tariff on sugar. The price of wool had dropped to a free-wool basis in advance of the act. The specific rates on woolens were taken off, and the ad valorem rate was reduced to 35 per cent. This looks low compared to what we had had for a few years. The rate had been heavy under the acts of 1897 and 1909, there having been a charge of 33 to 44 cents a pound, plus 50 and 55 per cent. The earlier rates were prohibitory, however, so when they were lowered, it was necessary to see at what figure they would stand shipment.

Duty on Steel and Iron. Steel rails, an old and important item, went on the free list, like almost all iron and steel and most forms of iron and steel in crude forms and shapes. In semimanufactured forms some iron was taxed at low rates such as 5 and 10 per cent. In general iron and steel came in free, or nearly so; not much came in.

Duty on Farm Implements. This was a great but empty measure. American manufacture of such goods had reached such a state that no one else could equal it or meet our prices. Hence there was no importation. Implements at that time were distinctly low in price, and although they have been much higher recently, with no tariff, they still are not imported to an extent that seems to make any difference to the trade or to prices.

Miscellaneous items, such as coal, lumber, hides, boots and shoes, cattle and meat, eggs and dairy products, went on the free list. At that time none of these items was of great consequence. Probably hides became cheaper, and therefore boots and shoes were priced lower. Later milk and cream were no doubt a little cheaper, especially in Chicago, and the duty was restored; yet this whole list, eventually rather significant, seemed petty and immaterial at the time.

Prices were so much affected by the war, were in fact so high, that little attention was paid to tariffs. For a period of some five years there was such an unusual demand for all manner of foodstuffs that we could sell everything we had for double ordinary prices. Then, with a foolishness hard to comprehend or even to believe now, we got a notion that all prices were up to stay. Land prices went up in two years or less after the war closed, till they were two or three times what they should have been. Stocks went even higher. Many individual stocks went to several times what they were worth.

America had become the world's greatest creditor nation, but the Re-

publicans had carried the 1920 election, and the first thing they wanted to do, right after an impossible peace, was to raise the tariff to a higher point than it had ever previously reached, at a time when the leading nations were short of money, short of income, and indebted to us for great sums of cash. These nations could not send us money because they did not have it; they could not send us goods on account of our tariffs.

The Act of 1922. There was, of course, an act of 1921, but this was merely a makeshift, hurriedly instituting a few schedules ahead of the main act. There was no change in the tariff from 1913 to 1921. The Democrats came near to losing their power in 1916, when they elected their President by a very few thousand votes and held Congress by a slim margin in each house. The tariff of 1913 held over because the Republicans were unable by a very small margin to carry either house and so had no hope of passing a bill. While the war was on, the tariff was of no consequence anyhow. Goods were moving out of the country at high prices, regardless of tariffs.

About a year and a half after the war closed, the economy collapsed. Hogs fell from $22 to $10 per hundredweight within a year, and cattle about the same amount. Farmers had gone into debt in one way and another as never before. They had, within two years after the close of the war, incurred indebtedness for farms, improvements, machinery, livestock, and the like, to such an extent as never had been known among farm folks before in the world. At first they were wild over the tariff. For a short time agricultural produce was being unloaded at our harbors because our prices were somewhat higher than the prices in some other countries, especially those of South America and the Southwest Pacific. American farmers, for example, could see no reason why they should tolerate the unloading of corn from Argentina, butter from New Zealand, or wheat from Australia. What they did not see was that this was merely a means of hastening just a little a movement which was sweeping the world and which could not be interfered with seriously for the next few years by any changes in tariff, at least not in a country that had an excess of agricultural products of these usual kinds. Tariffs or no tariffs, in all exporting countries, prices were simply destined to be low. So far as manufactured goods were concerned, manufacturers found it possible to discharge their employees, quit buying raw materials, and all but ceased to make goods. Companies that could stand the strain for a few years were on the job when times got better; many others went under.

Leading Rates Set in 1922. The new tariff act carried such rates as 30 cents on wheat, 15 cents on rye, and 15 cents on corn—all export commodities in normal years. The tariff on beef was raised from the 1½ cents of the preceding Republican tariff bill to 3 cents; lamb was raised

from 2 to 4 cents. But these were not so important. The great agricultural duties were still on sugar and wool. The sugar duty was 2.206 cents per pound. But the effective duty was that on Cuban sugar, 1.7648 cents. It will be remembered that the Democratic rate was 1¼ cents a pound, while previously the Republicans, under Taft, had set it at 1⅓ cents. Thus the new rate on sugar was noticeably higher. This was an increase in the tax on the sugar for each American family of about $2.50 per year. On wool there had always been a great deal of argument as to the amount of wool and the tariff charge. Some wool was much dirtier than other wool, but the tariff never varied for this consideration. Hence some wool paid much more tariff, some much less, merely because of weight as effected by the dirt it carried. The Republicans did one very sensible thing in this regard. They decided to put the impost on wool regardless of the dirt it happened to carry; so they set a tariff on clean wool at 31 cents a pound. The rate under the 1909 tariff had been 11 cents a pound. Roughly it was calculated that wool shrinks about two-thirds on an average in the cleaning process. Hence the real tariff was 33 cents. Therefore, the new tariff of 31 cents was rather close to the old rate, but at least was much more accurate. The rate on cloth was distinctly higher than on wool, owing to a rather tricky method of computation. The result was that cloth was not imported in quantity.

Duty on Steel Rails. On rails the rate was now made $2.20—practically nothing. This was only about a thirteenth as much as the duty had been back when Carnegie was making his millions. The 1922 rate was so small as to have little effect on the cost of rails, and at any rate many rails were not likely to be imported. Back in the real days of rail tariffs, $28 a ton, these outrageous costs were figured into every cost of freight and every passenger rate figured in the United States. Just a little of this cost, in the form of libraries and books, was returned to the American people as a gift some years later.

Exceptionally High Duties. We had almost never put duties above 50 or possibly 60 per cent, but in this tariff we went quite beyond these figures. By combining a flat specific charge with a 50 or 60 per cent duty, it was possible to get the combined duty up to 100 to 300 per cent on such articles as razors and pocket knives, without advertising the fact too plainly. Many items affected were relatively unimportant, but such things as guns, razors, and coal-tar products ranged from close to 100 up to 400 per cent.

Rates to Equalize Costs. The new view of the Republicans as dating from 1909 meant enough tariff to offset any costs. Carried out fully, this can mean enough tariff to make it profitable to manufacture or grow any goods or crops, without limit, within the country. In fact different members of Congress expressed the view that 1,000 per cent was not too high

a tariff if it was needed to protect a home producer from competition within his own market. On this ground Republicans held that tariffs should be high enough to cover differences in costs and make it feasible to keep all our workers employed. What the party in power from 1920 to 1932 did not comprehend was the revolution that had occurred in international relationships due to the change in international indebtedness. We had become the creditor nation. Consequently purchases from us were not as simple as they had been for a hundred years. What we said to Europe was substantially this: "You owe us, but what we propose is to sell to you and so increase the debt. We will not buy your goods." On this basis we went on selling goods by the billions of dollars' worth to Europe during the twenties. We elected Hoover, who believed firmly that we should abolish poverty from the land and that the country mouse should have as good a living as his town cousin. Hoover was elected in 1928 and inaugurated in 1929. During the latter year the worst depression ever known in America began. A fact of no less significance is that the tariff of 1922 was the highest ever passed in America, probably as high as any ever adopted in the world. But much higher ones came within a few years.

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Chapter 23

FEDERAL FARM BOARD

As Republican candidate for President, Hoover in 1928 had promised to set up a Federal Farm Board, which should undertake two main tasks: (1) to revive the cooperative companies, many of which were in financial straits after the panic of 1929 and the subsequent troubles; (2) to take charge of the marketing of farm crops and livestock in the hope of raising prices. With respect to the cooperative companies it is quite plain that the Board did a fairly good job. Many such companies with considerable quantities of produce on their hands had all but gone under. With the half billion dollars that Congress put at the Board's disposal it was able to help these companies; at the same time it revised their procedure to such an extent as to make a recurrence of their troubles unlikely. The Board lent a considerable amount of money to these people coming out of one-quarter of a billion dollars—half its appropriation—which was in the main later repaid. Next the Board undertook to revise the usual procedure followed in marketing both livestock and wheat. Livestock was sold for whatever it would bring. The Board assisted in creating a few organizations to go ahead with the marketing of livestock in several places. They tried nothing unusual along this line, lent the rest of the first quarter of a billion dollars to the livestock marketing group, and with few exceptions got it back. Another quarter billion dollars was used by the Board in marketing wheat and cotton. The Board itself made purchases. It became the owner within a couple of years of close to 2 million bales of cotton per year and somewhat over 200 million bushels of wheat. World consumption of American cotton outside our own country during 1929–1930 was 2 million bales below what it had been in the preceding year. This was the real beginning of a lessened demand for American cotton. Trade conditions were more favorable for European buyers in several other producing countries, and better cotton could often be obtained elsewhere. About this time we made a real study of the quality of cotton produced in

Brazil and found that much of it was better than ours; this discovery was a real shock to American producers, who had always considered themselves not only the greatest cotton producers in the world, but the producers of the best grade. By now we were in real trouble in selling our surplus cotton; world consumption of Indian cotton went up, and other countries also increased their shipments. America was certainly losing the position that she had held in the world for a century as a cotton seller. What to do about it she did not know and still does not know. The FFB came on the scene at a time when cotton prices were destined to fall abruptly and when wheat prices were going down disastrously. The Board regarded these declines as strictly temporary and really expected prices of these commodities to recover their former levels within a very few years.

Purchases by the Board. Within two years the Board had purchased something like 250 million bushels of wheat, for which, during the latter part of 1930 and some months following, it paid about 73 cents per bushel. Then came a remarkably big crop. In 1931 for the third time we produced more than 900 million bushels of wheat. This meant that we would have not far from 300 million bushels to sell outside the country plus the 250 million bushels that the Board had accumulated during the preceding two years. Congress refused to furnish any more money to the Board for buying wheat; the Board had no choice but to quit buying. During the closing days of June, 1931, the announcement was made—in Kansas—that the Board would buy no more wheat after July 1. Excitement ran high. The farmers and their friends insisted that the Board should not sell its wheat quickly. This was agreed to, and as a matter of fact, the Board took some years to dispose of its wheat. It was to be sold no more rapidly than 5 million bushels a month.

We undoubtedly sold our 1929 and 1930 crops of wheat for more than they would have brought in a free market. As a matter of fact the somewhat higher price that wheat brought during the period of sowing for the crop of 1931 did not induce heavier acreage. The acreage was lower than it had been for some five years, but the yield, when it came, was the highest ever known down to that date. The quality of much of the 1931 wheat, too, was perfect. Better wheat of its kind had never been seen than was grown in Kansas. The crop for the year in that state was reported at 252 million bushels. Some of this wheat sold as low as 22 cents a bushel. The price rose a little as the months went by, and the average for the year was reported at 33 cents, the lowest in any state of the Union. The price for 1932 for Kansas was 33 cents also. Thus for two successive years income from wheat was well below the cost of raising it.

The Board did well in explaining how cleverly the government was disposing of its surplus wheat, but very clearly this surplus aided greatly in

holding the price down. It would be hopeless to undertake to figure how much was gained altogether and how much lost. We sold very little abroad during the Roosevelt regime; carrying the surplus up to 1940 would have been expensive, but the Second World War came along to provide a use for a considerable part of the surplus. We were selling our surplus in large quantities for feed until as late as 1942. At present we are not closely related to the world wheat market and of course cannot very well be. In all likelihood demand for our wheat will remain high for a short time, but soon we shall again have a lot of wheat that no one wants. When the Board was obliged to close out, it had about 250 million bushels on hand.

Cotton. The cotton crop had been pretty high in price from 1909 to 1929. Before that time we had had a long period of low cotton prices. From 1876 to 1908, almost a third of a century, cotton had only four times averaged a full dime a pound for a year, and incomes for the great majority of cotton growers were poor indeed. Fifteen cents a pound is not a price that brings fat living for growers. Then for 20 years, from 1909 to 1929, the price was better than usual, ranging from 11 to 35.6 cents, with but two exceptions. During this period many tenants received so much more money for their crop, probably more than they were used to, that they had no notion how to spend it. That cotton tenants are poor throughout the cotton belt is well known. The real poverty of the cotton tenant is, however, not appreciated by many people. The North in general is not sufficiently acquainted with the South to appreciate how poverty stricken the small cotton grower is. In the South it is taken for granted that poverty is the natural status of these people and that little or nothing can be done about it. Their education is nothing, their accumulations are nothing, their living is frightful. When the FFB was set up, cotton was still bringing a pretty good price—about 16 cents. That it would fall almost to a third of that amount within two years nobody guessed, but it did.

One thing that the Board did not at all comprehend—any more than Congress and the President—was that international trade was destined to be on a different basis from anything previously known, especially in respect of our own country, because we had our international debts paid and held the major part of the world's gold. Thus the chances of the leading producer of surplus wheat, cotton, pork, tobacco, agricultural machinery, and so on, to make constant sales on a cash basis were poor indeed. We were, however, willing to continue to take quantities of tea, coffee, barbed wire, gold, silver, and so on, in place of more than 200 articles. Most of the things on the free list had been on it a long while and were by no means enough to pay for the agricultural and manufactured goods that we had for sale. Thus Schedule 16 of the Smoot-Hawley Tariff Act, with over 200 articles

on the free list, had little effect. Europe wanted a chance to trade its manufactured goods, such as cloth, small hardware, and utensils of all sorts. Europe wanted us to take the work of its women and children, such as watches, clocks, neckties, and a thousand different things that call for skill. But we cared little for the difference between cheap machine-made goods and the careful work of skilled hands. Hence when our international debts were paid and Europe had less occasion to take our raw products, we proceeded to tell her that we preferred our machine-made watches, our machine-made neckties, our factory-made oils in place of her products.

Thus, since many other countries had made much progress in the production of cotton and meat, Europe found it to her advantage to trade with those countries and leave our cotton. Thus we were driven to produce less—a slow, hard objective to reach. Until the government came to the rescue and the Second World War provided an outlet for part of our excess cotton, we had about one extra crop on hand. Under these bad market conditions we were paying from 17 to 19 cents a pound for cotton, always in the hope that the crop would be a little smaller and the demand somewhat greater. Our biggest trouble was that we could easily raise twice as much as we wanted ourselves and that the rest of the world finally refused to buy from us at a price that would keep our cotton-growing millions even half fed and clothed.

The Board Handles the Cotton. The Board went into the cotton business rather heavily and became a factor in the price paid. They made several different entries, the first in 1930. The cotton cooperatives formed the Cotton Stabilization Corporation, authorized to purchase about a million and a quarter bales of cotton. When it became known that the cotton crop of 1930 was full-sized and that even with rapidly sagging prices the foreign demand was at least no larger than usual, the hope of a higher price vanished. The 1930 crop was so nearly up to standard in size that there was no hope whatever of better price due to small yield; as a matter of fact the demand for cotton weakened with every report of sales. People had to buy less because they had less with which to buy. We had been in the habit of consuming around 6 to 8 million bales of cotton yearly; during 1930 we got down to 4½ million bales. Foreign countries were buying 50 per cent more than that from us. Borrowers of Board money had the privilege of selling at a loss, refusing to sell, or selling for what they could get and buying options, to be used in settling up with the Board as best they might. This last arrangement was agreed on. At the close of the year, June 30, 1931, the Board found itself in possession of 3,384,000 bales of cotton, much of it in the form of futures. The cooperatives, having done a losing business on the cotton market, were rather heavily in debt at the close of the year, all told about 120 million dollars. At the end of

two years the Board had made up its mind to this program: (1) urging reduction of acreage of particular crops; (2) collaborating with the U.S. Department of Agriculture and state colleges in their agricultural outlook services; (3) analyzing the possibilities of transferring land from agricultural to other uses.[1]

When the Board began its work in 1929, cotton was selling at about 16 cents a pound. When it closed up its work in the fall of 1932, it was worth a little under 6 cents a pound. The depression, the worst and the longest of any ever experienced by the United States, still had some seven years to run after Roosevelt was elected President. The Board did not appear to sense the fact that the depression was different in kind from the usual type.[2]

The Board announced that 300,000 bales of cotton were to be sold during the remaining months of 1932 and promised: "The corporation will make every effort to distribute sales throughout the season without disturbance to markets or to price levels." Just how more than a tenth could be added to the quantity of any great crop to be marketed without disturbing the level of prices is not clear. Even so, the Board sold its added amount with no very great disturbance to the market. For nearly a year and a half the government held off the market, and aided in the withholding of close to 3½ million bales of cotton. Late in 1932 the foreign market improved a little; our own demand reached its lowest point during the year. The Board had used close to its last dollar in withholding and helping to withhold cotton from the market, always with the hope that the depression would soon end. It will never be known just when the depression would have ended had not a new great war occurred, since we were still struggling with low prices and surplus quantities when the Second World War became the main cause of a general rise in prices.

Other Undertakings of the FFB. The FFB gave attention to almost every important line of farm marketing. It did a very great deal of work in the effort to reorganize and improve the leading farmers' cooperative companies of the country. Much of its funds was used in trying to improve the dairy cooperatives. Very many of these organizations, some of them small, undertook to do marketing with very little capital. Often they held their products for months during periods of falling prices. Prices soon fell to less than they had paid for the product and, since the prices did not then rise as expected, the companies could see nothing ahead but failure. Few failures occurred, however, since the FFB sent out many men to visit the companies and show them what might be done, usually advancing money to help them back on their feet. Great numbers of small companies

[1] U.S. Federal Farm Board, Reports 1 to 3, *Second Annual Report*, p. 62.
[2] See *Third Annual Report*, p. 74.

with very little capital needed advice, a little money with which to do business, and the like.

The most valuable thing to do in connection with these smaller companies was to get them better organized, raise small sums of money on which they might do business, and especially advise them on methods of procedure. It was especially urgent to guard against the real dangers attendant on holding a product for a considerable length of time when prices are declining. The very best work done by the FFB was with these cooperative companies. It of course was not very difficult work. The cooperative companies were in hard lines financially, but the FFB had money enough to help them out, and the companies could do little other than follow its directions respecting repayment. So within a comparatively few months they were again in running order. The final outcome is that the cooperative companies now have banks in each of 12 districts. These banks, called the Banks for Cooperatives, function well. They and their connections are all that still survive of the FFB.

Anyone ought to have realized, when the FFB was being planned, that it could not handle the marketing affairs of the country on a half billion dollars. At least a few men who knew markets in a comprehensive manner should have been among the members. There were no outstandingly gifted men on the Board. The chairman had brains, but he did not apply them very forthrightly to the needs of the moment. He advised farmers by radio not to sow too much wheat. No great crop was ever handled in that manner, unless growers were already disposed to make certain fundamental changes. When their inclination is to proceed as usual and some man like Legge advises them to grow 25 per cent less, the chances are perfectly good that they will produce more rather than less. Real action, with rules that can be put into effect, is needed to bring about a real change in farming methods. Yet Legge claimed that the Nebraska farmers had taken his advice and cut down their acreage of wheat in 1931, whereas the stubborn Kansas farmers had sowed a bigger acreage. So much wheat was damaged by weather in our Northwestern states that year that the country raised only its fifth largest crop instead of what might have been the biggest ever. The Board apparently learned that the hortative method was hardly effective in acreage control. There were undoubtedly plenty of men in the country who knew a great deal about what could be done through exhortation in the control of crop acreages, but they were not members of the Board. The Board, with the exception of its chairman who was an expert at selling machinery to farm people, was made up of men who had very little insight into the handling of unorganized millions of people. Thus the Board, with a very small amount of money and with few seaworthy plans, came rapidly to the end of its voyage.

Chapter 24

SMOOT-HAWLEY TARIFF ACT

The Tariff Act of 1930. Many Americans had supposed that the tariff act of 1922 was certainly high enough. It was passed under a Republican administration. The Democrats in 1912 and 1916 had not been equally strong; it was at that time a case of Republicans voting the Democratic ticket, and the second time they did it, in 1916, there were only just enough of them to carry the day, after which time we had three sweeping Republican victories. When the Republicans got back in, in 1920, at the beginning of a depression, it was time for them to assert themselves and show the world what they could do in saving the country from destruction. Substantially every tariff item was raised; even leather got back on the list. Though the tariff was mentioned in plenty of documents, it hardly played any part in the campaigning of 1928. The tariff act of 1930 was framed before the financial disasters of the latter part of 1929 and remained substantially as first drawn. A special session of Congress was called for June, 1929, and the House quite promptly prepared a bill and sent it to the Senate.

In the first committee bill presented to the House, there had been some attempt to follow the message of the President who understood Congress so little as to imagine that he could outline for them a procedure to be followed in drafting a tariff bill. He did not know Congress in its century-old methods of dealing with tariffs. When there is what may properly be called a general tariff bill before Congress, anybody in the Senate and very many members of the lower house may make amendments. In fact practically any member of Congress may be heard. No sooner was the bill reported to the House by the Ways and Means Committee than amendments were offered from all sides, and nearly everybody got whatever amendment he wanted attached to the bill. In other words, instead of being primarily a farmer bill pertaining only occasionally to matters of another character, where some commodity or other was found in distress

or probably had been in 1929, it was found in 1930 that the majority of people wanted "help" such as was generally believed to be offered by higher tariffs. It must be remembered that when the bill first went to the Senate the country was supposedly still prosperous.

In the Senate the procedure was just what might have been expected under Senator Reed Smoot as the chairman of the Finance Committee. Anyone could get anything he wanted in the way of an increase in tariff schedules if he would in return vote for the desired increases in the sugar and wool schedules. Thus Cuban sugar was taxed at 2 cents. Duties were raised somewhat on woolens but not much changed on wool. About all the great majority of farmers had to do with the sugar tariff was to pay the bill; the same was true of wool. Approximately only one farmer in six has any sheep, and many of these feel little interest in wool. About two-thirds of the sheep are raised in 12 Western states, including Texas, and it is within these states that the wool tariff is made. Eastern sheep are more important for mutton than for wool. The strength of the sheep men in Congress arises more from the curious fact of there being two Senators from each state than from anything else. Sheep interests have nearly always been a strong power in Congress, and since the development of the sugar beet within, say, the past 40 years, sugar has been a powerful factor in American politics.

The tariff act of 1930 was by far the most unfortunate and the most disastrous of any acts passed by the Congress of the United States since accounts were settled after the Civil War.

Tariff Demands from Manufacturers. Many farmers, individuals as well as organized groups, showed an interest in tariffs. The real demand for higher tariffs, however, came almost wholly from manufacturers, who, being few during our early years, needed the support of considerable numbers of farmers in order to carry their views into effect through legislation. To get this support they always favored high tariffs on wool, sugar, cereals, and dairy products; in fact they would give farmers tariffs on all their exports and even on a couple of products on which they only made prices higher, such as sugar and wool.

Powerful sentiments kept Ohio, Iowa, and all the intervening states voting with Pennsylvania, New York, and New England. The Middle Western people were closely related to those of the Eastern states. The Civil War separated them from the South for the greater part of a century. Although Iowa went Democratic a few times, once on account of prohibition, Roosevelt carried the state twice; after that it took no campaigning to hold Iowa to its long-beloved ticket.

We had been protectionists for about a century before Hoover became President. Most farmers were so thoroughly wedded to Republican doc-

trine, with high-tariff policy, that no arguments were effective on the free-trade side. They wanted, and had, a very heavy tariff on wheat while they regularly sold 200 million bushels, a quarter of the production, outside the country. In general the Middle West was as safe for a Republican candidate as the East.

Real Center of Tariff Interest. Of course the genuine interest of the tariff was primarily concerned with such goods as iron and steel, textiles, especially woolens, the manufactures of cotton goods, boots and shoes, and literally a thousand other things that make up the vast amount of manufactured goods used by the great masses of our people. The great claim was that tariffs were needed on substantially all manufactured goods for employers to be able to pay high wages. As a matter of fact just as high wages were paid in the manufacture of goods that carried no tariffs as for goods that were highly protected. In this connection the claim was made by protectionists that the general high wage rested on protection that a few (really many) other people got; good wages in general were paid because of tariffs on protected goods.

As a matter of fact the women and girls who worked in the textile factories, tariff-protected industries, were always poorly paid, while great numbers who worked in the "sweated" trades, largely connected with textiles, were pitifully underpaid. The great masses of our laborers, for many years, worked long hours for small pay. High tariffs did not seem to make for high wages.

World Creditor. When the First World War was over, we were clearly and apparently permanently the leading creditor of the world. But how to act the part of a creditor nation we did not know. We had long known how to play the part of the greatest debtor nation of the world. But when the war closed in 1918 we already had the main part of the world's good money and especially of its hard money, the gold. What to do with this gold we did not know; so we buried it in Kentucky. We then notified the rest of the world that we would be glad indeed to receive in cash the amounts they owed us. It is hard for an American to realize how difficult it is to pay debts in gold after your gold is all gone, perhaps without mines from which to dig any more and without trade by which it might be acquired. Europe owed us over 10 billion dollars, and the only way they could pay it was in goods. We had first made it much more difficult for them to pay by our tariff act of 1922, made exactly after the manner of a rich and independent, but after all a debtor nation. Our Congress had said in effect: "We shall be glad to have you pay your debts in an orderly and prompt manner. We have become the leading creditor nation of the world. We still have vast quantities of raw products, foodstuffs, and cotton, likewise many manufactured

goods, which we should be glad to sell to you, and for these things we should be glad to be paid in gold. We do not care for your manufactured goods. We do not want any of the products of your mills or any of your handwork. We do not really want anything from you except a few articles that we cannot very well grow for ourselves, such as ivory, or minerals that we do not find readily, such as tungsten, possibly tin, perhaps bananas, or rubber, coffee, or tea." In short, we did not want to leave unprotected anything that we could produce in this country, not even though our sale prices were twice or three times as much as others could furnish it for.

We told South America that we wanted to sell them grain combines, but by no means did we want their wheat or cattle. We wanted to sell automobiles to the English, but we did not want their textiles as pay. Wheat and pork we were only too glad to sell them, but we did not want them to pay us in their wares, although we would have gladly taken their last gold coin. We would have bought more, much more, olive oil of the Italians, but we could offer nothing in exchange for it except cottonseed oil. The fact is we did not want the products of their mills and factories, and by no means did we want the products of their fields. If we had even been willing to take such amounts of their goods as we had been getting, we might have made out rather well with them. But no! We told them we wanted less of their goods in general. Of course we would take rubber and bananas, a little guano, a few Oriental rugs, and so on, but these specialties, oddities, and luxuries would by no means pay us for the vast shipments of cotton, wheat, pork, tobacco, automobiles, agricultural machinery, and many other articles that we had in excess of our own needs. To express our feelings as to what we should like to do, we therefore passed the Smoot-Hawley tariff act of 1930, and an accommodating President signed it!

In the 1930 Smoot-Hawley tariff it may be said that the farmers got the biggest increases in duties, mainly on export products. Some of them, however, were on import goods such as dairy products, for part of the country and possibly part of the year; on meats, partly effective; on vegetables, effective in part, but unimportant; on gasoline, not important; on watches and clocks, extremely important to the people making the goods for us—and so on.

Congress took over a year to formulate this bill, which was no model of sweet reasonableness. We raised import tariffs on export commodities. We put the rates on many importable goods up a little. Import rates in general were raised, though not very much. The fact is that the psychological effect was fully as important as the economic. Without question

the impact on the rest of the world was severe. For example, Canada passed her reciprocal act before we had finished the bill that provoked it.

Smoot-Hawley Tariff in Retrospect. More than 30 foreign countries protested formally against the Smoot-Hawley tariff. No such number of nations ever protested against an act of this kind before. As a matter of fact there was never before so much occasion for protest. How much effect the act had in world affairs is a question that might be debated at length. About all that can be said is that the depression lasted, in this country, about a decade—longer than any previous one. It lasted in other countries in general not so long, although just how long it was in any one country is a hard question to answer. Neither is it easy to say how much influence the Smoot-Hawley act had on the prosperity of the world; yet it can be said with certainty that whatever influence it had was wholly on the wrong side. What the world needed was more trade, more sound credit. This act of 1930 without a doubt made less trade and less credit.

Nature of the Smoot-Hawley Tariff. The act made many increases running from 10 to 20 per cent. Moreover, it struck Europe at the worst possible moment, just when the great depression of 1930 was beginning to be felt violently. Europe had by no means got on her feet since the war, not by any means as much as we appeared to have done. Yet our own farmers were still hopelessly in debt, and many others were likewise desperately in debt, while our prices were so high that any disturbance of equilibrium might be dangerous. What was worse was that for several years we did not take in the character of the depression that had struck us. We were still hoping for a revival of the European market, which did not come.

We had raised our tariff at the most unfortunate moment. That is to say, we had begun raising it about half a year before the collapse in prices in the fall of 1929. What were we to do? What we did do was to proceed to increase tariffs in about the same spirit as we had brought to the tariff of 1922. At that time we raised rates heroically. In 1929 and 1930 we proceeded to increase tariff rates in a thoroughly self-assured manner.

Europe had been aghast at our tariff of 1922 but probably had hoped to be able to hold her own in spite of it. She had not done so. When the 1930 tariff struck at the same time as an awful depression, Europe suffered a staggering body blow. To pay tariffs that were not infrequently 40 or 50 per cent higher than they had been paying or at least trying to pay for years was impossible. The European nations and a few other countries, some 30 in all, not only remonstrated against our

latest tariff insult but started at once to raise their own tariffs until we could no longer ship them goods. This at least helped in putting us still lower in the scale as a selling nation, and right after the act of 1930 went on the books we found ourselves with huge quantities of both agricultural and manufactured goods to sell, and with fewer buyers than ever previously in our history.

Discussion of the Bill. There has possibly never been as much discussion concerning a tariff bill passed by the United States as there was about the Smoot-Hawley Act of 1930. On the other hand, few tariff acts have had less influence on the shipment of goods into the country, unless it was merely by angering people sufficiently to cause them to quit shipping. The act did, however, greatly affect the goods shipped out of our country, and this, a new experience, had something to do with the falling off of goods shipped in. From 33 different countries of the world came protests about the increases in our tariffs. To all these we were perfectly deaf. It was apparently believed that these countries were destined to go ahead on the old lines buying our wheat, cotton, and everything else. But foreign sales fell off very greatly after 1930. We managed to sell something over 100 million bushels of wheat in 1937 and the same in 1938, simply because the government first bought it and then sold it at a loss. Our sales were also low for a couple of years on account of poor crops, but as time passed, the government bought great quantities of wheat and stored it in little sheet-iron bins throughout the wheat region. Then came the Second World War, which increased demand, and for some two years we sold wheat at less than we paid for it, to be fed to chickens and cows.

How to hold production down was a problem that had not yet been solved when the recent war increased the demand. In 1942 we produced 981 million bushels, and for the three years beginning in 1944 over a billion bushels, which left us the task of finding a market for more than 300 million bushels at a loss. Corn production was also a surprise. First, during the thirties and the early forties, we cut down acreage, but good weather and hybrid seed gave record crops in 1942, 1943, and 1944 on distinctly reduced acreages as compared with some years earlier—over 3 billion bushels a year, which was nearly a third more than we had been growing for 10 years on acreages greater by more than 10 million acres than those we had in 1942, 1943, and 1944. New demands occasioned by the war wiped out most of our stored-up surplus. With cotton the case was not as favorable regarding surplus. We had on hand for several years a surplus close to 20 million bales (down to 18 million in 1943), on which the government had made advances and which at the time

seemed large. Within a few years we are likely to find ourselves again unable to sell our surpluses, which will again, or still, look large. We are sure to remain the greatest of creditor nations, and it is difficult for a creditor nation to proceed on our century-old plan of always selling much more than we buy. If we cannot learn how to buy considerable quantities of goods beyond what we sell, the settling up of accounts is likely again to get us into trouble.

The Smoot-Hawley Bill Passed. No good reason can be given for the passage of this act. The new President was not happy over it. He had not asked Congress for such a bill or anything like it. Quite possibly he did not know enough United States history to know that the tariff question was open; it was wide open. The campaign had promised the country a full revision of the agricultural tariff and such other tariff revision as might be necessary. The case now was even worse than the one that got poor Taft into so much trouble. All that was promised in the platform on which Hoover had been elected was that tariff provisions were to be reviewed with an eye to lowering the rates, whereas Congress was disposed to raise practically all. There were men in Congress who wanted every rate raised. Taft in his time had stood like a monument demanding that leather and shoes be put on the free list; this was done, and Taft signed the bill. All that Hoover could say for himself was that the campaign had been fought on and for an agricultural tariff; it had been passed; therefore all he could do was sign the bill. So through it went, with rates the highest in the world, though they should at that particular moment as well as for some years before have been the lowest of the 10 leading nations of the world.

The reason that the Smoot-Hawley tariff bill was passed was that we did not know the difference between a debtor and a creditor nation. We had been a debtor nation for a hundred years and had acted the part tolerably well. As a creditor nation we had new responsibilities; we did not accept them with particularly good grace; we were perhaps unconsciously happy of the chance to try to play the part of the debtor nation. For example, what did we want to do with the overlarge cotton crops that we so often raised? We did not like to sell them for prices so low as to leave us desperately poor. No, but we were fully as well off to sell at 5 cents a pound as to be unable to sell at all. There were times around 1932 when it was all but impossible to sell many kinds of farm products for enough to pay the freight on them, while many manufactured products would not sell for enough to pay the necessary expenses of the producer.

In view of these facts why did the goods not cease to travel and simply stay at home? One group of people owed another, and there is always

a tendency for the debtor to pay what he owes, just as there is a tendency for a person to sell what he has, but cannot use, for a low price in order to pay his debts. Even so, trade with foreign nations was at a low ebb during a large part of the thirties. This nation with goods that were already too high in price did its best to raise them to a higher price, and all went to the bottom. It was not a pleasant or easy job to get prices so related that we could continue our trade with the rest of the world as things were running a little over 10 years before. Yet what else could be done? This was, however, preceded by an effort to sell at high prices to people who were hardly able to pay moderate prices. These same people owed us gold, but did not have the gold and could not get it. Later came the high prices of the Second World War, which left us to face a most serious situation.

Changing from a Debtor to a Creditor Nation. While we were the debtor nation, settling up by selling much more than we bought was easy. We sold quantities of farm produce, and for years we sold much in the nature of manufactured goods. Even so, our foreign debts were big enough to balance the account. A stream of travelers from America to Europe required a considerable amount of money to keep the books annually balanced. But we must take into account the situation of the twenties and thirties. Possibly worst of all was that we had the bulk of the world's gold already. The use to which we were putting it came to be doubtful. What we really did for years was to dig more gold in the West, coin it in the East, bury it in the South, and pray that some day it would be useful. Other nations could not use gold as money because they had too little of it; we could not use it because we had too much. If we let our citizens have the gold to use, they would pay it out to foreigners; then we would soon be poor. So we hire men to watch it, buried deep in Kentucky. Our paper money says on its face: "This note is legal tender for all debts, public and private, and is redeemable in lawful money at the United States Treasury, or at any Federal Reserve Bank." On a silver certificate they will pay silver dollars worth about half as much as the bills, if redeemed in metal and melted up. We cannot get the gold nor anything else that is worth much for our paper money.

How High Should Our Tariff Be? After the First World War was over, we needed the lowest tariff of all important trading nations of the world. What we had was the highest. What is more, the party in control of events was the Grand Old Party, which had ruled the country magnificently. They had always raised the tariff a notch or so every few years. They did it again in 1930. It is true that we did not raise the tariff so very much in 1930; it was already high—so high that many goods could not come in at all.

We had always made our tariffs independently. We had paid no attention to suggestions or protests from interested parties. Our leaders in Congress assumed that American tariffs were to be made at home and that Europe had nothing to say about it. Other countries had complained before and then submitted rather peaceably later, after the acts were passed. At this time, however, Europe was desperate. Also there were other people who would furnish them almost anything they wanted and take goods in pay. Thus after remonstrating to the full extent of their power during the time the Smoot-Hawley bill was being whipped into shape, they began at once to make arrangements to do their trading elsewhere as soon as it was assured that it would pass. Whether the Smoot-Hawley tariff act was in any real way responsible for the depression that followed almost immediately is highly debatable.

Americans tried to make excuses for the bad times that trailed the passage of the act. Many people blamed the depression primarily on the financial crash of 1929 and predicted that very soon matters would again be all right. But 1930, 1931, and half of 1932 had slid past without bringing anything that looked like recovery, when another time for putting up candidates for the presidency arrived and the writing of new platforms was in vogue. Very clearly the Republicans didn't know what line to take. To say as they did that all that was needed was a little more time, that Hoover had already done many good things in restoring prosperity, was of no avail. The country as a whole had lost faith in Hoover. It made no difference what was said in his favor. He had made the most magnificent promises before his election in 1928 that had perhaps ever been made by any candidate for the Presidency on a major ticket; hardly was he inaugurated when things went wrong. The stock market went to pieces. Land prices fell disastrously. Out in the corn belt corn sold from 4 to 8 cents a bushel. Hoover was a poor campaigner; his opponent in 1932 was a magnificent one. Hoover had nothing in his platform that appealed to the populace. American voters wanted "action, and action now." Tariff issues were too remote and ineffective to strike fire with the mass of those seeking the polls as a way out of their troubles. Roosevelt had everything that was wanted. It should not be forgotten that in 1928 Hoover had hoped to save agriculture by the use of a half billion dollars, possibly about 5 per cent of a year's farm income, and during the 1932 campaign he promised the farmers very little. On the other hand the Democrats made wonderful use of the old doctrine of the McNary-Haugen bill, but with real modifications. Their best thought developed the plan not of taking our surplus and selling it for what it would bring, but of reducing production and at the same time storing up

such surplus as we might, even with reduced output, happen to have. So such became the doctrine under which we proceeded.

Hoover might have been defeated if there had been no panic in 1929. But with the panic, a very deep and protracted one, with the passage of the Smoot-Hawley tariff act, and with starvation staring millions of people in the face, his chances of reelection completely vanished. The Smoot-Hawley tariff act was denounced in the Democratic platform of 1932 in strong terms, mainly true: "We condemn the Hawley-Smoot tariff law, the prohibitive rates of which have resulted in retaliatory action by more than 40 countries, created international economic hostilities, destroyed international trade, driven our factories into foreign countries, robbed the American farmer of his foreign markets, and increased the cost of production." This feature of the campaign was dwelt on by Roosevelt in his speech at Enid, Okla., in September, 1932.

Effect of the Smoot-Hawley Tariff Act. The Republican party was in power. This party had raised the tariff every few years and expanded it until it was hard indeed to find any article not covered, aside from a comparatively small number such as agricultural goods coming for the most part from warmer climates. Many of the rates were a full 100 per cent, while a larger number were around 50 per cent. Since we had the bulk of the world's gold, it was very difficult for the debtor countries of Europe to make payments in that metal. Thus many of the countries that had already been making payments and finding it hard to make them were not at all to be criticized when, on account of the increased rates of the Smoot-Hawley tariff act, they gave up paying. The Fordney-McCumber bill, passed in 1922, was hard for Europeans to face; yet many European countries had slowly tried to make some payments. They were much aroused over the new act and complained bitterly over the treatment it accorded them. They had been somewhat displeased over the passage of the Fordney-McCumber Act, but they did not fight it very forcibly because it was not greatly worse than the previous tariff acts and because they were at the time hopeful of forming better relationships with us. As the years passed, they found the situation difficult and for the most part getting worse rather than better.

And now came the Smoot-Hawley Act, which for our foreign friends made everything worse. This bill, to most Europeans, was the last straw. Or it was the last rail on a fence that was now clearly too high for them, and they would no longer try to scale it. Instead they began to raise their own tariffs to heights altogether too high for us, and we could no longer sell abroad, even on time. In 1934 to 1936 we actually imported wheat, owing to small crops. In 1937 and 1938 we managed, by round-

about means, to sell small amounts of wheat, the government suffering some loss in the transactions. Since 1938 we have had virtually no sale for wheat abroad. Some exchange of products has, however, been brought about through reciprocal trade agreements, as we shall see in the next chapter.

Chapter 25

EFFECT OF THE SMOOT-HAWLEY ACT ON WORLD TRADE

For this nation to go ahead selling an excess of its goods in great amounts to other nations that might pay for them all or nearly all in gold to the end of time might be a fine thing—in case we did not wake up to the foolishness of burying the gold as soon as we got it. We had the bulk of the world's gold already. We felt sure that we could not continue to use it freely in the purchase of world goods; yet in what but gold could payments be made? A nation that becomes a creditor among other nations, as the United States did after the First World War, must soon cease to act like a debtor nation. Such a nation must be content to exchange goods for goods. We did everything else. We sold goods to the Germans and took mortgages on their public buildings as pay. We sold to the English and took accounts as pay; later we asked if they would kindly pay us in gold or at least give us another 10 per cent on back accounts in the form of increased tariffs, while we would be glad to make continuous shipments to them in the form of additional foodstuff and manufactures.

Just why men who filled the seats of statesmen should play such roles as our President and Congressmen played in passing such an act as the Smoot-Hawley tariff act is quite past finding out. Hoover had been around and about the world. Europe was greatly pleased to see him chosen as our chief executive; they had faith in his statesmanship. He could have shown himself to be a statesman with an understanding of economic affairs by vetoing the Smoot-Hawley bill, but although the bill was not to his liking, he had not the nerve to do so, and a petition against it signed by a thousand economists did not impress him. Congress at the time was in control, but perhaps not sufficiently so to have overridden a veto. The Smoot-Hawley tariff act meant that country after country was virtually forced to quit trading with us. Consequently we received almost no further payments on the debts they owed us; since

we had made it all but impossible for them to ship goods to us, we could blame ourselves for the stoppage of payments. After struggling for just a few years over the exchange of goods, we were saved by the outbreak of the war in Europe in 1939, which changed the demand for goods very appreciably. We were obliged to convert many of our factories to the making of war goods in place of such things as had been made in the hope of sales abroad. The result is that our war economy was so tailored to the demands of the times and paid for by the government that ordinary international trade no longer existed. The Smoot-Hawley tariff act probably had a greater effect in changing our foreign trade disastrously to us than any other act of its character that was ever passed. What it would have done to us if the Second World War had not occurred is hard to say.

The tariff arrangements of the Roosevelt administration had in part counteracted the act; but even so the blow to our foreign trade was so great that the treaties made under Cordell Hull as Secretary of State had by no means provided a complete cure. Thus our trade with Europe was still small when the war came to occupy the centers of world exchange of goods. It is not to be hoped that the old volume of trade will come back again on the old lines immediately and automatically with the war over. The same question will confront us that faced us so unmistakably after the First World War. We solved that question with no wisdom, with no understanding of what changes had taken place, and we paid rather heavily for the trouble we got into. It is not an easy matter for any great nation to change its methods of making a living and adapt its procedure to new international relationships that world forces have brought to pass. The basis of our renewed trade with other nations, undoubtedly to be made over after the Second World War, will be of profound international interest. The Smoot-Hawley tariff, with all the European counter-measures inspired by it, will furnish a vast amount of history showing how not to proceed. It is to be hoped that the supporters of the Smoot-Hawley tariff act will be few and that the friends of international trade will be both more numerous and more effective. The chances are that there will be opportunities to build up an Oriental trade quite beyond what we have yet known.

OUR TRADE WITH CANADA

In the year 1929, before the Smoot-Hawley tariff, we sold almost a billion dollars' worth of goods to Canada and took from them a little over half a billion dollars' worth. We got the rest of the returns in roundabout ways, mainly from England, where the Canadians had credits. We had many reasons to hold Canada and its people in high esteem. Our

sales to them were the highest we made, and the pay was sure. We sold them quantities of iron and steel, automobiles, machinery for nearly every use, especially tractors to be used by their farmers; also gasoline, hard coal, and much cotton. They paid us in paper on which to print our newspapers, lumber, wood pulp, pulpwood, copper, nickel, furs, a few cattle, and a small quantity of dairy products, plus English credits. It was greatly to our advantage to sell so much to Canada in the way of heavy goods on which the hauls were short and the freight therefore small. It was particularly to our advantage to have the Canadians buy so much of us and let us trade out the great balance in their purchases with England, with which the Canadians had many credits. This trade was of long standing. It was thoroughly well established. The credits that Canada turned over to us were worth a full 100 per cent. The fact is, the Canadians were our best customers, and the transactions were closely associated with England, who for many years had been our best customer.

Canada's Reaction to the Smoot-Hawley Tariff. Our Fordney-McCumber tariff had tested the friendship existing between the two countries pretty thoroughly and had been a factor in the legislation passed by Canada respecting tariffs on several occasions. When we carried the matter much further in our Smoot-Hawley Act, the Canadians felt that all questions of friendship were suspended and that they were now obliged to look after themselves as never before. There had been for many years a strong party in Ontario always ready to rise up and assert themselves as manufacturers. Now this party, apparently to the surprise of nearly everyone, came to the front, carried the election of 1930, and set out at once to pass an act. Not merely Ontario was interested in it, but the whole of Canada.

Canada under Premier King responded more promptly than any other nation to our Smoot-Hawley tariff act. The Liberals, however, did not go far enough to satisfy the country respecting the tariff, and in the summer of 1930 an election was held in which Richard B. Bennett, a Conservative, was elected Premier. Bennett made the campaign on the proposition that Canada, protected by a heavy tariff, should undertake a bold program of manufacturing. The plan was that she should unite more closely than before with England, send her wheat and a few factory products to England, and buy from England machinery, automobiles, and a large part of her woven goods.

Canada passed one anti-American act under Mackenzie King and two more within a few months. They made new arrangements with England for trade. Many of our manufacturing companies set up a series of plants for manufacturing in Canada—just what Canada wanted—and our exports

to Canada, almost a billion dollars, as already noted, fell within three years to just over a quarter as much. Our purchases from Canada, which had been over half a billion dollars a year, fell to a third of that amount. Canada played a rather clever game with respect to these changes. The country was not so badly off as it sounds, owing to arrangements made with England. Then, too, they had told us all along that when we got ready to trade with them again on a fair basis they would deal with us. Canada was in a strong position. England could make her some pretty good offers. Many companies moved into Canada back of the high tariffs that they had just built up. Canadian trade was desirable to us because, unlike many European countries, they would pay whatever they owed; their credit was good. During the thirties we were having pretty hard times, going further and further into debt, selling less and less and at lower prices.

The Canadian election was held on July 30, 1930. However, a Liberal party in power anticipated the action of the Conservatives some three months by passing in May of that year an act providing for automatic reciprocal duties on substantially all American goods likely to be offered at the new rate, thus anticipating our high rates against them by a few months. An act was at the same time passed providing for important reductions on many English goods, and indeed many on which there had been a duty were now admitted free. Canada now provided that the duties that American goods should pay on entering that country were to be the same as Canadian goods were required to pay on entering the United States. If, for example, we should have a chance of selling a little wheat or butter at a Canadian port, the tariff on the wheat would be 42 cents, on butter 14 cents, with the same on oleomargarine. A considerable quantity of goods sold in Canada was now obliged to pay distinctly high duties in order to be admitted. Certain goods, which had had for years the privilege of being sold in Canada without duties, now had to pay the same duties they would be charged if they should happen to be going the other way.

As for our exports to Canada there can be no question as to their desirability from our standpoint. Of course this is generally true. On the question of imports the case was different. Our lumbermen hated to see a stick of timber enter the country; cattle raisers did not want a single import; dairymen could not see a nickel's worth of dairy products come in without feeling outraged; mining men could not contentedly see a pound of metal imported. All these people were glad to see us sell machinery, coal, and cotton to Canada, but buying of the Canadians was altogether another matter. They wanted pay in cash; it must be remem-

bered that Canada for years had been second on the list of nations in the matter of trade with us; at times they have ranked first.

Canada's Trading Relations with England. Canada had been wholly independent in passing tariffs that the mother country should accept the same as any other country. Now the proposal comes, not from England, but from Canada, that the situation be changed. It is the latter country that now wants to let England's goods in free to a great extent, and all she asks in return is that England should give her the privilege of freedom of market in England's ports, whereas she would offer to that country freedom of markets in Canada, a real reward, since she at the same time would meet us with tariffs that we would have hard work to surmount. England was not ready to raise a tariff against everyone else, but a little later virtually did even that.

In 1931 Canada passed a new tariff, the third act since the summer of the preceding year. It was much more inclusive than the preceding ones, and the rates were higher. Nearly everything made of iron and steel was put at such a high figure that American manufacturers were shut out. At least 20 important agricultural products were put at such high figures in the way of tariffs that it was all but impossible to effect any exports to Canada from this country. Along all these lines duties were low or were nothing at all on English goods. Very many American manufacturers started branch businesses in Canada, exactly what Canada wanted done.

Canada's Enterprises. Canada had clearly made up her mind to do more manufacturing; there was at least some advantage in connection with this work and probably some in a broader program of agricultural production. Another line of enterprise that had gained favor with Canadians was the development of manufacturing at home, even though the actual start was made by foreign manufacturing establishments. This undertaking meant to the Canadians a broadening of employment for their increasing population. They also had a strong feeling that through reciprocity much trade with other parts of the world could be built up in order to offset the immediate losses due to the failure of opportunities recently lost on account of difficulties with the United States.

American Industries Start Branches in Canada. By merely moving a branch from Detroit across the river to Canada a business can be freed not alone from Canadian tariffs, but from substantially all British and British Empire tariffs. This being the case, a considerable number of automobile factories were started up in Canada by American companies. All told, about 1,200 companies of one kind or another were started in Canada by people from other countries. In general terms this meant that

Canadian wages would be raised, while wages in the United States would at least tend downward.

Canada agreed, in her budget of 1931, that Canadian tariffs might be lowered, by the governor in council, to any country that would grant reciprocity. Thus Canada was willing to bargain. She had appeared extremely independent of us during two or three years covering the period of recent legislation and then finally gave us a chance to undo some of our recent intolerable action respecting trade relations.

GREAT BRITAIN AND PROTECTION

After the rise of the modern great powers of the world England was the first and almost the only free-trade country. Several countries had, like Germany, for some years imposed only low tariffs; these schedules were all shifted upward by 1871. For many years England had had an immense system of tariffs touching substantially everything grown or manufactured, and it was only after a severe tariff fight covering something like a decade that Parliament succeeded in passing the free-trade act of 1846; several important tariffs were given three further years of life, but by 1849 England was practically on a free-trade basis. A minor tariff act was passed in 1880, but for the most part England was on a free-trade basis until in 1915, in the stress of the First World War, a considerable duty was laid on a few articles, such as timepieces, films, and motors, for the most part a duty of 33⅓ per cent. This act was kept on the books until 1924, then renewed until in 1931 the Board of Trade was given the power of increasing tariffs up to 100 per cent. The next year it was made a bit more formal by an act of Parliament. Representatives from the whole British Empire met at Ottawa, Canada, in July, 1932. It was arranged that Great Britain should charge countries outside her Empire from 33⅓ to 100 per cent additional duty on such things as cereals, fresh and dried fruits, dairy products, eggs, and honey, and it was further provided that many of these goods should not be reduced below 10 per cent tariff for at least five years. Great Britain undertook to give her dominions an expanding share of her imports of meats, which would, it was hoped, require a decreased importation.

The hardest blow suffered by United States trade in recent years consists of the increases of duties charged us in the markets of Canada and England, our two best markets. In the year 1930 our exports to Great Britain were just about three-quarters of a billion dollars' worth. About 70 per cent of our shipments to Great Britain prior to 1930 were free of duty. After 1932 there was a duty on all but 20 per cent. This situation was due in no small measure to the influence of Bennett of Canada, who had set out to build up as great a trade within the British Empire

as possible and as far as possible at our expense. Of course after our treatment of Canada under the Smoot-Hawley Act this feeling toward us was as good as could be expected. England raised her duties against us reluctantly, but on the other hand she was ready to try a tariff in order to bring us, and possibly the rest of the world, to see that so much high tariff was absurd. The fact is that England had been hoping for lower tariffs all around, and here she was confronted with the most outrageously high tariffs the world had ever known. England was convinced of one thing: She could not go on paying such high tariffs and leave her own markets wide open to the rest of the world. If all other countries must have high tariffs, then she also must be obliged to charge rates more or less the same.

Reciprocal Arrangements. Hoover lost the election of 1932 as no election was ever before lost. Roosevelt came in with many things to attend to. It seemed that he was pretty slow in getting started at matters pertaining to foreign trade. But during the latter part of his second year he started the reciprocity agreements. If he had had the nerve to ask for the repeal of the Smoot-Hawley Act, it would no doubt have passed Congress in a few minutes, leaving us under the preceding bill. This gesture would have pleased a large part of the world and would have had a splendid effect on many countries. It would probably have done very little at that time to right matters, but pleasing a great many people with whom we were getting ready to deal would have been worth much to us.

In the middle of 1934 Roosevelt got to work at trade relations between ourselves and other nations. For a year or so it seemed that the work progressed slowly, but by 1940 we had some 20 treaties on the books, and during the next two or three years several of the leading countries were put on the reciprocity list.

For the first time in our history we had a chance to deal with any and every nation on its merits. We had a group of men charged with the task of providing fair and square dealings, whereas, under the usual process, it often happened that some one man on the Conference Committee could make demands that had to be accepted. Conceivably a senator from Montana might insist on an increase of 10 per cent in the duty on hides and get it, with hardly another man in Congress wanting it. Or a senator from Louisiana might make a real increase in the duty on sugar. At least nothing of this sort could happen in the provisions of the committees struggling with the provisions of the trade agreements of the Roosevelt revisions.

Value of English Trade. Over any considerable length of time our trade with England is worth more to us than any other trade we have. Several things happened to it simultaneously with the passage of the

Smoot-Hawley tariff act. England was coaxed, and all but compelled about the same time, to take sides with Canada, although not for exactly the same reasons that led Canada to take her stand against us. In any case our trade with England declined badly between 1930 and 1935. We were down to third or fourth place in rank among the exporting nations. We managed in one way and another to get ourselves nearly out of the world trade in wheat, although we had been second for several years in world wheat sales.

Our trade with England had been for some years at the top of world transactions with a long list of million-dollar items. England did not like to lose our trade, but still she felt obliged to stand with Canada in the struggle following the Smoot-Hawley tariff act. So she just about quit buying our wheat, a sorry blow to us. Nevertheless, we made, near the close of 1938, an agreement with England respecting tariffs.

In agricultural commodities we were in rather poor circumstances for making sales, since we were holding our surplus products at figures quite above the world market. For example, for several years we held our cotton at prices well above world prices. In 1938 and 1939 we sold it to local buyers for 8.6 to 9 cents per pound. In 1941 we raised the price to 16.77 cents. This meant that we could not sell any real amount of cotton to England, since our cotton was appreciably above the world price. During 1940 and 1941, under the ever-normal granary principle, we held our corn, wheat, and cotton above world prices. The claim was made that we had learned how to reserve in the soil rich stores of plant food, but at the same time carry out "a protected farm income."[1] These claims were hardly supportable until the war came and created a demand for farm produce. We have been able, owing to the added demands for foodstuff and many other goods, to reduce our oversupplies to something like reasonable proportions within the few years following 1941.

Our new arrangements for trade with England were made nearly at the close of 1938, almost at the beginning of the Second World War. Thus the act had hardly any time to operate under circumstances at all normal.

Trade Agreement with England. Although Roosevelt was elected in 1932, it was six years later that a trade agreement was signed with England. This agreement related to over 50 of England's smaller dependencies. The trade with England proper and with her smaller dependencies constituted the largest trade item of the world. It included not merely the home country but also very many other smaller spots of the world, such as British Malaya, Hong Kong, Jamaica, Trinidad, and the Gold Coast. We had had a 1936 trade with these countries, England

[1] U.S. Department of Agriculture, AAA, *Reports for* 1941, p. 12.

and her small dependencies, of 675 million dollars, though prices were low the world around.

England had put a duty of 6 cents a bushel on wheat in 1932. This was a relatively low tariff; yet it made dealing with England difficult, since we were attempting to keep wheat high in this country and at the same time trying to export it. We were trying several different methods in holding prices high, chiefly the ever-normal granary plan. During some months we held our wheat at a figure about 35 cents above the Liverpool price. Thus prices were high enough so that wheat could not be bought for the Liverpool market. What would have happened to us had not the Second World War raised the price of wheat is an unanswerable question. Things dragged along with immense quantities of wheat on hand. It would have been quite a normal matter for us to sell 200 or 300 million bushels of wheat a year for a period of years. Instead of that we managed to sell from 30 to 100 million bushels a year for a decade. We held our prices so high that no shipper could buy to sell in England.[2] The New Deal, however, had the price above the world price, and a little later sold a good deal of wheat, to be fed to stock, at prices corresponding to feed-grain prices. During these years we sold little wheat to England, and finally got down to less than 4 per cent of sales of our wheat per year. Thus the new trade agreement with England had little influence on the disposition of the crops. What we did sell during 1937 and 1938 through the Federal Surplus Commodity Corporation we sold at a loss.

Thus after making a bargain with England for the sale of wheat we took care of it by another process, a process which persisted well into the Second World War, and which as it happened brought a fairly good figure. By this means we bought wheat at a high figure and sold it to England at a loss. Very clearly it was the war that was giving us a tolerably good price for wheat rather than our bargain with England.

Trade with England under the 1938 Agreement. The first item was wheat; yet the amount of wheat sent to England while the war was on was quite small. England was importing much wheat from Canada and from her other dependencies. Our shipments of other grains to England were small. Our shipments of meat, mainly pork, were fairly heavy. England had not subjected the bulk of our pork to duties; yet the amounts sent over in terms of money were distinctly low in 1937, as compared with eight years earlier, owing mainly to the lower prices. We sold them four-fifths of the hams they purchased in 1929 and less than half in 1937. England, letting all chilled and frozen pork in free, bought

[2] The crops were so short in 1934 and 1936, owing to drought, that we had very little to spare during those two years.

about a fifth of her total of it from us in 1929, and only a thirty-fourth part in 1937. After the passage of the Smoot-Hawley tariff act they simply did not care to trade with us if they could do as well trading with someone else. Along the same line they bought more than half their apples of us in 1929, and in 1937 a quarter of them. On pears they were already taking a somewhat larger proportion of their supply from us than formerly. The tariffs on prunes and raisins were left at the old figures. Canned salmon was left as before at 10 per cent duty.

Lard was an item of some moment. We had been furnishing them something like four-fifths of their supply. In 1937 we were below half; yet they took off the 10 per cent duty. On oleo they retained a 10 per cent duty, yet they were taking from us less than a quarter as much of the product as in 1929.

On tobacco, although we had gained somewhat on the amount sent to England from 1929 to 1936, other countries had gained by 23 million pounds over us on full amount supplied. The tariffs on tobacco are high, ranging from $2.35 to $2.61 per pound. On tobacco grown within the Empire the tax is about 50 cents less per pound. Although the tax is high, the disadvantage to our growers is mainly in the 50-cent concession given to tobacco grown within the Empire, since the rest of the tax must be paid by the consumer if the tobacco is to be used. Existing margins of preference are bound.

In general the tariff on wood and timber is around 10 per cent. On sulphur it is nothing. On cotton there has been no general tariff; yet it is difficult to find a buyer for our cotton, since it is worth more under the market arrangements we have created at home than it is to sell elsewhere. Thus far we have made these conditions good, and probably can continue to do so for some years yet to come. Cotton has been on the free list and still is. So also are fur skins, a considerable list of them.

The tariff on a rather large number of metal goods, such as braces, vises, and pipe cutters, was lowered from 20 to 15 per cent. The rates on typewriters were reduced from £4 10*s*. to £3 10*s*., sewing machines from 20 to 15 per cent. Paraffin wax was left at 10 per cent, as was carbon black. *Glacé* kidskins were also left at 10 per cent. Automobiles were left at 33½ per cent, about the highest of all imported goods. Toilet preparations were held at 20 per cent, having been lowered from 30 per cent. The above includes roughly all goods on which the reports show a million dollars' worth each shipped to England.

Shipments from England to the United States. Whereas it takes several pages to note the goods received in England from the United States, little space is required to mention the leading goods shipped from England to this country. Several pages would be needed for trade names and de-

scriptions of goods bought of England, but most of them can be lumped together under comparatively few terms.

We start out with clay for making china, which just gets over the million-dollar amount. The second item is fish, largely cod and haddock, just big enough to be noticed. Next comes whisky, with a figure of 52 million dollars, much the largest of all. Then we come to fabrics—flax, woolen, and cotton—which we receive in considerable quantities, yet not in really great amounts.

A quantity of choice broadcloth is imported, better cloth than we can afford to make sufficiently to supply our trade. Also fine linens such as tablecloths and napkins will be bought by the well to do in spite of high tariffs. We still must have from 25 to 33 per cent tariffs on such fabrics as these and 50 per cent on other linens. On certain cotton goods we still insisted on 50 per cent duties.

On wool and woolens the Americans held their own most fully, with little indication that the party then in power was ready to reduce rates greatly. Out of 49 items pertaining to wool, 29 were shown as above 50 per cent, ranging up to 85 per cent tariffs. Wool itself was not mentioned, although very clearly our present tariff on it was high enough to call attention to itself. Thirty-four cents a pound on wool is a real tariff, and without doubt England would like to have it lowered. On the other hand, it probably makes more difference to us than it does to them, since we apparently actually pay the tariff asked on a considerable quantity of wool and its equivalent on quantities of woolen goods. Why the Democratic party in 1938 did not feel strong enough to lower this schedule somewhat would be sheer guesswork. In any case, this, one of the highest of our duties, was left untouched. It shows that the tariff has very powerful support when the opposition, with a very large nominal support in Congress, is unable to disturb it. Yet, with the large number of articles mentioned above held at 50 to 85 per cent, there were also nine important items "bound" at the tariff rates then prevailing. It is clear that high tariffs were not altogether out of favor with Americans, even with the party that for so many years, while out of office, had talked vigorously against them.

Fifteen of these items were below the 2-million-dollar mark; therefore there were but 10 above, and but one above the 4-million-dollar mark, which means that we really import but a relatively small amount of woolen, cotton, and silk goods.

In asking Congress for the privilege of proceeding, the President proposed that his authority should follow the provision of the preceding two tariff acts, which, incidentally, provided that the Tariff Commission in making changes should not go beyond a 50 per cent change. Four other

departments were joined with the Tariff Commission, and surely Congress was competent to pass a rule that should undo a method of procedure followed for a few previous years. Even so, they decided to limit their tariff action to 50 per cent changes, as the Tariff Commission had been obliged to do.

Tariff Concessions to England. In this matter we were the aggressors; we proposed the change. This was due to our change from Republican to Democratic authority. The Republicans had been in authority, with two or three periods excepted, since the Civil War. We had returned to a genuine restoration of Democratic rule, and the Democrats were determined to get the country on a different basis respecting tariff relations. Instead of working through Congress the new party plan was for the Administration to take over the authority for new tariff relations, leaving Congress unconsulted. On this basis we made something like 24 arrangements for new tariffs with other countries during the first 5 years of Roosevelt's administration. England stood twenty-fifth in the list of countries with which we dealt regarding tariffs.

In looking over the schedule between this country and England, signed in November, 1938, there are several considerations of more than passing interest. To begin with, the items of the schedule, nearly 400 in number, are reduced from 50 per cent down to 5, 2, or 1 per cent. Probably the average reduction would be down to not far from 35 per cent. However, it would be a difficult job to make an estimate of an average reduction. The most noticeable feature is that nothing was reduced over 50 per cent. Complying with this arrangement the administrative authorities cut no tariffs more than 50 per cent, although they reached this point oftener than any other, making 122 reductions of 50 per cent. Many of these tariffs were not of much apparent importance. On the other hand there were four items in the schedule of important size, amounting in the aggregate to $4,823,000, on which the tariff was lowered 50 per cent. One of these was wool rags, lowered from 18 to 9 cents; another was codfish, lowered from ¾ to ⅜ cent; a third was netting made of finely woven fabric, lowered from 90 to 45 per cent; the last, and somewhat the largest, was on books, lowered from 15 to 7½ per cent.

In general, English imports to America were low at the time of the tariff revision, after which trade was greatly interfered with by the war. For this reason it is difficult to arrive at a conclusion respecting the result of the lowering of the tariff. In all reason it would have made a great difference in international trade had things been normal. They have, however, been so abnormal that no very certain conclusion can yet be drawn from the new arrangements without much study of the facts pertaining to the trades made. It is, however, to be hoped that, when we

get back to some sort of normalcy, trading will be on a freer basis than has for some years characterized the relations of international exchange.

SWITZERLAND

Of the many countries harmed by our Smoot-Hawley Act, probably little Switzerland was damaged as much as any. Switzerland has for many years been one of the leading watchmaking countries of the world. Their watches are, for the most part, made in small shops, often located within the homes of the workers. It so happened that for some years they had been making an unusual number of cheap, six-jewel watches, not really good instruments, which had been selling for $1.41 to $1.68. There were other Swiss watches selling for decidedly more, but not in such large numbers that they would be greatly hurt by a rise in the tariff. It was unfortunate for many Swiss that they had turned their attention so strongly to the very cheap watches. No one cared to pay $3 or $4 duty on a watch selling at the lowest figure—making the tariff 250 or more per cent.

Great Excitement over the Tariff. The Swiss were much excited over our new tariff. They held many meetings and made speeches. Their own sales abroad had fallen greatly. But this was in 1931 and 1932, which means that substantially around the world all manner of sales were down. While the lessened sales were general, however, hitting all countries, exports of Swiss goods to the United States were down more than half, while from other countries they were down a scant third.

The Swiss had lost the best part of their American watch trade, almost without knowing either how it happened or that it had happened. For years, principally during the twenties, following the war, it had been easy to sell rather cheap watches in America. The Swiss were able to make cheap watches as well as better ones. The tariff rates were rather low, 75 cents and $2 on the works of the two lowest grades. Also unassembled works for watches came at a low figure. American dealers found it comparatively easy to buy these cheaper works, assembled and not assembled, and with low rates on the 15-jewel works and still lower on the 6-jewel, to put them into cheap American-made cases and sell them in competition with homemade watches. After this sort of trade had reached considerable proportions, it was rather natural for our American makers of watches to feel that they might as well sell their own cheap makes as to deal in imported works not appreciably better. Thus did we decide to raise the tariffs on Swiss watchworks. For one thing we had learned how to imitate Swiss watches more closely than we had previously been doing. Besides, a 6-jewel watch is not hard to match. It is a poor watch at best.

So what happened was that the Americans for some years bought many very cheap Swiss watches. Following this, the Swiss watchmakers saw that their trade was slipping down to a low level and that the Americans could successfully imitate their cheap parts. Thus the wiser of the Swiss saw that it was time for them to turn from the very cheap to the better, more expensive watches. But before this could be done they were caught by the Smoot-Hawley tariff act. In 1929 three-quarters of the Swiss watch trade in America was in the form of imported finished works and parts, which commanded little tariff and were sold to people who did not care about quality. The choice, carefully made, meant that durable Swiss watches made in Switzerland and sold as such gradually were lost to the trade.

Switzerland and the Tariff Act of 1930. The most important tariff against the Swiss was that on timepieces. In this act we charged them not to exceed $4.50 per watch as a cash duty, but immediately increased the rate by 65 per cent—to something like $7.50. Thus on a $10 watch the total duty was $12, while on a $20 watch it was $17.50. On high-priced watches the charge was prohibitive. Against these charges the Swiss became furious. They had been paying what seemed to them high tariffs. Now they were required to pay more than the transactions would stand. Many tariffs were, under the Smoot-Hawley Act, more than 200 per cent.

The Swiss could not pay these tariffs and at once put up a great protest. If they had relied more, as they had done back before the tariff passed in 1922, on the very choice, distinctive watches that had always sold well in America, no one would have taken their trade away from them. But they competed against us along a line that was easily vulnerable. With just a little raising of prices we could turn out probably nearly as good and fully as stylish cheap watches as they. They had competed against us along a line on which we were wonderfully efficient and on which they themselves had been nearly reduced to the point where they could no longer make a living.

Swiss Reaction. For a time the Swiss watchmakers induced many sellers of automobiles to drop us from the list and put in German or French machines. But this could not last long. Our cars were too good, and the others were not sufficiently below us in price. Switzerland did not feel the importance of her trade to the United States. She had but four million people; we had over twenty-five times as many. Our per capita wealth was greater than theirs. They hardly had a trump card in their hands. Sympathy for them was strong in many countries. But playing to win on low cards was a mistake on their part.

A Tariff War. Switzerland could not harm us much. Even though we should lose all her trade, it would not be a great item. But our tariff had not offended merely Switzerland. It had offended something over 30 nations to the extent of causing them to issue verbal remonstrances. Many of these nations passed tariff acts, several of the leading ones raising their own acts to 60, 100, and more per cent on wheat, and with other items very high. These acts were passed early in the thirties. The acts applied not only to us but to every other nation. Therefore, the accommodating measures passed respecting Switzerland's relations to other nations were soon at an end. The special arrangements made between her and her neighbors were soon crossed off the books, and Switzerland, like all other nations, was soon bargaining respecting the exchange of goods in whatever manner appeared to be advantageous to herself, with the result that her grievance appeared like a single item among a multitude of others more or less like it. Switzerland gained little by fighting us, probably largely because she was too little to strike a hard blow.

Reciprocity Dealings. The Roosevelt Administration made a new bargain with Switzerland about three years after coming into power. During this three-year period the amount of our trade with Switzerland was low. Of course trade with all countries was low, but no nation was out of patience with us more than Switzerland. On Feb. 15, 1936, a new basis of trade was adopted. In general terms this arranged for a very distinct lowering of American tariffs as provided for in the Smoot-Hawley tariff act. The rates were not lowered 50 per cent on all goods, but on many this was the amount; on others the rate was brought down appreciably, as from 3 to 2 cents, from 15 to 9 cents, or from 50 to 35 per cent.

No sooner was the change made known than trade was resumed. It is not easy to change instantly from one line of trade to another. For a year or two the new arrangement may not have looked too hopeful; yet by 1940, when it had had a four-year trial, trade was substantially restored. The purchase of watches was hit rather harder than any other line between the two countries by the passage of the Smoot-Hawley act. In fact little was left of the market for Swiss watches in America.[3]

In summary it may be said that the Swiss did not seem to realize that their strongest hold on the American watch trade lay in the high-grade product. They should at least have exerted themselves to hold their trade in the better watch, with distinctive gold cases, such as Americans have never made, at least not in quantity. In making the cheapest watch,

[3] See *Foreign Commerce and Navigation of the United States,* volumes for the years 1929 to 1940. Consult indexes.

they were competing against the great mass of machine-made watches, which could meet all their advances and could probably eventually outdo them. As it was, the Swiss lost their hold on the better sort of watch by turning their main attention to the cheap kinds, and in this part of the field they were clearly vulnerable. With our lower tariffs at present in vogue, there is hope that better quality may be worked into the fine grades of Swiss watches than appeared in their cheap output of 15 years ago.

TRADE AGREEMENTS WITH OTHER COUNTRIES

By the close of 1938 we had made trade agreements with about all the leading countries of Europe and South America, as well as with the leading countries of the rest of the world, covering most of the countries with which we had any considerable amount of trade.

We had made some important gains from the low point reached in 1932 to 1933 before making agreements with the various countries. However, if we wanted much trade with most of the countries of the world it was clearly our place to make a move in the direction of lower tariffs. We were not very quick to get around to direct proposals. It was a rather slow job to make our acts over in the way of reductions. This was true mainly because there was a strong feeling about treating all items alike. Some were to be reduced the full 50 per cent allowed; others not at all. Thus months went by between the time of beginning to study our tariffs as they stood and the rates to be adopted in their place.

We shall notice a few changes made in amounts shipped. We made some very good gains in exports from 1932 to 1940. However, they were mainly in manufactured goods, while in agricultural goods there was a distinct falling off in receipts in most countries of heavy shipments of American goods. Our agricultural goods held their own around the 50 per cent mark until about 1931. After that time they slipped down through 40 per cent in about a decade and then descended more rapidly until in 1940 they were but 8.8 per cent of all our exports.

Of course the rapid decline in agricultural exports from 1935 till 1944 was due mainly to the policy adopted in the middle of the thirties respecting agricultural prices. At that time such prices were low in Europe and it became the policy here to store up such crops as cotton, corn, and wheat and hold them for appreciably higher prices, which never came till the war brought them. Our ideas concerning proper prices for these products were at such a level that exportation was about out of the question for the three crops mentioned. The prices were set at a fairly high level and held there for the most part until the Second World War came

along and raised them still higher. Just what would have happened respecting storages and prices without the war can never be known, but at all events it would undoubtedly have fallen to the lot of the other political party to settle the matter.

That the Smoot-Hawley tariff was responsible for the unprecedented outbreak of European tariffs, higher than had ever before been known, is not to be proved or disproved, although it appears likely. It was lucky as well as inevitable that we should have a change of party government following the passage of the act of 1930. At the present time it hardly looks as though the modifications made in the tariff would in the near future call for a showdown in American political thought at all comparable to what took place in 1920 to 1922, 1929 and 1930, and again in 1932 to 1938. The chances are that even the Republicans may not in the near future again ask for such a violation of reason as they themselves used in the passage of the Smoot-Hawley Act.

Our prices should have been lowered after the First World War, because it was the time for us to receive produce from our friends across the waters and because we were destined to become a great trading nation, buying more than we sold. For a hundred years we had sold more than we bought. But the nation that is the creditor to other nations cannot hold these other nations up and make them pay a premium in order to start doing business.

It is now plain that if we had lowered our tariffs in 1930 instead of raising them, we might have created a different international relationship in the world. As it was, about all the other nations hated us because they owed us a considerable amount of money, and money was the only sort of medium in which we would let them pay. Probably the party in charge of the government did not understand that we could not hope to collect great sums of money, as such, from countries that had already parted with most of their gold and had no means of rapidly increasing their supplies of it. Neither did we comprehend the difficulties and the cost of taking care of our great surpluses of crops without selling them to someone outside the country. At first we encouraged farmers to build new corncribs for their corn. Then after the surplus reached a huge figure, the government decided that, since it was destined to own a lot of corn, it would be best to shell and store it in metal bins. The same sort of storage was provided for wheat. For a year or two these supplies increased greatly in size and would quite likely have proved very embarrassing to the government if the Second World War had not come, with its call for a great deal of the surplus grain, and made the control of output at least a little easier. The greatest cause of oversupplies of farm produce, be it remembered, was the loss of a foreign market, a loss

caused mainly by the discrepancy between our artificial prices and the low world prices that postwar circumstances had brought to pass.

To talk about our conservation of soil, learned under the New Deal, was trivial. We had indeed made a few splendid attempts at soil-conservation demonstrations, but the amount of soil carried to the Gulf by the Mississippi River had not shown any remarkable diminution, and the amount of produce grown upon the average farm had shown no change except where the quality of seed sown or planted had made a difference; but here we had seen remarkable, almost revolutionary changes. The new kind of corn grown by most corn growers in the corn belt increased the output by several, or perhaps many bushels per acre. The yields of corn per acre are reported for the period from 1941 to 1944 at over 30 bu. per acre, the highest being for 1942, when it stood at 35.2 bu. per acre. These years of high yields are not many. A careful study of the yields per acre for a considerable number of years, such as 40, seems to suggest, however, that the yield is up a few bushels. The reports show that the yields have increased the most in the best corn states, such as Iowa, Illinois, Indiana, Ohio, and Minnesota. In these states there has probably been greater care taken to hold yields at the highest point; the seed is probably at its best on much of the acreage; more fertilizer is used; greater care is expended on cultivation. No doubt there will be for years to come more attention paid to the increase of yields in these better sections than over the whole extent of the corn-growing area.

Increased production of farm products will mean that more export markets will be needed, which can be recaptured only by permitting a reduction of tariffs so that goods from foreign nations can come into the United States.

Summary. The real trouble with the Smoot-Hawley tariff was that it was passed by a creditor nation. This nation owned most of the gold of the world. Goods had for years been bought and sold mainly on the basis of the value of gold. Most differences in credits had for years been settled by payments made back and forth in gold. So long as the gold of the world was quite widely distributed and nearly every important nation was able to get enough gold to settle its own obligations, making payments as demanded by its creditors, it was a rather easy matter to keep accounts balanced. Now we are still doing business largely on a gold basis, even though the gold is difficult to obtain. It is obtainable, though not in every country.

Only part of the gold-standard theory is needed in the discussion of this part of the question now before us. Since we have most of the gold of the world, it is difficult to get hold of gold in other countries. Hence

payments to the people of the United States are a difficult matter, especially where cash is needed.

Another real trouble with the Smoot-Hawley tariff bill was that it was launched about the time prices began to fall and in fact when prices were already well down to what they had been for several years. Money was hard to get hold of, and in fact it was quite impossible to raise the amount of the tariff, something like 30 to a full 100 per cent of the original importing price. In other words, the tariff had made goods hard to obtain.

It must not be forgotten that in America, of all countries, it was hard to import goods against a tariff, because we were the people who had the main part of the world's gold stored away, and the people who were obliged in the first place to advance the tariff charges were poor and could not readily make the payment. Anyhow, the American people were not ready to pay the necessary amount required in the purchase of goods. It meant that in order to buy of Europeans we were obliged to pay an additional sum for goods that were not only low in price but likely to go still lower. Therefore, it was nothing short of a disaster to undertake to handle these higher prices at a time when prices in general were going to lower figures than had been known in centuries. Any new, higher tariff act was a hard matter to handle at a time such as this. People who were in debt were asked to pay up, and just as they were trying to do so we asked them to pay the price of their goods for getting them into the country. Often it was impossible for them to make this extra payment and have anything left for their produce at all.

Chapter 26

AGRICULTURE UNDER THE NEW DEAL

The election of 1932 carried American politics into new phases. Farmers were given such attention as they had never before received. This was by way of a sudden spurt in a process that had been going on from somewhere near the middle of the nineteenth century; before that time relations between farmers and industrial groups were not very clearly drawn. Appropriate issues had no doubt already come to the front in various states, but they were not clearly and constantly felt in the Middle West until after that time, while in the East farmers, having tolerably good markets near at hand, had no sense of the middle classes as working regularly and constantly against them. Soon after the Civil War farmers began to feel that their interests diverged from those of the industrial groups. But this feeling was not strong enough to determine how each group would vote.

Not until the decade following the First World War did farmers realize that they had problems of their own clamoring for attention. Many candidates for the Presidency had talked glibly about the farmers' interests but proposed nothing more important about the matter than a little more tariff, mainly on their exports. Glowing tributes to the farming class survived till 1924 and 1928 as grandiloquent paragraphs addressed to farm voters. Roosevelt's addresses in 1932 had an altogether different ring. For once a candidate was telling the farmers in the simplest possible terms that what they wanted and needed would be *done* if it were humanly possible. During the campaign of 1932 Roosevelt felt that to insure his election he must have the farmer vote. He did not, of course, know during his first campaign that he would carry, and no doubt was surprised to find the morning after the election that he had carried, all but six states. Unlike the usual candidate for the Presidency, Roosevelt at once began to execute his somewhat vague plans to redeem agriculture from its terrible condition. The first move was to approve

of the somewhat unusual choice of a committee, headed by Henry A. Wallace and M. L. Wilson, that went to work almost at once on the drafting of a bill for agricultural recovery. This committee brought before Congress the draft of what soon came to be known as the AAA bill. With relatively little debate in Congress it became a law on June 26, 1933, and almost at once the act was in operation.

Main Provisions of the AAA. Never had farm prices fallen to such a low point and remained low for so long as during the early thirties; farm products in general stood at about 50 per cent of the prewar average for several years, and exchange value in paying taxes and credit charges was even lower. It is certainly true that, taking the whole world into account, there has never been either enough food or enough clothing for all; yet there is enough so that people can live and do a moderate amount of work. As previously noted, it is not possible for people doing business in a part of the world where wages are fairly high and where goods in general are proportionally high-priced to sell such goods to people who live on rice or millet and wear clothes costing but a few dollars a year. Wheat has to fall greatly to bring the price of a loaf of bread down even 1 or 2 cents or to make flour cheap enough to effect any great difference in the annual cost of a year's living for great numbers of people. When prices on nine different foodstuffs, together with most raw materials, fell as they did from 1923 to 1933 from somewhere near 135 to 43 per cent, with 1929 prices taken as 100, while the quantity of stuff on hand, for the world, rose from about 70 to 140 per cent, the farmer was down and out.[1] With available stocks doubled and prices down nearly 70 per cent, it was evident that farmers were bankrupt or close to it. Under the new plan it was held by farmers that prices would always be fair because the highest point that it allowed farm products to reach was the same in relation to manufactured prices as existed in the base period, 1909 to 1914. One advantage that farmers had under this plan was the undoubted fact that during the base period farm goods had enjoyed the highest prices in many years.

Seven Commodities Provided For. At first it was apparently believed that, if we could succeed in the support of seven selected commodities, the rest would need no special help. They were wheat, cotton, corn, hogs, rice, tobacco, and milk. For a time these were declared to be the fundamental crops and products, but this notion was soon abandoned.

Cotton. For a few years after the First World War the quantity of cotton produced was low on account of the boll weevil. The world still wanted much of our cotton and bid high to get it. A few years later,

[1] U.S. Department of Agriculture, AAA, *Report from May, 1933, to February, 1934*, p. 2.

from 1922 to 1925 inclusive, we sold our cotton for 20 to 29 cents a pound. The weevil had reduced the output, and we were still the world's great producer of cotton. Then things began to change. Our yields were again heavy, and in 1933 we began to reduce the acreage in the interest of price. The rest of the world set to work raising cotton as never before. Quantity and quality were both up. Our general trade relations were not good. For these reasons instead of selling to the rest of the world from 7 to 9 million bales, we began about 1934 to export less. In the late thirties we sold smaller amounts, while during the forties we were selling a little over 1 million bales instead of 5 to 11 millions as during the preceding years. Our cotton trade was gone, and we peddled out, here and there, a paltry amount of cotton. Just about the time the foreign market failed us, we decided that our own people should be well paid for the cotton grown. The decision was made in 1936 that our 40 million cotton acreage should be reduced to 30 million.

The Corn Belt. About 75 per cent of the hogs commercially slaughtered in the United States originate in the Middle West. Roughly they are found west from the middle of Ohio to the middle of Nebraska and in southeastern South Dakota, southwestern Minnesota, about all of Iowa, and to the east; then, beginning on the south side in northeastern Kansas, they run to the north of the Ozark Mountains back to south central Ohio. In the Middle Western states 65 per cent of the corn is grown. A considerable part of the grain-fed cattle, hogs, sheep, chickens, and dairy cattle is found in the corn belt.

The best soil of the entire country is in this section and, although the original fertility is somewhat depleted, the application of additional fertilizer, usually in small amounts per acre, has made the yield of corn, oats, and hay higher now than when the soil was at its best. It will of course cost somewhat more to grow the best of crops than it did to grow the ordinary ones of 25 to 50 years ago.

Wheat and Other Small-grains Regions. The principal wheat regions are found as follows: winter wheat, centered in Kansas, but reaching rather far to the southwest into Oklahoma, Texas, southeastern Colorado, and northeastern New Mexico, also north into Nebraska; spring wheat, mostly in Minnesota, North and South Dakota, and Montana; soft winter wheat, in the Far West, including parts of Washington, Idaho, and Oregon. In these three great districts we produce most of the wheat grown in the United States. A considerable quantity is also grown in Illinois, Indiana, and farther east, but the people who produce this wheat are not primarily wheatgrowers. They are corngrowers to a greater degree and grow wheat in addition because it seems to pay better than oats. In the places where wheat is grown extensively, the land is rela-

tively smooth and the climate in general fairly or quite dry. The result is that farms have been getting bigger and bigger, and the machinery used is adapted to very large farms.

The Dairy Business. The region of this industry is rather extensive, reaching across all the states bordering on the Great Lakes and New England. It is a region where rain is copious, the surface of the land is broken by lakes and hills, and grass is one of the greatest and best of crops. In the eastern group of these states and also largely in the middle part of the Middle West liquid milk is a leading farm product. Farther west butter predominates, while cheese is produced heavily in Wisconsin.

THE AAA OF 1936 AND 1938

On Mar. 20, 1936, the Secretary of Agriculture signed a bulletin putting the new Congressional act into effect in each of five regional divisions. Congress had voted to provide 470 million dollars for carrying out the program that was voted. Provision was made for considerable variation of the regular program in order to meet the difficulties caused by the 1936 drought. A great point was payment of a dollar per acre for "soil-building" practices, the amount to be determined by the recommendations of a state committee and the approval of the Secretary of Agriculture. This might run to any reasonable payment per acre. The more usual payment was made to farmers who reported the amount of land put into "soil-building" crops for which a dollar per acre was paid. The soil-conserving payments were at higher rates, averaging $10 per acre and applied to not over 15 per cent of each farm on which they were paid. On cotton farms a payment of 5 cents per pound was made, reckoned on the "normal" yield per acre, and might cover 35 per cent of the whole farm acreage. Similar payments were made for acres of tobacco up to 30 per cent of the base allowed. Tobacco payments were from 3 to 5 cents per pound.

Results of the 1936 Program. Just over two-thirds of the cropland of the United States was covered by the New Deal program. Soil-building practices were attempted on more than 53 million acres of land. Although on account of drought much new seeding failed, it was attempted on 34 million acres of land, mainly seeded to legumes. Seven and a half million acres of green manure seedings were made, and more chemical fertilizers were sold than ever before. Farmers had apparently done their best in connection with these programs put out by the government. They had the most tangible reasons for complying. In the first place they were paid in cash more than it cost them to do what was suggested. Furthermore there were advantages in crop returns likely to come from complying.

In the corn belt 62 per cent of the cropland was helped by applications for grants under the new arrangements. Nearly all diversions of land from former uses to new uses were taken from a soil-depleting base and presumably used in a manner that meant more careful operations with the soil, while 15 per cent of the payments made were for actual soil building. In the wheat region 73 per cent of the cropland was brought into the program, a large part of which was diverted from soil-depleting uses. Likewise, within the dairy region much land was rescued from soil depletion.[2]

Exports. Throughout the thirties our wheat exports were down to insignificant figures; they ran for the most part at something like 25 to 40 million bushels per year. We would have noticed no difference if wheat exportation had ceased altogether. Meat exports were extremely low, and at the same time consumption of meat was low. It appears to require rather high wages to induce a consumption of a high or even of the usual quantity of meat. During the two years before the depression our excess of agricultural exports over imports was just more than 700 million dollars per year. During the thirties the excess was down to 200 million, peddled here and there at low prices. Our exports amounted to but little during the period, while our surpluses grew ever greater.

AAA of 1938.[3] Owing no doubt primarily to the experiences of 1934 and 1936 the Secretary of Agriculture proposed what came to be looked upon as the leading section of the 1938 act—the Ever-normal Granary program. The main novelty involved in this act provided for the control of surpluses in product and likewise for a Federal crop-insurance program for wheat. All payments amounting to less than $200 were scaled upward, while, beginning in 1939, no one might receive a payment greater than $10,000.

Ever-normal Granary Provision. This plan is quite easy to understand, so far as mere statement of the general principles is concerned. The intention was to hold over from every year that showed a surplus a stated amount of produce of each of the four leading crops of cotton, corn, wheat, and rice; from this quantity there were to be provided, if possible, amounts for domestic, export, and reserve needs. To come out even on these different demands it would be necessary to designate each year the acreages that would presumably provide the required yields. As matters were handled during the few years while the plan was in operation, the yields were more than ample. Of cotton we had a full

[2] *Agricultural Conservation, 1936,* U.S. Department of Agriculture. Consult table of contents and index.

[3] There was an act passed in 1937, but it was not outstanding (approved June 3, 1937).

year's supply on hand; of wheat we had the biggest quantities ever known, while of corn the yields were the heaviest ever known. Thus the ever-normal granary was full to the brim almost as soon as it was established, and how to take care of the overplus was beyond every man's guess. Recent world demands for wheat have reduced the surplus appreciably. The large amounts of meat, milk, and eggs that were wanted have kept the surplus pretty well down. The fact is that wartime demands for most of these simple products took care of the surpluses pretty well.

Even all the added demands for cotton, however, have failed to take care of the surplus. How are we ever to dispose of it? Recent methods of growing cotton have made it possible to produce a crop, under the most favorable circumstances, at not more than half the expense required 25 years ago. It looks now as though eventually the poorer producers will be unable to live on what they can raise, while the good producers on the good land will furnish us with all the cotton we can possibly use.

Need for the Ever-normal Granary. No one can doubt the wisdom of Joseph in providing the granaries out of which his people might live during the dry years; but remember that transportation facilities then were poor, the donkey carried a trifling load, and not too many neighbors had grain to spare. Now with boats that make the trip to Australia, Argentina, or South Africa and back in a few weeks and bring back, if necessary, around a million bushels of wheat, it hardly looks as though, in a world literally filled with surplus wheat, we as a trading nation should go hungry. Buying wheat, should we need it, will make a market for our machinery, steel rails, or any of the scores of our manufactures. Only once in many years, for a three-year period, were we short of wheat at all; this was in 1934 to 1936, and then we were hardly short to the extent of going hungry without importations. We might have got along very comfortably on our own wheat, though we preferred to buy a little high-grade wheat in order to make the exact kind of bread we liked best. If we start the plan of storing up quantities of wheat at times when we have something like a surplus, it is certain that our worries will not cease. No doubt the intention is to pay for the surplus and hold it till such time as we shall need it. On the other hand the prospect of really needing it is quite remote. In the worst, driest years we have had in a century we raised almost enough wheat for our own use. Even in 1934 to 1936 our wheat prices were up to $1 but one year, and for two other years of short wheat the prices were 84 and 85 cents. During the worst period in at least two generations we were never really short of a reasonable amount of wheat for a day. If we had been a little more careful and fed a bit less of the wheat to sheep, chickens, and other animals, we would have had plenty

of wheat for the American people even in our shortest year. The chances are that the distress will be much greater over the many years that we shall have too much wheat rather than during the few years when we may be a little short. The purchase of a few million bushels of wheat when our weather is a little too dry is not alarming; we can easily find it in the market, and we can easily buy it and bring it home.

Farmers and Prosperity. Time after time the AAA group argued at length that farmers must prosper if the whole population in general were to prosper. This is not wholly true. For example, in England the farmer group was not nearly so prosperous as the manufacturing group. In Germany the same condition was to be found. Prosperity was at a distinctly higher level in the city than among the farmer group. As a matter of fact the level of prosperity has been higher in our own cities than in the country. Of course it would require hundreds of pages to handle this subject fully and properly. A large part of our city population is desperately poor, and we have great numbers of farm people who have almost nothing. It is silly, however, to pretend that the country people enjoy any such prosperity as the upper quarter of the city people. The farmer, true enough, furnishes the bulk of the food and clothing material for the whole population. He does not do this in order to fulfill a duty to the city population. It is his only means of making a living. The farmer never gives a thought to what becomes of his wheat or his hogs. The wheat may be made into whisky; the hogs may be exported; or both may be consumed by friends in his home country. The farmer feels no moral obligation to produce either cotton or corn, though no doubt he did have some sense of a mission when he produced foodstuff and wool around Boston in 1621 or 1630.[4]

Résumé. The first reports put out by the AAA are about 400 pages long; the last is down to 40. Even so the triple A is still at work. Probably the amounts paid to farmers by this organization are a much less impressive part of the income of recent years than they were back at the period of the smallest incomes of recent times, in the early thirties. The greatest income to farmers was for the year ending June 30, 1944, when it was over 12 billion dollars. Of this amount the government was still paying 715 million dollars by way of subsidies.[5] The AAA pays over 385 million dollars as a bonus on milk production. This is more than the sum of all other payments by the government to farmers. Even so the AAA is still paying about 286 million dollars under production, conservation, and parity headings. Probably the interest of farmers in such projects is a little less keen at times when crops are the heaviest and

[4] U.S. Department of Agriculture, AAA, *Report for 1938–1939*, pp. 1–5.

[5] *Crops and Markets*, Department of Agriculture, October, 1945, p. 175.

prices about the highest ever known. It may be hoped, however, that concern for soil conservation has been so deeply implanted in farmers' minds that it will be a permanent asset to the nation.

The income for 1945 was a little higher than for 1944, about two-thirds of a billion dollars; for 1946 the gross income was $27,300,000,000, while the net income was tentatively set at $14,800,000,000.

Chapter 27

THE GRANGE

Founding. The Grange was started by O. H. Kelley. Born in Boston in 1826, Kelley in his young manhood tried various jobs—clerking in a drugstore, reporting for the *Chicago Tribune*, and telegraphy—before he went to Itaska, Minn., and settled on a farm. Not doing too well as a farmer either, he went to Washington and got a job as a clerk in the Department of Agriculture. In January, 1866, Kelley started on a trip to the Southern states to find out for the Department of Agriculture the condition of the Southern farmer. He traveled a few months down through Virginia and as far as Mississippi. President Johnson took great interest in the trip. Kelley must have made a report to the Department or possibly to the President, but it has never been found. The significance of his trip was quite different from what had been intended. While in the South he visited the farm people and soon discovered that in his membership in the Masonic order he had a bond with the Masons of the South. In Mississippi he was asked by a planter to come to the home of a gentleman whom he had happened to meet casually. At the home where they stopped, the farmer said to Kelley: "I want you to come in and stay with us tonight, but before you enter the house let me say to you that someone in a company of Union soldiers shot and killed my father sitting on this porch. But you are a Mason. Come on in." This so impressed Kelley that he made up his mind to try to start a movement that would have as its object the uniting of North and South in some sort of brotherhood. Kelley returned to Washington in April. Then he went to Boston in order to visit a niece to whom he had written about a new organization of farmers. She answered at once, giving him great encouragement, but asked why he did not include women in the proposed group, since they needed such a society even more than men did. The suggestion appealed to him strongly, and he regarded the inclusion of women as settled from the moment it was suggested. Kelley spent

the summer of 1866 on his Minnesota farm, but he returned to Washington in November and, getting a job in the Post Office, worked there for about two years.

The names applied to the organization were, primarily, Patrons of Husbandry for the whole body of members and Grange for the local group. The former name was chosen by Kelley and Anson Bartlett of Ohio. The local name, Grange, Kelley encountered as a book title. It was exactly what he wanted, and it was adopted without debate. The work of the Grange was divided into seven degrees, which are still in use. During the fall of 1867 Kelley and six assistants worked up in rough form the outline of what later became the constitution and bylaws of the organization. Kelley resigned his job with the Post Office and with $2.50 of borrowed money in his pocket started out on Apr. 3, 1868, to organize Granges. For some reason he tried to do this in small cities rather than actually among farmers. For example, he attempted to organize a Grange in Madison, Wis. Actually he organized only one Grange, at Fredonia, N. Y., before reaching his home in Minnesota in debt to the tune of $15. He had collected a $15 organization fee in a very small number of instances, but with the one exception mentioned no Granges developed. At Madison he borrowed $15 from the master of the Masonic lodge to pay his way home. The first Western Grange was organized in Iowa on Apr. 15, and the $15 fee was sent to Kelley. Just how this Grange was started nobody seems to know, but the fee furnished Kelley the means of paying his Madison debt.

Organizing the farmers of Minnesota did get under way at once, but by the next February 11, local Granges had been started, and representatives from these groups got together in February and organized the first state Grange. Kelley now made a trip to Washington, and the second annual meeting of the National Grange was held. The members in Washington had had some printing done; they owed a little money for rent and had no funds. Kelley, out of some $200, had managed to pay for a trip to Washington, clear up the Washington bills, and get back to Minnesota—with no money. His annual salary was now $2,000 on which nothing was paid, and his nicce, Carrie A. Hall of Boston, was hired at $600 yearly.

The Situation, 1868 to 1871. It will be remembered that the Grange was founded primarily as a social and educational body. In Minnesota sentiment set along other lines. Kelley wrote to a friend in Washington on Mar. 1, 1869, that the Minnesota Grange had suggested having the different subordinate Granges lease flour mills, grind wheat, and send the flour, through an agent at St. Paul, to Eastern buyers. This, they thought, would leave the bran, shorts, and such for feed in the hands of Minnesota

farmers. Just how this looked to Kelley is not stated, but it looked pretty serious to his Washington correspondent, who doubted the wisdom of such action on the basis of such small organizations as the Granges.

Even without the active support of Kelley, the Minnesota State Grange as early as 1869, with not more than 11 subordinate Granges, had made up its mind to go into business. They started a monthly paper. At the end of the year they had in the whole country about 50 Granges, 40 of which were in Minnesota. In January, 1870, the third meeting of the National Grange was held in Washington with seven members present. During 1870 matters still moved slowly. At the end of that year there were altogether 71 Granges, 47 of them in Minnesota. Iowa had 11, and other states 7, with 1 to 3 each. These 71 Granges were the result of three years of hard work by Kelley, his secretary, and a few friends. Kelley now moved to Washington again.

The annual meeting, held in January, 1871, which should really have been the fourth meeting, was a failure.[1] Five members were present, and almost nothing was done. At a later meeting, held on January 25, there were four members present, including the treasurer, who delivered his resignation. One member gave a talk, disagreeing in the main with the views and acts of the secretary. The chairman said nothing, and the meeting adjourned. Thus the fourth annual meeting was hardly a meeting at all.

During 1871, 130 new Granges were added, making about 168 all told. It must be admitted in national matters the Grange was at a low ebb at the beginning of 1871. Following this meeting, Kelley was left pretty much to his own devices, with his new converts among the state organizations as his helpers. The seven members in Washington and its vicinity, six besides himself, were doing almost nothing.

The Grange in 1872. Over 1,000 Granges had been organized by the close of 1872, with 652 in the state of Iowa. Probably mainly because the movement against railroads had made so much progress in Illinois from 1869 to 1871 and because farmers were already organized with so many clubs, the Grange was never so strong in Illinois as in several other Middle Western states. It did reach a goodly number in the years of highest membership. The first real National Grange meeting was held in January, 1873. At this meeting, held at Kelley's home, there were present 23 men and 4 women. This meeting was called the sixth annual

[1] The birthday of the Grange is usually given as Dec. 4, 1867. However, a meeting on Jan. 7, 1868, is usually viewed as the first session of the National Grange. The first real delegate meeting was held in January, 1873. This was called the sixth meeting. The former meetings had been held, but were mostly attended by the founders, with as few as four or five members present.

meeting; in a sense it was the first. The preceding year, at Washington, the first meeting with a state official present was held, but he met with but five of the Washington group. A fairly full constitution for the first time was adopted. The organization was really organized.

Real Growth Begins. It was with the coming of 1873 that real growth began. Over 10,000 new Granges were added in that year, and in 1874 nearly as many more. The greatest number reached was near the beginning of 1875 when the organization had nearly 22,000 Granges. This meant that the Grange, near the close of 1875, had a membership of about 858,000.[2] From this number it went down rapidly, reaching the lowest point in 1889, when only 107,000 members were reported. In recent years the membership is a little higher than ever before.

Grange Agencies. Apparently not one Washington member of the Grange was ready to agree with Kelley that it was wise to accept the views of the new Minnesota members about going into buying and selling. It does not seem to have been Kelley's view at first, but where he found this thought so prominent in the minds of the farmers he was soon willing to modify his own notions to fit with theirs.

Minnesota Organization. When the local Granges in Minnesota numbered only about a dozen, a plan for organizing a state Grange was circulated. This was done in February, 1869, with 11 locals. At the meeting of the state Grange it was suggested that the subordinate Granges lease flour mills, grind their wheat, and ship the flour through agents of the Grange located at St. Paul and New York. The Grange group at Washington, sometimes called the National Grange even at that date, failed to approve of the plan. Nevertheless, the Minnesota organization, the state Grange, proceeded to appoint a state agent whose main duty should be the buying of farm supplies and farm implements. Kelley had been about won over to the approval of this venture, but the group in the East were not favorable. The fact is there was not much that Kelley could do but accept the Western view. The people of the West were just about unanimous in this matter. Kelley wrote to one of the founders: "Some of them say if they can't do as they please, and thus protect themselves against being swindled by the middlemen, they will withdraw from the organization in a body and run it on their own hook. I told them to go ahead."[3]

Farm Sizes. If the Grange had persisted in its first view that the main purpose of the new organization was the uplift of the intellect and the improvement of social relations among farmers, there would have been

[2] T. C. Atkeson, *The Semi-centennial History of the Patrons of Husbandry*, p. 359. The number had been given below this figure by other writers.

[3] *Ibid.*, p. 32.

at that time but little interest in it. Before the war there were many farmers who sold little and bought little, with no complaint. They owned only small pieces of land. In the Northern states the prevailing size was, in state after state, a mere 20 to 50 acres, which meant that a 40-acre tract was the one most frequently held. Twenty years later the commonest size in most states was from 100 to 500 acres. This particular size, 100 to 500 acres, comprised too big a class to mean much; yet it does at least show that the common size of farm had doubled. The average-sized farms in 1880 were: in Iowa, 134 acres; Minnesota, 145 acres; Kansas, 155 acres. Not far from half of these areas were cultivated. Thus the farms were not very large.

The families on these average-sized farms were buying a greater quantity of goods and were obliged to sell more produce in order to buy what they wanted. This meant that when their selling prices were rather close to the zero mark the family was in bad shape financially. That change occurred in the West especially.

The farmers of the West after the fall of prices in the early seventies were desperate. They could not pay for the land they had bought on time. They could not pay for the implements needed, the dry goods and groceries required from month to month. Thus they were not deeply interested in the cultural matters put forward as the main purpose of the Grange. What they wanted was one thing—a better price for their produce.

Thus these farmers, living as they were in small houses, poorly furnished, poorly heated, with bills facing them whenever they went to town and bigger bills to pay at least once a year—all of which made them anxious about the security of their homes—could hardly be talked to about the need of more reading matter or better playgrounds for children. For these reasons the farmers of Ohio, Illinois, Iowa, Nebraska, and states both north and south were interested in the subject that dominated their minds before they ever heard of the Grange: How were they going to meet the obligations they had already incurred? When the Grange was presented to them at the beginning of the seventies, they were much interested in it, but their great hope was that the new organization would be a means of bringing material betterment.

Kelley was apparently quite won over to the Western point of view. About Apr. 1, 1870, he was writing: "The idea of discussion upon how to raise crops is stale. They all want some plan of work to oppose the *infernal monopolies.* This seems to be uppermost in the mind of every member I have conversed with."[4] Kelley had become convinced that

[4] Date of this letter is not given but must be near Apr. 1, 1870. See O. H. Kelley, *History of Patrons of Husbandry*, p. 242, Philadelphia, 1875.

the only way to build a large organization was to accept the views of the people of the Middle West about its nature. Kelley believed that the railroads were extremely powerful, that they were the real enemies of agriculture, and that the Grange was capable of doing something about it.

Discontent Among Farmers. Farmers are much more discontented when they are not prosperous. After the Civil War they were much worse off than before. For many years, nearly always so far as American farmers were concerned, great numbers had got along mainly on their own products and by their own work. From New England to the Mississippi River the pioneers for the most part took care of themselves. The majority lived in log houses for a generation or two. There were few parts of the country east of the river that were not covered with timber. This meant that there were usually plenty of logs with which to build a house and stable. But probably more important than this was the fact that it took several generations to clear the land and to grow crops on anything like the whole farm. Most farms, moreover, were small rather than large. These early families produced practically all their own living, which consisted primarily of small quantities of wheat and corn ground at a near-by mill and of a considerable list of other foods, fruits, potatoes, vegetables, dairy products, meats, eggs, and the like, which could be produced on very few acres. Their simple clothing consisted mainly of woolen articles made from their own wool and from calico and muslin for which they traded at the store. Money played a small part in their lives; they had but a small investment in land. Their yearly household affairs required little cash. They bought little and sold little.

A considerable proportion of people had always been located where markets were better. These were the ones near the cities and towns. Some of them could sell to customers in other countries. Grain was exported, as well as meat, tobacco, and cotton, almost as soon as America was settled. Exports were always small, however, except of tobacco and cotton, until after the Civil War. When the Western prairies were settled, life was different. The Iowa farmer could not keep a few dozen sheep at all easily while trying to farm 160 acres of land. He lacked fences; dogs got into his little flocks and ruined them. He had so much field work to do that he could not put in as much time as formerly with what fruit he raised. His wife had to do most of the gardening, and the work was skimped as it had not been before. The farm had cost more than it would have farther east. Interest rates were high and it took a good deal of cash to keep the family and the farm going. His wheat crops were often a disappointment. Summers were hot, and again

and again the wheat blighted. Instead of a harvest of 20 bu. per acre as he had hoped, the usual amount was around 10 bu.; if the quality had been good, it would have been tolerable, but the quality was prevailingly poor. The fields soon got weedy, and dockage took a good bite out of income. Iowa was never a great wheat state; she ranked second after Illinois in 1869, but she went down rapidly from that time on. Wheat-growers of Iowa were strong for the Grange; they were poor and full of grievances. Having much freight to pay on their wheat, they felt that it was they, the farmers, who lost the extra dime that the railroads demanded for carrying the wheat to market.[5]

Farmers' Troubles. Many farm grievances were quite specific and deep-seated before the Grange was organized. During the fifties and into the seventies Western farmers felt that they needed railroads more than anything else. During these years they subscribed for railroad stock, frequently borrowing the price of it at high interest rates. When the states west of Chicago were settled, the farmers felt that they had penetrated the West deeply. The Eastern states had been more slowly settled. Professor Turner estimated that settlement in general moved west but a mile or two a year. Thus the outermost settlers were usually only a day's drive beyond older settlements. As we reached the prairies and went faster into the wilderness, the railroad arrived at Chicago, with full connection with New York, in 1853.[6] In the latter part of the sixties, before the Grange had influenced such matters in the West, the farmers were undertaking to fight the railroads as well as to help them extend their lines.

THE RAILROADS AND THE GRANGE

Farmers vs. Railroads. The fight against the railroads began in Illinois in the late sixties. An act passed in 1869, preceding the appearance of the Grange in Illinois, proved ineffective. There were a large number of clubs in the state, very loosely held together, the purpose of which was to look out for the interests of the farm people in their relations to the railroads. The high prices of the Civil War period died out in the latter part of the sixties. The Chicago wheat price in 1868 and 1869 was from 63 to 96 cents, which meant that many farmers out in Iowa received not more than 40 to 75 cents a bushel. With small yields of wheat of poor quality, their incomes were pinched indeed. Many ar-

[5] The class might discuss whether the consumer had to pay more for wheat because the railroad asked too much for its service, or whether the wheat would be cheaper in the central market if the freight were less.

[6] E. R. Johnson and T. W. Van Meter, *Principles of Railroad Transportation*, Chap. III, D. Appleton-Century Company, Inc., New York, 1917.

ticles were falling fast in price, farmers' products probably more than anything else. During these years railroad charges did not drop but in many cases were raised. It was at least an unfortunate time to put freight rates up, and Illinois farmers were the first to remonstrate by way of legislation.

The Illinois act of 1869 was preceded by bills in the state legislature at every session beginning in 1861; one of them almost passed. The act of 1869 did nobody any good. It was defective in several important ways and as a result was not enforced at all. Illinois was not the first Grange state. The fact is the work later taken over by the Grange was rather well under way in Illinois for the greater part of a decade before the Grange arrived in the state. In 1870 the state revised its constitution, and in 1871 it passed the first state act for actual railroad regulation. By this time Illinois had a Grange and, although it was not a very big one, it was big enough to exert an influence on such an action as this.

Growth of the Middle West. Probably no other part of the world ever developed so fast as the central part of the United States. Everything appeared to be ready for growth following the Civil War. The armies were disbanded with great speed. Congress had passed the Homestead Act. The railroads, which were but halfway across Iowa, were to gather up money from our Eastern states and from Europe to make extensions across the prairies and to the Pacific. With such plows as we had been using it would have taken many years to subdue the prairies; we had had a breaking plow in 1837, but its real use came after the Civil War. When we got into the prairies in the late sixties and seventies, we had not only the breaking plow but the self-binder and the railroads. With these conveniences we were ready to feed ourselves and furnish Europe with grain such as she had never seen. But how could prices be kept up? The unprecedented outpouring of wheat, corn, cotton, cattle, hogs, and sheep meant that producers were destined to receive the lowest prices ever known for them.

No Granger appeared to understand the situation. It took so little capital, so little education, so little real ability to produce agricultural crops that it seemed as though anyone could do it. And this was too near the truth. We were destined to produce at desperately low prices all the farm products the world wanted, and our only periods of prosperity appeared to be the times of great wars, when prices automatically doubled. The only way discovered for half a century was more efficient production, which would always leave the best producer with at least appreciably more than his neighbors got, even though it was not very much.

Farm populations have always increased rapidly; so our farmers have

been able to keep their own numbers on the increase while at the same time they have contributed a stream of people moving from farm to city in almost every year since cities started to grow. The Grange has substantially always used its influence to keep boys interested in staying on the farm. It seems almost impossible to encourage a quarter to half of the young people to stay on the farm and the rest to go somewhere else. A large part of our young people, especially for the past half century, have been leaving the farm. We appear to be able to get along, get the work done, and hold our own with about as many acres and probably as much output as ever, even with fewer people to do the work.

The very rapid growth of the West began right after the Civil War. The majority of the people were farmers. When it came time to send most of a million men back home at the close of the war, we had little congestion in the older settled part of the country because of the situation to the West. Our soldiers had learned to sleep out of doors, especially in tents. The homestead law had been passed in 1862, but for three years few had been free to take advantage of it. During the closing years of the sixties and the early seventies great areas were homesteaded. Many thousands of miles of railroads were built. Many carpenters, blacksmiths, and storekeepers were required to do the work of the small towns and cities that grew up all over the great prairies. The result was that labor was relatively scarce in many of our Eastern cities, while great numbers of men were building railroads, equipping trains, and engaged in the hundreds of jobs that grew out of the settling of the West.

In the six West Central states there was from 1870 to 1880 an amount added to the farm acreage equal to more than one and two-thirds times the area of Iowa, while in the United States the added area was about three times the area of Missouri. Although there was a great increase in farm land for one more decade, 1880 to 1890, this figure—97 million acres—was much below the amount added within the Middle West alone the decade before.

The period of such unexampled expansion of farm acreage, especially the seventies, saw the Grange playing its big role. The main growth of the organization had been made during a very brief time. From early in 1873 till the end of 1874 something over 3,000 Granges expanded to 21,600. It seems a bit strange that in the parts of the country where the Grange was doing the most it went to pieces most rapidly. In the Middle West it made its first real start, organized its state Granges, and had by far its greatest number of members until October, 1875, when it still reported an increase in Granges and more members everywhere else, but lost in this section of the country. The loss was heavy, with a drop from more than 12,000 to little over 8,000 Granges.

Efforts of the Grange. Had the Grange attempted a more modest program, it would no doubt have held its ground more securely. Its big objectives were the following: (1) fighting the railroads, (2) establishing cooperation, (3) manufacturing farm implements.

A word has already been said about the attempt of the farmers to handle the railroad question in Illinois. The first act, as noted, failed to accomplish anything. In 1871 another act was passed, under which a case was carried through the courts. In 1872 a circuit court decision was handed down, declaring that the 1871 act was legal and enforceable and that the state had the right to prevent unjust discrimination in freight rates. The legislation passed in 1871 regulating railroad rates was remodeled in 1873. One great victory was won by the farmers in the act of 1871 in connection with warehouse charges. Under the designation, *Munn v. Illinois*, a decision was won, first in a lower court, for the plaintiff; it was next affirmed in the state Supreme Court and finally in the national Supreme Court. This decision, which has stood all these years, was handed down in 1876, the first of the well-known "Granger cases." It meant that all warehouses might be brought under public control in respect of rates.

Illinois Railroad Act of 1873. This is often called a Granger act, and possibly it was, although at that time the Grange of the state was not very large. As a matter of fact Illinois had probably about a quarter as many Granges as were reported in the state of Iowa in the early part of 1873. Although Illinois had very many farmers' clubs before the Grange was started there, it is no doubt true that the Grange did take a prominent part in the work of fighting the railroads there.[7] The farmers in 1871 were organized into a Legislative Farmers' Club. In 1873, under the title of the State Farmers' Association, they put their views into the hands of the legislature. It was probably after the passage of similar laws in other states that the Illinois railroad legislation was called a "Granger act." It was clearly an act of the same character and was handled largely by farmers, both before its passage and afterward.

The act of 1871 pertaining to railroads was declared to be unconstitutional, and therefore the legislature of 1873 undertook at once the passage of another act. This bill moved rather rapidly, and on May 2 of the same year it became law. This act has not been fundamentally changed thus far.

Iowa's Experience with Railroads. As early as 1866 the legislature of Iowa began attempts to legislate on the railroad question. No bill was made into a law until 1874. The Grange was at its height in Iowa in

[7] There were 830 "clubs" in the state in December, 1873. In May of that year there were 430 Granges reported in the state.

1874 and was still fairly strong the next year. There were 70 Granger farmers in the lower house in 1873, and 50 of them belonged to the Anti-Monopolist party. After about two months the legislature formulated and passed a bill, which was signed by the Governor on Mar. 23, 1874. This act remained in force four years. By that time the Grange power in Iowa was weakened. The new law provided for a railroad commission, but with little power. About all it could do was to look into a disputed case and make recommendations to the Governor and legislature. In 1888 the state provided a commission with power to act. Undoubtedly the Grange lost much real interest; yet under the law of 1888 the state has got along moderately well.

Legislation in Wisconsin. Wisconsin has been wise in one important particular. She had guarded against getting caught in any such manner as in the Dartmouth College case years before. There were bills in the legislature at every session beginning in 1864 to compel concessions from railroads about rates. In the fall of 1873 a body of men calling themselves the Reformers, with a very dynamic man, W. R. Taylor, as their candidate for governor, united with the Democrats and carried the election. They had a good majority in the lower house and tied in the senate. This was about the only year that the Grange was strong enough to cut any figure in the election, but about this time 446 Granges were reported within the state. This meant that the Grange was strong enough to exert considerable influence. Soon afterward the legislature got to work, and a joint committee presented a bill, which passed the lower house by a good vote. In the senate, however, the friends of the railroads proposed to substitute a bill named for a man from a county without a mile of railroad. It was said that he wrote this bill by first sending out letters to people over the state to ask what in their opinion should be done to control the railroads; then, taking the most extreme proposals on each of many points, he concocted the so-called Potter Bill. It is reported that this bill was chosen by the railroad interests because they thought it was sufficiently absurd so that it probably would not pass the assembly, or if it should, then the courts would at once destroy it. The house and senate each passed it by a good majority. It went to the state Supreme Court rather promptly and was declared constitutional.

A railroad commission was appointed the same year. The railroads claimed that all they could do under this act would be to lose money. However, it must be remembered that the middle seventies were bad years for all railroads. The Wisconsin railroads made a great to-do over the fact that they built no railroad from 1874 to 1876. The fact is that little road was built anywhere in the country during those years. Indeed

very little road was built between 1873 and 1878, less than 10,000 miles.[8] The two leading railroad companies doing business in Wisconsin refused to submit to the new law. This led to a suit that was decided against the railroads. The case was at once appealed to the United States Supreme Court. The court was so slow that its decision was not handed down till several months after the law had finally been repealed. Meanwhile, however, in September, 1874, the Supreme Court of Wisconsin declared the act legal, and from that time on the roads submitted. Thus within something like half a year the law was fairly well obeyed. Not a railroad in Wisconsin, during the time this law was in effect, paid dividends, and few of them paid interest on bonds. Many railroads in other states paid very little on either of these accounts during some years following the collapse of 1873, and the Wisconsin act came right at this time. Slack business was reason enough for nonpayment. The railroads, looking ahead for some years, were apparently happy to let it be known that they could not pay, since this would pretty generally be looked on as the result of the Granger acts. It is probably true that the Potter law was the direct cause of the complete stoppage of railroad building in Wisconsin. By the next election year the Grange had lost its great hold on Wisconsin politics. The people of the state were losing interest in the whole affair, and the result was that the legislature repealed the Potter law and put nothing of any importance in its place. The railroads had given up the idea of higher rates, and therefore the repeal of the law had less effect than had been expected. The Potter law had had some effect on the attitude of railroads and likewise on their fares and rates. But it was about the end of the century before the state again tried to handle the railroads.

Other Railroad Acts. We have noticed the acts passed by the first four states or at least the first four of importance. Yet railroad acts similar in character were passed in practically all the states of the nation. Such legislation ran over into the decade of the eighties. The four states noticed were clearly the most aggressive, and the first to get cases passed on by the Supreme Court. These were all prominent Granger states, and the Grange was active in carrying the legislation through. Whether or not the Grange was influential in all the other states is not so easy to discover. It was of real importance in many of them, not in all. But the laws of the leading four very properly gave the name of "Granger legislation" to the main group. The same general type of legislation has been passed by all states.

The decisions of the court carried the following views concerning the rights of the state over corporations:

[8] Johnson and Van Meter, *op. cit.*, p. 31.

1. Under the police power a state may regulate to the extent of fixing maximum charges any business that is public in its nature or has been "clothed with a public interest."

2. The warehouse business (as in Chicago) and the business of operating a railroad are sufficiently of a public nature to be subject to such regulation by the state.

3. At least until Congress acts in the premises, a state may regulate interstate commerce so far as its citizens are affected.

4. Although a railroad charter is a contract, it does not interfere with the right of a state to regulate charges unless it contains a direct stipulation to that effect, and the charters are subject to reservations contained in the general laws under which they are obtained or in the state constitutions.

5. The courts are not competent to review the question of the reasonableness of charges fixed by the legislature; in other words the power of the state to regulate rates is subject to no restraint by the courts. Numbers three and five of the above have been set aside by subsequent decisions, but the other three counts still hold.[9]

Two Means of Rate Relief. Many had a great deal of faith in canals and other waterways for the shipment of heavy freight, for it cost little more than half as much to ship wheat east by water as by rail. For example, although the canals were in operation but little over seven months a year, it cost but 51 per cent as much to ship wheat this way as by railroad.[10] In 1869 it was reported that wheat was selling in New York for $1.20 to $1.25 a bushel after it had been sold for 50 cents, presumably in Iowa and Minnesota. Thus the Minnesota growers would get less than half as much as was paid for the same grain a little later in New York. Worse yet, this grain was shipped over roads that the people had helped to build through land grants and subscriptions.[11]

The second means of holding the privately owned railroads down in the minds of Congressmen from the Middle West was as early as 1873 the proposal to build a railroad, probably double tracked, from New York City to Omaha. This road was to be and to remain the property of the United States. The Continental Railway Company was projected in 1872 and was really started. It had located and surveyed 450 miles of road, had built bridges, and had secured a right of way for 900 miles. For a time it appeared that Congress was quite ready to see the road

[9] See S. J. Buck, *The Granger Movement*, pp. 211ff, Harvard University Press, Cambridge, Mass., 1913.

[10] Lewis Henry Haney, *The Congressional History of Railways in the United States, 1850–1878*, p. 248.

[11] *Ibid.*

built, the government to become the owner. During the second year of this project Congress' interest lapsed, and the scheme came to an end. A little more interest in the project, and we should have had a government-owned railroad over 1,200 miles long, projected with the intention of furnishing facilities for getting farm produce across the country at cost.

Lessons from the Grange. Out of the Grange experience with the railroads we learned that they are semipublic organizations that must submit to the rules laid down for them. The railroads were about half a century old before the government was ready to pass an act under which they could be controlled. The questions that first came up were such as the right of a railroad incorporated in one state to do business outside the state. The Grange always taught that the railroads must of necessity be controlled by the state, and Grangers came to see that the country as a whole was the only power that could say the last word.

End of the Granger Railroad Acts. It must be admitted that they came to an early end. The acts passed by Iowa and Wisconsin did not last long, but other acts stayed on the books. The legislation in many states provided the rules under which the railroads acted. Although it is true that there have been many serious cases in which the actions of the railroads were not ideal, in general, they obey the laws fairly well.

National Legislation. There was at least very strong reason to believe that after the well-known decisions of the Supreme Court during the seventies had given the states the power to regulate railroad rates within their borders, the question of interstate traffic would sooner or later have to be decided on. It was generally assumed that any state might regulate railroad rates insofar as these affected the citizens of its own territory. This absurd view finally in 1886 got to the consideration of the United States Supreme Court, which decided that no state can act at all on rates outside its own border. This furnished the needed stimulus for the enactment of the Interstate Commerce Commission Act. This principle had been advocated by state Granges. In Iowa the state Grange in 1873 resolved to petition Congress to regulate freights and fares of all railroads. The governors of Minnesota and Missouri recommended that the Congress be requested to undertake the regulation of interstate rates and fares. Illinois took much the same action. Meetings were held in New York City, with delegates from most Eastern states, and from the Middle West, this same year, in the hope of devising some means by which interstate rates might be regulated. Even so, for the next 14 years, bills were introduced in Congress, but nothing was done until the decision of the Supreme Court declaring that no state could have authority over interstate traffic. In 1887 the Interstate Commerce Act settled the mat-

ter so far as it could be done by a law that merely decided the question of authority respecting what state power might handle the matter and therefore what duties the United States had. The matter was cleared up.

The time of passage of the Interstate Commerce Act was a period of low power for the Grange. Even so, it is perfectly clear that the influence of the Grange was great through the whole period from the early seventies to the closing act respecting the control of railroads, notwithstanding the fact that it had nothing to do with the first railroad-regulating act of Illinois and that the final act of the period was passed with very little direct influence by it. The Grange was nevertheless the strongest force in bringing the railroads to recognize the power of the state respecting their conduct.

GRANGE COOPERATION

The first plans of the Grange were centered on educational and social matters. What they wanted was to develop a more intelligent and happier people. Kelley's idea at the start was to unite the farm people of the North and the South. What he had in mind was by no means a business organization, but a social and educational organization. By 1869 he had different ideas. The Minnesota Grangers showed intelligence, but their interests were in business cooperation, in agencies, in cooperative stores, in banking and insurance. Later they gave their attention to schools, colleges, and college courses, but in the early seventies such considerations could hardly get a listener.

Kelley was not slow to see what would and what would not interest the farm people he was dealing with. He had hardly started the Grange in Minnesota when he became fully convinced that it was of no use to talk cultural matters to these people. They were excited over other affairs. What they wanted was bigger prices for their produce and lower prices on what they bought. Kelley found them reasonable. There was something of the same feeling in the East, but the excitement there was mild as compared to the raging sentiments of the West. The Eastern farmer could get a considerable part of the 75 cents a bushel for his corn that it would bring in small quantities in New York City. But in Iowa and Minnesota just as good corn was worth but 15 cents. Charges made by local buyers were high, commission men in Chicago got from one to three regular fees, and local dealers at the end of the line had to be paid, with the result that everybody was better off than the farmer who produced the grain.

Most farmers bought their dry goods and groceries on time, and year after year the accounts had to be carried over. Now the farmers were ready to rebel. They did not realize that the first great drawback to

their business was that it was overdone. The fact was that the American people had improved the methods and means of farming to a great extent. Forty-acre farms were rapidly disappearing, and farms four times that size were becoming the most numerous. But prices, low at the beginning of the seventies, fell greatly within the next three or four years, so the new Grange found farmers desperately poor, with freight rates high and in fact just recently raised; storekeepers were charging rather wide margins in order to run at all. The farmer's wife was making butter in the hot confines of a four-room farmhouse and selling it for 5 cents a pound, and eggs brought 5 cents a dozen. In the winter prices were high, possibly 30 to 40 cents for both butter and eggs; but the cows were dry, and the hens didn't lay.

Cooperation. During the early days of the Grange most farmers were desperately poor. The Grange taught cooperation along many lines. It started in the sale of grain, of butter and eggs, of livestock, of cotton. In fact it was tried in selling practically every kind of farm produce. They also bought cooperatively, dealing in groceries, dry goods, and agricultural implements. Also they went into the work of manufacturing and planned to carry their produce to Europe. It must be remembered that very few farmers had had any experience other than that acquired on their farms. Dealing with big firms at a distance, defending patents, competing against big companies already in business, were kinds of work of which they knew nothing and for defending which they had no capital; at any rate their capital was desperately small. The Grange could do business such as was involved in shipping produce to market and manufacturing butter and still can do these things, probably doing them well and making them pay. Going into big business and still remaining farmers are quite other matters.

Agents and Agencies as Storekeepers and Stores. The simplest means of making cooperative purchases was practiced throughout the country. The man who was picked to send in the orders found almost at once that he could not exactly fill his orders with the wholesale quantities he was obliged to buy. This can be illustrated by a few examples. Coffee often is shipped in 100-lb. bags. Suppose 65 lb. are ordered; the agent then finds himself left with 35 lb. Sugar comes in barrels occasionally, more often in 100-lb. sacks. If his customers want 250 lb., including his own order, he is left with 50 lb. Flour in those days often came in barrels of 196 lb. and the agent might find himself with several pounds over. Tea came in big sacks, and the amount left over might be enough to last a family a year and a half. Calico and ginghams are sold in bolts. Fifty yards make a lot of school aprons for little girls, who do not like being dressed all alike. Perhaps only half the girls of a given school get the

similar dresses or aprons. Uncomplimentary remarks are frequent. With all the goods left over in the hands of the buyer and with almost no houseroom in which to keep them, it is soon decided that what is needed is a small store—dry goods and groceries. But there is little or no money for the stock. The storeroom is a poor one; the storekeeper is worse. He, at least in some districts, was paid twice farm wages, or something like $40 a month. Stores became plentiful. Work clothes were piled up through the middle of the floor. The books were not well kept. The stockholders did not want to be seen in the store. Some did not want to pay cash. Although a real percentage of the cost of the goods could be saved while some good-natured farmer and his wife ran the store, with almost no margins above cost, it was soon found that stores could not be handled indefinitely on a no-profit basis. There was rent to pay on buildings. There was the manager's salary. And, although everybody earnestly desired not to have them, there were unpaid bills. A poor manager and a poor store meant little business. When the Grange began to go down in 1878 and afterward, the stores nearly all quit. They were already in disrepute, and with no friends a business cannot prosper. A very few, well started and well managed, are still running in the Eastern states. Most of them in 1873 to 1880 were in the Middle West, and almost every one in this section of the country failed.

Various kinds of stores were started. Quite often, through the country, or Pomona Grange, they did a little business and on certain kinds of purchases, such as agricultural machinery, made considerable savings. Such savings were realized on purchases of this kind largely because, when business began to expand rapidly after the war, nearly all the stores began with high prices. As their sales were usually small, they could hardly sell at lower prices and exist. Many companies did try selling at much lower prices in the hope that by that means they might enlarge the demand for their goods.

Business by the State Agent of Iowa. There were 26 state agencies in the country. Only a few did any considerable amount of business, and Iowa was probably the leading state in purchases and sales. Iowa farmers made heavy sales of livestock, often at great advantage to themselves. However, the work was done in a rather unbusinesslike fashion. They could not organize a legal cooperative company under the law. Much of the stock was shipped without any legal organization to handle it. It was reported "that one-third of the grain elevators and warehouses in the state were owned or controlled by the Grange."[12] This was no doubt far from the actual case. There is no way of finding out how

[12] Buck, *op. cit.*, p. 243.

much produce was shipped by Grangers. The figure was large enough to compel better treatment of the shippers.

Extreme examples were reported concerning the sale of implements, such as the reduction of a $240 machine to $140. To begin with, a case of this kind means that all the dealer's margin disappears. Then, by taking a number of machines that might not otherwise have been sold, a further reduction of price is made. The first retail price was too high without a doubt, whereas the second one may have been too low. It was claimed by the state Grange that for the year 1873 the savings made on 5 million dollars' worth of purchases gave the Iowa farmers a saving of 15 per cent on family supplies and 20 per cent on agricultural implements.[13]

Granges in Other States. During the seventies—not for the whole decade, however—Granges made money from the Atlantic to the Pacific. It was not through the state agencies alone that this was so. Hundreds of local groups shipped produce and bought household supplies and farm equipment. These savings were a great help to the farmers who were involved, often a half or a third of those in many neighborhoods. This manner of making money, however, came to an end rather promptly. The Granges shut down. Good times did not come to farming at all promptly, but farmers were better off in the eighties than they had been in the seventies. The greatest success in cooperative undertakings appears to have been made in a few places in Kansas, Texas, and several Eastern states.

Work of the Grange in the Eastern States. The Grange of the Eastern states did not make the mistakes made in the Middle West. Hence it did not have so much to live down. The result is that in many of these states the Grange has always had a considerable membership and throughout the years has done a fair amount of business. In about eight states, including most of New England and the Middle states, there were and are many stores, which have existed for years. More recently there have grown up similar undertakings, such as the GLF at Ithaca, N. Y., which has done a 40- or 50-million-dollar business yearly among the farmers of several states.

In Manufacturing. As early as 1873, the first year when there were any large numbers of Granges, the idea of manufacturing farm machinery became widespread. During the summer of 1873 a bargain was made by a committee of men from Iowa for the control of the Werner harvester, a machine made in Wisconsin. Iowa had considerable money at the time, and it looked quite safe for them to give $1,000 to the owner and builder of the Werner machine under a contract requiring the payment

[13] *Ibid.*, p. 244.

of $2 in royalty on each machine built. The new company started to have the machines built in Iowa, Minnesota, and Nebraska. Arrangements were made for the building of sewing machines, harrows, cultivators, reapers, mowers, and so on.

During the year 1874 a beginning was made in the manufacture of these machines. Factories were started from Nebraska to West Virginia. Most of the money was spent in building harvesters in Iowa. The main business done by this undertaking was during the year 1874. Losses were small. They built about 250 harvesters; not quite all the product was sold, and some that were sold failed to work satisfactorily. The harvester companies, in general, had a crew of men on the go night and day to get machines started and see what was the trouble with those that did not work satisfactorily. The farmers had no agents. The machines were often shipped knocked-down to save time and freight. The farmers were by no means always able to put the machines together properly. Some of them were not delivered in time for use in the harvest.[14]

Discouragement was probably enough to bring the work of implement manufacture to an end. However, trouble with the Marsh harvester people over the use of the Werner harvester with its patents seems to have added the final touch of discouragement to the Iowa enterprise. The Iowa people were in no shape to meet a fight that might cost many thousands of dollars. At this time the Iowa Granges were beginning a long and disastrous decline in number. The state Grange was considerably in debt to the National Grange. Grasshoppers had destroyed the crops for two years over much of the state. Other crop failures or at least partial failures had struck. Hardly a dollar was left with which to fight legal battles. The prices of agricultural machinery were coming down rather rapidly. Almost no one in Iowa was now disposed to spend money in a court fight for a harvester which, although reasonably successful, required considerable upkeep. The farmers felt too poor to start a battle of that sort. Hence they gave the case up with little protest and in general stopped the manufacture of farm machinery. The fact is the farmers were not prepared to fight the fierce battles of the courts respecting patents. Suppose the price of a harvester was $20 or $50 too high. Could the farmers stand the cost of carrying the case through the courts? There was no principle at stake that they could invoke on their side, as there was in the railroad case. In all reason the state could not

[14] *Ibid.*, p. 268. Buck says the machines that had been sold by the harvester companies at $225 to $300 were now sold by the farmers at $150. The former figure was apparently the price for a "combined" machine. The $150 was for a reaper only. The price of the reaper was $160 cash or $170 on credit. See William Hutchinson, *Cyrus H. McCormick*, New York and London, 1930. Thus the farmers were selling for only $10 or $20 less than the McCormicks and were furnishing no service.

be appealed to for a favorable decision. When the farmers plunged into machinery manufacturing, they invited their own defeat.

Cooperative Shipping of Grains and Livestock. Although cooperative shipping, as stated above, was pretty prevalent, it was by no means as prevalent as some believed. In Iowa it seems that there were about 100 cooperative elevators out of 1,200 or 1,500. Livestock was shipped cooperatively, but at times trains were wrecked, or something else happened to prevent prompt delivery. A cooperative group of farmers, not incorporated, was a poor body to defend itself in a court case. The result was that, as soon as the Granges began to go down in numbers, cooperative shipping was greatly reduced. A few farmers who learned how to ship for themselves continued to do so, probably to their own advantage, although in general livestock is shipped on low margins from the Middle West to buyers. As a rule buyers make little money, and many of them fail. Apparently under the direction of the Grange there was some gain in shipping grain, but probably very little in connection with livestock.[15] The Granges had trouble in incorporating properly for the shipment of produce of any kind. Such matters have been attended to within the past 20 or 25 years.

Farmers as Bankers. The number of banks started by Grangers was small—perhaps no more altogether than three in California and one in Kansas. The California banks came under different management within a few years. In general, although it appeared in the early seventies that the California banks were well established, there is no Grange bank other than the one in Kansas in existence now. The general weakening of the Grange following 1876 was such that few undertakings of any importance could survive.

Insurance. The Grangers went into both life and fire insurance about 1877. There were already some mutual fire-insurance companies in the country before the organization of the Grange. For instance, Wisconsin had one in Manitowoc County in 1860. Several states organized their insurance on a state-wide plan that seems more economical and likewise safer than those involving one or a few townships. In Iowa there are some mutual fire-insurance companies on a county basis that appear to be sounder than those organized for a much smaller territory. However, fires do not spread from one farm to another often enough to be important, hence a group of farmers big enough to support a single fire-insurance company without great expense is probably not likely to get into much trouble. However, the county-wide basis appears not to be objectionable and to be somewhat safer than those based on a smaller

[15] Livestock is being shipped by the Farmers' Union. See Chap. 30.

group, since losses can be spread somewhat more evenly over the whole number involved.

Probably the Grange did not start any hail-insurance companies, but they grew out of the same need. Hail damage is often partial and, when harvest time comes, it is hard to say what the yield would have been had there been no hail. Hail often hits a particular township or county pretty hard; hence it is more usual to organize on a state-wide basis. Mutual companies are likely to be rather more liberal in their estimates of damage than private companies. North Dakota established a compulsory state-wide hail-insurance company, although through application one might withdraw from the protection and thus avoid having to make payment. This plan was put into effect by the Nonpartisan League.

Life insurance was started in perhaps eight or ten states by the Grange. It flourished while the membership of the state society was good. When Grange membership had fallen to a low point, the life insurance was generally dropped. In New Hampshire, New York, and Maine it lasted for some time. However, these small groups could not pay large amounts. Then too the burden fell heavily on the few remaining in the Grange, or more likely yielded but small returns where there were but a few left to pay dues. No mutual life insurance has been able to withstand the strain of a falling membership, since either the families of the decedents receive less relatively than they have contributed, or existing members will have to continue to pay ever-increasing amounts. No one has yet been able to make a decreasing membership of a mutual life-insurance group see how to keep a constantly declining group continue to pay the same small dues and get as much out of the deal as they feel they have coming to them. They are almost sure to devise some means of closing the accounts and quitting.

What the Grange Attempted. In this brief sketch we have noticed that the farmers attempted, within a matter of two or three years, to go into substantially all the work of the middleman, at least respecting the handling of groceries, dry goods, and farm machinery. They undertook to handle banking and to manufacture implements; in fact there were few undertakings that involved business within two or three steps of cultivating the soil that the farmer did not venture into. One of his greatest undertakings was the control of the railroads and the rates charged for service.

As we look back over the field we find that at present the farmer does little business as a middleman, although he does ship a lot of his produce to the markets of the cities. He manufactures such things as butter and cheese. He has learned to ship his grain to the city market, to sell his livestock in Milwaukee or Indianapolis. He has even made some progress

in marketing cotton. In the matter of making purchases, the farmer has done splendidly in buying his feeds, such as dairy and chicken feed. We have a few cooperative stores doing well. But the great quantities of machinery used on farms are bought from local dealers. Do not forget that a real amount of machinery is sold cooperatively and that the margin charged by local dealers is pretty well known and in general not very high. The farmer is so likely to need some help in getting machinery to work properly that many times he is glad to have somebody in a near-by village who will do his best to make things run as they should.

As to manufacturing, the farmer is not in a position to make things go. The farmers of the Middle West who plunged into manufacturing so precipitately in the seventies got into all manner of trouble respecting such matters as patents. The patents on the machines that they put out had to be fought through the courts; there was also the advisability of buying a new patent that would improve the machines. Their experience in this matter was so short that such questions did not often trouble them. As manufacturers their experience was over in about two years.

Farmers have done a few things such as building tractors, largely merely assembling them, and have apparently saved a little money. But shrewd tractor manufacturers keep their prices low enough so that it is not easy for a new company that can undersell them to start. Farmers can undoubtedly run a bank, but by the time they have that work well in hand they usually find that farming takes a lot of time, long days, and hard work. So the banker-farmer is likely to become a banker, and the farm is put into someone else's hands.

The Grange made a rapid growth because the farmers first got excited over the treatment received from the railroads. If the railroads had treated the farmers better—had treated them fairly—things might have run on for some years before coming to a final showdown. Respecting railroad rates the farmers were clearly the worst sufferers. Farmers, for one thing, had gone too far west. It was a long haul for grain from Nebraska to New York City. The New York people paid a high price for wheat because of high costs of getting it from Minnesota. Why did not the people of New York complain about the high price of wheat when it cost $1 or $1.25? Wheat was only one item in the cost of living, and in general their living was not very high. At the other end of the line wheat was the main source of income, and when it brought only 50 cents a bushel the farmer could not pay his debts, build a good house, or enjoy a good living. Western farmers lived poorly. They had very few good doctors, wore cheap clothes, lived in houses that were frightfully cold in winter and hot in summer. They rode over poor roads in lumber wagons without spring seats. Shipping prices paid on farm produce as it went to

market were undoubtedly high. When Kelley went back to Minnesota in 1868, he was surprised to find the farmers excited over railroad charges. They had a feeling that something could be done about it, but they were without plans. Kelley was smart enough to see that if these farmers were to be organized, it would be necessary to offer them something along the line of railroad control. It should be remembered that this subject had been mentioned in Washington, although nothing was done and little was said about it.

Kelley in the first place wanted to organize the farmers; in the second place he was convinced that the Minnesota farmers had a real case against the railroads. Thus the Grange held to its original "uplift" views about living a better life, reading more newspapers and books, but first and foremost its principle was to work for control of the railroads. Who first suggested that the state was superior to the railroad and had a right to control it, including its charges, is not clearly known, but the makers of one or two state constitutions had previously had the idea clearly in mind. So there was excellent ground for calling the farmers of the Middle West together and asking them what was to be done about the matter. And the means of getting them together was primarily the Grange. Within the first half of the seventies acts were passed, especially in the north middle section of the group of the West Central states and, although a few of the laws were apparently modified rather too much, the railroads learned once and for all that they were subject to control by the states separately and by the United States as a whole. This movement began before the Grange was organized; nevertheless it was through the action of the Grange that it was brought to a successful issue.

The Present Grange. It has been noticed that the first Grange provided for doing little business; its plans were concerned mainly with social and educational undertakings. The Grange that we know most about is the one that existed from about 1871 to 1876. During these few years it had money to spend; it controlled the legislatures of several states, passed laws, planned international trading, and expected to establish Granges in several foreign countries. As a business undertaking with all but endless limits the Grange came to a sudden end. From the business standpoint it is now a very modest society.

The Grange is now a larger group than ever before, something like 900,000. But from the business standpoint it is not ambitious. It runs a few stores and buys a considerable amount of feed, seed, and the like. What it does is to build halls, hold meetings, provide reading matter, hold dances and picnics, keep track of legislation, both state and national, and use its influence respecting acts passed.

A few months before his death, Kelley said to the author: "Strange,

isn't it, that the Grange was first organized as a social and educational body? These are now its main interests, with cooperative business on a small scale." Although some of its business is on a somewhat large scale, the statement in general is correct.

It is probably impossible to say just what was and what was not done through the influence of the Grange. It was, however, at least mainly responsible for the following legislative acts:

1. Preventing the renewal of patents on sewing machines.
2. Various state and national acts regulating the action of railroads.
3. The oleomargarine law.
4. The Interstate Commerce Act.
5. Creation of the office of Secretary of Agriculture.
6. Promotion of agricultural colleges, experiment stations, and farmers' institutes in different states.

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Chapter 28

THE FARMERS' ALLIANCE

The Farmers' Alliance had several different beginnings under various names, perhaps six separate but quite similar groups out of which the two later alliances were formed. The different groups united into one big organization within a few years and spread over the whole South. To the Southern organization were added, at least nominally, Kansas and North and South Dakota. This left still separate the Northwestern Alliance, which operated to the west and northwest of Chicago. In the South between 1874 or 1875 and during the early eighties several organizations—the Wheel and the Federation of Arkansas, where they originated, and most of the states to the east and south to which the movement had spread; another much smaller group, the Brothers of Freedom, also in Arkansas; and the Farmers' Union of Louisiana—all got together during the next six or eight years into what was often called the Southern Alliance. The official name was changed several times, but "Southern Alliance" distinguishes them clearly from the only other alliance, which was usually called the Northwestern Alliance (with headquarters at Chicago). These two alliances never succeeded in joining, although as noted above, three states joined nominally with them. The Northwestern Alliance, starting in Chicago on Apr. 15, 1880, probably got its name from a group in New York state that hardly was heard from later. The Chicago group was under the direction of Milton George, editor of the *Western Rural* of Chicago. George's organization was at first a rather loose-jointed affair. It consisted mainly of subscribers to the *Western Rural* but soon spread to chartered groups that paid no national dues, the cost of meetings for the first few years being paid by George. Something like a thousand locals were organized within a year after the start was made. A local might be formed by seven men and women, and the meetings were not secret. Members should be "practical and operative farmers."

Although the Grange had been working on the railroad question for

most of a decade, these early Alliance people felt that railroads were not yet in hand. The main objective in the minds of the Alliance of the Northern states was the control of railroads, although in their first constitutions they did not mention railroads specifically but declared themselves against "the encroachments of concentrated capital and the tyranny of monopoly."[1]

Alliance in the South. In the South, beginning a little earlier, at least five separate attempts were made to organize the farmers. In this part of the country, the cotton belt, the purpose was to raise the price of cotton, to buy more directly and therefore at lower prices, and to sell their cotton more directly to manufacturers. Before going much further the different groups united, and by 1889 all the groups had joined the Texas organization, which was the oldest. The Texas group was started in the first place to rid a few southern counties of such undesirable characters as horse thieves, to put a stop to the stealing of cattle, and to combat land sharks. This work was started on a secret basis in Lampasas County. Apparently the founders were well satisfied with the organization, and two or three years later, in 1878, they established it on a state basis. This organization, however, got into politics and soon went out of existence. The new organization got lost in the Greenback party and was reorganized in 1879 as a county undertaking. In the next year, 1880, a real start was made on a state basis with what was renamed the Farmers' State Alliance. Just after the middle of the decade, in 1886, a state meeting was held. It was claimed at that time that the organization had 2,700 local groups.

The program of the new organization was quite unlike that of the earlier efforts. The plan now was to make a move against the low prices paid for farm products and in general against the prevalent outrages of the country merchant and to attempt to counteract the widespread havoc of the crop-lien system. What the South needed was leadership, and this they discovered in a lawyer-preacher by the name of Macune. Macune was a self-made man whose father, dying when the son was one year old, left his family with little support. The family was moving from Wisconsin to California when the father died; they went on to California, and there at ten years of age the boy left school to help his mother make a living. Later he became somewhat of a wanderer, going to live in Kansas and next in Texas. It was in Texas that he became the president and manager of the new Alliance in 1886. His first plan involved uniting the Texas Alliance with the Wheel of Arkansas, now spread over the South to the east of Arkansas, and with a third organization, the Brothers of Freedom. Already a union had been made with a rather

[1] *Western Rural Yearbook*, 1886, pp. 130–143.

smaller group, the Farmers' Union of Louisiana. These four groups were merged during the years 1887 to 1889. By this time the organization had spread throughout the cotton belt. It lasted for a few years longer. The Alliance in the South was undoubtedly organized rather closely after the plan of the Grange, which had pretty well died out in the South. During its early years the new group went rather heavily into cooperative business.

Attempts to Join the Northern and Southern Alliances. The two alliances, Northern and Southern, might have been expected to join, but although it was attempted it largely failed. The Northern group claimed in the later eighties to have a million members, and the Southern something over 2 million, including over a million in a Colored Alliance. The numbers in the various branches were always uncertain and were probably quite below the claims. The Southern group was much larger than the Northern, with more aggressive leadership. The Southern group had a more definite program. In 1889 both Northern and Southern bodies met at St. Louis at the same time. Indiana and Kansas both met with the Southern group, and the Dakotas were admitted to membership in the Southern organization a little later. During the year following, 1890, the three Pacific states, together with Ohio, Pennsylvania, and New York, joined the Southern Alliance, now called the Farmers' Alliance and Industrial Union. Thus the Alliance, while not exactly one organization, was practically ready to subscribe to one platform. Both groups favored an income tax and lower tariff, and both favored the issuance of more money directly by the government, not through the National Bank. The great organization of the South, much the larger of the two, was now in debt to the amount of $6,000, with no way of meeting it in sight.

Why Were Farmers Poor? The fact is that farmers have always been poor rather than rich. It is relatively easy to get hold of land, either by buying it on time or in those days by "squatting" on it, out beyond where markets have developed. As we spread over the land to the east of the Mississippi River the amount owned by one man was usually small, 40 or 80 acres or even a mere 20. It took a lifetime to clear the timber off such pieces, and the land was usually worth only a small amount for many years afterward. The farmers lived fairly well, but within narrow limits. They owned little in the way of vehicles or implements. Their children married and went onto unimproved land a bit farther west and again began the great work of clearing and improving. When, however, they reached the prairies, and after they had learned the value of these lands and, moreover, learned how to break prairie, life was different. Now, on a quarter section of excellent land, which had cost but $5 to $10 per acre, bought from former owners, or $1.25 from the government,

they began to grow more wheat than they could eat. The Homestead Act gave the land to them, but they were no better off.

The railroads charged them too much for hauling their wheat, which was an outrage; yet even if the roads had hauled it for nothing, it would have been but a decade until the farmers would have been the poorest people of the world, or at least but very little above the poorest. This is because no one will pay much more than is necessary for the good things of life offered on the market, and with no freight charges the produce would have been just so much cheaper. Even so, with all the necessary charges, wheat reached $1 in Liverpool in its downward plunges, and naturally 50 or 60 cents a bushel was all it was worth in the Western states. Suppose the railroads had cut 15 cents a bushel off the cost of shipping. It might easily have been a decent thing to do, but, had it been done, the amount of wheat grown would have risen to a higher figure right away and the price would have gone down as rapidly as the quantity of wheat had gone up.

The fact is that the amount of wheat was such that it was destined to be worth but very little 4,000 miles to the west of Liverpool. There was no way out of the wheatgrower's growing his wheat for very, very little. America was furnishing wheat to the world at a desperately small price, and even with poor crops, which were due to appear at least a third of the time along the line of the hundredth-meridian states and frequently much farther east, the amount of wheat grown was greater than the world had ever consciously wanted. As the farmers got farther and farther west, they fought a worse losing battle against the elements. Now the complaint was that the grain dealers cheated them out of a living by undergrading their grain, by underweighing it, by overdocking for dirt, weed seed, and the like. Still, the railroad was about the only visible cause of low prices on wheat, which seemed to the farmer to be at a high figure 1,000 miles to the east. Farmers were poor because they were too numerous in relation to the number of people dependent on them. Farmers are still overabundant in numbers, although much fewer relatively than they were a generation or two ago. Thus they can and do produce more food and clothing material than is wanted at a reasonable figure.

Farmers' Discontent. The discontent that had so strongly taken hold of American farmers had made its way into other countries. At least six or seven of the countries of western Europe had discontented farmers. To some extent, at least, this feeling was caused by the low agricultural prices following the importations of so much product from America. We had unintentionally succeeded in bringing prices down in Europe as much as in our own country. We had not increased our agricultural wealth as much as our urban wealth. For example, from 1850 to 1890

our agricultural wealth had grown from 4 to 16 billion dollars. At the same time our urban wealth had grown from 3 to 49 billion dollars. This means that, while our agricultural wealth had grown to four times its former size, urban wealth had increased by more than sixteenfold. This is full proof that America's wealth was increasing much faster in the cities than in the country. But how is city wealth distributed among those who produce it, among employers and employed, and how is country wealth distributed? Of course there are great differences to be found within each group. Among the farming class there are great numbers who possess very little. Probably there are a full fourth of the farming group who are worth substantially nothing at all. But in the city group less than half have anything beyond a few household effects and when they are too old to work must be taken care of by friends or go to the poorhouse. Not so many farmers spend their latter days in the poorhouse, although very few indeed leave any wealth. Outside the cotton belt, however, where croppers and tenants have little indeed, most farmers get through life with at least enough to live on. In many other countries farmers accumulate less property than in America.

The Alliance in Business. The Northern states had had their fling at business and were not ready to try it again. They did such things as buy twine collectively at a saving of something like 2 cents a pound. They did other similar bits of buying. Out beyond where the Grange had been strong, in the Dakotas and Minnesota, they built a few elevators, but there was no big rush into cooperation under the Alliance.

In the South the Alliance really went into business. At Dallas, Tex., they put up a big building, filled it with goods, and waited for orders from their scattered members. For a year or two things went well. Many small cooperative stores had been started that appeared for a year or two to save the member patrons a real amount of money, but in the later eighties most of them failed. Just why such stores cannot make a better showing is not easy to say, but in general selling on time, engaging poor managers, and allowing the store to fall below its competitors in size and style seem to lead to disaster. For these reasons the good wholesale store at Dallas and the little stores of the villages shut up shop. The real difficulty at the Dallas store appears to have been an attempt to do business on too small a margin. The store presumably had the right to collect a fee of $2 from each member, some 250,000. But they failed to get the money from any considerable number, and so the store failed.[2] No such effort in any other state succeeded for more than a year or two. The mistakes were in general the same as had been made by the Grange.

[2] J. D. Hicks, *The Populist Revolt*, pp. 136–137, University of Minnesota Press, Minneapolis, 1931.

They started a small number of big state general stores, but they did business on too small a margin and rather soon found themselves unable to proceed. In the North they did a little careful buying of seed, fertilizer, and occasionally machinery. But buying in general reached no such proportions as in the South. The Grange had had its lesson only a decade earlier.

The Subtreasury Scheme. The subtreasury plan was presented by Macune at the St. Louis meeting of the Alliance in December, 1889. It was a plan for the deposit of any cereal, tobacco, cotton, wool, or sugar for periods not to exceed a year in warehouses built by the government on land furnished by the counties in which they were to be situated. The entire bill, presented by its advocates to Congress[3] in 1890, was modeled on a bill drawn by Windom of Minnesota about the silver question. The friends of this bill found that by a few substitutions and additions they could make it fit their needs.

Leading advocates of the subtreasury scheme believed that prices could be decreased and expanded at will by national bankers through their ability to expand and contract the currency. They forgot when expounding this idea that we substantially always had an exportable quantity, and one of the complaints for years had been that the English price was too low. It was always demonstrable that the American price of wheat corresponded very closely with the price in Liverpool, American prices in different places always showing a close relationship to the English and rising and falling daily with the Liverpool variations. A complaint of the Grange had always been that it cost too much to get our wheat from the farmer to the English buyer; there was a lot of truth in this, since local buyers got pretty wide margins of profit and railroad charges were high. About 1890, however, English wheat prices were low. Starting with that fact, it was easy to see that the American wheatgrower was likely to get distinctly low prices when wheat was worth only about $1 thousands of miles away from where it was grown.

The people who claimed that our own money situation was alone responsible for the low price of wheat and its fluctuations on the way to the mill, in relation to Liverpool prices, probably could not have been taken care of by any known system of banking. With all their complaints about the ability of the National Bank to put prices up in the interest of themselves, the American money lender, and so on, the fact was that the Western farmer undoubtedly paid more for borrowed money than it should have cost him. If it had been possible to lend money to farmers at 5 per cent in 1890 instead of 10 per cent, in all reason the price of land would have gone to $50 an acre in place of the $10 to $25 that it

[3] H. R. 7162.

then brought, and the amount of money needed to pay the interest would have been just as hard to raise as was the amount at 10 per cent on the smaller sums owed. The worst poverty occurred among the farmers along the line of the hundredth meridian and farther west. The farmers of Iowa, Illinois, and eastward were poor in the sense that it took them a lifetime to pay for a farm, and they lived in poor houses and could not take trips around the world or anywhere much beyond the county seat. Yet few farmers east of the hundredth meridian seldom lost their farms because of debt. Of course there was always a minority who, with heavy debts, probably especially when crops were poor and prices very low, were in hard lines.

Grain Prices after Harvest. It has been often said that grain was always low in price soon after harvest and that speculators got a much higher price soon afterward. It has been claimed, in fact, that this was the main occasion for farmers to hold their grain for a few months following harvest time in order, as it were, to beat out the regular and usual outrage of low prices following harvest, in relation to the high prices sure to come a little later.

Taking the Chicago high prices of wheat for December and the following May for the years 1880 to 1900, we find the facts presented in the accompanying table.

TABLE XXXII.—WHEAT PRICES RISE AND FALL

Year	Price changes, cents	Year	Price changes, cents
1880	+3	1890	+15
1881	+11	1891	−8
1882	+19	1892	+3
1883	−5	1893	−4
1884	+14	1894	+21
1885	−10	1895	+3
1886	+9	1896	+4
1887	+10	1897*	+76
1888	−10	1898	+9
1889	+19	1899	−2
		1900	0

* The year in this table begins on July 1.

Assuming that the expense of carrying this wheat during the 5 or 6 months would amount to 9 cents a bushel, then during 11 years the owner would sustain a loss, while during 10 years he would make something or come out even, on an average 18 cents, or twice the 9 cents assumed just to cover cost. Leaving out the year 1897, which was mainly 1898, the year of the Spanish War, leaves 12.7 cents gain per year. Now by ignoring

the spectacular war year and by combining the remaining years it appears that, for the man who would do the unusual thing of holding his wheat for the whole year each time he bought, the other 10 years would yield a loss of 2.6 cents a bushel. Adding these numbers together gives an annual gain—rather, a gain during the five months—of about 5 cents per bushel, or a gain of 1 cent a month per bushel. It should be noted, too, that these gains are for the period of lowest prices, or at least of low prices, to the period when prices are at their best, and for a term of 20 years. It hardly looks tempting to a man of much caution. Neither does it look much as though the fall of the year were a time of great depression in prices.[4] It is probably true that wheat sold at a rather low figure during the first month or two after harvest, but it is also true that grain at that time of year contains a little extra moisture, which will disappear during the next month or two. At all events Dec. 1 is not a time of especially high prices, and if wheat is to go up much for the year it will do so during the period between December and the following May. The fact is that wheat is harvested all over the world during every month of the year and that even our crops, the biggest of any country during the period under consideration, were not great enough to hold the world price down very much lower than it was for the other months. One reason that wheat drops in price so frequently during the spring months is that the crop of the Southern Hemisphere is probably a little bigger than expected. The fact is that holding our wheat for six months after it is harvested does not always pay.

Alliance Plan. The plan put forward by the Alliance in 1889 provided for an advance of 80 per cent of the value of all leading crops of the country as the basis for financing farmers through the year. The government was to create new paper money with which to make the purchase. If this had been tried, we undoubtedly would have been in a predicament not altogether unlike the situation that confronted us during the last few years before the Second World War. We were storing wheat, corn, cotton, and tobacco and making governmental advances on them in considerable amounts. We were unable to make any appreciable sales of these products to other countries. Most of the importing countries put such tariffs on the products that we could not pay them and hence could not export. The next question was how our own product could be held down in quantity without exports. So we started the limitation of acreage. We struggled along with an extra year's crop of cotton on hand, and with a price about twice the figure that prevailed on the world's market. There is still some extra cotton, and whether we shall return to the attempt to grow only what we can use remains to be

[4] See Hicks, *op. cit.*, p. 193.

seen. The corn situation has temporarily taken care of itself, while the demand for meat is so strong that we can dispose of whatever is produced. After meat falls in price, shall we again undertake to reduce our corn crop to American demands? In other words, can we again undertake to establish a set of prices not related to world prices, again undertake the task of producing no more than we ourselves can consume, and hold prices at perhaps twice as high a figure as the world will pay? We had not solved the question of how to operate on a permanent basis toward such a goal before the war. Do we want to try it again?

The Alliance people found instances in which it seemed that the variation in grain prices between fall and spring was too great. Now, having disproved that fallacy, shall we still have faith in a plan to hold products over a single long season? The plan then proposed would, under normal circumstances, give us such quantities of produce on hand that the sales by the government would tend to drag prices to low levels, and a bit of success would at times give crops too big to be handled.

If it were really true that crops were desperately low at the time of harvest and just following and that they regularly rose within a few months to a much higher price, it would at least appear that the outsider buying into the market in the fall and selling in the spring could make money regularly and easily. A study of the table given above shows that this is not so easy to do. Taking the prices of produce given for the 12 months of the year for any considerable number of years will convince the most skeptical that speculation in farm products is not an easy game to follow, and the chances to lose money are about as great as to make anything. Consider the tables given in the *Agricultural Yearbook* for the prices of farm produce by each month of the year, and the facts stare one in the face. There is no month in which it is safe to buy for holding for any length of time. Prices do not rise regularly and surely from fall till winter nor from winter to summer. Rains in Argentina may depress wheat prices in February; a drought in Russia may raise them in the fall. Of course in some out-of-the-way district, with only one buyer of grain in a market, prices may be absurdly low, but taking one time with another over the main part of the country, prices rise and fall with the main facts of the market published and recognized.

The subtreasury plan came to an end within some three years and was never revived. Had it done what was claimed for it, it would have stimulated agricultural production inordinately. There was no extensive instance of many cents a bushel to be gained by farmers from speculators. There was no opportunity of saving several cents a pound on cotton. There were many instances of sales to unscrupulous buyers who took

wider margins than they should have. On the other hand there was no case of desperately low prices of grain held down fall after fall by speculators. There was no general gang of crooks handling the cotton so as to steal a nickel from the grower. There were a lot of crooked buyers who took bits here and there and who, let us hope, have found it harder in recent years to steal from the grower. There have been a multitude of unfortunate dealings between buyer and seller. It is not easy, however, to discover great whirlpools of crookedness in which agriculture has lost its fortune. The real trouble with agriculture has been rather that it has continually sent more produce to the market than the market really needed.

Money to Be Redeemable. The Alliance, when its produce was sold, was to return the money to the government, which should then destroy it. This would mean each year that the money paid to farmers for their produce should be printed and used for that purpose; then when the produce was sold to someone else, the amount of notes received should be destroyed.[5] Thus something like half or three-quarters of a billion dollars, possibly more, in special notes would be printed and paid out each year, but made useless, redeemed, and destroyed annually.

The End of the Alliance. The Farmers' Alliance just about survived the decade of the eighties; there is little to be said about it during the preceding decade. About 1890 it got into politics, and politics drained its energies. From the time the Alliance really entered politics in the early nineties till McKinley was elected President in 1896 the Alliance ceased. It probably went out of existence more completely than has any other farm body with any such membership. It had had a long and impressive program. Then as it got into politics it had nothing left except a free-silver plank in the Democratic platform. With the defeat of the Democrats in 1896 it had nothing left, in fact very little after its small showing of 1892.

The two old parties were well established. The new third party was without any large, strong following. The politics of this country got started on a two-party system, and almost never has a third party won or come near doing so. The Populist party of 1892 cast over a million votes, but they were widely scattered, mainly in the West, on the silver issue. In the South, the earlier stronghold, they did almost nothing. Southerners were undertaking to get the Negroes in hand and were afraid to vote anything other than the Democratic ticket. Thus the new party did more in 1890. Incidentally it succeeded in 1890 in defeating the

[5] This, of course, means that the notes would be worthless after a given date, but, being exchangeable for other money, could be collected and destroyed.

famous Senator Ingalls in Kansas and putting Senator William A. Peffer, an agricultural editor, in his place.

The Alliance had cast over a million votes in 1892 and came near a million and a half in 1894. It is a question just what the men at the polls were really voting for in these elections. They hardly wanted free silver, at least not for many years. So, by the middle nineties the Alliance seems to have lost its hold. What had they accomplished? Immediately the accomplishments seemed very small. However, the Alliance fought hard, even furiously, on a few matters that within a quarter of a century had come to pass. Probably the matters coming before the Interstate Commerce Commission that have been decided in favor of the American people can hardly be credited to the Alliance. The chances are that the men on the Commission were not influenced by the Alliance. No doubt the same cases would have come along at about the same time and been decided in about the same manner without the Alliance. At least a decade or two passed before they did come up for decision. The Alliance insisted that the railroads must be owned by the government in case they could not be controlled otherwise. But many such questions were a long time in getting settled, and little was said about the resort to public ownership. So far as relation to the railroads is concerned, it was almost insignificant as compared with the constant contest covering several years by the Grange. Although the work of the Alliance is due much credit in respect to railroads, it was the Grange that got the work started and carried it through.

The business undertakings of the Alliance mostly came to an end in the very early nineties, after some two to four years. There was little inclination to make a second trial. The finish of the Alliance was caused by its entering politics. Its economic program was a fairly large one, pertaining to land, banks, money, and marketing. Its leaders usually stood for free silver, at 16 to 1, no doubt a concession to the silver miners, which the people as a whole could not afford to make. The English, no doubt, would have paid us about the same amount of gold for our wheat as before if we had gone on a silver basis. And for many years we sold our wheat on the English market at their price. The money situation since the First World War would no doubt be just what it is and has been for the 20 years considered, either with or without the Alliance.

Had we adopted the subtreasury plan, we would, about one year in two or three, have been left with much wheat to sell for less than it was worth the fall before, and surpluses would have been hard to handle. The relation of late-summer prices of wheat to the prices six months later must be looked into carefully before too many remarks are made regard-

ing the outrages of the buyers or the sorry plight of farmers who sell early. During the 21 years from 1880 to 1900 inclusive, the December prices (high) of wheat in Chicago were such as to yield very little profit for the whole period. We know now, as we did not then, that it would be impossible to hold all our surplus grain off the European market and then finally dump it on these markets. Foreign countries would not take grain handled and offered for sale in such a manner without a great deal of adverse reaction. Just as soon as it was learned or suspected that our government was handling wheat, trouble of some sort would arise.

Reforms by the Alliance. As we look at the demands of the Alliance, it is difficult to pick out many proposals of importance not previously presented by the Grange or other agencies. Without doubt the Alliance was appealing to the general voter, not alone to the farmer. Also the political appeal was mainly on things that have never come to pass and apparently are not wanted. The Alliance, together with the Knights of Labor, in 1889 adopted a joint platform consisting of seven demands. These included (1) the abolition of national banks, (2) the prevention of dealing in "futures" of all agricultural and mechanical products, (3) the free and unlimited coinage of silver, (4) no alien ownership of land, (5) taxation not to be used to build up one national or state interest at the expense of another—"All revenues, national, state, or county, shall be limited to the necessary expenses of the government,"[6] (6) Congress should issue a sufficient amount of fractional paper currency (this was to facilitate ease of payment through the mail), (7) means of communication and transportation should be government-owned and -operated "as is the United States postal system."[7] None of the above items, unless the fifth, has been put into effect, and this count is hard, if not impossible, to interpret.

Within the next year or two they added demands for a postal savings bank and a national income tax. The first was of interest mainly to city and village people. The income tax was tried during the Civil War and was again proposed by the Grange in 1880. It seems safe to say that the income tax would have been enacted exactly when it was if there had never been a Farmers' Alliance. So far as the irrigation of Western land is concerned, it is still doubtful that any recent efforts have been worth while. Most such efforts along this line have cost more than they are worth, and every additional bushel and pound of agricultural crop have made harder the task of disposing of the same. We have had a lot of foodstuff that we didn't need in spite of all efforts to reduce output.

[6] Very hard to tell what they had in mind.

[7] N. A. Dunning, *Farmers' Alliance History and Agricultural Digest*, p. 122, Alliance Publishing Company, Washington, 1889.

In the platforms of 1890 to 1896 appeals primarily of farmers were directed just as much to the laborers of the country as to the farmers. Such reforms as the income tax, a postal savings bank, the Australian system of voting, the direct election of senators, and woman suffrage had been previously demanded and were absolutely sure to come. These were not agricultural demands, but were just as heavily supported in cities and villages. The other counts in the various platforms supported by the Alliance pertain mainly to the abolition of national banks, the dealing in futures of agricultural and mechanical products, the free and unlimited coinage of silver, fractional paper currency, disposition of public land, tax on real-estate mortgages, reduction of the tariff, alien ownership of land, and so on. It is not plain that many of these demands have even been considered seriously.

Probably the adoption of the income tax was as great a reform as any in these years. The next income tax after the attempt made during the Civil War came in the state of Wisconsin in 1911. Following this law other states, first slowly, then faster, passed similar laws, until over half of them had income-tax acts. In 1930 there were 15 states with income tax; in 1945, there were 34.

The Alliance Disappeared. The Alliance almost completely disappeared between 1890 and 1900. When it went into politics in 1892 with a fairly long platform having over 30 separate counts it was combined with the dying labor party, the Knights of Labor. The platform opened and closed with labor demands. It is doubtful that agriculture will ever be able to unite politically with labor. As one goes over the many demands of its platform it has to be admitted that few of the proposals have yet been put into effect. And those which have been enacted into laws, like the income tax, Australian ballot, and woman suffrage, would have passed if all farmers had voted against them. The many things that have been done in favor of farmers have been what circumstances at the time absolutely demanded; for example, the great help given them to hold their farms during the thirties. The help given to the cooperatives under the Hoover administration was of major importance. Before that, the development of the great number of cooperative marketing companies which have grown up throughout the country have been of great value to agriculture. These organizations owe their origin mainly to the Grange and to the general organizations of farmers that started after 1900. No one would want to say that the Alliance had no part in this growth, but its immediate connection with the efforts was almost nothing.

There were no political leaders, no cooperative leaders, left after the political collapse of the Alliance to show that these people had ever existed. Hardly a trace of it was left after the collapse in the nineties.

To begin with, the bulk of the Alliance for a time was mainly Southern, and it appeared that cooperation was not wanted in the South as it was in the North. There was a period of more than 10 years after the death of the Alliance before anything was happening along the lines of co-operation, and by that time the next two farmer movements, the Society of Equity and the Farmers' Union, had come to the front. No one can say that the work done by the Alliance was wholly lost, but for any great farmers' group to put its main effort into such a question as the free coinage of silver is likely to prove fatal to its interest in such matters as farmers usually work, and worry, to accomplish.[8]

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[8] It will be quite worth while for students to read the last chapter of Hick's *Populist Revolt.*

Chapter 29

THE AMERICAN SOCIETY OF EQUITY

Apparently, the American Society of Equity was organized mainly by one man and his helpers. This man was J. A. Everitt, editor of *Up-to-Date Farming*, a paper published at Indianapolis, Ind. His main helper appears to have been M. Wes Tubbs, who was a poet, as well as a lecturer, and was usually called secretary. Everitt wrote a book, *The Third Power,* which was, for the most part, given away to subscribers. The organization was started in 1902 and for a time consisted of subscribers to the paper. It was built up, nominally at least, by increasing the number of papers sent out of the office and by big issues of sample copies. The growth of the group was mainly in two districts, *viz.*, in Kentucky where the tobacco growers were having great trouble selling their crop and in the spring-wheat district of the Northwest.

Tobacco Growers Decide to Fight. The claim was that the wholesale tobacco men, on account of big combinations recently made among manufacturers, were cutting prices to farmers unmercifully. The main part of the terrible price cut came in connection with burley tobacco. This variety, light in color and fine of texture, had for years been grown chiefly in the mountain and hilly districts in the eastern part of Kentucky. Prices for years had been high, such as 20 to 22 cents a pound. Now, in 1904 to 1908 the prices were as low as 6 cents a pound. The feeling was widespread that these low prices were due to the reorganization of the buying companies, which had become much bigger. It had, for example, been noted that the buyers for two of the earlier companies, any two, apparently, often rode about the growing districts in the same buggy when soliciting purchases. Of course they always offered the same prices. Actions of this kind always attract attention.

The growers of light burley were, or rather had been, up to about this time, among the small farmers of eastern Kentucky, with fewer of the same sort of growers in the mountain districts of Tennessee, and a

very few in Virginia and North Carolina. The great bulk of such tobacco was grown in Kentucky, and the difficulties that arose between growers and manufacturers were mainly in the eastern, mountainous, part of this state.

The light, or white, burley tobacco had always been grown by people with but few acres of cultivated land, but the usual prices received for the crop on 6 acres of such tobacco at 20 cents a pound brought the grower a real income; produced by the unusual grower it would bring around $1,200 or more. It must be remembered, however, that as much income per farmer as this was unusual, even rare.

The fact is that during the nineties growing burley tobacco had been tried in the bluegrass region and had succeeded very well. For many years it was believed that such tobacco did best on the thin light-colored soil of the hills and mountains. It was, however, discovered that the quality was not very different on the better soils of the bluegrass region. As a matter of fact this discovery was primarily responsible for bringing the price down. This fact did not make itself known to the "hillbilly" type of grower. He read but little and traveled less. Hence, to him, the world should not change. It was easy to persuade people of this kind to fight the buyers.

Society of Equity to the Rescue. It happened that a man with many farms on which burley tobacco was grown was acquainted with the efforts of the Equity people of Indianapolis, whose organizer was glad of a chance to try his skill as a farmer organizer. Believing the farmers to be wholly right and the tobacco buyers to be wholly wrong, he at once undertook the job of building up a membership of his American Society of Equity. Getting members was easy. The society took over and, for a small sum, offered to sign up the tobacco growers. Very soon the Society was well organized throughout the tobacco-growing districts, and the war was on.

The introduction of the Society of Equity was greatly facilitated by the help of a large landowner in the burley-growing district, who was extremely anxious to put up a real fight against the tobacco buyers. This man, in addition to his energy, had considerable money which he was willing to spend.

During 1906 and 1907 a considerable Society of Equity was established. Tobacco was still low in price. The monopoly claimed to have enough tobacco in storage to last the greater part of a decade. It hardly seems that this could have been true since, within the next two years, the actions were such as to bring about a great increase in price.

The Society of Equity was pretty well established in Kentucky by 1906, and presumably had much to do with the program for about three

years. They appeared to gain fairly good control of affairs during 1906. There was always a large number of small tobacco growers who would not join the control movement. Likewise, the larger growers in the bluegrass district were not anxious to join. Although the growers in this section were by no means rich, they could, year by year, win an income about twice as big from tobacco growing as could the people in the hills. Besides this major income they were far more likely to be able to hire out at tolerable wages to the bigger farmers of the vicinity, so that their income for the year was likely to rise toward $500 from tobacco and possibly $100 or more earned as wages. On this sum these families were able to live. In the sterile hill country of eastern Kentucky the tobacco grower could, at good prices, from his 4 acres of tobacco, hardly hope for more than $200 to $400, with much less from other crops and wages than the tenant of the bluegrass region might expect. Thus the cooperative company had trouble in both parts of the state. There were too many small farms, tenants and likewise their landlords, who could not easily be persuaded to join the new association.

After struggling along through 1906 and 1907, with some success it must be admitted, the decision was arrived at to cut out the burley crop for 1908. In general the stronger and bigger growers (not including all, by any means, in the bluegrass country) were ready for action. It had been but a few years since the Ku Klux Klan was active in this part of the country, and it seemed that the spirit of the old night riders was rather easily revived.

It must be remembered that the tobacco growers had the most of a year's crop in storage. The prospect was that nonmembers would undertake to grow a much larger amount of tobacco than usual. These recalcitrants refused to join the associations, at least merely through invitations, and, when it came time to prepare and sow the tobacco beds, they went ahead. Trouble grew rapidly. The determined members of the association mounted their saddle horses and, well armed, visited these nonmembers near midnight, called them out of bed, and told them what program to follow. Words and, not infrequently, shooting followed. In the meantime the tobacco beds were destroyed. Later in the spring and early summer, the program was pretty well completed: such fields as were growing were ridden through at a gallop, corn knives were used to cut down tobacco, and little of value was left. Since fires and shootings were frequent, many farmers gave up fully, and it was said that nine-tenths of the burley crop, all told, disappeared for the year.

Burley tobacco was reduced to such reasonable quantities for 1908 that the price went to about 17 cents a pound. The battle would seem to have been won. Instead of that it was completely lost, lost morally.

The better part of Kentucky society, editors, preachers, and the calmer portion of society in general, said in no uncertain terms to the trouble-makers that nothing like the year just closed could be repeated. The result was that the Equity leaders had all gone back to Indianapolis. The new members of the society in Kentucky dropped their membership. The burley growers planted more tobacco in 1909 than had previously been grown. The price again fell. When asked why they were dropping the matter in 1909, the Equity replied, "We won the war, so of course we quit fighting."

As a matter of fact a tobacco tenant of the bluegrass country could do much better growing tobacco than could the tenants, or owners for that matter, in the hills. There was also an advantage to the landowner. In the hills, where they grew tobacco on the same land about every seventh year, it took several more tobacco sheds on a plantation than the number of tobacco fields grown in any one year. This meant perhaps twice as much expenditure for sheds as was needed where they could be used every year.

Tobacco Acreage, 1890–1910. The acreage of tobacco grown in the bluegrass section was almost doubled between 1890 and 1910. Since that time it has not changed a great deal. The amount of tobacco grown per acre there is around 1,000 lb., while in the mountain region it is but about three-quarters as much. Furthermore, in the bluegrass region the crop is grown for several years on the same land, and then probably on a field close by; in the hills it is grown about one year in six or seven and then moved perhaps to a field a mile away. In this section the amount of tobacco grown did not change much. Apparently tobacco is the most profitable crop, so they have stuck to it, even at the lower prices.

Equity Quits in Kentucky. At the end of the big fight in 1908, the Equity just about quit Kentucky. It is not likely that it was much to blame for the rough character of work done in the state, but anyhow those who were blamed for the bloodshed were no longer welcome in Kentucky society. So the Equity, which had undergone a major reorganization, withdrew. Everitt was thrown out of the presidency, having been accused of many crooked acts by the second-class mail division of the Post Office. It was claimed in 1907 that membership had gone beyond half a million. The membership that remained was largely in Wisconsin, with respectable numbers along the northern row of states reaching to Montana.

Equity in the Northwest. While the Equity was distinctly young, during the first years of its life from 1903 to 1908, it had undertaken to help the wheatgrowers of the Northwest spring-wheat district to get better prices. Wheat was quite below $1 a bushel during these years, and the

Equity went in for dollar wheat. It was instrumental in organizing a considerable number of cooperative elevators and influencing many organizations before they themselves got started. The main plan proposed for better prices was the holding of wheat off the markets for a few months. Equity was also instrumental in trying to bring about better conditions in respect to the quality of scales for weighing grain, matters of dockage, and so on, following the general program that had been started by the first farmers' cooperative elevators. About 1914 a small terminal elevator was built in St. Paul in order to compete against the big terminals located in Minneapolis. This undertaking was not financed by Equity itself, but by a smaller group of men who put up a little money and who tried to sell stock to the cooperatives to the northwest, especially in North and South Dakota. For a few years preceding the building of their terminal elevator they had carried on a hot fight against the organization of grain dealers in Minneapolis.

A few reforms were brought about through this attack on the wholesale grain trade. No doubt several of these involved such matters as dockage, switching charges, and private sales among dealers, which should have been open dealings on the board. By bringing these matters before the proper state authorities several important corrections in business practices were undoubtedly made. For a year or two Equity did a business of some importance, as far as size is concerned, reaching about 40,000,000 bu. This however, soon fell to a quarter of that amount. It soon developed that St. Paul was not favorably situated for receiving grain from the Northwest. The main trouble was that it was not equipped to handle much grain with one small elevator. Worse yet Equity had a poor manager who knew very little about the wholesale grain trade. A study made in the summer of 1917 showed that it was doing a very small amount of business and was getting no more money for the grain that it did handle than the Minneapolis board was paying. Something will be said of this undertaking in a later chapter.

With the rise of the Nonpartisan League, Equity, which had reached, thinly, to the mountains, just about went out of existence, being confined almost exclusively to Wisconsin.

Equity of Wisconsin. With a comparatively small number of members after its reorganization in 1907, the program was quite unlike that of either Kentucky or the Northwest. In Wisconsin there was no single program to be fought for. On the contrary, there was the matter of the type of farming that characterized the state. It is well known that Wisconsin has a rather complex type of agriculture surrounding primarily the dairy. Wisconsin figures but little in the grain or crop market. Over 50 per cent of sales come from the dairy; in addition there are the

poultry products, swine, cattle, garden, and field products of many kinds, through a long list of miscellaneous items. The Equity went into sales work of many kinds. It established selling agencies for dairymen and buying agencies for their feed and supplies. They handled much fertilizer, some implements, and so on, almost without end.

The organization had perhaps 7,000 members in 1907. Ten years later they claimed to go beyond 20,000. Wisconsin has always had all the well-known organizations of the country at large, besides a few home groups covering a county or two.

At one time there were several men belonging to this Society who were in the legislature. One of them was Speaker of the House.

Equity and the Grain Dealers of Minneapolis. In the summer of 1912 the Exchange started to buy grain and during the ensuing year marketed 1,600,000 bu. For some reason the Equity was not strong in South Dakota. In December of 1913, at a meeting at Sioux Falls, the leading speakers of the Chamber of Commerce[1] and the Equity, led by Mr. McHugh, secretary of the former, and Mr. George Loftus, leader of the latter, held a debate respecting the relations between the Equity and the Chamber of Commerce. The convention voted in favor of the Chamber of Commerce, which was clearly not giving the farmers a square deal. For some reason the Equity was unable to carry the points they were trying to make. Further, it was rather well known that the Equity was in financial straits. Its leader was a whirlwind speaker, probably honest, but unable to build up a strong following.

The Equity was weak respecting the character of many of the managers of its local elevators. Many of them, for example, did not handle enough grain. In general, they appeared to be weak, although their claims regarding the lack of good treatment on the part of the Minneapolis Chamber of Commerce were apparently sound. In Loftus they had a powerful leader, but circumstances were much against them. For example, they could not get into the Chamber of Commerce salesroom and therefore could not do business in a regular manner. The city banks did not like to handle their finances.

Equity in St. Paul. The Equity was virtually squeezed out of Minneapolis, but went to St. Paul in 1914 and built a small terminal elevator. St. Paul showed much friendliness and furnished a site for the elevator. It should be noted that these movements on the part of the Equity did not include its full membership. The owners of the elevator consisted of a group of Equity men from Minnesota, North Dakota, and Montana, not the whole membership within these states. The organization would undoubtedly have got along better had the state Equity societies gone into

[1] The Chamber of Commerce in Minneapolis means merely the Grain Exchange.

the business fully and wholly. However, it was the job of a promoting group to sell its stock to the elevators of the three states. It was never all sold and therefore the terminal elevator was never paid for.[2]

Equity Elevator in St. Paul. The existing Equity elevators did not join the new company very heavily, and in order to gain more business the new central company built new country elevators, keeping within its own hands the ownership. The money for building these new elevators, 80 in number, was obtained by selling to anyone who would buy stock in their company. The ownership of the new enterprises remained in the Equity Cooperative Exchange, which was therefore in debt to the purchasers of the stock sold. The trouble with this part of the enterprise was that the new elevators were not worth what they cost, having been built where the need for them was not sufficient to induce other investors to build. Not only did the Equity own these 80 elevators, but, in addition, the central organization tried to run another lot of elevators which could not quite finance themselves and which the Equity must therefore handle by way of furnishing them money.

One year the Equity did a fairly big business, something like 40,000,000 bu. They had expected that a large number of so-called Equity elevators, scattered far and wide over the country, would furnish them a big business. There were at least some buyers on their trading floor in 1915, but two or three years later the trading floor was empty, and the few cars that were shipped to them were sold by telephone. As a matter of fact, the office business, although not large, was not well done because of no system or order.

It developed that the Equity was losing money every year. The new elevators that had been built in the hope of more business resulted almost throughout in losses. The amount of business done altogether was small. The price paid for grain by the Equity was somewhat below that paid by the Minneapolis Chamber of Commerce. What is more, the Equity had to quit because of financial losses.

The Equity had started a cooperative packing company at Fargo, which ran for two years and lost so much money that it was obliged to quit. It sold out to the Armour Company which seems to get along fairly well.

The main trouble with the Equity in its grain dealing was poor management. It took no unusual ability to see that the men in charge of the grain business after it moved to St. Paul were capable of one thing, sorry failure. Shrewd, honest men might have made it go, but with the start

[2] In Montana little stock was held in the St. Paul elevator. In Montana the Equity was closely associated with the mine laborers. At one time they planned an elevator at the mouth of the Columbia River to hold 2,000,000 bu. They expected to clear about 11 cents a bushel on operations.

already made in Minneapolis it was not easy to build up an opposing company across the river. So far as the livestock undertaking is concerned they made a failure right from the beginning. Probably the main trouble was lack of experience in the business.

A main cause of the failure of the Equity in the states from Minnesota to Montana was the rise of the Nonpartisan League. It has almost never happened that the farmers of any given territory have supported vigorously two farmer movements at the same time. In the Northwest the Equity appeared to be fairly well established, but in 1915 the Nonpartisan League came along and swept the Equity off its feet. The League did not last many years, but it absorbed the whole farm group while it did last and left nothing of importance of any organization then in existence.

Equity in Wisconsin. When the breakup came in the first Equity at Indianapolis, it looked as though the Wisconsin Equity had inherited about all that was worth while of the earlier organization. The national organization was of little importance. The region from Minnesota to Montana developed the grain-marketing features, while Wisconsin developed a society which, for some years, appeared to cover about all the many phases required to satisfy the farmer interested in grain, livestock, the dairy, vegetable growing, and the like.

When the break came in the old Equity at Indianapolis in 1907, there were probably 7,000 to 10,000 Equity members in Wisconsin. This number grew a little during the next 10 years, and then with high farm prices the membership rose to what was called 30,000, covering a large part of the state. There was at that time no other aggressive farm organization in the state. The leader and the president of the Equity was a man who had been employed by a railroad company in Michigan and who, in general and meaningless terms, could make a terrific speech.[3] That is to say, he could make a great impression on a big crowd who knew almost nothing about the situation and who felt that if they "could get their shoulders under these prices they could hold them up." The reasons why farm prices went down during 1920 and following were not comprehended by this man or by his followers in the least: the fact that the world was ready to produce more agricultural products than ever before and the fact that, at the same time, our prices on agricultural and other machinery were the highest in the world. Not only that, we had the highest prices known on all manner of manufactured goods, such as textiles, clothing, tools, and lumber. The old Republican party was in power with a unanimous determination to hold all prices up, if it could be done by tariffs. Probably the Equity could not have done very much to change the gen-

[3] J. N. Tittemore.

eral feeling regarding all these fundamental matters. What it really asked for was higher tariffs on eggs and butter.

The fact is that we were on a world market for most agricultural products. This means especially such things as wheat and other grains, pork, cotton, and tobacco. The Equity had no vision of what was ahead for us respecting prices and made no valuable suggestions regarding procedure. On the contrary, it went down lower and lower in membership and in influence.

Equity's Important Moves. During the years that followed the First World War the Equity developed within the state some good marketing companies. Among these the most important was the development of between 3,000 and 4,000 cooperative livestock shipping companies. On these there were real profits, often approaching $1 a hundred on cows, with at least good returns on hogs. They developed an excellent livestock sales agency in Milwaukee, which is running yet.

In many other lines the Equity was distinctly active. For example, they developed a considerable number of feed-handling companies.[4] These were able to make definitely lower prices on ground feeds and incidentally to handle many farm and garden seeds, along with feeds. Likewise the different companies added many incidental commodities, such as fertilizers, sprays, and tools, all of which are easily handled and which were sold quite below the usual store prices.

Equity Declines. The Equity for some reason declined in numbers. About 20 years ago it went out of all states in which it was organized, except Wisconsin. But even in Wisconsin it lost in membership. At one time the Equity had a president who used up a large part of the society funds for personal expenses. Then, with a deficit to overcome, the society taxed itself something like $10 apiece in order to get back on a solvent basis. In this there was, of course, a considerable loss of membership. Then other organizations made some gains, such as the Farmers' Union and the Farm Bureau Federation. Finally, in 1934, the Equity sold out its membership to the Union, and ceased to exist. At present Wisconsin has a number of members in each of the three leading organizations, with no one of them greatly in the lead. The Equity has left the farmers of the state a large number of cooperative companies that it had started, many of which are doing as well as any others. However, since the farmers belong to the different organizations now in existence, it would appear that the cooperative undertakings of the state would within a few years be affiliated with these regular groups.

On the other hand, it should be remembered that some of the well-established cooperatives are in no manner related to any general co-

[4] Held by all farmer associations.

operative undertaking. For example, there are very many cooperatives, such as creameries and cheese factories, that are so well understood as to be able to get along independently of any of the propagating organizations. The Equity started a very large number of the more recent companies, such as those buying farm supplies or what are left of the livestock shipping associations, which are in no way dependent on the help or inspiration coming from these general organizations. It often happens that the chief service furnished by a general group is inspiration. When once the work is started and the men interested in it are selected, eliminations are made of those who prefer to be on the outside, so that the work of the organizing group may be done, possibly once for all. Without any doubt such an organization as the Grange may inspire cooperative undertakings over the years. On the other hand, it is true that a general feeling for cooperation may remain within the minds of many men for years after the organization that for a time nourished the inspirations has gone. Thus it looks as though the Equity stirred up interest in a large number of cooperative undertakings such as are found in Wisconsin, but that these undertakings are no longer dependent for their existence upon a continuing connection with any such inspiring group. When once farmers have learned to cooperate, they may continue the work for a long, long time, even though the original inspiring meetings have ceased to exist.[5]

[5] "Equity" was dropped from the name of the Wisconsin Union a few years ago.

Chapter 30

THE FARMERS' UNION

The Farmers' Educational and Cooperative Union of America began in Texas in 1902. It was started by Newt Gresham, a native of eastern Texas who learned to read and write after he was twenty-one years old. Gresham was a small cotton grower; also he ran a newspaper.

The early growth of the Union was almost wholly in the South and was first a cotton-marketing undertaking. It next grew to some proportions in the West. At present it is strongest in the West Central states, especially the western row of them. The Union has never had a very heavy membership, a few hundred thousand, at times not above 200,000. There are, as a rule, many farmers who do not belong to the Union, who do not attend their meetings, but who may do a reasonable amount of business with their cooperative companies.

The Union was a secret organization during its first 15 years, with the usual unwritten work, passwords, and the like. Some prospective members will not, however, join such an organization. Thus in 1917 the vote to eliminate the secret work carried.

Eligibility. Any person may be admitted to membership if of sound mind, over the age of 16 years, of industrious habits, believes in a Supreme Being, is of good moral character, and if a farmer, country mechanic, school teacher, physician or minister of the gospel, and not engaged in any of the following occupations, to wit: banking, merchandising, practicing law, or belonging to any trust or combine that is for the purpose of speculating in any kind of agricultural products, or the necessities of life, or anything injuriously affecting agricultural interests; provided, that ownership of bank stock by any actual farmer shall not be construed as making him ineligible to membership.[1]

Five Considerations for Success. Concerning these undertakings, it should be noted that the leaders did not appear to feel that there was

[1] *The Constitution and By-Laws of the National Farmers' Union,* p. 10, 1942.

any problem to be solved other than the one last comprehended, plus the preceding. In other words, they were obliged to attempt success with each item of the five-point program believing that success might follow the adoption of each and every principle beginning with the first one, then with the first and the second, until they had all five in operation. It is a little strange that someone had not thought of at least part of the later counts a little earlier. The five points were as follows:

1. **Control of Prices.** The farmer was advised to be a good follower of the Union leaders who would take the matter of setting a price on cotton under consideration. It must be remembered that, although within a few years the Union was concerned with all farm prices, during the early years of the organization, the main consideration was the price paid the farmer for his cotton.

As early as 1904 the cotton growers in Texas began to set prices which they believed their cotton should bring. The price set was 10 cents, but cotton sold for 9 cents, even less at times. In 1906 a price of 11 cents was set, but in December the price was 9.6 cents "at farm or exchange." The next summer the crop was a poor one, so the price went up a little, although not enough for many farmers to receive 11 cents. With this partial success to their credit the Union made bold to set a price of 15 cents for 1907. Nearly the whole crop was sold for 10 or 12 cents a pound. The low price was due in part to the financial panic of that year. For 1908 the Union decided on 12 cents a pound, but the average for the year[2] was just over 9 cents.

The above experience discouraged the Union with respect to price setting. One of its leading speakers made the statement that the plantings went up whenever the Union decided on a higher price. This might easily have been true. So they attacked the acreage next.

2. **Limitation of Acreage.** The fact is that an attempt had previously been made to reduce the acreage. Several associations, the Southern Cotton Growers' Protective Association, the Southern Bankers' Association, and the cotton exchanges of different cities, all tried to reduce the amount planted. Probably the first time this was tried by these several associations it brought about considerable reduction. At least it was smaller than usual in 1905, by about 4 million acres. This was enough, presumably, to make a real difference. The price had responded properly. Therefore the Union decided that the thing to do was to reduce acreage. However, it never seemed to work well after 1905. The greatest effort was made in 1908. After having made several attempts at acreage reduction, one of their best workers among farmers made this re-

[2] This was the first year that the U.S. Department of Agriculture gave a yearly price. For the preceding years the price was for December.

mark: "Whenever we ask them to plant less, they increase their acreage." Each planter wanted to be the one with a big acreage alongside the many who had reduced.

In 1908 the leaders tried different tactics. They let all planters follow their own judgment at cotton-planting time; then in May, too late for replanting, they were all to be requested to plow up 10 per cent of what they had planted. Georgia appeared to be the only state with enough courage to carry the program through. In that state it was reported that cotton was actually being plowed under. However, the amount was negligible. The plan, therefore, had arrived at almost a complete failure. It was not tried again.

3. **Warehouse and Personal Credit.** Not many cotton growers had suitable storage room for keeping cotton for any length of time. Weather will eventually damage cotton as to both appearance and value. There were few warehouses on the small cotton farms, and on such farms most cotton is grown. The villages and cities had few enough warehouses at best and, even where there were warehouses, the arrangements whereby the grower might leave his cotton there for some months were usually wanting. The farmer would undoubtedly want to borrow money on it. It would need to be insured and protected from fire.

However, in many cases the Union had built warehouses and so could attend to these matters in a fairly good manner. Even so, the warehousing and storing of cotton did not prosper too well. Either the price did not rise later, as was expected, or they did not like to pay 10 per cent interest too long.

It seemed that, in order to make this sort of credit available in sufficient quantity, it would be necessary to approach the matter in a larger manner, such as by state organization. This was tried in Mississippi, but it very soon was given up. Although some progress was made, the necessary steps were apparently not taken since the matter was completely gone within a few years, and the storing of cotton for a higher price came to an end.

4. **Farm Credit Needed.** The ordinary tenant grower of cotton, who grows more than anyone else, is traditionally poor. The credit question soon reached the point of requiring something beyond the mere credit on cotton already picked but not sold. Here are a million and a half farmers, growing cotton and living on the crop as a source of credit for months before it is picked. Even the landowners are not by any means well off. Many of them have only small farms but are heavily in debt.

The Union was apparently well awake to the needs of the case, but little real progress was made. The landowner was paying too much in-

terest on his loans, but it must not be forgotten that most of the growers were not landowners at all and not likely, in the near future, to become such. The fact is that the program thus far proposed was a little too ambitious for the Southern tenant.

5. **Land Tenure.** Holding crops for better prices requires credit. But a consideration of credit for poor farmers, who own no land, will at once take us to the matter of land ownership as opposed to tenancy. Of course some tenants are pretty well off. That has been true in England for more than a century. To begin with, the English situation is quite unlike ours. Probably the first real difference is in the sort of man who leases the land. In England many of the tenants are as well off as the owners. Here that is almost never true. If they were, they would probably be buying a farm with little delay.

Among our tenants, Negroes are plentiful, yet not often so plentiful as white tenants. Mississippi, outstanding in this respect, is the one state of the Union in which the colored tenants outnumbered the white in 1940.

The Union, beyond that of any other farm group, was for a time concerned over tenancy. It was, moreover, distinctly strong in the South; then, after the First World War, it lost its strength in a large part of the South and became strong especially in the Mountain states, and later in the western part of the West North Central group.

Early Leaders of the Union. Just what to do next the leaders of the Union did not know. They apparently had a good deal of political strength in Congress for some years after their strength in the South became small, so far as farmer membership was concerned. After the First World War they appeared to have rather strong national leadership, yet the actual accomplishments were not impressive. It is within the past decade and a half that solid, strong growth has taken place. The type of leadership is far beyond what it was a short time ago, and their business operations have grown remarkably.

THE PRESENT FARMERS' UNION PROGRAM

Main Business Organizations of the Union. During recent years there have been built up three rather large business organizations, the Central Exchange, Grain Terminal Association, and Farmers' Union Live Stock Commission. The Union did some business outside of these companies; for example, a life-insurance company was organized in Colorado in 1938. In 1944 it was doing business in nine different states and was beyond 20 million dollars in the amount of risks carried.

Central Exchange. The work of this organization had been running for four years when it was made over with a new name. They were doing

a considerable amount of business under the old name, The Farmers' Union Exchange, but, in 1931, under a new name, The Farmers' Union Central Exchange, they got a new start.

Going in as part owners with several other fairly big farmer groups they became part owners of a cooperative tractor company. The tractor appears to be one of merit, though its manufacture was suspended until after the war was over.

Similarly they bought an interest in a big concern, the Universal Milking Machine Company. The name was changed to Co-op Milking Machine, the fourth largest selling machine of its kind.

In a similar manner they have gone into the manufacture of cedar shingles, in British Columbia, buying a mill and a quantity of timber.

At Menomonie, Wis., the same company runs a soybean mill which manufactures soybean meal for feed. The oil is being sold to refiners who turn it into many additional products.

The big business into which the Central Exchange has gone is, however, the purchase and operation of a petroleum plant, and a third interest in another. The refinery that they own wholly is located in Montana, with three separate fields from which the crude is obtained, lying partly in Montana and partly in Wyoming. The refinery is at Laurel and has a capacity of about 7,500 bbl. of crude oil daily. The main products from this plant are gasoline and tractor fuels used largely by farmers, fuel oil for railroads, and asphalt products for highway construction. The plant, in Kansas, in which the Farmers' Union owns about a one-third interest, yields more gasoline and oil than does the Montana plant and has a capacity for handling 17,500 bbl. of crude oil per day, making about every kind of fuel to be derived from petroleum.

The Central Exchange has, for some years, handled probably 50 different commodities quite successfully. There is a limit to the number, or the group, of commodities that any farmer company can handle successfully. But they are forever enlarging the list. One of the most usual and most successful of their undertakings is along the line of farm feeds and seeds.

The amount of business done can be shown rather well in the following items. The cash capital used by the Central Exchange, beginning with $500 in 1931, grew to 3⅔ million dollars in 1944. The value of goods handled in 1931 was $900,000; in 1944 it was $12,500,000. The organization began with less than half a million gallons of lubricating oil sold in 1931, but went above two million gallons in 1944. They shipped to their customers about 1,400 cars of gasoline and other fuels in 1931 but reached 12,000 cars in 1944.

Farmers' Union Grain Terminal Association. This organization has been running since 1938, a rather short time for a company that has become so large. During the first year of operation (1944) they handled 17 million bushels of grain; during the last year 129 million, or more than seven and a half times as much as they began with. At the present time (1947) they own eight big terminal elevators, stretching from Spokane to Superior, with one at Minneapolis and one at St. Paul. It is expected that the one at St. Paul will have a real advantage in shipping down the Mississippi to the Gulf, especially if our export trade should again develop.

When this business was started, the organization had but $30,000 to put into it. In 1944 the money invested by the farmers in the business amounted to $5,692,000. The amount of grain handled was over 15 per cent of the whole amount grown in the country. It was largely wheat, and quite above the average for the country as far as quality was concerned.

The grain came mainly from their own country members and was handled at the most advantageous points either for home use or for exportation. The company at St. Paul furnishes much help to the locals in such ways as aid in financial matters where assistance is needed; in bookkeeping and auditing for country elevators.

Through subsidiaries much help is given to the farmer members through the running of a hatchery, furnishing feed, seed, and the like. Also they run a lumber and coal subsidiary company. This work is only a very few years old but already has local units in several states.

Company Has Flourished. Not only do the farmers in this venture have the ownership of a going concern worth $5,692,000, a real asset, but they have paid back to their patrons during 1943–1944, the main part of $2,619,000, in the form of dividends. These patronage dividends in 1944 amounted to 1.87 cents a bushel on wheat, 1.25 cents on some other grains, 0.62 cent on oats, and 3.75 cents on flax.

Government Aid in Financing. The Federal government has made it possible for the country elevators to borrow money to pay for the grain they buy. First the borrowings are made by the Grain Terminal Association, at 2½ per cent, from the Central Bank for Cooperatives, which in turn remits to the country elevators to be used in buying grain. On this, as required by the grain exchanges, a charge of 5 per cent is made. The private buyers thus make 2½ per cent on all money lent for this purpose, which they keep for themselves. The Grain Terminal Association returns all such gains in dividends.

The Grain Terminal Association has reached financial security. Although it has paid more to the farmer for grain handled in the few short years they have been operating, they have paid a large part of the in-

debtedness on these big terminal buildings, until now their financial standing appears to be safe.

Livestock Buying in Omaha and to Northwest. The Farmers' Union has a livestock-buying company in Omaha, Neb., which in 1944 marketed 57,000 head of cattle, 206,000 head of hogs, and 320,000 sheep. This stock was shipped to them from three states west of the Missouri: Montana, Colorado, and Nebraska. This is at best a modest amount of business to come into Omaha from a territory that is tributary to such a stock-feeding area as is within shipping distance of Omaha. On the above-reported livestock for 1944 there was a marketing gain of $50,600. Although this sounds like a fair amount of money to make on the stock shipped, it is indeed a small item considering the amount of stock marketed within the territory from which it comes.

Twenty years ago there was a great gain in the amount of livestock sold cooperatively. Back in the early twenties it appeared that the farmers were getting the marketing of livestock rather well in hand. Then came the building of good roads and the hauling of quantities of livestock in trucks to market. Markets were not so far away as they had been for years. The big packers, and some not so big, had built small slaughtering establishments in every city of any size, while men with trucks hauled the stock in, usually during the night, from the farms to the small plants. It was not so easy to estimate the value of the stock, and soon the great number of farmer cooperative shipping companies found themselves with little to do, and so quit shipping. For better, or worse, the buyers had a stronger hold on the livestock trade than they appeared to have had for a decade preceding that period. The Farmers' Union has a rather small buying company at South St. Paul. Although work is being done in the sale of livestock by the Farmers' Union, it looks small in comparison with their work in the gasoline and related business or with their work in the marketing of grain, seeds, and feed.

Nebraska Farmers' Union State Exchange. This store, with its connections, was started in 1914 and now does a business of more than 3½ million dollars per year. The store has a trade of more than a million dollars in goods sold to individual customers, some of which may be stores. Its main trade is with the cooperative stores of the state. This runs up to almost 2½ million dollars a year.

Scattered over the state are eight cooperative stores which, for some years past, seem to be doing pretty well. A little over 20 years ago there were many more cooperative stores in the state, but with the hard times of the twenties they went under. Cooperative stores appear to have a hard time throughout the country, although many of the newer ones now are presumably prosperous.

HOW BIG IS THE FARMERS' UNION?

Early Claims as to Size. In the early years of the Union claims of 3 million members were made. No exact figures were available, but it was very far below the numbers claimed. For example, it was reported that they had, in a colored organization, a million members. This was a vast exaggeration. Probably the main membership of white people was never greatly beyond a half million, and it was never in any effective, working fashion up to that number. By the time the membership was really known and definite, it was below half a million. Probably there was a time when the membership had the appearance of being higher than that, but it was a loose, weak membership. In recent years they have had a much better though smaller membership.

Present Size. In 1940 the Farmers' Union had a membership of about 143,000 families. This would mean somewhere around 400,000 members, counting the women and young people who belonged to the families of the members. Besides these there were members of the cooperative run largely by members of the Union, something like 150,000 men. Of course some of these could be members of other farmer organizations, such as the Grange.

The Farmers' Union is located largely in the western part of the Northwestern states and in four states in the central part of the South. The 10 leading states so far as membership is concerned are as follows:

TABLE XXXIII.—FARMERS' UNION BY STATES

Oklahoma	24,000	South Dakota	11,000
North Dakota	24,000	Wisconsin	10,000
Mississippi	18,000	Louisiana	7,600
Arkansas	15,000	Colorado	7,000
Nebraska	14,000	Montana	7,000

The above list shows six Northern states and four Southern. The former consist of four in the North Central group and two in the Mountain states. It will be noticed that the great share of all Union members are found in these 10 states. However, recent reports show important gains in Eastern states.

Trouble in Getting Ground Feeds, Seeds, etc. When the feeds and seeds were relatively scarce on account of war operations, there were several big companies buying up all that they could get of these products. The result was undue scarcity of these products over many months, with prices always on the upgrade. High prices are to be expected, but if the farmer companies could play a bigger role in the handling of their commodities they could be sold to farmers for prices quite below what

has been asked. In the case of everything in the way of mill feeds the farmers have been just about helpless. This means that there is occasion for the farmer groups to make a genuine effort to get these products back into their hands at an earlier point, for example, at the mills, but thus far the way to accomplish this has not appeared. So far as seeds are concerned, the growers should be treated fairly, and the connection between them and the distributors should not be extremely difficult to manage. On the question of fertilizers, a field of great profit to many operators, there is reason to hope that some good farmer companies may soon make a start in holding prices down. It would seem possible to get into this work without owning all the sources of supply. However, that would hardly seem to be more difficult to accomplish than has been the ownership of oil and gasoline facilities.

The Farmers' Union has made a good start along this line by going into the processing of soybeans at Menomonie, Wis. Feeds and seeds are both on a higher plane of excellence than was the case a few years ago. It is possible for farmers to get an early start in handling these high-priced products.

We are now using immense amounts of farm fertilizers and will probably continue to use more and more. In this connection it looks like a favorable opportunity for some group of farmers to discover first the amount of money to be saved to crop producers by the possible ownership and management of some of the sources from which may be derived the leading fertilizers used by farmers: the mines, quarries, and waterfalls.

Farmers' Union Much Stronger. Although the Farmers' Union made little progress for a considerable number of years, since about 1931 it has shown real strength. The Union has gone into the business of producing gasoline, lubricants, and machines. It has become the merchant for a long list of things the farmer has to buy. It manufactures tractors, shingles, and milking machines. It holds a lot of goods for sale, such as flour, feed, and seed. These things run into many millions of dollars.

The territory occupied by the Union is not occupied by the other farmer groups to any considerable extent. In the Northwest they have things pretty well to themselves. In that section of the country there is still much work for them to do, while farther on to the northwest there are few groups except the Grange in Washington, Oregon, and Idaho. Probably there is room for some group like the Union along with the Grange.

A good statement made by James G. Patton in his 1943 report, "A Crucial Year of War," reads:

"The military war may be won on the Rhone, the Po, the Rhine, the Dnieper, and in the Pacific while the war for democracy is lost in the Mississippi River Valley." This is true probably because, "We are developing in agriculture, as in industry, a power in the hands of man to destroy and brutalize his neighbor." Even so he believes that "we can plan and determine that there shall be a new, better and more democratic farm in America after the war."[3]

The Union "fought for the removal of acreage allotments and the expansion of production on small farms." Throughout the war the Union continued its fight for, and support of, incentive payments. These are, of course, subsidies. But many subsidies were given to manufacturers. Why not use the same device in promoting phases of agriculture?[4]

The National Farmers' Union proposed a War Production Agreement for farmers to put them on the same basis as war industry. We proposed that the government agree with the farmer to furnish him necessary credit, technical assistance, advance or progress payments during the crop period, to cover the crop production costs, War Risk Crop Insurance, the assumption on the part of government of responsibility for providing on a priority basis man power, fertilizer, machinery, and other production supplies. This involved the basic issues as to whether or not they were to be treated as industry had been treated and be given credit, war risk insurance, prices subsidized as a war cost by government, and all the other assistance which government has given industry.

The issues I have stated are peace issues as well as war issues. The inadequate decisions made [upon?] have already affected the war effort to a sizable degree. I am sure that the decisions which needed to be made, but have not been made, will have a very definite effect upon the peace to come.

A very excellent remark closes the paragraph headed Inflation—Subsidies—Prices:

If we want our dollars to buy less and less as inflation goes up its dizzy spiral, if we want land booms and busts, then we should oppose price control, rationing, subsidies, heavy taxation, compulsory savings, and all the other devices used to fight inflation.

[3] The address of James G. Patton, "A Crucial Year of War," in *National Farmers' Union, Annual Report, 1942–1943,* recommended that members of the class read the whole report.

[4] The Farmers' Union is critical of the American Farm Bureau, the Grange, the National Council of Farmer Cooperatives, the United States Chamber of Commerce, and the National Association of Manufacturers. See the sections under Basic Issues, Public Interest First, and Strategy, in *National Farmers' Union, Annual Report,* Nov. 1, 1942 to Nov. 1, 1943.

The President of the United States in 1942 called for a program as follows:

1. Heavier taxes to keep personal and corporate profits at a low and reasonable rate.
2. Fixed ceilings on prices and rents.
3. Stabilized wages.
4. Stabilized farm prices.
5. Put more billions into war bonds.
6. Ration all essential commodities which are scarce.
7. Discourage installment buying. Pay off debts.

So far the only tax programs passed soak the poor and save the rich to too great a degree. We have not fixed ceilings on all prices, though we have done a fairly good job in controlling rent and clothing prices. . . . In addition to this, we have raised prices of consumer goods clear across the board by failure to require quality minimums through the establishment of grade labeling.

With the exception of Mr. John L. Lewis, the Economic Stabilization Board and the others involved have done an excellent job of stabilizing wages. We have had inadequate stabilization of food prices.

We felt that the government could pay whatever the real costs of increased production were, such as incentive payments to absorb the differences in increased costs and ceiling prices, just as they absorbed them in the aluminum industry, the zinc industry, and a dozen other industries, so that the increases in cost would not be reflected in the general price structure. We proposed that all of the farmer's costs, including his labor costs, be included in these war production agreements.

For almost twenty years, farmers and their organizations have waged a battle for adequate prices and have come to look upon prices as goals. We thought in terms of $1.50 to $2 wheat, 15 to 20 [cent] cotton, etc. We developed this viewpoint through the struggles for the McNary-Haugen Bill, the struggles for the Farm Board program, the first and second AAA. . . . We developed the concept of parity.

As the years have passed it has been possible to grow crops for less cost. With wages back to what was, for years, normal, it was possible to grow wheat at much below $1.50 or $2, while cotton can pay well at figures quite below 18 or 20 cents a pound.

The concept of parity prices and parity income became one of the great concepts of the last decade. We saw establishments of a parity formula, commodity loan program (subsidies) the triple-A parity payments, soil conservation payments, agricultural conservation payments (all of these were subsidies). We, properly, came to look upon parity prices and its achievements as one of the great social gains.

We demand a parity floor for farm products during the war and assurance now of parity in the postwar period. We demand parity: we ask for no more, we will accept no less.

Full Credit at Cost. Full use of our land and machines to cover rural America with sturdy farm families operating their own family-type farms. To preserve the family-type farms, we must, among other things, provide needed credit at cost, a graduated land tax, sound crop insurance, a fair income tax, parity prices, planned production according to needs, extension of cooperative practice in the field of distribution and in the use of costly farm machinery.

This means that we cannot return to isolationism, but must participate in world affairs to protect the way of life we are determined to achieve. . . . Trade barriers lead to wars.

We have a continuous record of supporting sale of feed wheat and of moving feed to livestock. The Farmers' Union was the first to ask for the lifting of the scarcity program on wheat and corn and, after much difficult work succeeded in having the acreage limitation lifted on both wheat and corn.

We have joined with other groups in seeking an adequate graduated income tax law and a revision of the present law. . . . We have continuously opposed sales taxes.

We demand that privately controlled farm organizations be divorced from publicly supported agencies.[5]

To say that we must participate in world affairs is a remarkable statement. No one has expressed a better view of the world trade question. The difficulty is to make it fit with the above statement. The higher prices which parity gave us for many of our farm products constituted the immediate cause of the isolationism under which we struggled for several years, and which threatened until the Second World War began. There is altogether too much truth and reality in the quotation just made, "Trade barriers lead to wars" to allow us to ignore the situation now developing among our own and European countries. Europe is starving, much of it, and will be for the next year or two at least. Will we be able to hold our own tariffs at a distinctly low level, on manufactured foods, and at the same time get our agricultural goods down in price where the hungry people can trade us their output for the products of our fields? We can sell, or trade, to them a vast amount of foodstuff and clothing, but we cannot hope to send wheat and meat at present prices to Europe or take their manufactures in pay, first charging them heavy duties. It will not be easy to keep our wages up at present figures, after lowering tariffs, and the people who have suffered, as they have from the war in Europe, are not in a position to continue the old tariff war in the trade. We have carried on a small amount of trade on a lower tariff basis, but the exchanges, if they are to develop to any considerable degree, will have

[5] This statement refers to the relationship of the American Farm Bureau and the Agricultural Extension Service, *National Farmers' Union, Annual Report, 1942–1943.*

to be on a freer basis than yet can be found in the tariff agreements as they stand. Our agricultural prices are still too high for exchange, our wages are still too high to allow much export at prices that other nations are willing to pay. The danger is that our high prices may again lead to another situation such as hit us in 1929. If we care to trade with the world as it looks today, it would appear that our prices will have to come to a lower level. Could we get our prices down to a lower level, we might be able to trade on a profitable basis. If we try to pull the rest of the world up to our figures, there is bound to be trouble.

So we close the argument with the words used just a little earlier: "This means that we cannot return to isolationism, but must participate in world affairs to protect the way of life we are determined to achieve. . . . Trade barriers lead to wars."

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Chapter 31

THE NONPARTISAN LEAGUE

Since the Nonpartisan League is presumably dead, it should not take long to describe it. The League had what might be called its beginnings in the nineties of the preceding century. In North Dakota in 1892 a bill, providing merely that the railroads should furnish sites for grain elevators whenever they were wanted, was vetoed by the governor.[1] This was followed by fusion of the Farmers' Alliance, the Populists, and the Democrats who combined and elected a governor of the state in the fall of that year. An appropriation of a few thousand dollars of state money provided that an elevator might be erected for the farmers of the state at Duluth. However, this was not done at once, and the regular Republicans got back into power in 1894. Nothing further was done respecting the marketing of grain until 1906. In this year came a great awakening among the Scandinavian people, who for some years had been staunch Republicans. They began their revolt against the Republicans of North Dakota. Probably most of them were not clear in their own minds as to why they should vote the Republican rather than the Democratic ticket although on coming to this country they early learned that the Republicans had won the Civil War, whereas the Democrats had recently been slaveholders.

The older Scandinavians had been reading, and still read, newspapers in their own languages. They were, however, learning to read and understand English and made up about 40 per cent of the voters of North Dakota.

Grading Grain. There came to be endless dissatisfaction over the grading of the grain by the usual buyers, men who worked for "line elevators," that is, elevators from 2 to 40 or more in number, belonging to a single company. The managers of these elevators received small salaries but were thoroughly schooled in buying grain strictly according

[1] Andrew H. Burke.

to the grades and rules provided. The worst mistake they could make was to grade the grain above its proper grade. If they got it for a little too low a grade, nothing was said; no man could overgrade grain and hold his job. Time after time it was shown that these buying companies sold much more of No. 1 and No. 2 wheat than they bought and very little of the lower grades. This was looked upon as a case of extreme dishonesty on the part of the buyers. It was not by any means all outright dishonesty; it was rather a matter of taking advantage of the circumstances. For example, wheat might be No. 1 except that it was too moist for the high grades. However, there might be in the elevator several carloads of grain that were extremely dry. Mixing these quantities, say 3 to 1 in amounts, might easily bring No. 3 wheat up to the No. 1 requirement. It was the same with grain a little too shriveled; it would be mixed with some that was plump. The dirty grain could easily be cleaned. Thus grain bought at "no grade," or No. 4, might easily be brought up to No. 1. In recent years, at every big exporting city, there have been great elevators called "hospitals" at which the grain is so skillfully handled that the lower grades largely disappear.

It would be difficult to say to what extent the farmers were treated badly by the grain dealers, but in any case there were several matters that were not commendable. The buyers, for example, had things almost entirely in their own hands; they might tamper with their own scales so as to gain in the weight of purchases. Worse yet, they could interpret all manner of conditions and facts so as to gain for the buyer real percentages on everything they bought. On almost nothing of this sort could the farmer defend himself. Whether it was a matter of oats mixed with wheat, or a percentage of weed seed, moisture, or shriveled grain, the farmer had no defense; on these items the buyer had a long-established advantage. These facts gave the Nonpartisan League a real hold on the arguments during half a dozen years of fighting.

Farmers Not Financially Independent. Although it might be shown that the farmers of the Northwest were fairly well off financially, they were as a class not in easy circumstances. The average size of a farm in North Dakota in 1910 was 382 acres, with a value of $13,000. Just over half of them were mortgaged. Such farms were worth $11,000, with a mortgage of about 22.5 per cent. Thus the man with a mortgage on his farm owed about $2,500. The rate of interest was rather high, about 8 per cent, sometimes 10 per cent. When prices were fairly good and when the farmers got the usual harvests, things went pretty well, but in North Dakota dry years are likely to come at least twice a decade, occasionally oftener. Then, too, prices have very often fallen. Thus there are reasons to expect low incomes several times during a decade.

Many farms every 10 years are likely to be on the verge of bankruptcy. There have always been these unusual happenings, or at least they appear to the farmer as unusual. The farmer who had lived in such states as Iowa, Illinois, or Indiana was pretty likely to meet with many discouragements. Apparently the hard times that keep coming at not very long intervals to people living in the states subject to drouth have made them much readier to ask for something in the way of concessions than the people living in sections of the country where crops are more certain even though prices may go up and down.

People living on the plains where the weather plays such unkind variations have always been more likely to make demands of government respecting their welfare than are those who live where at least the annual returns vary less in quantity and therefore somewhat less in value.

North Dakota Ready to Rebel. There had been threats of rebellion ever since 1892, but North Dakota was a state not easily handled. It usually voted Republican, and the state ticket was nominated by a small number of overshrewd men. Although many voters were ready to rebel, they had never had a leader. In 1915 a leader appeared.

A young man who had grown up in northwestern Minnesota came to the front. Arthur C. Townley had moved out to the northwestern part of North Dakota where the rainfall is light and the grass is short. Here he became a great flaxgrower but was soon overtaken by trouble. He was heavily in debt, owned big tractors and other machinery, and grew at least a good crop, but the price that had been high fell to a low point, and he was financially ruined.

Not only was Townley ready to rebel, so also was North Dakota. It was in 1912 that Townley broke up in the flax business. For two years he spent most of his time trying to convert the Socialists of the western part of the state to some sort of genuine action. In the early weeks of 1915 he gave the Socialists up as a group with whom he could act and became acquainted with Fred B. Wood, a fairly prosperous farmer and big wheatgrower. Townley had met Wood at a Farmers' Equity meeting early in 1915 and had agreed to go out to Wood's farm early in the spring. He got there a bit before spring began and, after talking things over for a few days with Wood and his two sons, Townley developed a plan and the Woods accepted it. It was to organize the farmers of North Dakota into the Farmers' Nonpartisan Political League of North Dakota. During the first day's work in soliciting farmers about a dozen were visited, and they all joined the new society.

The rapid results in gaining signers were encouraging. Townley had been a Socialist for a few years, but the Socialists were not ready to be

led by him. Also Wood was a Socialist, but he and Townley agreed well regarding plans of organizing the farmers.

From the results of a few days' work with the Woods, Townley made up his mind that the case was ready and decided to get a number of Fords, with two workers per car and organize the farmers of the state. He soon had 100 cars for the work. The League is said to have owned a number of Fords and to have rented others on occasion. Also the leaders darted around in airplanes, especially Townley himself, and attended many meetings of thousands of farmers, being guided the last few miles to the place of meeting by a strawstack on fire.

Farmers Organized. Whether the farmers were made into Socialists is a matter of debate. Almost at once they had printed a platform about as follows:

1. State ownership of terminal elevators, flour mills, packing houses, and cold-storage plants.
2. State inspection of grain and grain dockage.
3. Exemption of farm improvements from taxation.
4. State hail insurance on the acreage tax basis.
5. Rural credit banks operated at cost.

The above program, which was the main basis of the program of the state for several years, is not too much like Socialism. Not a word was said about the ownership of land, or stores, or the running of general business. We would not now consider the first count of the program quite big enough to turn us all into Socialists although it does point in that direction undoubtedly. With those businesses taken into the hands of the state we would still be living under a general regime of private property.

By the winter of 1915–1916 the North Dakota Nonpartisan League had reached about 26,000 farmers, or more than a third of the farmers of the state. Soon afterward they passed the 50,000 mark.

The membership was rather large in Minnesota and Montana and was worth mentioning in several other states. In Wisconsin the membership reached nearly 20,000, just about the time the general membership began to go to pieces in the early twenties. They claimed to have around 200,000 members all told. Outside of North Dakota, and Minnesota in a small way, they accomplished very little. Their main showing was made in North Dakota.

They handled a good deal of money. During the first year they collected about $6 per member. There was some irregularity during the first few months concerning the amount that should have been collected, but during the first year they finally hit upon $6 per year for the biennium. They found too many farmers unable to make a full down

payment of that amount. What they did was to take what the farmer could pay in cash and then accept a postdated check for the balance. Or, they took the farmer's note for the amount not paid at once. The amount to be collected rose quickly from the first $6 to $9 per year, subscribed for a two-year period.

Legislative Acts of 1917 and 1919. During these two sessions of the legislature the state passed many new laws. Such action had been put into effect rather infrequently before, and a large number of these Nonpartisan acts do not, therefore, appear strange. During the first session of the legislature the acts passed were in part as follows: a cooperative law; grain inspection, and state control of weighing and grading; guarantee of bank deposits; an inheritance tax; legislation requiring railroads to furnish cars to all shippers; sites for elevators and warehouses; the taxing of automobiles according to weight.

The next session provided for such things as the following: exemption from taxation of all improvements on farm land; exemption of $1,000 worth of farm equipment; establishment of the Bank of North Dakota; establishment of a state hail insurance; an eight-hour day for women in factories; inspection of coal mines; maximum railroad rates. It will be seen at once that many of these laws, possibly with some revision, should be kept on the books. Some of these were not intended for anything of importance, since there was little or no such labor in the state. The League had its day in 1917 and 1919.[2]

End of Townley's Leadership. Townley's hold on North Dakota, which had been most remarkable from 1915 to 1919, came to an end soon after. He no doubt lost many supporters on account of his war attitude. The state did its full duty during the war, but Townley's patriotism was called in question. The government brought a charge that some of his speeches had been contrary to public interest and brought him into court. The war was over and, no doubt owing largely to that fact, they gave him a three-month sentence. While serving this sentence he wrote quite freely, even glowingly, of his character and plans, and of course he was soon at liberty.

There had, however, been many curious phases to his financial operations. It must be remembered that he held no legal position, no office, and could not very easily be called to account. That he was the complete manager of the Nonpartisan League's affairs was pretty well recognized. He was not elected to this position; he merely assumed it. Yet he employed something like 200 people in North Dakota, probably more than that in other states. For the most of this period, say from 1915 to

[2] A. A. Bruce, *The Non-partisan League*, p. 88, The Macmillan Company, New York, 1921.

1920, he, or they, were collecting around $9 from each member, mainly in cash, and another $9 in some sort of paper. At least $4 of this first sum collected went to the solicitors. For the first few years collections were easy. It took only one or two meetings to organize a township, getting, at times, a full hundred men to join. The revenues ran into real figures; just how much, however, was never stated. Supposedly something like $5 was to be sent back to headquarters in North Dakota, but how much money was received there was never known. But with 200,000 members it might be believed that a million dollars a year was collected. Even cutting this sum down appreciably would still leave a lot of money. Townley received, supposedly, only $3,000 a year. He did not have any large number of helpers or a large force of clerks. He had a newspaper which may have needed some support. Apparently no one has even tried to account for the use made of the cash. In any case the money paid in came to an end soon after 1920.

Nonpartisan Influence. Although according to their own reports they had members in every state from North Dakota to Texas, and from Wisconsin to the West coast, as well as a few others near by, they never had control of any state besides North Dakota. In Minnesota they did elect a small number of men to county offices. As a political force they just about disappeared, although they elected one congressman out of three, and the governor of North Dakota, and held the Senate by a single vote.

Whether or not Townley was a genuine Socialist is not very important. He was a thoroughgoing Socialist during the two years between his financial failure and the beginning of his Nonpartisan campaign. As mentioned, the real Nonpartisan program was by no means a full socialistic one. On the other hand, he was surrounded, and probably influenced, greatly by Socialists throughout his activities. Many of his state officials during the main part of his regime from 1917 to 1920 were Socialists. Also a real part of his solicitors for membership were likewise Socialists, not of the highest type.

In no state besides North Dakota did the Nonpartisan League ever gain control.

Why Townley's Leadership Ended. Townley seemed to have brains enough to get along well with many people but for some reason, hard to explain, he quarreled with others greatly. It must be kept in mind that he was not elected to any position, yet he undertook to run all matters pertaining to politics. In 1920 he undertook to manage the state election, as he had done at the three preceding ones. From 1915 to 1919, Townley was the man who could both predict and manage substantially every election held. He had been the unquestioned leader of three elec-

tions, but his war record counted much against him. When the 1920 votes were counted, it was evident that Townley's day was done.

Townley certainly had complete control of North Dakota for several years; but he lost it through his doubtful attitude concerning the war, through the toleration of several Socialists who came into control of traveling library books and who circulated books on free love, and in his support of Kate O'Hare. Townley did not know that his state support was gone until the election of 1920. After that he had no leadership and soon was attempting the sale of stock in gasoline companies that had no oil in their holdings. He was a third-party candidate for the Presidency of the United States at one time. Townley is completely down and out and, politically, has been for many years.

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Chapter 32

THE AMERICAN FARM BUREAU FEDERATION

County Agents. Presumably, the American Farm Bureau was built upon a foundation of county agents. This has been said over and over. On the other hand, it was rather clearly built upon the groups of farmers who first demanded and supported the county agents. There were not a great number of county agents before the First World War. The first one, much like those of today, was A. B. Ross, who went to work in Bedford County, Pa., starting there as an unappointed county agent about 1907. He was later employed by Professor Spillman of the Department of Agriculture and became a paid county agent of Bedford County in 1910. Other county agents were employed in the same state in 1912 to 1914, and by 1914 all but three of the counties of the state had agents.

Outstanding Work in Illinois. In 1910–1911, a citizen of DeKalb County advised that a county agent be employed. The men there raised several thousand dollars by subscription for soil improvement, and by June, 1912, the county employed an agent. Kankakee County also did some remarkable work, and within two years the spirit manifested by these two counties had shown itself elsewhere. Their example spread rapidly and quite soon there were 14 county agents in the state. The counties that went into this work early did not proceed altogether on a democratic basis. Probably they did not have the courage to expect that counties as a whole would put up money for work of this kind, so they got something like 300 enterprising farmers to subscribe $10 or $15 each, hired a man to supervise the work, and established a county agent system for the well-to-do, enterprising farmers. Within a very few years the counties raised the money by levying a tax against all the general property of the county. Later the number of men in the county group was much more inclusive, but the high dues charged have been continued in at least two states, Illinois and Iowa. The South had their

county organizations, rather unlike the county organizations of the North. In order to work together it seemed desirable to make the two groups alike, and for the most part the Southern organizations became more and more like the county organizations of the North.

Farm Bureau Leaders. The leaders of the American Farm Bureau were not the county agents, most of whom were too young for that role, being still in their early twenties. The real leaders of the movement, as is the case with about every movement that starts, were between twenty-five and fifty. The county agents furnished no leaders among the groups that planned the work that was done, or among those that planned the schemes that failed. As is usually the case, the men who made the plans were those with years of experience, probably over forty years of age on an average.

Farm Bureau Extends Its Work. The Farm Bureau leaders for a short time, during its formative stage, attended meetings, usually the annual meetings of the county agents held at the same time as the regular meetings of farmers at the college. As things were going, it was seen that something besides the work of the county agent was needed to save agriculture. The Farm Bureau was very much alive in this respect and began by asking for appropriations from counties, to be used largely by county agents. Next it demanded appropriations from state legislatures and got them. Much money was put into extension work.

From these beginnings the Farm Bureau began to look to Congress for help. However, the Bureau undertook one very big program before asking the state for help. Probably the greatest single undertaking of the Bureau was the development of a nation-wide plan for marketing the nation's grain. This attempt was apparently largely the result of a famous speech made by Aaron Sapiro of California at the meeting of the Bureau held in Chicago on July 23 and 24, 1920.

Sapiro, a native of San Francisco, had for several years been in the Department of Cooperation, of California. Although not widely known at the time, somebody proposed him as a speaker and he spoke at the July meeting. Having worked for the Department of Cooperation of California as a lawyer, he became, supposedly, for a few years their greatest expert. He knew almost nothing about selling wheat but had apparently put in a little time studying the figures. His main complaint was against the board of trade. Sapiro advocated a plan whereby the farmers would own at least 51 per cent of the wheat in the nine leading wheat-growing states. Just what such a quantity of wheat would have been worth to them in the early thirties is a question. What Sapiro evidently had in mind was something like a monopoly of the past year's crop in the hands of the growers, year by year.

O. M. Kile gives Sapiro the credit for first proposing to have cooperative companies organized along the commodity lines.[1] This idea was not so new. There had been grain companies, with nothing but grain to sell, for 20 years, also many fruit-selling companies, as well as various others along the line of commodities.

Committee of Seventeen. In the summer of 1919 the Bureau, through its president, appointed a committee of 17 men to devise a plan for marketing grain. This was, presumably, a remarkable committee. It included such men as J. M. Anderson of St. Paul, manager of the Equity Cooperative Exchange, who was considered an orator but was not an expert in the grain business. W. G. Eckhart, director of the Grain Marketing Department of the Illinois Agricultural Association, was a soils man in Illinois for a period, then a county agent. C. V. Gregory, editor of the *Prairie Farmer*, was not a grain man. C. H. Gustafson, president of a livestock-marketing company, was from Nebraska. C. H. Hyde of Oklahoma was connected with efforts to market grain from Oklahoma. President Ladd of North Dakota was a chemist. A. L. Middleton, an honest farmer from Iowa, had been president of a state farmers' grain dealers' association. L. J. Tabor was later the master of the National Grange. This was a good group of men, but by no means experts in the work of marketing grain.

Several of this committee had been much impressed with Sapiro's famous speech. Sapiro conferred with this committee for some days and apparently greatly impressed them. At least the plan that they agreed upon was closely in accord with the leading ideas expressed by him in his Chicago speech. Sapiro was clear in what he believed about grain. To begin with, he was clear in saying that he would have nothing to do with the existing grain organizations. He would organize wholly independently of them. He was very uncomplimentary in his comments concerning the cooperative elevators of the country.

The Committee of Seventeen held many meetings in the West, California especially, and went to Canada to confer with the big cooperatives engaged in the grain business. However, they were ready, in about six months, to make a report on their findings. One of the boldest and most striking statements concerning the farmers' lack of prosperity was the following: "Investigation conducted by this committee convinces us that the fundamental reason for the lack of adequate profits in farming is a faulty system of marketing farm products." A careful study of "profits in farming" during the period when this sentence was written, 1921, to such a date as 1938, will show the utter fallacy of the notion that the

[1] O. M. Kile, *The Farm Bureau Movement*, p. 150, The Macmillan Company, New York, 1921.

lack of a good system of marketing is the occasion for low prices. The statement, no doubt, contains some truth, but there have been long stretches of years during which the prices paid at leading markets, like Chicago, were lower than a farmer could afford to take. Yet these prices were 30 to 50 cents higher than wheatgrowers were getting for their grain. The fact is the market was thoroughly demoralized from 1930 to 1941, with a short period of three or four years during which the price went up to just a decent figure. It was these low prices that induced the government in 1933 to take such drastic measures to bring prices back to somewhere near the level that farmers had to have in order to hold their farms at the high prices at which they had bought them.

The committee goes on to say that prices "are determined in a few large centers of distribution." It may of course be true that, in these large centers, the figures for the country, or a series of countries, become known, and the price is determined accordingly. Do not think, however, that a group of men are able to set these prices at 50 cents or $2 as they please. The men who conduct the leading grain markets are no doubt responsible for the ups and downs of a few cents per bushel from day to day, and no doubt some innocent farmers suffer losses because of the lower priced sales made from time to time because of it. Just so, others get higher prices if they happen to sell when the bulls, instead of the bears, are in the ascendency.

The committee also says that "the inevitable results of this speculation are: First, constant manipulation of prices. Second, great losses to producers and the public generally." If speculation results in a general raising of prices, it would look as though farmers should profit by the operations. If wheat is held to a lower level of price than would otherwise obtain, it would look as though the millers should be able to make flour cheaper than it otherwise would be and we would all, eventually, have an advantage.

This committee states that "the consumer's price is based on the high point of the year, while the producer sells most of the grain at the low point." These two statements are about as far from the truth, taking the whole year into account, as could well be. For example, the low prices for wheat come right after harvest while the high prices come, presumably, during the second half of the year following harvest. Does this mean, then, that the prices paid by the consumer are based for the first half of the year on the prices paid by the middleman during the last half of the year? Or is it forgotten that, about one year in four, wheat is lower in price during the second half of the year than during the first half? The fact is that the whole statement is so weak as to be just about worthless.

Committee Plan. Its plan was complex and consisted of two parts. The first method provided for "sales agencies" at various markets, presumably local ones. At the central markets, warehouses were to be provided and were to be handled by finance corporations and an export corporation. Apparently the local people were unable to visualize this plan. Who was to be in charge? It all seemed far away and vague. They apparently were not at all ready to adopt a plan of this kind. Probably they could not quite visualize the long haul to foreign markets. As they did not know who was to have charge of the business, they were not ready to do business on this basis.

By the second method, they might sell for cash at a price offered by the elevator company. Probably had they been ready to accept anything offered by the committee it might have been this plan. But there wasn't much to the plan, for this was about what they had been doing. Or, they might send their grain to a national sales agency, the grower to decide later when to sell. But this involved expense, and the growers did not want to try it. Or they might enter "local" or "joint" pools, or finally they could enter an export pool and sell one-third of their grain by that means.

Whatever else the plan, or plans, involved, the farmers did not feel ready to adopt them, knowing so little about who were to perform the operations. The Bureau voted to incorporate with a capitalization of 100 million dollars. However, the money was never raised. A very small amount of grain was shipped to them in St. Paul, and probably a bit more in Chicago. The men to whom it was shipped turned it over to real grain dealers who paid the going prices for it. But the farmers were in no sense ready to go into any such plans.

Incidentally the committee was financially embarrassed. The collapse in farm prices that occurred during the very months when the committee was making its travels and its studies was quite disastrous to the Farm Bureau.

The report of the committee, the plan to handle a large part of the grain of the country, collapsed almost completely. The Bureau tried hard to get hold of the dairy interests but succeeded in only a small way. Apparently the committee appointed to handle the dairy affairs did not understand dairymen at all well and did not get very far in making their acquaintance.

The Bureau has done some very good work in dealing with the fruit and truck industries, but this attracts but little general attention.

The Cause of Agriculture. The Bureau came to believe that agriculture was in about the same trouble that for years had threatened industry. They concluded that the troubles of the other great groups could be

settled only through control of output and that the only way they could take care of themselves was likewise, through control of output. They believed that industry had made up its mind that its only hope was found in the conscious limitation of production. The railroads ceased to build road and, stopping with a mileage that would just serve the country, were able to make charges that continued to be profitable. The organized trades refused to take in more members than could be employed. Thus wages could be kept high. So the farmers arrived at the idea that the only way agriculture could become prosperous again was to limit output to a figure that would adequately pay the farmer for his work and to stop producing while the public was still hungry. But to do this while every farmer was free to plant and sow at will they looked upon as hopeless.

The farmers had tried on various occasions to limit the production of crops and animals. To succeed, they decided, required the authority of government. Thus the Bureau arrived at the conclusion that Federal aid would be needed in order to hold the amount of goods produced down to a figure that would pay the farmer adequately for his efforts. The Farm Bureau tried in 1923 to raise the price of wheat by asking the farmers to withhold a couple of million bushels from the market. However, the trouble was to compel adequate and definite quantities to be withheld. Ten years later this matter was brought to a head by making specific loans on quantities of corn stored on farms at prices something like twice the value of corn at the time of husking in the fall of 1934. Cotton was handled in much the same manner.

The McNary-Haugen Bill. Although this bill was not recognized as a Bureau bill, it was clearly supported by this group much more strongly than by other farmer groups. The plan, under this bill, for a considerable part of the decade of the twenties, was supported mainly by the farmer friends in Congress and opposed by leading members of both House and Senate. Briefly, the plan was to retain the tariff then existing, if not to provide higher rates of tariff on all the products to be controlled. There was to be collected an adequate fee out of which to provide necessary funds for paying losses on farm product handled, some portion of which was to be sold abroad. Hence, if wheat were bought at $1.12 a bushel and the 12 cents retained by the government, it would be possible to sell about one-quarter of it to foreigners at 48 cents less than the nominal amount for which it had been sold by our farmers, and still come out about even in the transaction. The supposition was that, since we sold outside the country only one-sixth to one-fourth of the wheat we grew, it was possible, out of something like one-eighth or one-ninth of what we sold the whole amount for at home, to collect enough

money to pay the losses. Just how happy the foreigners would be to take our extra wheat at a price so much below the prices we were getting did not worry the men who were planning the procedure during the twenties. Later, they, the best of them, concluded that it could not be done that way.

It was not possible to set a price that would just cover losses. To begin with, as the price had to be made before we knew how much wheat we were to get, we could not figure very accurately. Also the price to be received for the wheat exported was an unknown quantity. Thus we could expect to balance the books each year only roughly. Nevertheless, within the limits that the country could stand we would attempt, on an average, to come somewhere near the mark.

It apparently did not occur to Congress, or to the farmers, that anyone across the water would object to buying our surplus wheat at world prices even though we should, through our own devices raise our home prices to quite a higher figure. It was said in Congress that the European people would not even need to know, or care, what we were paying for the wheat used at home. However, in 1934, Henry A. Wallace wrote a book in which he stated, "It is becoming more and more apparent that most of the world will not tolerate subsidized exports."[2] This was a plain truth. As a matter of fact we were already objecting to Poland's attempt to land subsidized rye on our shores, and of course ready to pay our tariff. Quite contrary to our own doctrine respecting our proposed exports to Europe, we at once objected to the Poles trying to unload their rye! This, of course, was exactly what we were proposing to do, in a large manner, with nation after nation. Even so, not a man in Congress would listen to a suggestion that anyone could object to our subsidized exports to them. Through this experience we arrived at the New Deal plan of a limited output of farm product.

The Farm Bureau Helps Agriculture, 1920–1941. The railroads were in rather hard financial circumstances soon after the war. They had been in government hands for several years, and their equipment and the condition of the roads were in poor shape. The roads held their own valuations at a high figure. These valuations were appreciably reduced, saving on farm traffic something like $100,000,000 in charges. What is more, the Bureau fought vigorously, and defeated, the proposal by the roads of a 55.5 per cent increase in freight rates, which would have increased charges on farmer freight by $300,000,000. In 1922 an attack was made on freight rates, and the result was a reduction of 10 per cent, which saved the farmers $120,000,000.

[2] H. A. Wallace, *New Frontiers*, p. 186, Reynal & Hitchcock, Inc., New York, 1934.

Also, in 1921, for the first time, a farm representative was secured on the Interstate Commerce Commission.

The organization of an agricultural bloc took place in 1921. This was stronger and much better organized in the Senate than in the House. It did considerable good work for a few years but fell into the background with the overwhelming preponderance of the Democrats during the early years under Roosevelt.

The Farm Bureau helped to defeat the phantom, fake, Pittsburgh-plus system, under which the steel people for years had collected freight rates that really had no basis. The steel had its origin in Chicago, or near by, but the buyers paid for it as though it had all originated in Pittsburgh. In 1931 the Farm Bureau claimed the credit for defeating another attempt to raise freight rates by 15 per cent. This would have cost farmers, had it been passed, about $100,000,000 per year. The provision related to 166 separate commodities.

Cooperative Sale of Livestock. In 1922, the farmers of this country began an important piece of work, the cooperative handling, shipping, and sale of fat livestock. This scheme spread over the country with speed and showed great strength and the prospect of further development. Then, within five years of the time it started, it began to go under and within a few years was handling only a small percentage of the livestock of the country. It has been estimated that not over 20 per cent of the hogs of the country are sold cooperatively; in many cases the amount of cooperation is smaller. The trouble appeared to be divided between good roads and the practices of the packers. Good roads had made it possible to haul hogs to market by truck. At the same time the packers had made truck hauling easy by establishing something like a hundred small packing plants over the country, thus greatly shortening the haul from farm to plant, both in time and mileage. Thus the cooperative shipping companies which had well covered the corn-hog territory found their work about gone. Truckmen would pick up a load of hogs during the latter part of the day, drive during the night to the packing plant a hundred miles away, and arrive for an early unload. At least half of the hogs of the country were packed in small plants.

With the changes that have occurred in buying and selling livestock, many men who at one time represented the farmers have really become buying agents for the packers, probably offering the prices that they are told to pay. Twenty-five years ago the farmers had real representatives at a few of the big sales centers and were becoming important factors on these markets, often handling half of the stock offered. Now there are few farmer representatives at the market centers, while in their places are the truck haulers coming in with their loads and taking just what is

offered. Of these haulers there are hundreds. Then there are auction or sale barns in the villages here and there, a thousand of them; finally there are the small concentration yards with packing plants near by, at which the farmer is not present. As early as 1939, the work was begun, by the Farm Bureau, to put this matter on a different basis, but the war cut it off for a time and not much was accomplished. Since 1940 it has again been receiving much attention and is likely to get under way before long.

The Single Farmer as a Seller of Livestock. The farmer, alone out in the country, is an inexperienced seller of livestock. He does not know how to grade his stock at all accurately and is usually anxious to get his money as soon as possible. To grade livestock is a matter of judgment, and a farmer who almost never sees grading done cannot come very close to doing it accurately. Thus, not knowing the grade of a single animal or of a carload of them, he cannot evaluate them within a dollar a hundred and is not able to tell whether he is well paid or not.

One trouble with the farmer as a seller is that he very likely does not sell his hogs or cattle oftener than once to four times a year. At best, he is not an intelligent seller of livestock when left to himself. What he needs is a man who can go between him and the packer-buyer, who knows the packing business well enough to be a good judge of prices, and who is also a good judge of livestock. The farmers made much progress along these lines back in the twenties but recently have lost it all.

The farmer must learn to wait a few days for the returns on livestock sold. The ease of truck transportation and the low freight rates on dressed meat are the two main factors that have broken up the system of intelligent sales which 20 years ago were getting the farmers well situated respecting the sale of livestock. The case is a serious one and requires careful treatment.

Need of Agents in Marketing. The farmers need an adviser in selling livestock. Possibly a truck driver might rise to the job. Of course a county, or several counties, could hire an agent whose whole work would consist in acting as salesman for the cooperating farmers. Whether such an agent could also drive a truck would have to be determined. In any case such a man would become acquainted with the market and its method of grading stock and, at the same time, should be on friendly terms with the farmers selling the stock. In any case the farmer needs an adviser in whom he can put much faith, who can tell him where to send his stock, and who can satisfy him that stock is sold honestly and for the price that represents the real worth at the time of sale. This service would undoubtedly be worth what it would cost and, with the

right kind of management, would not cost a big sum per sale. If some of the best haulers could be trained to act as the agents of the farmers for whom they sell it would be a great achievement.

Needs in Reorganization of Selling Livestock. It must be admitted that at present the farmer, time after time every year, gets less than his livestock is worth. It may well be doubted that competition works so constantly or perfectly as always to give to the farmers their just desserts. That there is some competition regularly at work to bring about a just condition attending each sale is probably true. However, that it always works, so that every sale strikes the level that it should reach, is not at all likely. To begin with, the sale of all livestock on the basis of what may be known about it while alive is a rough way of approximating worth. For example, the Danes for many years put the final price on the separate carcasses after they were seen as meat. This of course is a detail; probably we might approximate the final worth while the animal is still on foot.

Anyhow our methods of marketing are rather crude. Good research work might be done by our colleges of agriculture and the Department of Agriculture. With much better, more detailed information put in shape to be understood, our livestock cooperatives might become instrumental in putting it into practice. At present the farmer sells ignorantly; he sells to men who know much more about the case, in every instance, than he himself knows. If the farmer gets a square deal under such circumstances, it is because it comes to him gratuitously.

Probably the case might be approached somewhat intelligently by a cooperative distribution of dressed pork among people of a neighborhood. This would be, or at least could be, sold in quantities such as could be kept in cold lockers, at small expense. The cost of such pork would be quite below that of the meat market, and the return to the farmer might be somewhat higher. Probably a plan for bringing this to pass would involve the work of the organizations mentioned in the preceding paragraph, brought to the attention of the consumer by the Farm Bureau or similar organization.[3]

Grain Marketing Centered in Illinois. In Illinois and near-by states business is growing to immense proportions.

Working relationships between the Illinois, Indiana, and Iowa cooperatives during recent years indicate that Illinois is the pivotal state in the tri-state area. Illinois is the gateway of surplus grains moving west to east. Some of the Iowa-originated grain stops at Illinois terminals. A part of it moves

[3] Several ideas of the preceding pages were suggested by the Farm Bureau publication entitled *Proposed Plans for Improving and Developing Facilities and Marketing Methods in Selling Hogs in the Corn Belt.* No date, probably 1944.

through Illinois to Indiana and points east. . . . The interests of producers in the three states are interrelated. The operations of the three state marketing agencies have much in common.

Illinois, Indiana, and Iowa hold joint memberships and are linked together by their corporate structure. Illinois holds large blocks of Indiana stock. Iowa also holds stock in Indiana and is earning patronage stock in Illinois Grain Corporation. As a result of this close tie-in, relationships are mutually cordial.

It would appear that a strong regional cooperative development, having working relationships with large cooperatives in other regions, will be necessary to place cooperative grain marketing in a competitive position.[4]

The company handled, in 1944, more than 17 million bushels of grain. The sales of the Illinois Supply Company for the year ending Jan. 1, 1944, amounted to almost 20 million dollars, excluding gasoline,[5] while for the same year there was accumulated from earnings almost another 3 million.

The Farmers' Grain Dealers Association of Iowa joined the Cooperative Illinois Grain Company in 1943, and contributes much grain to the enlarged company. This latter company is sponsored by the Illinois Agricultural Association. In one way or another the Iowa grain must go to Chicago. Thus it is only reasonable that Iowa people should be closely associated with the Illinois people in handling the common quantity. At least half a dozen states should cooperate in marketing grain going in this direction.

Other Undertakings. The bureau has no control over the Pure Milk Association of Chicago but does own stock in the Sanitary Milk Producers of St. Louis and so has some control over this latter company. The Pure Milk Association is a member of the Illinois Milk Marketing Association, which is sponsored by the Farm Bureau. This association is a trade organization and has almost no control over the different companies.

The Illinois Fruit Growers Exchange, sponsored by its parent the Illinois Agricultural Association, sells over a million dollars' worth of fruit annually.

The Iowa association does not publish in its annual catalogue very much to show amounts of business done. It does, however, show an income of $338,000 a year. After paying dues to the national association, it has left just about $300,000 for running the organization. Iowa companies, managed by members of the Farm Bureau, do immense amounts

[4] *Annual Report, Illinois Agricultural Association and Associated Companies*, p. 63, 1944.

[5] *Ibid.*, p. 147.

of business in selling farm machinery, gasoline, and general supplies. Business of this kind is getting more and more into farmer hands.

THE COOPERATIVE GRANGE, LEAGUE, AND FEDERATION EXCHANGE, INC.

This organization, which consists of members of the three farmers' organizations, is the biggest thing of its kind in the East. It was organized in 1920 at Ithaca, N. Y., and has prospered throughout good times and bad. Since its organization, it has expanded greatly. It does not sell dairy products but deals in the many things required in operating farms, such as flour, feed, cereals, fertilizers, twine, seeds, petroleum, farm equipment, lumber, paint, and insecticides. These items run up to more than 75 million dollars a year. In order to handle all of them about two-thirds of the business is done through their own stores and petroleum organizations.

They deal quite largely in farm commodities, such as eggs, fruits, vegetables, grain, beans, and hay. These items amount to over 12 million dollars a year. On their whole operations they make a net saving of nearly 5½ million dollars a year, which is distributed back to their members at the end of the year in cash, or returned in participation certificates, or partly held as reserves. Their current assets amount to 20 million dollars.

MEMBERSHIP OF THE AMERICAN FARM BUREAU FEDERATION

In 1944 the membership was 828,000; in 1945, 986,000; in 1946, 1,027,000 (see Table XXXIV). It is not quite time for the 1947 report, but it is the belief of the organization that it will remain above the million mark. This is getting back toward its big figure for the first year of its existence, when it was about 1,250,000.[6] This was not a very substantial figure since apparently a considerable number joined without knowing much about what was to be expected of the membership. At least there was almost immediately a considerable falling off in numbers. At present the membership is a fairly solid one and is over the million mark.

The membership has been much heavier in the Midwest and in the Southern states than in other parts of the country. In the Northwest the Bureau has but few members in North Dakota, South Dakota, or Nebraska. In the South membership is light in Florida, Oklahoma, and South Carolina. In general this membership is heavy in the corn section of the North, and in the central cotton district of the South. It happens

[6] It is stated by the president, Mr. Howard, that their membership in 1921 was 1,500,000.

that in Oklahoma the Farmers' Union has a rather heavy membership, while the Federation's is small. The Federation's is light in Texas and in Louisiana.

The other states of New England and part of the South Atlantic states are not given. Presumably they have small memberships.

When the whole membership is carefully considered, also the work

TABLE XXXIV.—LEADING MEMBERSHIP BY REGIONS AND BY STATES*

	1944	1945
By regions:		
Midwest	408,478	480,756
Southern	252,626	313,215
Northeastern	119,703	140,460
Western	47,679	51,705
Total	828,486	986,136
Midwest:		
Illinois	103,483	111,932
Indiana	50,681	58,463
Iowa	78,414	90,051
Kansas	23,693	32,027
Michigan	29,030	38,120
Minnesota	46,209	51,717
Missouri	20,150	25,164
Nebraska	4,701	6,946
North Dakota	1,276	2,880
Ohio	40,272	45,857
South Dakota	510	534
Wisconsin	10,059	17,065
Total	408,478	480,756
Southern:		
Alabama	50,101	52,608
Arkansas	28,715	35,596
Florida	4,363	4,839
Georgia	20,671	31,277
Kentucky	23,363	32,711
Louisiana	7,501	8,197
Mississippi	35,900	44,558
North Carolina	30,010	32,506
Oklahoma	3,535	5,035
Puerto Rico	686	1,316
South Carolina	2,971	7,641
Tennessee	22,261	27,020
Texas	7,843	10,722
Virginia	14,706	19,189
Total	252,626	313,215

* The first column of figures is from the annual report of the American Farm Bureau Federation, 1944. The figures for 1946 are Midwest, 557,446; Southern, 364,841; Northeastern, 141,616; Western, 62,653; total, 1,126,556.

TABLE XXXIV.—LEADING MEMBERSHIP BY REGIONS AND BY STATES.—(*Continued*)

	1944	1945
Northeastern:		
Connecticut	8,780	9,700
Delaware	510	628
Maryland	8,509	10,515
Massachusetts	4,222	6,298
New Hampshire	3,100	4,477
New Jersey	8,768	10,426
New York	65,866	76,500
Vermont	9,246	10,195
West Virginia	10,702	11,721
Total	119,703	140,460
Western:		
Arizona	708	1,187
California	32,716	33,356
Colorado	1,166	1,683
Idaho	529	964
Montana	961	635
Nevada	1,275	1,335
New Mexico	593	1,109
Oregon	1,014	1,523
Utah	3,909	4,347
Washington	2,192	3,117
Wyoming	2,616	2,449
Total	47,679	51,705

done along many lines by the different states, the amount of money handled, the steadiness of the membership, and the amount of dues paid per year, it is plain that the Bureau is a representative of the Middle Western states. It is here that the dues per year are high; that crops and products are bought, processed, and sold. The farmers are conscious that they belong to the organization. The great line of strength is from Ohio west to Iowa, and to the north and south of that line of states including several more on each side.

Resolutions of the Farm Bureau,[7] December, 1944. The little pamphlet that contains these resolutions is some 14,000 words in extent. A few of these resolutions are bound to be called in question. For example, under the heading, National Farm Program, it is stated that the "Continuation of the present mandatory loan rates on basic commodities and the price supports which are now provided under the Steagall Act, as amended, for the period of the present emergency, as defined in that Act" must be insisted upon. This is merely a statement that the prices

[7] Resolutions adapted at 26th annual convention of the American Farm Bureau Federation, Dec. 14, 1944. See especially the first twelve pages.

that were maintained for several years preceding the war will again be resumed following the war, in case prices should fall sufficiently to bring them automatically back into use again. This would mean that we should again be obliged to reduce the war production to a figure far below the present yields. Or the government would again have the sorry task of selling these extra bushels at a price much below the amount that the producer presumably would demand under the prewar act. It would be a hard blow should we be obliged to take all excess bushels of corn and wheat, plus the unwanted extra bales of cotton, and at once pay for them, and put them in storage, or sell them, outside the country, at some low price. To reduce the farm output, back to the levels of 1940, on a falling market, will cost a lot of money and a lot of grief.

The Farm Bureau insists that it is the duty of the government to adjust ceiling prices so as "to eliminate subsidies in lieu of fair prices."

International Trade. Under this heading the Bureau makes many statements, no doubt sincerely enough, but just how they may be carried out is not clear. The first one is short and to the point. "International trade is basic to the well-being of this Nation and of the World." Then comes a paragraph reviewing the mistakes made following the First World War. Nearly every nation resorted to extreme measures by which to protect its own production and defend itself against the wrecking of its own business by the dumping of too many cheap goods on its shores. They do not mention the fact that we were the worst early offender in this regard by the passage of our tariff acts, first in 1921 and 1922, and much worse, the Smoot-Hawley Act of 1930. We have already discussed these acts and do not need to say much more about them.

Resumption of Trade. The Bureau makes a wise remark concerning trade:

> We cannot sell our surpluses abroad unless we are willing to buy from other countries. Unless other nations have sufficient dollar exchange to pay for our goods they cannot buy from us. . . . Merely lending money is not a sound basis for permanent trade. Unless the barriers to trade are removed, such loans become merely gifts.[8]

In another paragraph the remark is made:

> Pending the attainment of sound foreign trade policies, our Government, if necessary in order to regain our fair share of the world market, should enable domestic producers to meet world prices through export subsidies; and ways and means should be sought to provide other nations with dollar exchange with which to buy our surpluses.[9]

[8] Resolutions adopted at 26th annual convention of the American Farm Bureau Federation, 1944, p. 6.

[9] *Loc. cit.*

This statement leads to real problems. Export subsidies would increase our domestic indebtedness, possibly by a big amount, and at a time when, possibly, we shall not be so cheerful about going into debt heavily in order to subsidize payments that many of our people will not approve. This would increase our indebtedness which is already at a staggeringly high figure. What is more, providing other nations with real sums of "dollar exchange" will not be an easy undertaking. We plan to keep our prices high, no doubt higher than other world prices, following the weak bidding of many nations. To carry out such a plan will involve major problems concerning all the crushed, weaker nations of the world. Just how may we hold prices up? The time will no doubt come when many nations will have much wheat and meat to sell at comparatively low prices. Other nations will be hungry but have low buying power. Can the nations with quantities of goods to sell subsidize themselves into prosperity?

The Farm Bureau goes so far as to recommend "That an international trade conference be called for the purpose of attempting to lower the trade barriers among all nations and to discourage the creation of additional trade barriers." Later they assert that "a stabilized price level, both domestic and international, is essential not only to international trade but also to the maintenance of a fair balance in domestic prices of raw material with other prices."[10]

"We reaffirm our unalterable opposition to subsidies in lieu of fair prices in the market place.[11] There are indeed positive objections to paying subsidies; likewise there are objections to voting to raise prices to high points in satisfying the demands of the interested people. Raising the prices of certain goods results in demands for raising other prices. Also it may happen that, when prices are raised on an important commodity, not alone the producer but perhaps the people who handle it will demand a larger share of the final price, so that the producer may get very little benefit out of the increased price.

Farm Credit. The statement is made that credit should be so administered that it will not contribute to land inflation. Twenty-five years ago and until 1935, the interest paid was 5 and 6 per cent, with many instances well above those rates. Now the prevailing rate is usually 4 per cent. This is hardly above two-thirds of what was being paid some years ago. Would this rather low rate have a tendency to raise the selling price of land? Surely, it takes but 66 per cent, or less frequently, 80 per cent, as much to pay the interest. On an average it is not above 66 per cent. Will a cut of this proportion have an effect similar, rela-

[10] *Loc. cit.*

[11] *Ibid.*, p. 10.

tively, to that which would happen were the cut equal to half the earlier cost? The Farm Bureau has worked desperately, and somewhat successfully, to hold prices up to a figure quite beyond world prices. If we try again to hold our prices quite beyond world prices, there will be many difficulties, not only at home but with our best neighbors.

Farm Bureau in the Middle West. The strength of the Farm Bureau is mainly in the Middle West in spite of the fact that there is much real strength in the Eastern states, as well as a good deal in the South. However, in the South, the real strength of the Bureau is centered on the price of cotton. Should the hold on cotton prices weaken, it is not at all likely that the membership would last long. In the East the continued hope is for fairly good prices of dairy products, with feed prices not too high, and not much lowering of tariffs on importations of the products. The Bureau will always have its hands full keeping the tariffs sufficiently high on Canadian products and, at the same time, holding the Canadian market in machinery, automobiles, and other steel products, fruits, cotton, and the like. There are not too many strong economic ties between the North and the South. It is a difficult task to hold the price of cotton high in view of the cheap production of the crop in South America, Africa, and southern Asia.

As matters now stand it looks as though we might, for a few years at least, hold the price of cotton above the world figure, but it would seem that our inflated prices on machinery and steel products in general would have to drop so as to permit exportation; quite likely great quantities will be wanted in the Orient, but not at prices such as Americans have been used to during the past generation. Twenty cents, or more, on cotton, will not be needed to induce our best growers, on the good lands of the South, to keep the supply up. This means that cotton, on the poor soils, will result in poorer and poorer people. Thus the strong hold between the corn belt and the cotton belt hardly seems to be permanently established. The strength of the Bureau in the corn belt appears to be here to stay, with great strength also among the strong dairy states of the East. What is more, the ability of the North and the South to work together has been demonstrated and, at least from time to time, they will no doubt continue to do so.

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Chapter 33

FACTS FROM THE CENSUS OF 1945

NEW ENGLAND AND MIDDLE ATLANTIC STATES

Size of Farms in 1940 and 1945. In 1940 the average size of the New England farm was 96.53 acres; in 1945 it had fallen to 87.75 acres. Two of the states pulled in the opposite direction, Maine and Connecticut showing slight increases. The largest farms of New England are found in Vermont, where they contained 148.4 acres in 1945, and 155.5 in 1940. They were smallest in Massachusetts, showing 60.8 acres each in 1940 and 56.2 acres in 1945.

In 1945, the Massachusetts people occupied the most land not in farms in 1940, a little over 5,000 acres. The Rhode Island people occupied additional land about equal to a single rather large wheat farm of North Dakota.

Although the average size of farms in the Middle Atlantic states showed an increase, it was not very evenly distributed, there being an increase of 5.4 acres in New York, 1 acre in Pennsylvania, and a decrease in New Jersey of nearly 3 acres. As a matter of fact, there are no pronounced changes in size in either of these two sections. The change is so little that the only thing worth remembering is that nothing of importance happened.

However, the changes in value, although not great, were important. Five New England states show an increase of about 20 per cent in value of farms, while Rhode Island rose in value by 46 per cent.

In the Middle Atlantic states land made some moderate increases in value. In New York it rose almost 15 per cent, in Pennsylvania 17 per cent, in New Jersey nearly 29 per cent.

Livestock rose much faster than did farms. In New England its value was up in 1945 by 79 per cent over that of 1940, while in Connecticut and Rhode Island it rose somewhat over 100 per cent. In the Middle Atlan-

tic states the livestock rose in New York by 84.4 per cent, in Pennsylvania by 81 per cent, in New Jersey by 90 per cent.

In New York wages paid rose 110 per cent, in Pennsylvania 100 per cent, in New Jersey 100 per cent. These comparisons are in the amount paid to all people hired.

Pennsylvania. The total number of farms in the state rose by 2,734 in the five years, while the number of acres of land included in farms rose by 426,000 acres. The amount of land upon which crops were grown, hay cut, or orchards standing, was 507,000 acres greater than in 1940.

The real changes that took place in the agriculture of the state were mainly in an increase in the number of cattle by over a third of a million head, 225,000 of which consisted in cows. The number of hogs kept rose by 252,000. The number of chickens kept increased from 15 to 20 million, and the number of eggs produced rose from 126 to 175 million dozens.

In Connecticut the amount paid in wages rose 108 per cent, in Maine 211 per cent, in Massachusetts 67 per cent, in New Hampshire 53.3 per cent, in Rhode Island 57.9 per cent, in Vermont 98 per cent.

EAST NORTH CENTRAL STATES

Size of Farms. In this section there was an increase of 8.2 acres per farm within the five-year period, from 113.0 to 121.2 acres. Illinois had an increase from 145.4 acres to 154.7, lacking but a little of a gain of 10 acres. Wisconsin shows a gain of 10.4 acres per farm, Michigan of 8.7 acres, while Indiana and Ohio of around 6 acres each (Indiana 6.5, Ohio, 5.7). Although these are by no means great increases in size, nevertheless, they show appreciable gain. In almost every state in this section the counties with the highest priced land show the greatest increases.

Number of Farms per State. These five states have approximately the same number of farms each; Illinois and Ohio with just over 200,000, while the other three states have about seven-eighths as many. The number of farms here decreased from about 9,000 to 13,000 each; Wisconsin showing the smallest decrease, Ohio the greatest. This means that just about 5 per cent of the farms disappeared in the five years. Should this decrease continue for several five-year periods, it would become a serious matter. However, it is by no means likely that such will be the case. The loss of farms has recently been due in large part to the scarcity of men and the high prices of produce.

In value per acre the increase was rapid. However, the cases as they are shown in the census are not quite comparable to the census data for the First World War since the 1920 census came out over a year following the close of the war in 1920, while the 1945 census was taken before the

recent war was over. In Illinois, for example, the increase reported in the value of farm land and buildings for the five years was 31.6 per cent. The 1920 census showed an increase, for Illinois, of 70.3 per cent in value, for the 10-year period 1910 to 1920, well above double the increase given for the 1940–1945 period. For the same time (1940–1945) the Wisconsin increase shows only 16.9 per cent; the increase for Michigan was 28.3 per cent.

In Illinois, livestock was up in value in 1945, as compared with 1940, about 108 per cent. In Michigan there was an increase in livestock values of 51.0 per cent for the same period. In Wisconsin the increase was not quite so great as in Illinois, being 91.4 per cent. Apparently dairy cows did not go so high, relatively, as did beef cattle.

WEST NORTH CENTRAL STATES

Size of Farms. For the whole section there was an increase in average farm size of 36.7 acres. However, the three states to the east and the four to the west are quite unlike in this respect. For example, the tier of three states to the east averaged 153.6 acres in 1940 and 162.00 in 1945. This shows a gain of 8.4 acres, whereas, farms in the four states to the west rose by 57.9 acres each, it must be remembered that they were very much bigger than previously in 1940. In 1945, it will be noticed that in South Dakota the average-sized farm had all but reached a full section, while North Dakota showed an average of 46.5 acres per farm less. Nebraska showed a gain of over 36 acres per farm, reaching 427.3; Kansas, with about the same amount of increase per farm, showed 345.4 acres.

Numbers of Farms in the West North Central States. The three states to the east of the Missouri River have a considerable number of farms per state more than have the four states to the west, although the latter are, on an average, larger states. The number of farms altogether in the seven states in 1940 was 1,090,474. In 1945 the number had fallen to 1,031,992, having decreased by 58,482. The three older states in the more humid area to the east lost 25,850 farms, while the four states to the west lost 32,632 farms.

The heaviest falling off for any single state was in Kansas, with a decline of 15,135; the second was Missouri, which lost 13,166 farms. In general, it may be noticed that the greatest increase in the size of farms is relatively much higher in the four meridian states than in the older states to the east. The meridian states are primarily wheat states; at the same time, there is much grazing done in the western and drier portions.

Iowa. In this state farm produce sales exceeded a billion dollars (1.1 billion) in 1944. Only four states exceeded a billion dollars for the

year: Illinois, just over a billion; Texas, about the same; Iowa ranked second and California first with 1.4 billion dollars in income. The great bulk of income in Iowa is derived from livestock, 713 million dollars, not lacking much of three-fourths of the whole income. Counting in the returns from dairy and poultry, it goes quite beyond that figure.

In the state were 116,000 farms, out of the full number of 208,934 which got half or more of their income from livestock; this number, not greatly over half of the farms of the state, received three-fourths of the total income for the year.

The farmers who received $10,000, or over, for 1945 were almost six times as great as in 1930, in number reaching 28,648, only a little below a seventh of all. More than 5,000 of these farmers made over $20,000 each.

Livestock more than doubled in value in the five years preceding the past census.

Farms, although still presumably rising, were up in value about 34 per cent during the five-year period, going from $78.79 to $104.81 per acre. Iowa land had not been reported at more than $100 per acre since 1930. It was at its lowest in 1935, when it stood at $71.66. Thus in the 10-year period from 1935 to 1945 it rose $33.15 or 46 per cent. The value of a farm was $12,614 in 1940 and up to $17,284 in 1945. The value of livestock in 1945 was more than double the value reported in 1940.

CHANGES IN NUMBER OF FARMS BETWEEN 1940 AND 1945

	1945	1940	Farms down	Percentage down
Iowa	208,933	213,318	4,386	2.06
Minnesota	188,952	197,315	8,399	4.2
Missouri	242,934	256,100	13,166	5.1
South Dakota	68,705	72,454	3,749	5.2
North Dakota	69,520	73,962	4,442	6.0
Nebraska	111,756	121,062	9,306	7.7
Kansas	141,192	156,327	15,135	9.7

Well over half of the farms of Iowa—55.5 per cent—derived the greater part of their income from livestock and its products. Since this group receives about 75 per cent of the total income of the state, they are quite in the lead in income per farm.

Electricity is found in 62 per cent of the farm homes of Iowa, compared with 41 per cent in 1939. This improvement probably adds as much to the comfort of living as does any similar expenditure. About half as many homes, 32 per cent, have running water. Although this figure seems rather low, the majority of the states of the Middle West

show still lower. Beginning with Ohio and Michigan the states to the east are well along in providing running water in houses, many of them having over 80 per cent so equipped. Likewise this convenience is in a large percentage of the farms of the Mountain states, running around 70 or 80 per cent, although several states are quite low. Telephones are pretty numerous, being found on almost 80 per cent of all farms, while 91 per cent had radios. Almost three-fourths of the farms had tractors, and 91 per cent had automobiles.

MOUNTAIN STATES

Arizona. In average size of farm Arizona showed an increase of 107 per cent, going from 1,388.9 acres per farm to 2,844.4 acres. This means that the average farm covers about 4½ sections of land.

The value of land and buildings rose from $153,677,000 to $287,933,000 —an increase of about 87.3 per cent. The great increase in the size of farms, however, gave an increase of 164 per cent in their value. As big as these farms are, however, eighteen times as big as an Iowa farm, their worth is less than 1¾ that of Iowa farms.

Thus they are not altogether outside the field of value of Iowa farms. Whereas an Iowa farm was worth $104.81 per acre, the Arizona farm was reported at but $7.60 per acre, a little less than 1/14 as much. This very low value per acre is due to the prevalence of so much grazing land, which comprises about 80 per cent of the farm land of the state.

Colorado. This is another state with large farms, 760.6 acres on the average. Five years earlier the farms were 148 acres smaller. About two-thirds of the farm land of the state is used for pasture.

Farm land in Colorado did not rise in value so much as in many other states, only 45.3 per cent. Land, on the average, does not sell at a high figure, since too much grazing land is included, three-quarters of all farm land being so listed.

Although there are over three-quarters of 1,000 acres of land in a farm, the sale value of it is only $11,855, less by $759 than an Iowa farm.

Livestock made a good advance between 1940 and 1945, rising in value by about 113 per cent.

An outstanding evidence of the increase in the size of farms is noticeable in the fact that, leaving out a few farms below 10 acres in size, we find all the larger farms fewer in number in 1945 than in 1940, except those of 1,000 acres and over, which have increased in number by 1,000.

That Colorado farmers in general are fairly well off is seen in the fact that nearly three-fifths of them fall in the income class of $10,000 or more. The livestock farmers, 2,709 of them, took in almost $30,000 each, in the year 1944. Another group, 2,215 out of 13,001, those with

crops not including "fruits and nuts, vegetables, or horticultural specialties," in the same year took in $20,000 each. When about a sixth of the growers out of 13,000 can receive as big a figure as that, it must be admitted that the incomes are pretty good, especially when it appears that the whole group of 13,001 farmers were making an average income of $6,460. True enough there were a few at the bottom of the list with small incomes, but as a group they were doing very well.

Idaho. Sales made during 1944 from Idaho farms amounted to almost 215 million dollars, which was 156 per cent over the sales in 1939. A little more than half the income of farmers for that year was derived from field crops. The second item of income was from livestock, other than from dairy products and poultry, amounting to appreciably more than half as much as from field crops.

The average size of farms went from 235.8 to 302.6 acres, an increase of 66.8 acres. Farm lands went up in value from $339,194,000 to $493,-331,000, an increase of $154,137,000, a gain of 45.5 per cent in the five years, or something over $4,000 per farm. Livestock rose from $50,944,-000 to $97,254,000, a gain of $46,310,000.

The men working away from the home farms were decidedly fewer for all shorter periods until the 250-day period was reached when they increased in number by 1,244.

Montana. Sales of farm products totaled 223 million dollars in 1944, which was 165 per cent over the sales of five years previous. Field crop sales came near to half of the total amount. Livestock sales were 167 per cent above those of 1939.

The large ranches, selling $10,000 worth or more each, equaled 131 million dollars worth, quite over half of all sales. Livestock on farms and ranches rose in value by 175 million dollars, an increase of 113 per cent above five years before.

Farms changed in size from 1,110.7 acres in 1940 to 1,557.4 acres in 1945, a gain of 446.7 acres. The value of farms rose from $350,178,000 to $517,891,000, or 47.8 per cent. Thus the value of farm land, up to this time, has risen much more slowly than is the case with the animal products.

Montana is a state of big farms, which seem to be decidedly more successful than the smaller ones.

Nevada. The number of farms in Nevada fell from 3,573 to 3,429, while the size rose from 3,785,000 to 6,178,000 acres. Thus the number of farms fell about 4 per cent, while the total acreage rose by 2,402,000 acres, or 63.4 per cent. The average size of farms rose from 1,059.4 acres to 1,801.7, or just about 70 per cent.

This was not very valuable land, though higher than in several other

states. The taking in of much new land brought the average price down somewhat, from $12.57 per acre to $11.65. The total value went up from $47,594,000 to $71,956,000. The value per farm rose from $13,321 to $20,985. The value of livestock rose just about 100 per cent, from $21,196,000 to $41,818,000.

New Mexico. The sales of farm products rose in New Mexico to a total of nearly 82 million dollars in 1944, which was 92 per cent higher than five years earlier. The sales of livestock products, other than dairy products and poultry, brought over 40 million dollars, or nearly half of the total farm income. The second item in income, farm crops, was almost 30 million dollars, more than double the sales of 1939.

The value of farms and ranches amounted to 327 million dollars in 1945; about 74 per cent higher than in 1940. Livestock increased in value during the five-year period from 45 to 85 million dollars, or 88.8 per cent.

The average size of farms increased from 1,139.4 to 1,670.6, or 531 acres per farm. This increase was mainly in grazing lands. The average value of farm land for the state was $4.83 per acre in 1940 and $6.59 in 1945. The average value of farms was $5,498 in 1940 and $11,004 in 1945, not extremely high figures but 100 per cent higher than in the former year.

Utah. It would seem that the ownership and use of valuable farm property are rather highly concentrated in Utah since one-sixth of the farms and ranches report the production of 59 per cent of all farm produce sold or used. This means that 61, out of a total of 103 million dollars, was reported by 3,970, or 15 per cent of all farmers. The 59 per cent of the people reported having sold, or used, 93 per cent of the total income. The main source of farm income was livestock, which brought in almost two-thirds of the whole farm income.

Utah is a state with large farms or ranches. Out of the 26,322 farms, there were 1,440 of over 1,000 acres each. These big ranches, less than 6 per cent in number for the state, contain 75 per cent of the whole farm area. They contained almost a fourth of the crop acreage of the state. Half of the farms of the state contained 49 acres or less.

The value of farms and ranches increased from 154 to 262 million dollars, a gain of 70 per cent. The value of livestock rose about 116 per cent.

An unusual number of tractors were used on farms, increasing more than 100 per cent between 1940 and 1945. Farms rose in size about 104 acres each in the same period, and in value from $6,074 to $9,947 per farm, a difference of nearly 64 per cent. The value of Utah farms per acre in 1940 was $21.14, in 1945 it was $25.40.

In working elsewhere than on the home place, the Utah farmers, 6,088 in 1945 as opposed to 2,649 in 1940, worked out 250 or more days.

Wyoming. In 1944, livestock and livestock products sold for 60 million dollars, or 72 per cent of all products, not including dairy products or poultry.

There are many livestock owners in Wyoming who are well off. For example, about 1,500 ranchmen had, on an average, almost $30,000 worth of livestock each; over half of them had electricity in their dwellings; and 31 per cent had running water. The value of livestock increased 64 per cent from 1940 to 1945.

In the same period farms increased in size from 1,866.2 to 2,532.6, or 666.4 acres during the 5 years just passed. Thus in Wyoming, a state in which the government tried to establish farms of a half section, or less, a farm now occupies about four sections on an average. It should be noticed with care that the average value of an acre of farm land in Wyoming is reported at $7.01. The value of a farm during the 5 years increased from $10,585 to $17,746, or $7,161.

In the state there are 33 million acres of land in farms. Nearly 31 million of these acres are included in farms of 1,000 or more acres each. The value of these big farms is given as two-thirds of that of all the farms of the state.

Summary Comments. These are by far the biggest states of the Union. In 1940 they averaged 962.6 acres per farm, with five of them over the 1,000-acre mark. In 1945 there were still just five with farms over 1,000 acres, but the average had risen by 525.1 acres and stood at 1,487.7 acres. Arizona stood at 2,884.8, while Idaho showed but 302.6 acres.

The four states with lowest values, below $10, averaged $7.50 per acre in 1945; these were Arizona, Montana, New Mexico, and Wyoming. The other four states averaged $20.48 the same year.

The land is cheap, except where irrigated, and does not lend itself to farming in small amounts; no man can make a living on a few unirrigated acres. It is necessary to hold enough to allow the keeping of cattle or sheep in pretty large numbers, with probably a few men hired to help in looking after them. It does not require great wealth to operate a farm of this size, but it does require a few thousand dollars' worth of stock, and some thousands of dollars' worth of land in order to operate successfully.

These Mountain states face more danger in the overgrazing of their pasture land and in the cutting down of their forests, often made up of small trees and somewhat more widely scattered than anywhere else in the country. The Taylor Act put vast quantities of cheap land, sold even at too low prices, into the hands of ranchmen. By overgrazing and by overcutting of timber, very great dangers are involved. Furious floods

occur, and little valleys, with their small cities, are destroyed. The grass is killed out over wide stretches. The damage cannot be repaired in a thousand years.

Private ownership, unrestricted, cannot be trusted to care for land of this sort; good management requires the hand of government strongly applied.[1]

SOUTH ATLANTIC STATES

Delaware. The number of farms in Delaware was 9,296 in 1945; their size averaged 99.3 acres, almost exactly the same as in 1940. The amount of land in them comprised 923,350 acres. At the time of the latest census, the value of all farms was $72,694,000, nearly $18,000,000 above the value reported in 1940. This is at the rate of $78.73 per acre, the highest ever reported, and 28.0 per cent higher than in 1940.

On more than one-third of the 9,296 farms in the state, poultry and poultry products constituted 50 per cent or more of the value of all farm products sold in 1944. The total value of all farm products on poultry farms (farms on which poultry and poultry products amount to 50 per cent or more of the value of all farm products sold) exceeded 48 million dollars and comprised 75 per cent of the value of all farm products sold or used by farm households in 1944. The 1,363 poultry farms in the state having a total value of all farm products of $10,000 or more each reported a total value of farm products in 1944 of almost 41 million dollars, or approximately two-thirds of the total value of farm products for all farms in the state.

Florida. From 1940 to 1945, the amount of land in farms rose from 8,338,000 acres to 13,348,000, a matter of 60 per cent. Although the number of farms fell from 62,248 to 61,159, their average size rose from 133.9 to 213.9 acres.

The number of cattle rose from 721,015 to 1,114,917, a gain of almost 55 per cent; hogs from 481,040 to 676,644, just over 40 per cent; cows increased 14 per cent.

The real increases were in tree crops and in vegetables. The sale of pecans rose from 3,225,000 to 4,441,000 lb.; nuts from just over 1 million to nearly 12 million pounds. Oranges yielded 40,279,000 boxes in 1944; tangerines rose from 2,286,000 to 2,969,000 boxes; grapefruit from 14,456,000 to 21,754,000 boxes; limes from 5,822,000 to 8,578,000 boxes.

Vegetable acreage increased from 185,164 to 225,243 acres, a gain of 21.7 per cent on a base already large.

[1] See three excellent articles by Bernard DeVoto, *Harper's Magazine*, December, 1946, The Anxious West; and January, 1946, The West Against Itself, and The Easy Chair.

Georgia. The proportion of Georgia farms that sold or used less than $1,000 worth of farm crops in 1939 was 82 per cent of all in the state. In 1944 this figure had fallen to 44 per cent.

The value of farms in 1945 was 754 million dollars. For the same period the value of farm machinery rose over 100 per cent, reaching 73 million dollars; livestock rose 62 per cent; farm lands and buildings rose a little over 36 per cent. The average size of farms fell from 109.6 acres in 1940 to 104.8 acres in 1945.

For many years Georgia was one of our leading cotton states, but it no longer ranks high. In 1909 she grew almost 5 million acres, in 1944 but 1,282,000 acres. She is growing just over a quarter as many acres as in 1910, but produced 40 per cent as much cotton in 1945 as in the former year. The amount of milk sold is up somewhat, though not high; it has doubled since 1930. Their chickens are not very numerous; in eggs produced they are about double what they produced 20 years ago, while in chickens raised they are 170 per cent above the former date.

In corn growing they are appreciably above the low points of 1929 and 1934.

North Carolina. The amount of farm land used has not changed very much. It is now 10.7 per cent lower than in 1910 but has been rising since 1925. The size of farms has dropped from 67.7 to 54.8 acres, or about 3 acres.

In 1940, the average farm was valued at $26.47 per acre; in 1945, it stood at $34.80, thus rising about a third.

The number of persons hired to work on farms fell from 58,444 in 1940 to 14,726 in 1945. However, the smaller number in the latter year cost $41,458,000 compared with $14,836,000 in the earlier year.

Of all farms reported by the kind of produce sold, the greatest sum was received by the poultry farmers, 18 million dollars, as compared to 17 million paid to dairy farmers.

Livestock values increased, in the five years, by almost 60 per cent. In numbers there has been a considerable advance during recent years. The number of cattle has risen 42 per cent since 1940 but is now about where it was in 1935. Hogs are 33.8 per cent higher than they were in 1910 but are down over 33 per cent of the number in 1920.

The state is down 25 per cent in the number of acres of corn grown but only 2.3 per cent down in production. North Carolina is not a great cotton state. In 1925 the farmers grew 1,733,000 acres; in 1945 the acreage was down to 714,000, or 58.8 per cent lower. During the past 5 years they came up by 0.6 per cent, an insignificant amount. The number of bales increased from 458,000 to 687,000, or about 50 per cent.

In milk produced they have come up almost steadily since 1910, and

in 1945 produced 160,798,000 gal., nearly twice as much as in the former year. Egg production rose from 23 to 63 million dozens; chickens raised from 14 million in 1910 to 30 million in 1945, a gain of 120 per cent.

South Carolina. In 1919, this state apparently reached its highest acreage in cotton, 2.6 million acres. In 1944, it had just above one million acres, which was over 60 per cent below that of 1919. The corn acreage has gone down ever since 1910, though the heaviest loss was during the past five years, 14.5 per cent. With a single exception, the bushels grown have gained every census year since 1925.

The greatest gain has been in the amount of milk sold, which went from 920,000 to over 17 million gallons in 1944. The amount of wheat threshed rose from ½ to over 3 million bushels in 1944. Peanuts rose greatly, increasing from 9 to over 20 million pounds from 1939 to 1944. Eggs made a real advance from 11 million dozens in 1909 to 24 million dozens in 1944. Cattle were more numerous in 1944 than they had been since 1919.

Unlike most other states, the number of horses and colts had gained 10 per cent, around 2,000, from 1940 to 1945; mules—much more important—went down by 15,000.

The number of farms rose, instead of going down, by more than 10,000, the average size falling by 3.3 acres.

Maryland. In 1939 the sales of dairy products were the leading items for the year; in 1944 the sales of poultry and poultry products ranked first, although the difference between them was small. These two products were quite in the lead above field crops and other sources of income.

The value of farms rose 39.6 per cent during the period from 1940 to 1945. Implements and machinery almost doubled during the same period, while livestock rose 71 per cent in value.

The size of farms rose a single acre, while the individual farm rose in value from $6,506 to $8,596. Livestock went from 31 to 54 million dollars, an increase of 74 per cent. As in most states, the rise in the value of the farms was less than that of the other property. The cash wages for hired help rose from 11 to 23 million dollars, an increase of about 109 per cent.

Virginia. Farm products amounted to 448 million dollars in 1944, which was 129 per cent over the figure five years earlier. In 1944, the total value of farm products sold or used in the state was 315 million dollars, a little over 100 per cent greater than in 1939. About 3,500 farms produced, each, over $10,000 worth of product in 1944. In 1939, 88 per cent of the farms produced less than $1,500 worth. This group fell to 68 per cent in 1944.

The value of land and buildings per farm, which had risen about 30

per cent, was up to $5,020 in 1944, the per-acre value at that time being $53.11. Tractors were found on 11.6 per cent of the farms, nearly twice as many as in 1940. The average size of farms, 94.5 acres, was ½ acre larger than five years before.

The main income to Virginia farmers is from livestock, 38 million dollars; poultry, 36 million; and dairies, 29 million.

West Virginia. The income to farmers was up 108 per cent between 1939 and 1944. A large part of the West Virginia farmers get along on small incomes. In 1939 over 90 per cent of the families had an income of less than $1,000. This low-income group was down to 76 per cent in 1944. More than four times as many farmers in 1944 as in 1939 had an income of $10,000 or more, reaching 800 families in 1944. Land and buildings rose 26 per cent in value during these five years.

As in several other states of this district the size of farms remained almost constant, falling 0.4 acre, from 89.7 to 89.3 acres. The value of farms rose from $2,718 to $3,494. As in other states, wages rose here in amount from $4,013,000 to $8,475,000 in 1944.

Farm income was mainly from three sources: livestock, 20 million dollars; poultry, 13 million; and dairy, 11 million.

EAST SOUTH CENTRAL STATES

Kentucky. The number of cattle in Kentucky in 1945 was above 1.4 million, about 206,000 above the figure for 1935. Milk in 1944 was above 244 million gallons, 17 per cent over the amount produced in 1939. The eggs produced in 1944 amounted to 61.6 million dozens, as compared with 45.4 million dozens in 1939.

Tobacco was produced on 372,000 acres in 1944, which was 41 per cent fewer than in 1919. However, the yield was better, the total being down only 14 per cent.

Corn, in acres, has fallen each census but one since 1909, a total decline of 30.9 per cent. The milk produced fell in amount, by a rather small figure from 1929 to 1939, but made a gain after 1939 of almost 17 per cent, rising from 209 million gallons in that year to 244 million in 1944.

The number of farms fell from 252,894 to 238,501 from 1940 to 1945. During these years the size of the average farm rose from 80.2 to 83.0 acres.

Tennessee. There were 1.4 million cattle on Tennessee farms in 1945, the highest number ever recorded. In 1944, 80 per cent more milk was produced than in 1910, and 14 per cent more than in 1939; whole milk has been sold recently in quantities greatly beyond that of previous years. Eggs were up in production by nearly 63 per cent in 1944 as compared with 20 years before, and 43.3 per cent more than in 1939. The produc-

tion of wheat was 17.2 per cent lower than in 1910; in recent years it had made a considerable recovery, rising 38.8 per cent from 1939 to 1944.

In 1944, tobacco was produced 77.7 per cent more heavily than in 1909, and was up 11.6 per cent in 1944 as compared with 1939. Apples and peaches are down greatly during the past 35 years, 72 and 60 per cent, respectively.

The number of farms has fallen from 247,617 to 234,431, but their average size has risen from 74.7 to 75.9 acres. The land used for growing the leading crops fell during the past five years by nearly a third of a million acres.

The value of a farm rose from $2,683 to $3,715, or $1,032. The average value per acre from $35.93 to $48.96, amounting to $13.03, about 36 per cent. Livestock rose from $97,634,000 to $147,309,000, a matter of 51 per cent.

Alabama. Cattle numbered almost 1.3 million in 1945, an increase of over 150,000 above the previous high figure of 1935. In 1944 the milk produced was 12.5 per cent above that of 1939. The number of dozens of eggs produced doubled from 1909 to 1944, and rose 31.4 per cent from 1939 to 1944.

The acres planted to cotton went down 63.2 per cent from 1910 to 1944, and 28.9 per cent from 1939 to 1944. An unusually heavy yield per acre in 1944 gave them an increase of 25 per cent in bales above the yield of 1939.

Hogs have increased in numbers quite appreciably since 1930, going from 537,000 to 980,000, just over 80 per cent. The corn yielded but 15 bu. per acre in 1944. Compared with corn in the corn belt, this is a low yield; for the South it is not so bad.

The number of farms fell from 231,746 to 223,369, a matter of nearly 3.8 per cent. The average size of farms increased by 4.1 acres. The main crops grown fell by nearly a million acres.

Mississippi. Farm products sold for 146 per cent more in 1945 than in 1939, the main item being cotton. All crops sold for 227 million dollars in 1945. This was 80 per cent of all farm products sold that year. Livestock, not including poultry, sold for 18.5 million dollars. Farm income was up in value by 127 per cent in 1944 over 1939 and amounted to 360 million dollars. The farms with big incomes, although pretty important, are of relatively small number. There are but 900 farms with an income of $10,000 or more each.

From 1940 to 1945, the size of farms rose from 65.8 to 74.4 acres; in value from $1,632 to $2,457. The value per acre at the same time

increased from $24.80 to $33.01. Livestock rose in value from 83 to 138 million dollars, which is 65.0 per cent.

The amount of wages paid rose, in the five years, from $9,148,000 to $21,235,000, which equals 132 per cent in increase.

WEST SOUTH CENTRAL STATES

Arkansas. Land in farms is a little lower than it was in 1940, about 8 per cent. Acres of crop harvested were down 9.2 per cent; hogs and pigs down 6.1 per cent; corn down by 29.7 per cent in acres and 25.1 per cent in quantity; cotton down 14 per cent in acres and up 0.7 per cent in bales.

Rice rose in acres by 86.9 per cent and in yield 104.1 per cent. Soybeans increased from 552,000 to 3,179,000 bu., and oats from 4,211,000 to 7,264,000 bu.

Apples and peaches both show distinct decreases. Milk, unlike the trend in most states, showed a decrease, going down from 151 to 148 million gallons. As is true in almost all states, the production of whole milk rose, going from 17 to 36 million pounds, while eggs increased from 38,600,000 to over 50 million dozens.

The number of farms in the state dropped from 216,674 in 1940 to 198,769 in 1945, a decrease of 8.3 per cent. The average size of farms rose from 83.3 to 88.0 acres, or nearly 6 per cent.

Louisiana. The farmers of Louisiana derive the main portion of their income from the sale of field crops, this portion amounting to more than half the income of 76,000 farm families out of the total number of 129,295, or almost 60 per cent. The income of this 60 per cent of the farmers amounted to almost 90 per cent of the total farm income of the state, but it was not very evenly distributed. For example, those with incomes of over $10,000 each in 1944, of which there were 2,346 farmers, had an income of 57 million dollars, or an average of $24,297. This is a remarkable figure and means that the first quarter or third of them had unusually high incomes.

The average Louisiana farmer is not well to do. For example, only 29 per cent of them had automobiles and 5 per cent had telephones; only 11,000 had tractors, or about 8.5 per cent of all.

The Negroes are dropping out of the farmer class pretty fast. They lost nearly 11,000 out of 60,000 from 1940 to 1945; the white farmers fell 10,000 out of 90,000 at the same time. Thus the white farmers decreased by a ninth; the Negroes by nearly a fifth. A few similar decreases in each group would leave the Negroes in small numbers.

The high price of milk in the South has brought the income from dairies nearly up to the livestock figures. On the other hand, chickens,

owing no doubt to the greater ease of shipping eggs as compared to milk, are kept in relatively larger numbers.

Thus the important products in Louisiana are, in general, those of sugar, rice, and cotton, while dairy products, poultry, and livestock play a small role.

In value, farms rose from 354 to 470 million dollars, almost 33 per cent; per acre the value increased from $35.40 to $46.85. Livestock rose from $60,610,000 to $110,874,000, or 82 per cent.

Oklahoma. In Oklahoma the rank of farm products is, first, field crops such as cotton and wheat, with livestock playing a much more modest role than in many other states, while dairy and poultry play a distinctly small role. Thus the field crops sold for 52 per cent of all products in 1944, about 190 million dollars, while livestock brought 108 million dollars, just over half as much.

All farm products, sold or used, amounted to 426 million dollars, which was 141 per cent above the returns in 1940. Of this income, 229 million dollars, more than half, was derived from field crops. Since livestock farms of the state, 20,000 in number, produced 76 million dollars' worth of output, the year's income was $3,800 each, for big and little stock farms.

The number of dwellings with electric service rose during the five-year period from 28,000 to 47,000. In 1945 it was reported that 17 per cent of the farms had running water in the houses, while 61,000 farms had tractors compared with 41,000 five years before.

There is much comparatively poor land in the farms of Oklahoma, so that the average value reported in 1945 was $30.59, against $23.88 in 1940. The livestock of the state increased in value from 108 to 207 million dollars, or 92 per cent in the same period.

Farms increased in size from 193.7 to 219.4 acres, which means that, in general, the size is not very great. The amount of land pastured is over 19 million acres, while the amount of cropland is only 14 million acres. Oklahoma is a grazing state.

A rather remarkable change took place respecting the ownership and renting of land. For example, in 1940 the percentage of tenancy was, in the state, 54.4; in 1945 it was 39.9 per cent, a very positive decline.

There was a real change in the relationship between the white and colored ownership of land and also in the tenancy of the two groups. The white owners increased in numbers by 17,000, the colored by 464. The white tenants decreased by 2,900, the colored by 2,800. Very clearly the colored men are losing their hold on the land as far as both ownership and tenancy are concerned. True enough, they gained a bit in ownership, but the increase does not appear large enough to be sig-

nificant. What is more, there are many Indian farmers in Oklahoma; many of these, who may be half or more white, are often good farmers and are accepted socially about as the whites.

Texas. In 1945, the numbers of cattle and sheep were the highest ever recorded for the state. The cattle numbered 8.86 million and the sheep 8.6 million. The next state in the number of cattle is Iowa with about five-eighths as many. So far as sheep are concerned, there is no state that is a close second to Texas in any sense. Montana with a number a third as high is second, other states stand at the 2 million mark or less. The Texas farmers were somewhat up and down in the matter of cattle from 1910 to 1945, but finished the period with a rise of 41.1 per cent. The sheep, on the other hand, began with a rather low figure in 1910 and made a gain for every census taken since.

Cotton rose and then fell, reaching its highest point, for any census year, in 1929. This accounted for 16,814,000 acres. By 1944 it was down by a matter of 60.8 per cent. The yield had decreased likewise, though not quite so much, 57.0 per cent.

The main gains in farming, other than in cattle and sheep, were in wheat, eggs, and sorghum. The wheat acreage made a distinct rise, going from a scant third of a million acres in 1909 to 4.4 million in 1944, more than 1,000 per cent. It dropped to a low point in 1924 but was back to a high figure, 3 million acres, in 1929, went down in 1939 by 10 per cent, but rose 60.6 per cent in 1944 over 1939. The yields corresponded closely to the acreage ups and downs.

Eggs have dropped at least twice since 1909 but made a distinct rise from 1939 to 1944, going up 40.1 per cent. They were produced in 1944 about three times as plentifully as in the earlier years since 1909.

Sorghum has been making distinct increases in recent years, about doubling from 1934 to 1944, and almost reaching the 8-million-acre mark. This crop does pretty well with comparatively light rainfall, and in recent years has completely outrun both corn and the small grains. It yielded appreciably more as threshed grain than did wheat, besides furnishing the bulk of the hay crop, around three-quarters. This crop has brought about a revolution in Texas farming, which will, on account of the remarkable development in this crop, be able to resist some of the temptation to go back to the old cotton acreage. Sorghum is grown over a large part of the state, in the panhandle—especially to the south of the northern panhandle—and pretty well throughout the central part of the state over which much of the cotton was spread thickly when Texas was at the top of her cotton growing. Sorghum being a livestock feed is likely to help hold cattle at a high figure and, in case cotton should

become more attractive than at present, it will undoubtedly be a real factor in keeping the acreage down.

The average size of farms increased about 40 acres. In the distinct cattle country, a considerable number of counties show a very great increase in this respect and have farms of unbelievable size. The largest one, of about 3 million acres, is known to everybody. But there are others of great size. One county, at least, has farms with an average size of around 60,000 acres, another of 39,000, and a considerable number between 3,000 and 10,000 acres.

The amount of land included in farms rose from 137 million acres in 1944 to 141 million in 1945. In 1945, there were about 64 per cent as many acres of land rented as owned. The average size of farms rose from 329.4 to 367.1 acres.

Farms rose a little more than 50 per cent in value; implements about the same; and livestock a little over 80 per cent.

White farmers decreased by nearly 10 per cent, while the colored decreased by over 13 per cent.

PACIFIC STATES

Washington. In 1944, the value of farm products sold by the farmers of this state amounted to 354 million dollars, more than three times as great a sum as in 1939. Very few states made as great an increase. The biggest item in the list of receipts was field crops, with an income in 1944 of 125 million dollars; the second source of income was fruits and nuts, with more than two-thirds the size of the field crops in amount of returns yielded.

There were 9,486 farms in 1944, out of the full number 79,887, about one-twelfth of all, which yielded $10,000 or more each. This amounted to 66 per cent of the farm income of the state. The income of all farms amount to 377 million dollars, an increase over the income five years before of 189 per cent. This means that the Washington farmers had nearly three times the income of 1939. The farms with $10,000 or more income were the most numerous of all in the state except those with an income under $250. The Washington people know how to expend their money wisely. They have, for example, provided running water in about 77 per cent of the farm homes.

The value of land and buildings rose 65.9 per cent during the five years. The size of farms made a considerable increase, rising from 185.9 acres each to 210.2 in the same period, a gain of almost 25 acres. Their average value increased from $7,264 to $11,268 each, a matter of 55 per cent.

The number of acres of land operated by owners increased by 1¾

million acres; the number of acres increased by tenant operators equaled 600,000 acres.[2]

The average values of farms of the leading three types was rather high, but not extremely so. Livestock farms averaged $4,534; poultry farms $4,145; and dairy farms, $3,567. Over half of the total livestock farms were valued at $10,000 or more each. The average value of these farms was $33,930. This means of course that out of 499 such farms many of them are worth much over this average amount.

The total value of the dairy farms is quite above that of any other group, even though the average value is the lowest of the three. The $10,000, and over, dairy farms average $17,042, which means that there are a considerable number of them running into real figures, averaging about half as much as the high-priced livestock farms. The poultry farms, with higher averages than the dairy farms, show, on the average, $21,808, about two-thirds as much as the average value of livestock farms.

The figures are given for farms showing the amount of average incomes from the smallest up to $20,000 and over. In 1944, there were 5,373 farms with incomes of $10,000 to $19,999, and 4,113 with more than $20,000. In 1939, these two classes numbered 1,705, or 18 per cent as many as in 1944.

Oregon. The farm products sold by Oregon farmers in 1944 were valued at about 239 million dollars. This was almost 2½ times as much as was sold in 1939. The amount received for livestock products in 1944 was over 107 million dollars, twice the amount received five years earlier. Dairy products accounted for about one-third, and poultry products for about a fourth as much as the livestock brought.

The value of crops in 1944 was about three times as much as in 1939, more than 76 million dollars. In 1945, farm and ranch lands were valued at 697 million dollars, a gain of 46 per cent above that for 1939.

Almost three-fourths of the farms and ranches had running water in the houses.

The size of farms rose from 290.9 acres in 1940 to 312.9 in 1945. Farms rose in value from $7,712 each in 1940 to $11,054 in 1945, a matter of 43.3 per cent. The rise in dollars per acre was about 33.2 per cent.

The amount of livestock products sold was 108 million dollars' worth; whereas in 1939 it was 54 million dollars. Dairy products rose from 15 to 33 million dollars, appreciably over 100 per cent. Subtracting the dairy and poultry income leaves 49 million dollars as the income from other livestock. On the same basis there was a livestock figure of 28

[2] The number of farms rented is not available at this time.

million dollars left in 1939. Thus this item rose 75 per cent during the five years.

The larger farms are distinctly prevalent in Oregon. For instance, livestock farms sold 41 million dollars' worth of stock in 1944. Out of this amount the farms selling over $10,000 worth received 24 million dollars, or almost 60 per cent of the whole sum received by all. Likewise the poultry farmers in the $10,000 class received 60 per cent of all money from poultry. In dairying those in the $10,000 class received almost 29 per cent of the dairy income. It is a little more difficult to operate a big dairy farm than a big cattle ranch or a large chicken establishment. Even on the general farms the $10,000 farmers got almost 36 per cent of the total income. Thus in Oregon there is a considerable tendency for the bigger farmers to get quite beyond the smaller ones in income.

California. The leading crops and products that show recent increases in output are oranges, cattle, and milk. Also there have been increases in the production of barley, lemons, almonds, walnuts, milk, eggs, and turkeys.

Between 1940 and 1945, the number of farms rose from 132,658 to 138,917, a gain of over 6,000. The average size of farms for the same period rose almost 22 acres. The amount of cropland harvested likewise had increased by a million acres. The value of California farm land rose from $70.97 per acre to $99.40. Livestock increased in value by over 100 per cent. The fruit and nut farms produced over a third of the total sum produced by all farms of the state.

Cash wages went from $114,123,000 to $291,967,000, or 2.6 times as much as for the earlier year.

RÉSUMÉ

Tenancy was lower for the country as a whole in 1945 than it had been for more than half a century. It was down from the 42 per cent figure of 1930, and 39 per cent of 1940, to 32 per cent for 1945. In numbers there were a million fewer than in the thirties, and a half million less than in 1940. In general there was an increase in the size of farms, due ho doubt to the fact that so many men had gone into the Army during the war. Many others went to the cities. The average tenant farm was 20 acres larger in 1945 than it had been in 1940.

The greatest decrease in tenancy was in the South. In this section of the country the number of owners rose by 14 per cent. In other parts of the country there were only small increases among owners. The great change in farms in the North and West was the increase in their size. In the South the greatest change was in the increase found in farms less than 10 acres

in size. It is not altogether likely that these farms will continue long at this size. Too many of them had belonged to men who were working in the government plants connected with the war. Should these little farms be absorbed into larger units, it would no doubt increase the percentage in the hands of tenants.

Many tenants and others bought comparatively small farms in the North and then rented other land near by. It is probable that many of the farms recently bought are not up to the best standards in quality. Should prices fall it would not be easy to continue to make payments on such tracts. The purchasers of inferior farms, or farms too high in price, are likely to find it difficult to complete their payments, while successful tenants may get along at least fairly well.

Tenants in the North have been holding farms of about 200 acres, much larger than the owned farms.[3]

MIGRATORY FARM HOMES

There are great numbers of farm people who have left their former homes and gone here and there to get seasonal work. These, for the most part, are, or were, residents of the Gulf States, from Louisiana to South Carolina. Many of these people have lost their homes.

Within comparatively few years, on account of the bigger and better farm machinery, on account of the reduction in cotton acreage, and on account of the seasonal demand for labor in many other states, many home settlements have been abandoned. The people, possibly with as good or better incomes than they were accustomed to, have become wanderers. They lack home attachments, school and church connections, and all the associations required in developing character.

[3] *Agricultural Situation*, Bureau of Agricultural Economics, March, 1947.

Chapter 34

AFTER THE SECOND WORLD WAR

We are producing agricultural products at a rate never known before. Probably there will be as many, or more, people who would like to get our products as was ever the case in other similar circumstances. We have been disposing of our goods at a rapid rate for several years. But we did not sell many of them at war prices and collect the money. What we did was to pay the producer for his produce and then send it in lavish quantities to our own soldiers, and to other fighting men, paying the whole cost with borrowed money.

After the First World War, we lent great quantities of money to the Europeans with which they continued for a time to buy our goods. But a transaction of this sort is destined, after a short time, to come to an end, following which our goods, like wheat and cotton, will pile up at home, and export prices will go down to mere nominal figures. When these troubles cover a broad base and when the big nations of the world are involved, there has appeared thus far no means of avoiding a calamity. The people who carry on the trade are willing to continue as long as the owners of the goods make deals. The result is that banks hold paper on which collections cannot be made. The actual owners of goods take paper that appears to be good, as was much German paper following the First World War. Much of it was secured by mortgages on buildings in German cities. The buildings were good enough, no doubt, but they could not be sold for cash, and it was soon evident that as the basis of international claims the paper that the Americans held was worthless. We could not take such buildings and use them. They could not be sold. Other claims, secured or unsecured, were worthless.

The World in the Thirties. Except the farmers, we were apparently prosperous for some years preceding 1930. From that time on, for the greater part of a decade, we were desperately poor. How could we get so poor within a year or two? Largely because of a fall in prices, and a

clogging up of goods in the market. We had just been through a boom. Stocks had been higher than ever before. The earnings on stocks were not high. Apparently people believed that the earnings were going to be high, but there was no evidence that such would be the case. The prices of stocks were so high that the earnings per hundred dollars of selling value did not yield 1 per cent.

In the fall of 1929 the market broke. Judged by the bulk of nominal values just before the break, Americans were the richest they had ever been. Within a few weeks stocks were so low and so few people wanted them at all that they actually sold for less than they were worth, as judged by their earnings. Wheat and cotton, hogs and cattle, all went to such low prices that offerings seemed like nothing at all.

It will be remembered that we were struggling to the limit in our efforts to hold our production of various farm crops down to consumption levels and had not too well succeeded during the greater part of a decade. With as much cotton on hand as we could use in two or three years, with so much wheat that we had to sell it for stock feed, and with little prospect in sight for getting our surpluses on the world market, foreign trade began to look pretty discouraging. At the same time the reduction of output appeared about as bad. However, the New Deal attempted a solution, the reduction of output with an increase in price. The better farmers on the good land appeared able to produce all the crops we could use. What then were the poorer farmers to do? If they still had to reduce their output by 25 per cent, they could not live on the receipts. It was evident that we had many more farmers than were needed to produce all the farm produce we could use. The "ever-normal granary" looked foolish, not only because it was sure to keep the surplus too voluminous, but because selling it to our foreign neighbors was becoming more and more discouraging from year to year. If the Second World War had not come on, we were at least destined to have a change in political control. But the outbreak of the war in Europe at least helped to keep Roosevelt in, probably for two elections. Thus, four times in succession, the Democrats, twice by smaller pluralities, held their power. World demand took care of a large part of the surplus meat and grain produced year after year, even though some wheat had to be sold for feed and not all the surplus cotton was wanted at the prices we were asking. However, we were able to sell about as much cotton as we were growing each year, leaving us with a constant carry-over from year to year of about a single year's growth.

Farm Income. After the war started, the farmers had wonderfully good years. For one thing yields were heavy. Not only was acreage increased, but the average yield was, from 1940 to 1947, heavier than

ever before known. These heavy crops over a succession of years, together with war prices, by no means as high as during the First World War, made farmers prosperous. The gross income for the United States in 1943 was 185 billion dollars, which was over twice as much as in 1939. Making allowance for the decline in the purchasing power of the dollar, we were apparently getting 60 per cent more in 1944 than in 1940. A most remarkable thing happened respecting the amount of work done by the farm people. It was estimated that the farms lost three million people on account of the entrance into the military service and to industries. By some means, however, the farm work was done. This was because of help from older people who were not working when the war began, from young people who were not previously employed in vacations, and finally from the women who took hold at many things, such as driving machines in the field, milking, and gardening. The work was done.

What is more, implements were getting scarcer from year to year, prices for many secondhand tools were above their cost years before when new. With all these troubles, however, the work was done, and the harvests gathered.

Farmers Want Heavy Protection. It is no doubt safe to refer to the past and to recall that farmers were keen, following the First World War, to ask for an increase in tariffs on their products. It is true that the feeling that tariffs might do little if any good was general among part of the farmers, yet in 1921 and 1922 when the Fordney-McCumber tariff was before Congress, the farmer vote was all but solid in favor of increased rates. It will be remembered that the farmers, a few years later, supported, quite generally, the McNary-Haugen bills. This was mainly because they had no hope of reducing the tariff in general and so accepted the tariff on manufactured goods and demanded for themselves a payment on their agricultural products which would give them a satisfactory price on the portion used at home plus enough more to bring the price on exports up to the same figure.

Of course if farmers could bring themselves to desire something approaching free trade following the war and if manufacturers at the same time could be convinced that they likewise could hold their own in a world with low tariffs, it might be possible to get started anew on this basis. But with the majority of our manufacturers believing that they can make more money with tariffs at 50 to a 100 per cent, and with farmers used to cotton at 30 cents a pound, and wheatgrowers receiving $2.25 a bushel, it is a hard time to propose free trade when many countries are destined within a few years to be selling at half of today's prices. To hold these prices with such yields as we are now getting will undoubtedly require a strong hand, keeping production down to levels such

as we can use at home. To return to the small amounts produced in the late thirties will require a strong hand on the part of government. Can this power be exercised by either of our political parties?

Farms of the Future. Are we to have many big farms with cheap labor, or will independent small farms prevail? To begin with, the moderately small farm prevails over the greater part of the United States. In England and in most European countries there are many more of the larger farms with anywhere from 3 to 4 to perhaps 10 or 12 or more hired men. In the United States we have had a small number of cotton farms with large numbers of hired men, at least one wheat farm with hundreds of workers, and cattle farms with men enough to handle a few million acres. Even so, these very large farms occupy but a small part of the landed territory in this country involved in any particular kind of farming.

On some of the largest farms were, a few years ago, to be found genuine organizations for handling the hired help. For instance, in the corn belt were a very small number of big farms on which the help were under the direction of overseers who, perhaps on riding horses, supervised something like eight men each. These workers were often stupid or untrained for the kind of work expected of them. A man who was fairly bright could usually, with a little help from the overseer, learn to drive teams of mules, or horses, such as were needed on plows, corn cultivators, or self-binders. Others did so poorly that they were kept but a single day. This meant a rapid turnover of men hired. Such men were found on corn farms, wheat farms, and the like. On cotton farms there were many men employed who stayed for rather long periods of time but who required constant superintendence. Their pay was small, and they made little advance in status from year to year.

Although it does not seem that this low-grade form of help is either hard to find or hard to keep, it must be noticed that the responsibility is heavy on the superintendent. A man, such as is often found on a big farm, getting along fairly well, would hardly do on a farm with but one hired man. Almost without exception the man working alone as a hired man must be able to do any sort of work. Not only must he be able to work in an acceptable manner, but he must be willing to do a full day's work without being watched. On the comparatively small farm, with one hired man, unless the man can be trusted to do good work, and a reasonable amount of it, he simply is undesirable. Thus the small farms cannot afford to hire the cheapest help. On the big farms, where 10 men are needed, the chances are that 10 good men are not available.

In recent years, with better and bigger machinery, this old, inefficient type of man is not so useful. For handling tractors and big machines,

better men must be found. Foremen may be needed, but not so many of them. The men are more highly paid, and are much more responsible.

European System. Europe has been more successful under her small farmers than under her large-estate farms. In few of her big estates, managed by the wealthy, or at least by those able to keep control of the vast tracts of land still held together as great farms, are the products as important, all told, as those of the small owners and renters. A poor family on a small farm may not be first-class managers, but the women and children all work. The older people, often with poor equipment, put in long days in the fields, and with a few pigs and chickens, a little flock of geese, one to three cows, and the like, will produce more food per acre than is produced on the big estate.

Too much tariff has made production difficult in Europe. The poverty of many people in Europe, before the First World War, was pitiful. The small income that these people had was, to no small degree, due to the high tariffs paid on substantially everything that moved across international boundary lines. The prosperous countries were mainly the few small countries which, for the most part, had free trade with England; for example, Denmark and Holland. These countries were doing wonderfully well until they were overrun by the Germans at the beginning of the war. On the other hand, several small countries of southeastern Europe were in bad shape because of extremely high tariffs on their agricultural products which kept them at prices too high for the city people to pay, while the goods produced by the city people were, because of tariffs, too dear for farmers to buy. In general the trouble was that each little country was trying desperately to produce too many things that were hard for them to make or grow, but the tariffs were so nearly prohibitive that they could not buy from their neighboring countries the things that should have cost, under low tariffs, not over half as much. Thus wheat grown in the southeastern countries could hardly get into Germany at all, while German manufactures were all but prohibited on the return trip. Trade was all but impossible from country to country after the First World War.

Of course, after tariffs are once in effect it would wreck a vast number of producers and tradespeople to wipe them all off the books in a moment. A few years are always required for such changes without too much shock. Allowing a few years in which adjustments may be made is, however, vastly more desirable than the continuation of unreasonable trade obstructions.

The United States and the World Market. The political party in power under Hoover was courageous enough to make a feeble effort to

set up a series of prices independent of world prices. As noticed before, they collapsed pitifully. The Democrats tried pretty much the same thing a few years later in their attempt to hold production down. Thus our sales were small because the foreign tariffs were so high that we could not afford to pay them. Our purchases were small because our own tariffs were so high that our people could not buy. Thus both purchases and sales were on a low level.

The longer a case of this kind continues, the harder it is to readjust. There will be so many people producing goods which could not be produced except under the protection of tariffs. In this way we may assume that half of the goods made are made under protection of a tariff; without the tariff they could not be made at all. Thus half of the manufacturers whose business is dependent upon the tariff will of course be strong supporters of the tariff and they usually, at least if their brand of goods is imported at all, will want the tariff increased. A group of such manufacturers is hard to down, because the public will not want to see them ruined. It is always a hard matter to reduce tariffs because the group dependent upon the protection can always get powerful support from every other group that is protected. The people who pay these tariff charges do so only a few cents at a time and get used to the prices. Another group who own the stock in such a company and who get dividends do not want their stock to go down in value. Thus there are about three groups of people who want to keep the business going, and few who are hurt enough in paying the costs to make a big fight to correct the matter.

American Agriculture and European Industry. Even if the world does get back onto a peaceful businesslike regime, more or less as it has been in the past, the real question as to what role we can play depends mainly on ourselves. For example, what do we propose to do about cotton? Must we insist, for example, upon 30-cent cotton, and therefore about half as much of it as we were able to grow a decade ago? That we can use half of our cotton at 30 cents at home and sell the other half to Europe at 10 cents is improbable. It is hardly likely that we can go ahead with $2.25 wheat at home, and sell at half or two-thirds as much while we pay off our enormous debts incurred during the war. To pay such huge bonuses to cotton growers wheatgrowers, and all other farmers would not be an easy matter. This is assuming that we might go ahead trading with Europe year after year, holding our own prices behind a high tariff wall. Nothing can be plainer than the difficulties encountered at once in the matter of making collections for our exports.

Probably we might make some payments to farmers in the form of bonuses over and above the prices at which they made sales to foreigners.

That these bonuses can be huge in amount, running into hundreds of millions of dollars annually, is unlikely. Neither is it likely that we can pay laborers at $10 a day in manufacturing plants in the form of wages over a long period of years, unless indeed we inflate our currency to the point that means a dollar with little value.

In other words, the way does not seem easy whereby we can hold our own prices at figures quite beyond those obtaining in the rest of the world and at the same time continue to sell quantities of agricultural goods and manufactured goods to other countries that cannot pay us with anything other than credit or cash. What we need, beyond anything and everything else, is a plan that will allow an exchange of goods for goods. This would eventually resolve itself into something like the plan that we followed for years before the Hoover tariff and the efforts of the Federal Farm Board. The Hoover tariff was a grand failure and the Farm Board was a fiasco, yet out of these failures came certain results that have left their influence.

It is plain that America needs to trade with some other countries, especially with those well populated and ready to trade their fine handiwork, painstaking mechanical structures, and in general their products requiring much human skill, the work of minds and fingers, such as are with us somewhat scarce. These European peoples can trade many conveniences for the products of our fields and heavy factories. There is much opportunity to carry on commerce valuable to the peoples on each side of the Atlantic, all of which can be, in fact, has largely been, wiped out by the overgrasping programs of our heavy manufacturers. We undoubtedly need fairly heavy tariffs on a few things; we have extremely heavy tariffs on most things. We have had good incomes in the past five years from all our goods. What we now need is a careful overhauling of our trade relationships with country after country, based on probable future facts rather than on the facts now past. Are we smart enough to see that what we most need is to reestablish, and establish anew a big trade with the newly born peoples of both Europe and Asia. What we need is a group of statesmen who can forget the political battle cries of the past two generations, and so relieve some of the hunger and nakedness of Europe and help our own country to a higher level of culture and comfort.

The World Market. To withdraw from the world market is in a great measure a calamity. It means that, every time we get a big crop, we shall have to store the excess in elevators or in little bins along the railroad lines through the productive areas. Cotton will be in storage from New York to Galveston. We have been through a semicalamity like this before. To make farmers produce less than they are disposed to

produce is not easy. On the poor land it means that, even with higher prices, the income will no doubt be too small; on the best land, the large crops will yield excellent incomes.

Under these circumstances if we export at all we shall be buying from the farmer at a high price and selling to a foreigner at a low price. The government will probably stand the loss. We would no doubt be better off as a nation to let the price go to the world level for everybody. By doing this those on the good land would do not too badly. Those on the poor land would probably be obliged to reduce production of their leading crop, like cotton, grow what they could of crops to be used at home, and accept added income from the government. By following a device of this kind we, with distinctly lower tariffs, would find ourselves with lower incomes. However, the lower incomes would be spread to a larger number of people. Instead of having perhaps 10 million people on the unemployed list, we would have 3 million. Under these circumstances our trade would grow larger instead of smaller. Tariffs of 100 per cent and 30 per cent might go down to 10 per cent, and we would have a real part of the world trade. Under these circumstances we might be a busy nation again, with few out of employment. Otherwise we may have everyone's ill will, together with overproduction of many kinds of farm products. In manufacturing we would no doubt have great numbers of unemployed, and hence, great bills to be paid to the unemployed, the indigent. By hook or crook, by fair means or foul, by one means or another, we will undoubtedly pull ourselves through bad times. Eventually we must be on trading terms with other nations; it appears impossible to go ahead with a national arrangement not related to them. We shall produce quantities of stuff, both agricultural and manufactured, which we could exchange with other people to advantage. The trouble is that we want $10 a day for much of our work while people of many other nations can get but $1. What we shall have to do will be to come down somewhat in our own wages and other incomes, and exchange the goods that we are best able to make, for foreign goods that we shall be glad to get in exchange for our products. We believed, in the years following the First World War, that we could get along mainly by ourselves, buying here and there a few minerals or a little manufactured stuff from the Orient. Under this plan we lost nearly a million dollars in exports to Canada, and great sums here and there. Other countries were getting our South American trade away from us. We were piling goods up right and left, agricultural and manufactured, till the Germans called a halt in the procedure. For us to live mainly to ourselves and by our own efforts is absurd. To get back into good trading relations from a high-tariff policy is a painful, laborious under-

taking. It means that many people and companies, engaged in business shielded by high tariffs, will suffer greatly in fitting themselves into a world plan of trade. In 1930, the old dominant political party voted, almost unanimously, that we should make big additions to our tariff. The President was swept off his feet and promptly signed the bill. Had we put our tariffs down as much as we then put them up, it would have been a great step away from the war just closed. What our people could not, and would not, countenance, in advance, was a lower tariff. All they could see was lower prices, loss of money, ruin. There was much more financial grief caused by the hard times of the thirties than a moderate lowering of the tariff could ever have brought. But lowering tariffs was unknown and impossible to Republicans. They had raised tariffs many times; lowered them never. The spirit of withdrawal from the world market, in case prices fall badly, will again become a powerful proposal.

If we withdraw again from the main world market, as we did several years ago, the situation will be extremely difficult to handle. If it should begin under the Democrats, we are likely again to change parties, a move more likely to make things worse than better. Withdrawal from the world market will mean a repetition of the difficulties of the thirties.

Paying the Damages from Lowered Tariffs. We made many, many raises in tariffs between 1860 and 1930, with two lowerings, the first of which was poorly handled. The second was almost entirely blotted out by the First World War. These were Republican times. Therefore, the attempts to lower the rates were doomed at the start. The country was genuinely Republican, owing largely to sentiments developed in connection with the Civil War.

We have many industries that have been dependent on tariffs for their prosperity for a long time. Probably the fact that we have supported so many people in their business by tariffs for so many years has built up a public responsibility that we cannot well drop all at once. No doubt after we make a move for freer trade, should we ever do it in a large way, we shall have occasion to pay subsidies to certain industries on the grounds that they were previously getting along well under protection, and were paying good wages and contributing to the prosperity of the country. Many industries will put up a powerful demand for subsidies, some with reason. Should we meet this demand by cash payment out of the treasury for a few years, it would not be so bad. If they continue in business, merely getting along with the subsidy, the case will require the same treatment from year to year. If the bargain is for something like five years only, with little prospect of renewal, we may eventually get onto better, safer ground. One great trouble will be in distinguishing the businesses that really have a claim for subsidy from those that do not.

If we lower tariffs, the demand for subsidies will be powerful. If we hold our tariffs high, we shall soon be badly weighted down by quantities of produce which, no doubt, the government will be obliged to buy and store. Shall we pay the damages from the lowering of tariffs, or shall we experiment again with high tariffs and quantities of goods that will not sell to Americans as before? It would no doubt be much easier to let the goods sell on the world market and take care of the people, in part, who could not make a decent living at such low prices.

Agricultural Products Likely to Be Too Great. We undoubtedly have far too great capacity for producing agricultural goods merely for our own people. We could, unchecked by governmental authority, produce twice the cotton, 40 per cent more wheat, and appreciable quantities of pork, rice, fruit, and, at least every few years, great amounts of beef, dairy products, peanuts, and the like. We are, in fact, apparently capable of producing immense quantities of farm products beyond what we could do 10 years ago, and we have by no means reached our capacity in this respect. We do not want to produce at low prices. We want the best of machinery and the finest of livestock. We want to improve and enrich our soils. Unless compelled to do otherwise, we want to increase our agricultural population. But we are educated to high prices. It would be possible to squeeze much of the present land value again down and out. What we like is a growing, expanding business. We like growing prices, high prices. What the world is likely to see for some years is larger quantities of production, with a tendency for free prices, if there are any, to hang at quite low levels.

Too great agricultural production usually means that agricultural people are too many. At many times during the early years agricultural people were too plentiful, a fact not always recognized. Blame was put on other classes of people because of their high prices and high charges. True enough, they were such because the people rendering them were relatively few, while the farm people were many. A doctor with the health of a thousand people to look after might make money ten times faster than the farmer, who had to sell his corn at 10 or 25 cents a bushel because it was plentiful.

America from early colonial days has had many more farmers than were needed to provide her with food and clothing. Since the First World War we have had too many farmers if we ourselves are to use the whole product. We tried our best to cut down their output, leaving the farmers to decide whether or not they wished to continue their business. It was not a very good time to find something else to do, say for 10 years before the beginning of the last war. So what the farmers hoped for was a sufficiently high price to take care of them in comfort. Next

they were put into the Army, or coaxed into other, much better paying jobs. Now they are losing these jobs, and many are ready to return to the farms. Farm pay is fairly high. But in all reason it will fall, no doubt rapidly.

International Trade or Tariffs. During the period from 1922 to 1935 we had tariffs so high that foreign trade was pretty nearly impossible. It is hardly probable that, after a hundred years of tariffs, especially after nearly 20 years of tariffs higher than ever known before, all important nations of the world will quietly submit to a drop to a low tariff without a protest. Although the world is undoubtedly ready for such a move, there will be in country after country a considerable group of people who are more prosperous with the high tariffs than they would be without them. These must be coldly voted down or bought off, either of which procedures would require much work, time, and concession. However, the chances for such an agreement are much better at the present moment than they ever were before.

The proposal for a new world plan for trade on a much freer basis than in many years was proposed by Secretary of State Byrnes, in a speech in Charleston, S.C., in November, 1945. He proposed the following:

. . . we have been discussing with Great Britain the principles of commercial relations—principles we want to see applied to all nations in the post-war world . . . based on the conviction that what matters is not the buttressing of particular competitive positions but the increase of productive employment, the increase of production and the increase of general prosperity . . . world trade cannot be throttled by burdensome restrictions.

We shall shortly submit to the peoples of the world our views about these matters.

We intend to propose: that commercial quotas and embargoes be restricted to a few really necessary cases, and that discrimination in their application be avoided.

That tariffs be reduced and tariff preferences be eliminated.

That subsidies, in general, should be the subject of international discussions, and that subsidies on exports be confined to exceptional cases, under general rules.

That Governments conducting public enterprises in foreign trade . . . give fair treatment to the commerce of all friendly nations . . . make their purchases and sales on purely economic grounds . . . avoid using monopoly of imports to give excessive protection to their own producers.

That international cartels and monopolies be prevented, by international action, from restricting the commerce of the world.

That the special problems of the great primary commodities should be

studied internationally, and that consuming countries should have an equal voice with producing countries in whatever decisions may be made.

That the efforts of all countries to maintain full and regular employment should be guided by the rule that no country should solve its domestic problems by measures that would prevent the expansion of world trade, and that no country will be at liberty to export its unemployment to its neighbors.

We intend to propose that an international trade organization be created under the Economic and Social Council, as an integral part of the structure of the United Nations . . . that the United Nations call an international conference on trade and employment to deal with these problems.[1]

Just what will come of a proposal like this is hard to predict, but if England and the United States can agree to it, it at least has some hope.

A very distinctive statement by Mr. Ezekiel is worthy of attention.

It is commonly thought that helping other countries industrialize will reduce our markets. This is not true. Canada makes more of the same products as the United States than any other country in the Americas. It is this country's greatest competitor and the most industrialized outside of the United States in this hemisphere. Yet this nation of 11 million people before the war took more of American exports than all of the 130 million people living south of the Rio Grande put together. The reason is that Canadians have a high income per capita, compared to the mere $25–$50 per capita earned in a year by most Latin Americans. This high income was achieved through industrialization.[2]

The article goes on to state that the more America buys the more the rest of the world will buy from America. This is undoubtedly true, yet a great many countries do not live up to the belief that international trade will move a lot faster if we help other countries get into production soon. And so in about these words Ezekiel goes on to recommend the increase in foreign trade. Although the truth and wisdom of these words are both great, it does not follow that all the local selfishness, the local ignorance, and the local ambition can be overcome merely by a statement of the generous, truthful, and much-to-be-desired change. Selfishness is powerful and ignorance is a precipice.

Even so, if the British and the Americans would actually come to the point of near free and full exchange of goods, it is likely that other nations would, even though somewhat slowly, adopt a trade condition so much freer than has recently prevailed, that the business world would find itself on an essentially improved trading basis. If we should start a much freer basis of buying goods of other countries, they would at once

[1] Mordecai Ezekiel, *The Agricultural Situation*, p. 10, January, 1946.
[2] *Ibid.*, p. 11.

get the money with which to buy our goods. To get a plan of this sort at work somebody must start it.

To repeat, to get this more generous plan into effect, it would no doubt be necessary to help out, for a few years, certain firms and men who would be hurt by the new arrangements. It might happen that many poor cotton growers would be obliged to turn toward growing crops for their own living, but this, in itself, might not be a calamity. The nation and the states might be called upon to help the poor people of the country to a considerable extent. They have been in need of help for many years.

Study and Plans Needed. It will be necessary to study with care both the immediate and the ultimate results of freer trade. America will be better off when she lives in a world of many well-fed, well-clothed nations. We never get much that is worth while out of the poor people we deal with. Our trade with Canada was worth more to us than all our trade with South America. But the South American trade can yet grow and be distinctly important. If we again lose the Canadian trade, it will be a calamity. A real world trade, on somewhat lower prices than we struggled to get a few years ago, would give us the richness of living that the "statesmen" of the three Presidential periods following the First World War provided. We cannot be too proud of our efforts to take care of surpluses for nearly a decade, following the first election of Franklin D. Roosevelt as President. Our handling of surplus crops and meat animals left much to be desired.

Getting down from high national prices to a lower level of world prices has never been done by a country like ours. Its accomplishment would cost many people real sums of money or incomes of generous size. If we can handle a case of this kind, if we can salvage a real percentage of the prosperity involved and get off on a much lower level of prices as a genuine and friendly member of a new world group of nations, we shall doubtless be able to live more peaceably and more profitably than we could if we followed the plan of the old party that struggled to give us high prices through tariffs, or of the other old party that tried to give us high prices through reductions of our output and hoardings of our surpluses, which still persisted. What we most need, and eventually must have, is reestablished world trade.

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