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The Economic Development of the British Overseas Empire

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VOLUME THREE

THE UNION OF SOUTH AFRICA

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PREFACE

THE present volume is a further contribution to the series planned by the late Professor Lilian Knowles. The first volume, which included a view of the Empire as a whole and a particular study of the British Tropics, she completed in her lifetime. The second volume, which contained a comparative study of Dominion problems as well as an Economic History of Canada, was written by herself in part and completed by me in accordance with what I concluded to be her designs as gathered from her lecture and other notes. Her original plan was to complete the series with a third volume which was to present the economic development of Australasia and the Union of South Africa.

When considering the possibility of completing the work she had planned, I found various indications that it had been her intention to deal next in order with South Africa. At the same time it became clear that I should have to undertake a great deal of original research, for lecture notes represented the only form in which she had thus far been able to embody her own researches into the subject. Thus it came about that I started on the exploration of South African official reports, parliamentary debates, contemporary records and other original material to be found primarily in the Dominions and Colonial Office Library, and again I have to acknowledge the efficient and ready assistance of the staff of that institution.

As the work developed it became apparent that the subject, adequately treated, was too vast for the inclusion of the economic history of more than the one Dominion in a single volume, and that South Africa must have a volume to itself, so constituting the third volume of the series.

As in the preceding volume, so also in this, I have received invaluable help from Dr. Allan McPhee. The chapter on Trade Relations in the present volume, as in its predecessor, is his. The Mining chapters contain much of his work, notably those sections which deal with diamonds and coal, and his researches enabled me to avoid various loose ends in the sections of the book devoted to the farming

industry. I also had the advantage of finding at my disposal a number of memoranda on various aspects of South African economic history prepared by him for the use of Professor Lilian Knowles during her lifetime. Finally, he undertook the compilation of the Index.

C. M. KNOWLES.

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THE UNION OF SOUTH AFRICA

CHAPTER I

THE DUTCH FOUNDATIONS OF THE COLONY

The Colony founded by J. van Riebeek, 1652, for the Dutch East India Company; captured by British, 1795; restored to Batavian Republic, 1803; recaptured by British, 1806.

Its early importance as a port of call.

Policy of Dutch East India Company:

The settlement not regarded as a colony to be developed.
Trade monopoly.
Migration discouraged.
The Settlement to be self-contained.

Early Dutch Expansion:

Ex-servants of the Company the pioneers of expansion and first Free Burghers, 1657.
Farmers planted out.
Little immigration from without.

Dependence for labour on Hottentots and slaves.

Company rule generally oppressive:

Control over the more distant districts but slight;
Changed conditions after British occupation.

"WHOEVER has the Cape is master of the commerce of India." In this dictum Sir George Yonge, writing in the year 1800, when he was Governor of the Cape of Good Hope, indicates the main reason why the Dutch East India Company, in 1652, sent Jan van Riebeek to establish a settlement on the shores of Table Bay, and why the British dispossessed them, temporarily in 1795, and permanently in 1806. Colonization was not the purpose of the founders and rulers of the new settlement. Their desire was merely that the Cape should be available as a port of call where their ships, engaged in the Eastern trade, could water and obtain provisions. The interest of the captains of the Dutch ships in the place is indicated in its name. Bartolomeo Diaz, the Portuguese navigator who discovered and doubled this southernmost point of the African continent in 1488, gave it the name of *Cabo de Boa Esperança*, the Cape of Good Hope, "meaning good

hope of reaching the rich spice-producing islands of the East." [1]

Contemporaneously, the British held precisely similar views. In a letter from Sir Francis Baring, Director of the East India Company, to the Secretary of State, in 1795,[2] he refers to the danger of a French descent on the Cape and points out that the importance of the Cape is " comprised under two heads—as a place of refreshment for our ships on their return from India, as St. Helena is unequal to the supply and we should be much distrest for a substitute if the Cape is lost to us. Secondly, whoever is master of the Cape will be able to protect or annoy our ships out and home, serving at the same time as an effectual check upon Mauritius ". To look upon it as a Colony he regards as " rather dangerous ", for a reason which sounds strange in the twentieth century, that is to say, because " there is too much encouragement for settlers and we have already too many drains upon our own population ". The place was regarded as valuable merely from the detriment to British interests which would result if it were in the possession of an enemy. " What was a feather in the hands of Holland will become a sword in the hands of France." [3] As a Colony it was regarded as having no attractions at all.

It is an interesting speculation how and when the Cape would have become a white man's settlement had the Suez Canal been available in the middle of the seventeenth century.

When the Settlement had become firmly established and the inevitable time for expansion arrived, the Dutch East India Company took active steps to discourage the movement outwards from the centre. Their instincts were monopolistic and their purpose was to keep in their own hands whatever trade with the natives there might be. " The burghers or freemen, so called to distinguish them from the Company's servants, were from time to time prohibited by placaat to carry on any trade with the natives. . . . In 1726 instructions were received from Holland prohibiting all private trade with the Hottentots.

[1] J. A. J. de Villiers, *The Dutch in South Africa*, a lecture delivered in 1923, p. 1.

[2] *Records of the Cape Colony, 1793–1831*, ed. G. McCall Theal, vol. i, p. 17.

[3] Letter from Captain John Blankett, R.N., ibid., p. 26.

The Government wanted to have the monopoly for themselves." [1] But the centrifugal urge that carried the settlers and their descendants further and further from Capetown and its environs proved irresistible. They moved ever onwards and outwards, the stock farmer with his cattle invariably constituting the advance guard, and the forces and officials of the Government had to follow, if only to protect the colonists from the native attacks to which they were constantly exposed and to see that the Company's interest in the occupied land was secured.

The policy of the Company was to endeavour to produce in the Colony itself sufficient food supplies for their ships when they put in there and for the garrison and residents. At first they relied on their own direct efforts at farming or on barter with the natives, to procure what was wanted, but before long they came to the conclusion that the presence of a farming class was essential, although there was still no inclination in the direction of an active policy of expansion. The first free burghers and the pioneers of expansion in South Africa were the old servants of the Company whose five years' contract of service expired in 1657. They received grants of land and were planted out to produce the grain, the meat, and the wine that were wanted, subject, however, to such restriction as to the disposal of their produce as the Company, in its own interest, saw fit to impose. Then in 1679 Simon van der Stel removed a number of families to a valley beyond the isthmus of the Cape of Good Hope and gave them plots in freehold with grazing rights beyond, and later at Drakenstein the process was repeated.

The endeavour to surround the Settlement with a ring fence proved futile, and when, in 1795, the Cape of Good Hope was surrendered to the British, the Colony consisted of the capital and its environs, and the districts of Stellenbosch, Swellendam, and Graaff Reinet, while the handful of Company's servants and ex-servants had expanded to a white population of 15,000.[2]

In the early history of Canada, geographical expansion took the form of penetration inland from a number of different points that were far apart.[3] In South Africa

[1] C. Graham Botha, "The Dispersion of the Stock Farmer in Cape Colony in the Eighteenth Century," *South African Journal of Science*, 1923, vol. xx, p. 575.

[2] *Records of the Cape Colony*, vol. i, p. 296.

[3] See Part II, Chapter 1, of Vol. II of the present work.

the form taken by early expansion rather suggests the sector of a circle which was ever widening from a single centre. Nor, again in contrast with Canada, was the access of population the result of immigration from outside. Save for a small minority, it was the result of natural increase from within. Fundamentally this form of growth persisted in South Africa right down to the time of the diamond and gold discoveries in the second half of the nineteenth century. It suggests the gradual appropriation of a country by a single large and prolific family. Such conditions do not foster feelings of hospitality towards immigrant strangers, and in this circumstance may be found one of the main causes of the race conflict between the immigrant British and the descendants of the old Dutch settlers which has remained one of South Africa's specially difficult problems.

From the first the Colony depended for labour on the nominally free Hottentot, and Malay and African slaves. The Hottentots were the native race whom the early European explorers found in occupation of the south-western region of what is now Cape Province, and who shared the land further north with the earlier aboriginal race of pigmy nomads, the Bushmen. As in the case of the Bushmen, a pure Hottentot is now hard to find, but in the early days of the Colony they played a part of some importance.[1]

Under Dutch rule the Hottentots were, in law, a free and independent people. In fact, however, their tribal government had hopelessly broken down, and in general their position was that of hired servants to the white man, or that of rovers.

Among the Hottentots, Moravian missionaries had exercised a civilizing influence, but the absence of any substitute for their own tribal rule, after its breakdown, left them for the most part without any obligations to any form of government. Governor Lord Caledon resolved to bring them under the discipline of the law and, in 1809, by proclamation, their position in the country was regularized to the extent that they were no longer free to wander at will, but were required, as were the other inhabitants of the Colony, to have a fixed and registered place of abode; when moving about the country they had to have a pass; and thenceforth they were regarded as subject to the local

[1] The early white settlers and Hottentot women were the parents of the mixed race at first called Bastards, but after 1813, Griquas.

courts of law, to taxation, and to the usual obligations of public service. In their own interests their contracts of service were placed upon a formal legal footing.

Save that by their depredations and attacks they compelled the strongly individualistic Boer settlers reluctantly to organize themselves in commandos for their own protection, the race of primitive aborigines called Bushmen are negligible as a factor in South African development. The Commission of Circuit of 1812 reported on the Bushmen in the following terms: "This people, which one can scarcely consider as such, because that they have not the smallest idea of social order, of Government, or of a head, still continues in the same state of barbarism as has been generally described by travellers." Unlike the Hottentots, the Bushmen were incapable of association with white men in any capacity save quite casually, and their bows and poisoned arrows were of no avail to save them from practical extinction.

The Burgher Senate—the Town Council of Capetown—having been consulted by the Acting Governor in 1799 as to the desirability of importing Mozambique slaves into the Colony, that body replied that "as we are not fortunate enough in the Colony to be able to do without slaves more especially as agriculture here is infinitely more difficult and of course requires a larger number of hands than in any other known country, it is therefore indispensably necessary (to prevent agriculture from going to decay) that a sufficient number of slaves should annually be imported, Mozambique slaves as well as Madagascars and other negroes being very proper for the Colony".[1]

The organization of the white settlement in South Africa up to 1834 on the basis of slavery has had a vital influence on the subsequent economic development of the country. The traditional conception that any rough, unskilled labour that had to be done was the proper work of the coloured races, and that the part of the white man was supervision and direction, survived the abolition of slavery and continued to govern the relations between the white and coloured races. Slavery was simply replaced by caste. "Before the emancipation of slaves, all menial work was performed by the slaves, and the white men were in the position of a more or less non-labouring aristocracy. This tradition as to the place of the white man has persisted more

[1] *Records of the Cape Colony*, vol. ii, p. 372.

or less ever since. Menial work has practically become class work—work for the native only. By menial work I mean labour for another. The Boer does not think labour for himself is menial, but to labour for another he considers to be derogatory to the dignity of the white man." [1] The result has been that in South Africa " there has never existed any class of efficient, hard-working, white labourers ",[2] and the unskilled labour market remained almost the monopoly of the native. There is evidence, however, that in recent years the white man's prejudice against doing " Kaffir work " is being gradually broken down, especially in the southern and western districts of Cape Province.

The oppressive and illiberal rule of the Dutch East India Company weighed on all classes. White society was organized into an oligarchy of Burghers, that is to say, " free persons who come to domiciliate here with the permission of the Dutch Government, then represented by the Directors of the East India Company, and with the liberty of carrying on all such trades as were consistent with the nature of the Settlement, and of hereditarily possessing estates and other landed property." The servants of the East India Company were excluded from most of these privileges and even when no longer in the service of the Company were barred from carrying on such occupations as were more particularly considered as Burgher trades, of which baking, ploughing, and farming were instances. Persons not possessing Burgher rights or not being past or present servants of the Company were strangers who " were not allowed to possess immoveable property and were obliged on the first order of the Government, to leave the Colony ".[3]

Although nominally subjects of the Dutch Government,

[1] *Transvaal Indigency Commission, 1906–8, Minutes of Evidence* (T.G. 11—1908). Evidence of J. H. Hofmeyr. Q. 464.

[2] *Report of Transvaal Indigency Commission, 1906–8* (T.G. 13—1908). Pretoria, 1908, p. 26.

[3] Letter from Chief Justice Truter to Deputy Secretary Bird, *Records of the Cape Colony*, vol. xi, p. 119.

When asking the Home Government to sanction such salaries for the officers of the Crown at the Cape as would relieve them from temptation and " place them above contempt or neglect which generally attaches itself to poverty ", Lord Charles Somerset, who took over the administration of the Colony in 1814, took occasion to point out that " under the old administration of the Dutch Company all salaries were low, and their servants were reimbursed or reimbursed themselves by monopoly or peculation " (ibid., p. 394).

the Boers settled in districts so remote as, for instance, Graaff Reinet, lived in a state of practical anarchy. The Governor of the Cape, writing in 1800,[1] remarked that the Dutch settlers and Hottentots, who constituted the inhabitants of that district, were oppressed by the Dutch Government to a degree which provoked them to independence, yet that Government " had the weakness at the same time to exercise no power of government, and in a manner to abandon them, so that there was neither government nor law and the consequence was mutual violence and oppression and depredations on each other without any restraint ".

By 1795, the year of the British occupation of the Colony, it was apparent to Englishmen in touch with the Cape that the Colonists were ripe for revolt, not so much against the Dutch Government at home as against the oppressive methods of the Dutch East India Company which was in effect the Government there. The Dutch never regarded the Cape as a colony to be developed nor as a commercial asset, save so far as it was useful as a place of refreshment for their ships in their trade with India. Their exactions were heavy for the reason that they intended that the cost of maintaining the colony should not be a charge on the Company's revenues. The price of commodities was fixed by the Company; Capetown was the only market open to foreigners and duties were levied on all sales there. Furthermore, the Company made all their payments in a paper currency which was of no value outside the Colony. But the most serious cause of dissatisfaction was the monopoly of the Company in the trade in wine, flour, grain, cattle, and most articles of general use. " While the Colony was in its infancy, and the plantations at no great distance, all went well. The farmer brought his cattle, his wine, and his corn to Capetown where it was bought by the Company's agents and put in their storehouses till the arrival of the ships. By this means the farmer was sure of his market and enabled to purchase from the Company's stores whatever was necessary to continue his cultivation. But as the Colony increased in population and culture the market became overstocked, the farmer had no longer vent for his increased produce, and, although the price to him was kept down, it was increased to the stranger, so that the colonist had the mortification to know that his

[1] *Records of the Cape Colony*, vol. iii, p. 88.

own commodity was resold for more than four times the value he received for it." [1]

To the discouragement by the Company of any private trading must be added the natural difficulties in the way of the farmers who lived in the parts of the Colony most remote from the capital in disposing of the produce of their farms. These difficulties were extreme, as appears from a letter written by General Craig,[2] who had been appointed Commandant of the Cape after its surrender to the British in 1795, in which he tried to convey " an idea of the state of the back parts of the extraordinary Settlement ". He described how: " It is not an uncommon thing for a waggon with sixteen bullocks and two drivers to be five weeks in bringing down a sufficiency of butter and perhaps a few skins, wherewith to purchase the quantity of iron necessary for the work of the farm for the ensuing year; and as to clothes it is a certain truth that very many of the inhabitants wear nothing but sheepskins as dressed by the Hottentots. . . . Cattle, which is the principal part of their property, is from two to three months in driving to the Cape Town, the only market for it, and there it is sold by the butcher at a penny farthing per pound."

In August, 1795, the Dutch Government at the Cape, as represented by the Dutch East India Company, capitulated to the British. In a Proclamation by the British Commander to the inhabitants of the Colony in October of that year [3] it was announced that the oppressive monopolies hitherto existing for the benefit of the India Company were to be abolished. All restrictions on the internal trade of the Colony were taken off and all persons were to be at liberty to exercise their several trades as best suited their own interests.

Difficulties were bound to arise when the methods of British rule were introduced among what, during the period of Dutch rule, had been largely a self-contained community. The Dutch East India Company, in time of peace, supplied all kinds of European manufactures and produce to the inhabitants, the proceeds being applied to the support of the civil and military establishments. " The colonists had no exports, neither did they feel the loss of them, since all their wants were abundantly supplied by the Company

[1] Letter from Captain John Blankett, R.N., 1795, *Records of the Cape Colony*, vol. i, p. 24.

[2] *Records of the Cape Colony*, vol. i, p. 264. [3] Ibid., p. 179.

for paper money, which paper flowed back again into the coffers of individuals in proportion to the public expenditure, and thus the paper effectually served the purpose of a circulating medium not liable to depreciation in the absence of all foreign commerce." But when the colony came under British control a complete change took place. "We find British capital employed in supplying all the wants of the colony at the expense and risk of the importers, which capitals are all eventually to be replaced in England. This want of exports to any amount is severely felt." [1] Difficult problems of exchange arose, the paper currency depreciated to a ruinous extent, and the price of every article of consumption rapidly mounted.

According to Governor Sir George Yonge, writing in 1800, "All European articles continue very dear, and in the shops and store-houses the price is reckoned by dollars in articles which in England would be reckoned by shillings and the sort sent out are so ill-made that things of the most conveniency are not to be had." [2] Nor was life made more comfortable by the fact that "there is a great want of hands, both labourers and especially artificers—all the ordinary mechanics of which there are none here except some few slaves or what the military can furnish". There was no blacksmith save such as belonged to the artillery; there was only one saddler, and not a single boot- or shoemaker. The public corn-mill was falling into complete disrepair for want of artificers to do what was necessary.[3]

[1] Letter from Francis Dashwood to Sir John Cradock in 1814, in *Records of the Cape Colony*, vol. ix, p. 480.

[2] It is not a little surprising to find that the system of food rationing with which the population of Great Britain became acquainted during the Great War had, with all the machinery of Food Commission and ration cards, been brought into use in Capetown more than a century previously. The harvest of 1800 had failed and Capetown, its population swollen by the presence of some 7,000 members of the military and naval forces, was faced with a very real prospect of famine. In February, 1801, Commissioners were appointed to take all steps necessary by reason of the scarcity of grain. An inventory of all available supplies was made, the one great aim being "that every individual of every description may be enabled to procure his just proportion of bread without obstruction or difficulty". The heads of families were assigned to particular bakers and each received a card or ticket signed by H.M. Fiscal, enabling him to procure the proportionate quantity of bread assigned to his family. The use of corn or bread for the purpose of feeding cattle or live stock was absolutely forbidden, and it was intimated that people who were in the habit of so doing "may rest assured that on every detection of such offence they shall be instantly tied to the Pump Post and severely whipped". (See *Records of the Cape Colony*, vol. iv, pp. 149–216.)

[3] *Records of the Cape Colony*, vol. iii, pp. 29–30, 101.

The Government of the Batavian Republic, to which the Cape was restored in 1803, unlike their predecessors who lost it in 1795, seem to have regarded the country as something more than a port of call and to have given some amount of attention to its possibilities as a Colony. Nevertheless, their expectations were none too optimistic. The Minister at the head of affairs at home, writing in 1805 to General Janssens, the Governor,[1] remarked that the official reports of the latter " do confirm the apprehensions that have been felt a long time since, namely, that the Cape is not such an Eldorado as it has been considered by some authors ". In particular " the want of water in that immense extent of land, as also of workmen, of means of exporting its produce, of safe harbours, of different necessities of the first importance for agriculture and navigation, and even sometimes of bread, particularly at the present period when the population amounts to 70,000 souls—these are certainly great obstacles to every endeavour of transforming a poor country into a rich, flourishing, and happy land ". With considerable foresight he indicated " the propagation of horned cattle and Spanish sheep " as the most promising means to that end and, incidentally, of enabling the Settlement to defray its own expenses.

The condition of the Colony at the time of its recapture in 1806 has been thus described : " Great distress prevailed amongst the inhabitants, arising from various causes, such as the great depreciation of the paper money, the almost total loss of confidence between man and man, the want of any fund from which they could derive temporary assistance, and the dreadful necessity of borrowing at usurious interest." [2]

One measure of relief instituted by the Governor, the Earl of Caledon, was the reorganization of the Lombard Bank, which had been founded in 1793 by the Dutch East India Company to relieve the distress then prevailing, by the liberal issue of paper money and to discourage usury by the grant of loans at a moderate rate of interest. It, however, failed in its object, largely through faulty administration,[3] and its resources were strained when the depreciation of the Company's paper money became so great that everybody took advantage of the occasion to pay off their debts

[1] Ibid., vol. v, p. 218.
[2] Memorandum by Francis Dashwood dated 1814, in ibid., vol. ix, p. 476.
[3] Ibid., vol. vii, pp. 179–180.

to the Bank.[1] Lord Caledon also in 1808 established a Bank of Discount, at which deposits were accepted. The new bank was successful, deposits flowed in, and from the Discount Bank the Lombard Bank was fed with funds which enabled additional relief to be brought to the community by the issue of short loans at a moderate rate of interest which was punctually paid. As a result, " it may be generally said that the face of the country and that of the people has undergone a material change and rapidly improved." [2]

[1] Ibid., vol i, p. 260.
[2] Letter from Francis Dashwood to Sir John Cradock in 1814, ibid., vol. ix, p. 482.

CHAPTER 2

The Leavening of the Native Population

Little encouragement to white immigration.

Reliance on native labour.
Small demand for unskilled whites.

The Huguenot Settlers of 1685.

The " 1820 " Settlers from Great Britain : the Byrne Settlers in Natal.

The Great Trek.

The Asiatic element.

The Malays in Cape Province.
The passing phase of Chinese immigration.
The Indians in Natal.

European immigrants.

The gold rush.
Immigration from Eastern Europe.

The Immigration Quota Act, 1930.

The Primary population conditions—a white minority dominating a native population numerically vastly superior.

RELIANCE on native labour is a factor which distinguishes the economic life of South Africa from that of the other Dominions. In the territory for which Durban is the port of entry—Natal, Griqualand East, the eastern part of the Free State, and a good deal of the Transvaal—the aboriginal Bantu does almost all the unskilled work.[1] In agriculture the labourer is a native, save for a sprinkling of Germans and Norwegians. In mining the hewing is left to the natives. The work of the white man is that of direction and supervision. White labour refuses to coalesce with coloured labour, and in this South Africa is repeating the experience of the Southern States of North America. South Africa has been prepared to absorb a certain number of skilled workers and of men capable of controlling the labour rank and file, but the Dominion has never been a reservoir into which pour the

[1] The Bantu predominates in each of the four Provinces ; but in Cape Province account has to be taken of a large coloured population of mixed blood doing a good deal of the manual labour and a certain amount of skilled work. And in Natal the Asiatic element in the population outnumbered the European until the year 1923, and still is not very far behind.

poor emigrants from Central Europe. The lads from Dr. Barnardo's Homes and similar institutions for whom careers have to be found must turn to one of the other Dominions. It has been stated that in South Africa, while coloured reformatory boys are placed out without much difficulty, to find employment for the children of white parents is by no means easy.[1]

Unlike Canada,[2] the Government of South Africa has never been disposed to expend any appreciable amount of effort or money on the procuring of immigrants. Over a long period there has, in fact, been very little difference between the totals of the immigration and emigration statistics for the Dominion.[3]

The only appreciable leavening of the original Dutch South African stock which is traceable during nearly two centuries came from the French in 1685 and from the British in 1820.

When, in 1685, the Edict of Nantes was revoked, one small body of migrating Huguenots, less than 200 in number, found their way to the Cape of Good Hope. Most of them settled in the Berg Valley, and the names of some of the most distinguished families of France still survive in their descendants.[4] They were soon completely assimilated with the Dutch in speech as well as in pursuits. Far different was the manner in which the 5,000 or so British immigrants who arrived in 1820 were disposed of. The " 1820 " settlers

[1] *D.R.C. Minutes of Evidence*, 1914 (Cd. 7706), Q. 181. Theal records that in 1833 " a small stream of immigration had commenced to set into the Colony in the form of destitute children sent from London by the Society for Suppressing Juvenile Vagrancy, later the Children's Friend Society. About one hundred boys and girls were being sent out yearly, and were on arrival apprenticed to respectable people " (*History of South Africa*, vol. i, p. 421). The stream dried up in 1839, after about 750 children had been sent out (ibid., vol. ii, p. 186).

[2] See Vol. II of the present work, p. 430.

[3] Satisfactory figures showing gains to the population by ingress into the Dominion and losses by egress are not available until the year 1924. The trouble has been the difficulty of checking the movement of population across the extensive land frontier, and isolating the large number of people in transit by way of the territory of the Union. The figures for 1924 show the total number of arrivals in the Union as 31,934 persons and of departures 31,163, persons in transit being excluded in both cases. In 1930 the arrivals numbered 37,449, and the departures 35,653. For the seven-years period 1924–1930, the arrivals totalled 245,353, and the departures 240,813. (*Official Year Book of the Union of South Africa, 1930–1*, pp. 804–5.)

[4] Smiles, *The Huguenots*, chap. xi. The " simple-minded farmer of Stellenbosch, near Cape Town " who " represents the ancient ducal house of Du Plessis " is quoted as an instance.

were segregated on the eastern frontier in the region of which Grahamstown was the centre. Unlike the Huguenot, the British settler was not under the necessity of acquiring the Dutch tongue, and in 1820 was born that bi-lingualism which has done so much to keep the two races apart with such fateful consequences to South Africa.

The "1820" Settlers and Others from Great Britain

Among the many thousands of English and Scottish who were driven to the Colonies as a result of the distress due to the depression and unemployment which followed the Napoleonic Wars were the "1820" Settlers, who gave their name to the first scheme of organized British emigration to South Africa. When moving, in the House of Commons, the grant of a sum not exceeding £50,000 for the purpose of assisting persons disposed to settle in the Cape of Good Hope, the Chancellor of the Exchequer remarked that most persons inclined to emigrate preferred to go to North America, but the Government had decided to divert the tide of emigration to the Cape because there, "from the mildness of the climate and the fertility of the soil in some parts, a rapid and abundant return might reasonably be expected. That colony was also highly favourable to the multiplication of stock. . . . The persons emigrating to this Settlement would soon find themselves comfortable." [1]

As early as 1817 the Colonial Office ceased to encourage individual settlement either in the South African or the North American Colonies, and it was announced that in future Government assistance would only be given to persons engaging to take out and locate upon the land granted at least ten settlers, in which case the quantity of land granted would be 100 acres for each settler. For experience had shown the folly of sending out emigrants without guidance or capital, and the money now voted by Parliament to assist emigration to South Africa was to be available only for people of means who would engage to take out a party of at least ten individuals. Persons so engaging would be required to deposit with the Government a sum of £10 for each person or family taken out and in consideration of such deposit the Government would provide free passages for the emigrants, and a grant of land would be made to the

[1] *Hansard's Parliamentary Debates*, House of Commons, 12th July, 1819.

responsible leader equal to 100 acres for each person or family in his group. The deposit was to be returnable on the successful settlement of the group upon the land allotted to them. Such land was to be subject to a quitrent not exceeding £2 for each 100 acres, which quitrent, however, was to be remitted for the first ten years.

The settlers landed at Algoa Bay in May, 1820, but their destination was some distance eastward. The area assigned to this heterogeneous collection of professional men, artisans, sailors, half-pay officers, shopkeepers, gentlemen, labourers, pensioners, merchants, schoolmasters, and manufacturers, with a leavening of farmers and husbandmen, many with their families, all brought together from every part of the United Kingdom,[1] was the frontier region west of the Great Fish River, then the dividing line between the Kaffirs and the Colony, and south of Grahamstown. They were to have a capital town of their own, and it was to be called Bathurst, after the Secretary of State then in office, " in commemoration of the great operation of colonizing Southern Africa having been accomplished under your Lordship's auspices," as the Acting Governor of the Cape tactfully informed his chief. The Kaffirs, as neighbours, had none too good a reputation, and the Acting Governor thought it worth while to send home the rather ingenuous reassurance : " The object of these savage tribes is, as your Lordship is aware, to find large quantities of cattle and few men looking after them, whereas in the Zuurveld they would find comparatively few cattle and a considerable population." [2]

This early settlement in the Zuurveld was badly organized and correspondingly a failure. In the first place quite the wrong sort of people were sent there, " such as manufacturers, too many mechanics, persons out of public and private offices, and half-pay officers." Very few had any practical knowledge of agriculture. Such were the people sent to wring a living out of a land where water was " scarce and bad ", and " only adapted to those by whom it has hitherto been inhabited, the Caffers, Hottentots, and Dutch Boers ".[3] Then the holdings of only 100 acres were quite insufficient for the support of a family in the Albany

[1] Scottish Highlanders, the backbone of the Canadian pioneers, showed no enthusiasm for South Africa. A choice stretch of territory was earmarked for one Captain Grant, who was expected to bring 400 Highland families, but they never arrived, being at the last moment unwilling to leave their farms (*Records of the Cape Colony*, vol. xiii, pp. 180, 195).

[2] Ibid., p. 195

[3] Ibid., vol. xvi, p. 54.

District, and the nearest market was Algoa Bay, 130 miles away, a journey of nine days to go and return.

It was also unfortunate that the arrival of the first settlers coincided with an interval during which the Governor, Lord Charles Somerset, was temporarily home from the Cape, his place being filled in his absence by Sir Rufane Donkin. The Governor's ideas of the manner in which the settlement was to be organized were not the Acting Governor's ideas. On the Governor's return to the Cape, in November, 1821, he found much to disapprove in the conduct of the Acting Governor, and in the resulting clash of personalities the Settlement suffered.

The evidence is that among the poorer class of immigrants who settled in South Africa during the early years of the nineteenth century there were a good many failures. This is not surprising, seeing that they included but a very small proportion of practical agriculturists. The English settler of the right type, in, for example, the Grahamstown region, could be easily distinguished by " his reed hut or wattled cabin, his cattle kraal and sheep-fold, his garden fence and even the division boundary from his neighbour's field, or the common lane, often carefully ditched and wattled with that peculiar neatness and taste which the English peasant alone displays in such circumstances." [1]

The hope of those who encouraged the settlement of the poorer type of British emigrants on comparatively small holdings in South Africa was the engrafting of a British stock upon the Dutch, and the erection of a barrier against the incursions of the Kaffirs. But by 1824 or 1825 many of these settlers in the region about Grahamstown, " having reaped little or no return from the land they have cultivated for four successive seasons, and having been robbed by the Caffres of a considerable portion of the cattle they had by great exertion collected, they are now for the most part in a state of extreme poverty." [2] Many, accordingly, abandoned their locations. Those who were mechanics found remunerative employment in Cape Town and other centres of population where skilled labour was in great demand and highly paid, while those who were labourers could earn good wages by hiring themselves out among the Dutch

[1] " Description of the Zuurveld," from *South African Journal*, in *Records of the Cape Colony*, vol. vii, p. 120.

[2] " The Present State and Prospects of the English Emigrants in South Africa," ibid., p. 222.

farmers or in the villages. Of those who clung by their locations, "some make a shift by having timber for sale, conveying goods to the shopkeepers of Grahamstown from Port Elizabeth and the Kowie in their wagons, and by other precarious occupations, to supply their families with the means of subsistence." [1]

Among the causes of the disastrous state of things that prevailed among the early settlers was the prevalence during successive seasons of rust in the crops, which, aided by drought, resulted in their complete failure. Besides these natural handicaps, however, there appear to have been equally potent economic causes for the breakdown. There is evidence of over-regulation, which prevented individual immigrants from fitting themselves into a new community in the manner for which their capital or character or training best fitted them. There was also a shortage of capital, with the result that transactions between producer, consumer, and exporter were not easy to carry out. And in the background there was always the shadow of the Kaffir menace, which produced in the settlers a constant feeling of apprehension and insecurity.

The depredations perpetrated by the Kaffirs upon the scattered farmers who had settled on the eastern border of the Colony in the years before the arrival of the Albany settlers had been the constant preoccupation of the Governor, Lord Charles Somerset. Writing in the year 1817, he described this eastern part of the Colony as "by far the most beautiful and fertile part of the Settlement". Moreover, "the soil, well adapted to cultivation, is peculiarly fitted for cattle, and the pasturage is entirely free from those noxious herbs and plants which render many other parts of the Colony unprofitable to the breeders. Hence it is that so long as our settlers possessed these pasturages cattle was in abundance and consequently cheap." [2] But to their Kaffir neighbours across the Great Fish River, neighbours to whom war was the natural state

[1] Ibid., pp. 221–2. From a return relative to the Albany settlers, compiled in 1823, it appears that the number of adults composing the parties on landing in 1820, was 1,004, and that 104,100 acres were allotted to them. In 1823, only 438 adults remained. More wheat than anything else was sown, but of that there was only 679 acres. Indian corn came next, and then followed barley, potatoes, pumpkins, oats, and rye. As pastoral farmers they possessed 3,227 oxen, and about the same number of sheep. Cows were rather fewer, and goats, pigs, and horses were small minorities (ibid., vol. xvi, pp. 40–41).

[2] Letter to Earl Bathurst, ibid., vol. xi, p. 305.

and with whom cattle served as currency, the livestock of the white settler was an irresistible attraction. Their incursions became bolder and more frequent, and when the Governor found it desirable to repair thither himself and to try to persuade the paramount chief Gaika to keep his people in their own territory, " not only on account of the colonists themselves but on account of the supplies which go from hence to the Isles of St. Helena, Tristan, and Mauritius," he found that, in the District of Albany alone, ninety families out of a total of 145 established there had abandoned their dwellings through terror of the Kaffirs.

Retaliation in kind the Governor would not allow. Actual depredators could be followed across the boundary and punished and stolen cattle brought back, but it was " His Excellency's positive direction that not a single head of cattle of Caffre property be brought into the Settlement by any party who shall have been authorized to follow the plunderers ".[1] He insisted on a policy of " treating the Caffres with mildness and kindness " in the hope that it would gradually inspire in the savage breast " a sense of the benefit of friendly intercourse ".[2] At the same time he made it clear that it was within the power of the settlers to protect themselves if they possessed the necessary vigilance and courage and lived in communities rather than in isolation. " The Kafirs do not molest those hamlets where six or seven families unite together for mutual support and are instantly on the alert for their defence in case of attack." [3]

Such was the " comfortable " estate promised to the " 1820 " emigrants by the British Chancellor of the Exchequer.

For five years or so the Zuurveld Settlement struggled on, and then the sun began to break through the dark clouds. The settlers who had hung on in the hope of better times found the place in the community for which each was best fitted. Their proximity to the Kaffirs, hitherto their bane, was turned to profit. Fairs were instituted at which profitable barter for the ivory brought in by the natives was carried on. Later the fairs were superseded by interior private trading by itinerant traders in the native territory.[4]

[1] Letter, Colonel Bird to Colonel Cuyler, 1814, ibid., vol. x, p. 123.
[2] Letter to Earl Bathurst, 1817, ibid., vol. xi, p. 253.
[3] Letter to Earl Bathurst, 1817, ibid., p. 427.
[4] G. E. Cory, *The Rise of South Africa*, vol. ii, p. 342. This volume of Professor Cory's great work includes what is one of the fullest accounts of the initiation and development of the Zuurveld Settlement.

As was fitting, the English settlers introduced sheep of the English breed, and by 1830 the foundations of the wool trade which was to bring to the Eastern Province so much prosperity were well and truly laid. Bathurst, Grahamstown, and Port Elizabeth survived a precarious infancy. These and other place names in the same region remind us that in the decade 1820–1830 the British were established as a permanent element in the population of South Africa.

Thereafter British emigration to South Africa became a trickle. In 1841, when 23,950 emigrants left England for Canada and 14,552 for Australia and New Zealand, only 130 went to the Cape of Good Hope.[1] At that time there was no state-aided emigration and the Imperial authorities, chiefly on the ground that the Colony could not afford it, declined to sanction its initiation. By 1844, however, the financial condition of the colony had so improved as to enable the Government to vote a first sum of £10,000 for the purpose of introducing European settlers. Emigration agents in England received £10 8*s*. for each selected adult they sent out of the agricultural labourer, mechanic, and domestic servant class. Arrived at Capetown or Port Elizabeth, the emigrants could make their own arrangements with the employers eagerly waiting to engage them. In 1846 and during the succeeding five years over 4,000 individuals of both sexes were settled in Cape Colony under this scheme: "They were the very best class of people that could be introduced and with hardly an exception were soon in thriving circumstances. They did not supply the want of labourers because they rapidly rose to the position of employers."[2] In numbers they exceeded their predecessors of a quarter of a century before, but their coming was less impressive, inasmuch as the trail had been blazed for them by the settlers of 1820.

In Natal white settlement really began with two immigration schemes organized in the middle of the nineteenth century by private promoters, the first by the Natal Cotton Company and the second and more ambitious by Joseph Charles Byrne.

The Cotton Company scheme was on quite a small scale compared with that of J. C. Byrne and Co., but it led the way. It belonged to the time of the first cotton famine in England, when the cotton industry, feeling the effect

[1] Cory, *The Rise of South Africa*, vol. iv, p. 391 n.
[2] Theal, *History of South Africa, 1834–1854*, pp. 230–1.

of restricted supplies, was looking anxiously for new sources from which to obtain the raw material.[1] The Natal Cotton Company was formed by a number of Cape merchants, of whom the chief was a Mr. Bergtheil, who had trading connections with Natal, and knowing the region he deemed it one eminently suited for supplying England's deficiency in cotton and for supplanting the slave-grown cotton of the United States. Immigration into Natal was essential, and to this end he visited England in 1847, but was unsuccessful in his attempt to obtain immigrants. He then went to Germany, where, after a great deal of persuasion, he induced thirty-five poor families, mostly journeymen weavers, with a minister, a schoolmaster, and a doctor, to accompany him to Natal. Their total numbers were less than 200. They sailed from Bremen in November, 1847, and each family received on arriving in the colony " an allotment of land, a plough, some oxen, and a cow, a certain quantity of building materials, and maintenance for a time ".[2] But the land chosen was poor, the settlers were unskilled in the cultivation and preparation of cotton, transit rates were high, and the staple of the Natal cotton was unsuitable to the machinery of the mills, which could only profitably be altered if a large and regular supply could be guaranteed, which could not be done. The result was failure and distress for the settlers. The advent of Byrne's immigrants in 1849–1851 saved the situation temporarily. A large demand at once sprung up for sweet potatoes and forage, and the German immigrants set to work to satisfy the demand. The relief was only temporary, and ten years after their first landing they were deeply in debt. The Company gave up its hopes of establishing a large cotton plantation. It resolved to cut the loss, and, cancelling past indebtedness, it offered to sell the holdings to the settlers at from 15*s*. to 30*s*. an acre by payment extending over ten years. Within three years almost every tenant had cleared his farm of debt. The Cotton Company had failed as a commercial concern, but it had succeeded as a settlement company. In 1872 its remaining estates were sold.[3]

The second scheme was a much more ambitious venture. It was the work of one man, a notable character in his time,

[1] See Vol. I of the present work, p. 131.

[2] J. Bergtheil, " Tribal Titles, Kafir Law, and Emigration Movements in Natal," in *Journal of the Society of Arts*, 1874–5, vol. xxiii, p. 472; J. C. Byrne, *Emigrant's Guide*, 1850, p. 93.

[3] J. Robinson, *Notes on Natal*, p. 32.

one Joseph Charles Byrne. But despite the fact that Natal was without the droughts of Cape Colony, the diseases of West Africa, the impenetrable forests and Arctic winters of Canada, or the convicts and deserts of Australia, the scheme failed.

In the first instance Byrne had attempted to persuade the Imperial Government itself to take action and promote a scheme of emigration to Natal for the sake of establishing there an Imperial source of cotton supplies, but all that Earl Grey would do was to encourage Byrne to form a private company for the fulfilment of the project, and to offer "every facility and protection" to those who might emigrate under the auspices of the company.

Byrne then proceeded with the organization of the venture. For one uniform payment of £10, with modified terms for families, the settler was to receive a free passage to Natal and on arrival there a grant of 20 acres of land. Some 4,500 people, mainly from England and Scotland, left their native lands for Natal during the years 1849, 1850, and 1851.[1] Then the stream ceased, for the scheme was not paying and Byrne had no more money.

The reasons for the failure are apparent. The settlers were poor, and their own resources were not sufficient to carry them through that unremunerative period that is experienced in all pioneer societies and comes between the initial outlay of capital and energy in preparing the soil and sowing the crops and the ultimate reaping of a steady and adequate return. Moreover, the amount of land offered to each settler was quite insufficient to enable the ordinary settler to support himself and his family. After a time Governor Pine succeeded in enlarging the grants to 45 acres, a measure which improved the situation. Then most of the settlers were unskilled in agriculture, and could scarcely expect to achieve success straight away in a new country of the conditions of which they were profoundly ignorant, especially seeing that they were expected to devote themselves to the cultivation of cotton, a plant which was to them quite exotic. The settlers, in fact, were ignorant alike of agricultural methods, of the nature of the soil, and of the growth of cotton; they had uneconomic holdings; and they lacked funds.

The Byrne settlers were no more successful than the Natal

[1] *Colonist's Handbook*, No. 5: Cape of Good Hope and Natal, S.P.C.K., 1883, p. 23.

Cotton Company settlers had been, and for the same reasons. The experiment of growing cotton was continued for many years, but by the time when hope of making it a success was finally fading the sugar cane had become the mainstay of the Natal farmer.[1]

Both schemes were financial failures from the promoters' point of view, but they were instrumental in planting 5,000 settlers on the land in a country where previously the only representatives of the white races had been traders occupying commercial outposts.

The Great Trek

Meanwhile, there had been proceeding the Dutch migration northward that is known in history as the Great Trek.

The Great Trek was the result of no sudden crisis. The underlying causes are to be found in the early system of colonization, by which individual farmers received grants of blocks of land, the area of which was anything from 10 to 30 square miles; the purely pastoral use that was made of such land; and the nomadic and isolated mode of life which resulted. Inherent race antipathy has also to be taken into account; and doubtless any one of the actual trekkers would have ascribed his determination to migrate to the opposing conceptions of the Boers and the British Government as to the relative positions of the black and white inhabitants of the country.

On the vast pastoral farms there grew up a race of men who were without that desire to settle in a definite and limited area which characterizes the agricultural farmer. Already these on the frontier of the colony had formed the habit of migrating to the region between the Vaal and Orange Rivers in time of drought but returning to the colony when the season of drought was over. Differences of temperament had been fanned into race hatred by the execution of the leaders of the pocket rebellion of 1815 at Slachters Nek, the spot where they had bound their followers by oath to stand by one another until they had " expelled the tyrants ".

Of these underlying causes the Boers who took part in

[1] Unfortunately for Byrne's reputation, he had said in a speech to a departing band of Natal emigrants at Plymouth: " I would not advise you to cultivate sugar; you will be able to get that perhaps better from the Mauritius."

the Great Trek were probably oblivious. The immediate grievance present in their minds was the manner in which the British Government and its representatives in South Africa had dealt with the triple question of the Hottentots, the Slaves, and the Kaffirs.

Whatever the merits of the controversy may have been, the responsibility of certain of the English missionaries for the exacerbation of the dispute between the Boers and the British Government as to the treatment of the Hottentot race seems beyond question. They had constituted themselves the special guardians of these early inhabitants of the country and instilled distrust of the Government by the manner in which they upheld their cause. " There were among those who assumed to themselves the important office of teachers in the missionary schools within the colony several persons so illiterate and beset by such narrow-minded prejudices as to render them totally unfit to direct the education and moral training of the Hottentot youth of both sexes." Furthermore, " the inhabitants saw, with dread and apprehension, how the Government gradually allowed the whole of that population (on which all farming pursuits on the frontier depended) to withdraw themselves from all control and agricultural pursuits, and to put themselves under the spiritual charge of any person who, without reference to country or nation, announced himself as inclined to become the pastor of such flocks." In the thirty or so missionary institutions which sprang up the younger Hottentots " no doubt received the rudiments of some elementary education ", but the older ones, while pleading that they were too old to learn, " yet preferred remaining there, leading a listless, idle life so congenial to their habits, and could only be induced in the seasons of harvest, or upon urgent application, occasionally to drive a waggon to market and thus so far to lend their help, but at such extravagant prices as at once deprived the agriculturist of his legitimate profits and rendered such sources of labour so uncertain and precarious that (in very many cases) he was compelled to abandon agriculture altogether." In the end, " the gradual withdrawal of the whole Hottentot race from agriculture or pastoral service—and the spirit of hostility which manifested itself in them towards the frontier colonists—left the latter no other remedy then to resort to the sad alternative of seeking elsewhere for a place where their herds and flocks might be

safe, and where they might obtain labour on more easy terms." [1]

The emancipation by the British Government of the South African slaves was a policy which presented itself to the mind of the Boers as nothing less than the confiscation of the property which made up a good proportion of their wealth. By an Act of the Imperial Government, as from the 1st December, 1834, slavery was for ever abolished in the Colony.[2] " Masters and mistresses who had forty, fifty and, some, eighty persons engaged in keeping up extensive farming establishments, saw, in one moment, the whole of their farming plans and pursuits destroyed ; no bribe nor entreaty, I believe, did avail in one single instance to induce any one of these now free persons to stay over that day." [3] It is true that the British taxpayer had provided a sum of £20,000,000 to be applied as compensation to the slave-owners throughout the Empire, but the method of distribution of the share allocated to Cape Colony, amounting to nearly £1,500,000, merely made a further addition to the long list of Boer grievances against the British Government.

The Kaffir question is capable of a simple definition. The British Government simply declined to punish with the severity the Boer farmer thought necessary the raiders from Kaffir territory who constantly plundered the cattle of the settlers across the border. The crisis which came when no more land was available in the Colony for pastoral farmers with nomadic habits precipitated not only the Poor White question, but also the series of native wars which are such a painful chapter in the history of South Africa. The Boer farmers clung to their alleged right to take as much land as they wanted when the existing farm became too small for their needs. Further land could only be acquired at the expense of the native tribes. It was too much to expect the latter to submit quietly to expropriation, and reprisals were not unnatural.

The ostensible reasons for the migration of so large a body of substantial burghers into the wilderness where they could live under a government of their own are set forth in a letter written to the *Grahamstown Journal* by Pieter

[1] Hon. Henry Cloete (High Commissioner for Natal, 1843–4), *The History of the Great Boer Trek*, pp. 36–8, 44.

[2] According to a Parliamentary Paper of 1838, the slaves liberated in Cape Colony numbered 35,750.

[3] Cloete, H., op. cit., p. 57.

Retief, one of the principal leaders of the trekkers. "We despair of saving the Colony from those evils which threaten it by the turbulent and dishonest conduct of vagrants who are allowed to infest the country. . . . We complain of the severe losses which we have been forced to sustain by the emancipation of our slaves and the vexatious laws which have been enacted respecting them. We complain of the continued system of plunder which we have for years endured from the Kaffirs and other coloured classes. . . . We complain of the unjustifiable odium which has been cast upon us by interested and dishonest persons under the name of religion, whose testimony is believed in England to the exclusion of all other evidence in our favour, and we can foresee as a result of their prejudice nothing but the total ruin of the country. . . . We quit this country under the full assurance that the English Government has nothing more to require of us and will allow us to govern ourselves without its interference in future. . . ." [1]

The main incidents of the Great Trek, which began in 1834, can be briefly told.

By the end of 1837 some 5,000 Boer men, women, and children had crossed the Orange River, then the boundary of the British Colony. The trekkers continued through what subsequently became the Orange Free State, until in 1836 they reached the Zoutpans Berg, in the Northern Transvaal.

In 1837 a provincial government was set up and Piet Retief was elected to be the Governor of the migrating Dutch. Basing himself on the site of Harrismith, he crossed the mountains to spy out the land in Natal.

There was at the time a small English settlement of traders and hunters at Port Natal, but the home Government had so far refused to accept Natal as a British Colony, and the country was under the sway of Dingaan, the Zulu king. Retief asked for a parley with the native ruler with a view to obtaining permission to settle in his territory. The preliminary parley was seemingly satisfactory, and in February, 1838, with only a small escort, Retief made his way to Dingaan's headquarters in Zululand to receive the promised concession. Instead the Boer emissaries were attacked in the King's kraal and the whole party was wiped

[1] Quoted in *Mr. Rudolph's Reminiscences of South African Pioneers*, ed. by E. V. Bambrick, Greytown, Natal, 1905 (S. Africa, Pamphlets, vol. ii, No. 53, in D. & C. O. Library).

out. Thousands of Zulus then poured across the Tugela River determined to clear the country of the invaders, and Weenen (the Dutch word for "weeping") still commemorates the massacre of Retief's followers that there took place. A section of the Boers who had remained at Winburg, under Potgieter, hastened to Natal, but they too were repulsed.

After a further period of confused warfare, Pretorius, a prosperous farmer in Graaff Reinet, undertook to avenge Retief and his companions, and in November, 1838, at the head of a band of less than 500 fearless, but God-fearing men, he set out on his long march. In December thousands of Dingaan's warriors swept down on the Boer laager. The attack was fierce, and the defence heroic. In the end the Zulus fled, leaving a fourth of their number dead on the field. Since then Dingaan's Day has been a Boer day of thanksgiving and prayer.

In 1840 Pretorius induced Panda, a brother of Dingaan, to make common cause against the Zulu king. Dingaan was heavily defeated, fled the country, and met his death in Swaziland, while Panda succeeded to his throne, the vassal of the trekkers.

Pretorius's plan for Natal was a Boer republic. Instead, its occupation by the Boers precipitated its annexation in 1843 as a British Colony. Pretorius and many of his companions once more set out on their travels and crossed the Vaal to settle in the present Rustenburg district.

There were now some half-dozen separate Boer settlements; four were in what became the Orange Free State and two, those under Potgieter and Pretorius, in the Transvaal. Nominally all were governed by the Volksraad at Potchefstroom, but each did much as to itself seemed good, and there was no real central administration.

The "Asiatic Invasion"

When, one evening late in the year 1860, the ship *Truro* sailed into port at Durban bringing from India a first draft of indentured labourers for work on the sugar plantations, it could scarcely have been realized that a veritable Frankenstein was being introduced among the people of Natal itself, and that a problem was being provided which was to be the constant preoccupation of the statesmen of all South Africa, a constant source of friction between that

country and the Indian Government, a cause of much concern to Ministers in Downing Street, and, in later years, a matter of serious consideration at successive Imperial Conferences. The Asiatic problem in South Africa began as a purely economic question. It developed into and has remained mainly a social and political question.

In South Africa the Asiatic problem is really an Indian problem. There is a Mohammedan Malay element which is congregated in the Cape, but they represent the early trading association of the Cape with the East Indies and, being the descendants of the slaves brought from the Dutch Islands in the Eastern Seas, may be regarded as indigenous to the country.[1] Chinese immigration was but a passing phase. The first Chinese labourers arrived for work in the mines in 1904. The last batch of them was repatriated in 1910. Their function was to tide over the economic crisis resulting from the reluctance of the native to return to the mines after the Boer War and the consequent general labour shortage. They constituted no permanent element in the population of South Africa.

It was in Natal that a South African Indian community first grew up, and it is in that province that Indians have continued to be most numerous and the Indian problem most acute. In the Transvaal and the Cape the Indians have never constituted more than a small minority of the total population, and in the Orange Free State there has been no Asiatic problem at all, for in that province Asiatics were altogether barred from trading or acquiring land.[2]

The Indians were brought to Natal from 1860 onwards for the purpose of providing the planters there with the labour necessary for the development of their sugar and tea estates. The recruits came mainly from the agricultural labouring classes in India, and the majority of those who settled in the Colony, on the expiry of their indentures, as also their descendants, have remained agriculturists, either as the servants of planters and farmers or settled on their own land as market gardeners. Their holdings are small and,

[1] It has been said that in the middle of the nineteenth century " the Malays numbered nearly one-half of the population of Cape Town ". (M. Kollisch, *The Mussulman Population at the Cape of Good Hope*, Constantinople, 1867. Cape of Hood Hope, Pamphlets, vol. i, No. 7, in D. & C.O. Library), p. 21.

[2] According to the 1921 census the total Indian population of the Union was 161,339 (2·3 per cent of the whole). Of these, 141,336 were in Natal.

as in India, intensively cultivated, and the coast belt in Natal, where Indians are numerous, has become the most intensively cultivated area in South Africa. The rest of the ex-indentured Indian labourers who remained have drifted into household service, industrial work, and small trading.

Following in the wake of the indentured Indians came a good many as free immigrants. These for the most part became traders, and it is from this trading class that the Indians who found their way into the Transvaal and the Cape were mostly drawn. Like their indentured brethren, they found in South Africa a congenial soil. The result of the Indian invasion has thus been described by Natal's first Premier:

At the time when the first shipload of Indian immigrants arrived " all the trade of the Colony, and especially that of the smaller storekeepers and ' Kaffir dealers ', was in the hands of white men, and there were none but English mechanics and operatives. Now country and Kaffir stores are almost wholly run by Indian traders. The vending of fruit and vegetables, and to a considerable extent their growth, are the business of the frugal and irrepressible coolie, who, after his term of service is over, settles on the soil, squats in a small kennel-like shanty, and lives at a cost which to an Englishman would spell starvation. Thus it has come to pass that the poorer classes of settlers have been elbowed out of the main walks of trade and agriculture — shopkeeping, market-gardening, hawking, rough labour of all kinds—and the prospects of Natal as a home for white men are being gradually narrowed and restricted." [1] The skilled artisan, the clerk and the shopman in the larger establishments were less easily displaced, but the thought that the more intelligent and ambitious of the Indians might very well train themselves for superior employments drove the better class of employees to ally themselves with those who were already suffering from Asiatic competition in opposition to indiscriminate Asiatic immigration.

The planters and the larger farmers and employers—and it was they who had the ear of the Government almost up to the time of the Union—insisted that the Indian element of the population of Natal was necessary for her economic development. " When emigration ceased for a few years after 1866, the sugar industry suffered so

[1] Sir John Robinson, *A Lifetime in South Africa*, p. 76.

seriously that, after further representations and appeals from Natal, it was resumed in 1874 and continued without material interruption until 1911. The sugar planters had discovered that Indian indentured labour was indispensable for their industry. Native labour was unsatisfactory and unreliable, and in those days was practically unobtainable." [1] Later the difficulty was enhanced by the demand for native labour for the diamond and gold mines. So it came about that by 1911, when Indian immigration ceased, the Indian population in Natal outnumbered the European by many thousands.[2]

It was not until 1893, when responsible government was established in Natal, that the anti-Asiatic movement could make its protests effective. Matters came to a crisis when the people of Durban forcibly prevented the landing of several hundreds of free Indian labourers until the Government undertook to introduce restrictive legislation as to Indian immigrants. The Government was in a difficult position, for in some way these demands for restriction by its own people had to be reconciled with the views of the Indian Government, which was becoming more and more dissatisfied with the manner in which Indians were being treated in Natal, especially in regard to the administration of the Licensing Acts, under which licenses to carry on trade were granted. The legislation adopted did not imperil indentured labour, although the annual grant of £10,000 towards the expenses incurred in bringing in indentured labour was discontinued, but the dissatisfaction of the Indian Government resulted in its prohibition in 1908 of the emigration of further indentured labourers to Natal. Even then the Natal Government found it necessary to make terms with India on the licensing question in order to secure indentured Indian labour for a further period. The emigration of indentured labour was then resumed, but only until 1911, when it was finally put an end to by the Indian Government. The principal aim of those in Natal who desired to be delivered from the fear of going down before the competition of what they regarded as a lower civilization was accomplished by the action of those whose motives were utterly different, that is to say, the safeguarding of the welfare of emigrated Indians.

[1] *Report of Asiatic Inquiry Commission, 1921* (U.G. 4—1921), p. 39.

[2] According to the 1911 census the total Indian population in Natal was 133,031 and the European population 98,114. In 1921 the respective figures were 141,336 Indians and 136,838 Europeans.

The anti-Asiatic movement in South Africa sprang from the fear that they would swamp the white population. In the words of General Smuts at the Imperial Conference of 1917 : " In South Africa there has been this fundamental trouble, that the white community have been afraid of opening the door too wide to Indian immigration. We are not a homogeneous population. We are a white minority on a black continent, and the settlers in South Africa have for many years been actuated by the fear that to open the door to another non-white race would make the position of the few whites in South Africa very dangerous indeed." Especially it was felt that his lower standard of living enabled the Indian to compete on unfair terms with the white man.

On their side the grievances alleged by the Indians in South Africa, as represented by Lord Sinha to the Imperial War Conference of 1918, had reference primarily to the requirement that Indians had to obtain licenses before they were allowed to carry on any trade or business in South Africa, and that Indians in the Transvaal, unlike their compatriots in Natal and the Cape Province, were denied the right to have the legal ownership of land registered in their own names. The grievance relating to trading licences was felt with special acuteness by the trading class of Indians, for the tendency in each province was to transfer the control of licences to the municipalities, and it was contended that those bodies often refused licences arbitrarily with the indirect purpose of destroying Indian trade. In answer to the special grievance of the small shopkeeper against their Indian competitors, it was said that the latter was able, by reason of his lower standard of expenses, to cater for the poorer classes in a way that was not possible for the European shopkeeper.

It has been the part of the Imperial Government to hold the balance even between two contending members of the British Empire, South Africa and India. Its policy was summed up in a dispatch of the Secretary of State addressed in 1908 to the Natal Government : " The principle followed by His Majesty's Government in dealing with recent Asiatic legislation in the Transvaal has been to defer with reluctance to the feeling in favour of excluding further Asiatic immigrants, but at the same time to aim at securing fair and proper treatment for Asiatics already in the country. His Majesty's Government are under an especial obligation

to ensure that the principle shall be upheld in Natal." [1] This obligation was especially binding in view of the fact that a large proportion of the Indians in Natal were born in that province.[2]

After the Union it was possible to deal with the question on broader lines and from the point of view of South Africa as a whole instead of by Provinces. The Immigrants Regulation Act, 1913, a Union measure, applies to all classes and races, but affects Asiatics in particular. It provides that among the class of prohibited immigrants may be included, " Any person or class of persons deemed by the Minister on economic grounds, or on account of standard or habit of life to be unsuited to the requirements of the Union or any particular Province thereof ". This provision has been applied so as to prevent the entry into the Union of further Asiatics with the exception of wives and children of domiciled relatives, and restricts those already there to the province in which they are resident. The Act closed the door of South Africa against Asiatic immigrants once and for all.

Thereafter the white man's chief concern was economic equality with his Indian competitor. The Indian henceforth rather interested himself in political equality. The Indians manifested their dissatisfaction with the Immigrants Regulation Act, 1913, by a strike organized by Gandhi, who was serving his apprenticeship in South Africa as a political leader among the Indian community. A rather theatrical march into the Transvaal was organized in October, 1913, with the deliberate object of contravening the Immigrants Regulation Act, 1913, or of courting arrest. It ended in the imprisonment of Gandhi and the return by rail to Natal of the 2,000 Indian marchers.

The strike and the disturbances that accompanied it were the subject of inquiry by what has come to be known as the Solomon Commission. The political rather than economic foundation of the movement, as well as the desire and capacity of the Union Government to deal fairly with legitimate grievances, are apparent from the terms of the Indian Relief Act of 1914, which was based on the recommendation of the Commission [3] in combination with the

[1] Quoted in *Final Report of Asiatic Inquiry Commission* (*supra*), p. 45.

[2] According to the 1921 census, of the 161,339 Indians in the Union, 102,323 had their birthplace there.

[3] Report of Indian Inquiry Commission. Capetown, 1914 (U.G. 16—1914.)

much-discussed Smuts-Gandhi agreement. The Act remedied grievances relating to the solemnization of Indian marriages; relaxed the Immigrants Regulation Act to the extent of allowing Indians in the country to have their wives with them; and repealed the provisions of the Natal Act of 1895, by which Indians who had entered the country as indentured labourers and who did not on the expiry of their indentures either enter into fresh indentures for a further period or return to India, were required to pay an annual licence fee of £3—a substantial sum in the eyes of labourers whose pecuniary wages were in the first year 16*s.* a month, and only reached 20*s.* in the fifth year.[1]

With the cessation of immigration the Indian question became much more manageable. It then became a question of dealing with what was in effect an Indian enclave in South Africa. Had immigration continued, the Hertzog-Habibullah pact of 1926–7, which settled the India-South Africa controversy of nearly half a century, could hardly have been achieved. That agreement, the result of a Round Table Conference at Capetown, dealt with political issues, but it pointed the way to the regularization also of the economic position of the Indian population in South Africa, inasmuch as, on the one hand, the Indian Government recognized the right of South Africa to maintain, by all just and legitimate means, Western standards of life; and, on the other hand, the authorities in South Africa agreed that Indians in the country who were prepared to conform to Western standards, should, by educational facilities and otherwise, be enabled to do so. The problem in South Africa resembled that with which the International Labour Organization of the League of Nations has long been grappling, namely how to bring about economic equality among nations having different standards of labour conditions. The solution is to bring the backward peoples up to the standard of the more advanced.

Meanwhile, the story of the "Asiatic Invasion" of South Africa and its consequences suggests that it may not be always wise to endeavour to speed up early development of the resources of a new country by the importation from elsewhere of cheap labour, especially under conditions which

[1] See s. 2 of Act No. 17 of 1895 (Natal). The effect of the stopping of further immigration was that after 1911 Indian labourers' wages rose to 30s. or £2 a month (*Report of Indian Inquiry Commission* (*supra*), p. 28).

leave such immigrants and their descendants free to compete with the European community.

European Immigrants

The crowd of miscellaneous immigrants of every class and profession who were attracted to South Africa by the diamond and gold discoveries, especially the banket gold-bearing reef of the Witwatersrand, which was opened as a goldfield in 1886, were by no means an unqualified asset to the country. Their expectation of being able to find wealth with certainty, if not with ease, was speedily dispelled, for most of them found that their only chance of getting a livelihood, much less wealth, was to obtain employment under conditions very similar to those found elsewhere. Even this was not easy, for " many of them were in no way qualified to do the skilled work for which white labour was required. There were too many ' handymen ', general workers, and people whose main experience was in clerical and other sedentary occupations. Further, the process of banket-mining took some time to set in motion. Capital had to be attracted from Europe, engineers had to make their plans and draw their designs, and machinery had to be imported. As a result there were from the beginning large numbers of the white population in the Witwatersrand who were unemployed ".[1] Those who were in employment earned, it is true, high wages ; but, on the other hand, the cost of living was high as a result of the long distance from which most supplies, even the necessaries of life, had to be brought.

After the South African War the experience of the gold discoveries in the " eighties " was repeated. There was a renewed influx of people eager to share in the wealth which was anticipated as a result of the access of prosperity to all pursuits which was confidently prophesied, and a large number of ex-soldiers remained in the country. " Many of these men were quite unqualified to become miners or to ply any trade which required skill or experience . . . and the lack of employment from which these people suffered was greatly accentuated in 1906–7 by the check given to mining and other industrial development work by the uncertainty in regard to the supply of coloured labour." [2]

[1] *Report of the Transvaal Indigency Commission, 1906–8* (T.G. 13—1908), Pretoria, 1908, p. 19.
[2] Ibid., p. 20.

From the beginning the factors in the race problem in South Africa have been the rivalry between the British and the Dutch and the struggle of the combined white races to maintain their position in the midst of a coloured population vastly superior in numbers. A new factor in the problem emerged when, in the second decade of the present century, it was discovered that, while there was a progressive increase in the number of immigrants into South Africa from Eastern Europe there had, in the same years, been an actual loss of British stock from the territory of the Union by excess of emigration over immigration. The inward stream came principally from Lithuania, Poland, Latvia, and Russia. The outward stream was bearing away many of the descendants of those who had built up the South African Dominion. During the six years 1924–9, 12,662 immigrants of all nationalities settled in South Africa. Of these less than 2,000 represented the main European racial stocks from which hitherto the white population in South Africa had been drawn. Taking the British stock separately during this period, up to 1929 the total net loss by excess of emigration over immigration was between 1800 and 1900, and in 1929 the net loss was 1,566.[1]

Of the immigrants from Eastern Europe the vast majority belonged to the class that was, economically, non-productive. Moreover, the United States and Australia had already erected barriers against promiscuous immigration, and it became apparent that unless South Africa took similar steps the Dominion would find itself the dumping ground of immigrants of a class which it did not want, and for which those other countries had equally little use.

In these circumstances, taking its stand upon the principle that every nation had the right, by controlling its own composition, maintaining its own particular type of civilization, and excluding those who manifested characteristics of unassimilability, to control its own destiny. General Hertzog's Government in 1930 introduced the Bill which became the Immigration Quota Act, 1930, with the approval of all save the small minority who scented anti-semitism in the measure.

The Act divided the countries from which immigrants were drawn into two categories, one being a restricted and the other remaining an unrestricted category. In the latter

[1] The Minister of the Interior, 10th February, 1930, *Debates of Union House of Assembly*, 1930, vol. xiv, col. 560.

category were placed the British Commonwealth of Nations, the United States of America, and the countries of Western Europe; that is to say, the countries whence was drawn the stock on which the Union was founded. On each of the restricted countries, that is to say, any country not included in the unrestricted schedule, was imposed a limitation, that limitation being an annual quota of 50. Furthermore, a back door was provided in the shape of an unallotted quota of 1,000, through which might be admitted desirable aliens who might otherwise be excluded from Union territory for the reason that the quota of their country of origin was exhausted, the test of desirability being good character, assimilability, inoffensiveness to the economic or industrial welfare of the Union, and absence of intention to pursue a vocation in which a sufficient number of persons is already engaged in the Union.

The aim of the measure was to be selective rather than prohibitive; and it avoided the somewhat autocratic procedure of the corresponding legislation of Australia of 1925, whereunder a mere proclamation might, for certain specified but very wide reasons, prohibit either wholly or in excess of prescribed limits the immigration into the Commonwealth of aliens of any specified nationality, race, class, or occupation.

South Africa seems likely to remain as unfruitful a field for the immigration agent as it has been in the past. All the indications are that it will never become a " white man's country ". In the twentieth century it is still a country with a population numerically predominantly native, but dominated by the white minority.

In 1814, when the Colony was finally ceded to Great Britain, it comprised an area which, for administrative purposes, was divided into the seven districts of the Cape, Stellenbosch, Swellendam, and Tulbagh west of the Gaurits, Gamka, and Zak Rivers (constituting the districts in the south-west, in which most of the white population was then congregated); George (further along the coast); and Graaff-Reinet and Uitenhage (the fertile districts on the eastern frontier to the west of the Great Fish River, the Kaffir boundary which had been fixed at the conclusion of the Kaffir War of 1793).

The white population in the year 1815 was returned as being 35,502. There were also 18,547 Hottentots, people who were entitled to be regarded as free labourers; 321

individuals classed as "Negro Apprentices"; and 29,607 as "slaves".[1] The last item doubtless explains why among the "Christian" population only seventy were classed as "servants".

In the twentieth century the Hottentots, as a distinct race, are as extinct as slavery, but, in essentials, population conditions remain the same for the Union as previously for the Colony. Broadly the population of South Africa is now three-fourths Bantu and one-fourth European, the population of Asiatic and mixed descent being less than one-tenth of the whole.[2] One of the grave problems still confronting the white minority is the determination of the part to be played by the black majority in the economic life of the country.

[1] *Records of the Cape Colony*, vol. xi, pp. 51, 164.

[2] TABLE SHOWING ESTIMATED MEAN POPULATION IN 1931

	Cape	Natal	Transvaal	Orange Free State	Totals for Union
European .	749,500	177,600	696,700	205,500	1,829,300
Bantu . .	1,841,700	1,343,300	1,806,100	528,400	5,519,500
Asiatic . .	8,100	161,100	21,500	700	191,400
Mixed and other	531,400	13,200	31,800	16,000	592,400
Totals . .	3,130,700	1,695,200	2,556,100	750,600	8,132,600

CHAPTER 3

The White Colonists and the Land

System of Tenure under the Dutch East India Company.
- Free Grant.
- Loan Places.
- Quitrent.

Land Reform under British rule.
- Sir John Cradock introduces Perpetual Quitrent.

Appropriation of land by the Voortrekkers.

Changed conditions when trekking no longer possible.
- Subdivision among members of the family—the *Legitima Pars*—*Fideicommissa.*
- Co-ownership.
- Emergence of the " bywoner " class.
- The Poor White problem arises.

The Transvaal Indigency Commission and closer settlement.

Limitations of closer settlement.
- Comparatively little eligible land still available.

Provincial Land Legislation.

The Union Land Settlement Act, 1912.

THE methods by which the white races took over the land in Canada and in South Africa respectively are in striking contrast. In Canada the Government kept a tight hold over the unoccupied regions and in the normal course the survey of new territory and its division into rectangular townships preceded its occupation.[1] Such a system left little room for disputes over titles or boundaries. In South Africa, especially those parts which were first settled by the Boers, such formalities were dispensed with. Where surveys were undertaken they usually followed occupation. In Canada land was allocated; in South Africa it was appropriated. Grants were approximate and titles correspondingly vague. Then when, in 1843, Natal came under British control after a brief period of rule by the Volksraad, one of the first things necessary to be done to settle the country was to investigate all claims to land and to effect registration of such claims as could be made good. " There had been no surveys, consequently boundaries

[1] See Vol. II of the present work, p. 433.

were indefinite. The extent of a farm was supposed to be 3,000 morgen (6,000 acres), but they were often far more than this." [1] In Canada a precisely delimited quarter section of 160 acres was the usual grant.

In South Africa, in conformity with the common notion that, in new countries, its clearance and cultivation is adequate consideration for a grant of land, the earliest recorded land grants were free. But the system of " property " tenure, which approximated to freehold, was not encouraged by the Dutch East India Company, nor could the free grants actually made have been extensive, seeing that in the latter half of the seventeenth century, to which period they belong, all that was desired was that sufficient produce should be grown for the subsistence of the colonists themselves and the refreshment of the ships of the Company. " Property " tenure merged into the tenure known as " loan for use ", which at first was also often gratuitous, and the term which was applied to such holdings, that is to say, " loan places," was retained when, early in the eighteenth century, an annual rent was required.[2] " The original lease of a loan place consists in nothing else but in a mere permission to the possessors to graze their cattle on a certain spot on condition of paying a certain rent, obliging them at the same time to have the lease renewed annually." [3] In 1812 this form of tenure was said to represent five-sixths of all the lands in the possession of individuals in the Colony.[4]

After the first free grants of " loan places ", a rent was required which was a fixed quantity. Colonists were permitted " to select a favourable situation, and having fixed a stake or mark, to walk from it for one hour in a straight line, then, assuming the line as the diameter of a circle, he was permitted to hold the land contained within the circle on the payment of an annual rent of 24 Rix dollars or about £3 sterling ; thus, supposing him to have walked three miles, he has an area of from eight to nine square miles or not less than 5,000 acres, cultivating, perhaps, at the utmost 50 acres for the support of his family, and leaving the remainder entirely unoccupied in a condition useless

[1] Cory, *The Rise of South Africa*, vol. iv, p. 195.
[2] *Records of the Cape Colony*, vol. viii. Letter from Fiscal J. A. Truter, June, 1811, pp. 93–5.
[3] Ibid., letter from W. S. van Ryneveld, p. 257.
[4] Ibid., pp. 257–8.

to himself, injurious to the colony, and paralysing any effort of improvement." [1]

During the earliest period, when the country was subject to Dutch rule, " the practice was for a farmer to select a suitable locality to graze his stock and apply to the Government for a permit to allow him to remain there. . . . Thus a stock farmer would go on from year to year, and even his children after him. If he found the ground unsuitable or wanted more, he moved further on and took out another permit for the other land chosen. It sometimes happened that he possessed several such farms. The Government had the right to withdraw the lease at its expiration, but this was seldom done ; if the lease was not renewed, the occupier was paid compensation for the *opstal* or buildings he had erected thereon. The lessee had no *dominium* in the ground, which belonged to the Company, and he could only sell or bequeath the *opstal* and nothing more." [2]

A second form of tenure comes down from the first half of the eighteenth century, namely Quitrent, whereby land was granted for a term of fifteen years on payment of a yearly rent. As with Loan Land, so with land held on Quitrent tenure, the Government had the right to resume the land as their property on payment only of compensation for buildings and plantations, a right, it was felt, that prevented the progress in agriculture that might be expected if the holders were secured in the permanent and undisturbed enjoyment of the land.

A system by which all farms, whatever their quality, paid much the same rent, was bound to be unsatisfactory, and boundaries fixed in such a rough and ready way were bound to be a fruitful source of disputes among neighbours. Moreover, the insecurity of tenure under this " loan lease " system discouraged expenditure and effort on the improvement of the holding.

In 1813 the Governor, Sir John Craddock, instituted a reformed system of land tenure. Provision was made for converting holdings into perpetual quitrent farms, under which system future grants were to be held. The size of a quitrent farm was nominally to be 3,000 morgen, and its

[1] Letter dated 12th May, 1819, to Earl Bathurst, in *Records of the Cape Colony*, vol. xii, p. 185.

[2] C. Graham Botha, " The Dispersion of the Stock Farmer in Cape Colony in the Eighteenth Century," *South African Journal of Science*, vol. xx, pp. 575–6.

situation and quality determined the rent to be paid. A holding on perpetual quitrent tenure was freely alienable. Each holding was to be surveyed and registered in the Deeds Office.[1]

No great eagerness was manifested for the conversion of existing holdings into perpetual quitrent farms. The occupation of land on what was in effect a yearly tenancy suited the migratory instincts of the pastoral Boer farmer, and the indisposition of the authorities to refuse a renewal of the tenancy was for him a sufficiently secure tenure. By facilitating trekking farther and farther afield in quest of new pastures, the loan land system of tenure contributed its share to South African expansion.

To the agricultural farmer of the south-west, on the other hand, security of tenure was all-important. His desire was to be sure that he or his heirs would reap the corn which he had sown or gather the vintage of the vines which he had planted. It is in the Western Province, accordingly, that most of the freehold farms are to be found.

When, after the Great Trek, the Dutch emigrants at last came to rest, they began to parcel out the land in their new territory. Each head of a household selected a site for his homestead, near a spring or stream, and appropriated the land around. It only became necessary to define the boundaries of each farm when all the eligible land in the high veld had been taken up. The farmers then registered with the landdrost the areas they claimed as theirs, but it was not until 1864 that provision was made for a proper survey of the farms, the erection of beacons and the establishment of a Registry of Deeds.

When the Boer land-hunger, which was the manifestation of the Boer tradition that the possession of land was the hall-mark of social status and influence, could no longer be satisfied by trekking to further unoccupied territory, it was only possible to maintain the position of the family as members of the landed aristocracy by the subdivision of the land already in the family's possession. Moreover, farming was in the Boer community the only means of livelihood, and the farm and its stock the only wealth. An interest in the farm was accordingly the only provision that could be made for the children.

To tradition and inclination were added as a further

[1] See Proclamation of 6th August, 1813, in *Records of the Cape Colony*, vol. ix, p. 204.

encouragement to its subdivision the limitations imposed by the Roman-Dutch law on the disposition of land. Under those provisions each child was entitled to a proportion, the *legitima pars* of Roman law, of his father's estate. The farmer whose estate was his farm had to leave portions of it to each of his children whether or not such portion was sufficient for the support of the recipient. This law survived in the Transvaal until 1902, but it had been amended in Cape Colony in 1874, and subsequently these shackles on the freedom of bequest were removed throughout South Africa. Nevertheless, the notion that every child must have a share in the parent's real property survived the change in the law, and an official witness before the Transvaal Indigency Commission of 1906–8 referred to the habit, which he thought grew out of the law in question, of bequeathing landed estate to all the children in equal undefined shares, whether it was capable of providing sufficiently for their support or not.[1]

The desire to retain landed property in the family was also made manifest in the use of the form of trust known in Roman law as *fideicommissa* for the purpose of tying up property over a series of generations. Such limitations were an impediment to the sale, exchange, or mortgage of the property, and resulted in the creation of a number of shares which decreased in size as each generation passed, until their value finally became insignificant, and the remote descendants, whom the arrangement was intended to benefit, were, if they still clung to the land, reduced to a condition of hopeless poverty.[2]

As a reaction from the practice of excessive subdivision there arose the system of undivided ownership by the various heirs. A typical farm consisting of a rocky kopje, dry veld suitable for grazing, a mealie patch, a strip of irrigable land, with perhaps a small plantation and a kaffir kraal, might be successfully worked in common by its various owners, but its division would obviously be disastrous.

Co-ownership of this character had little to recommend

[1] *Minutes of Evidence* (T.G. 11—1908), p. 190.

[2] The classical case illustrating the possibilities of the subdivision of real property in South Africa under the old law and custom, was presented to the Transvaal Indigency Commission of 1906–8 by the Registrar of Deeds, Cape Colony. It was that of the heir who was entitled to $\frac{296,386,007}{4,705,511,234,760} = \frac{1}{15,876}$ of a farm of 2,527 morgen (*Minutes of Evidence, supra*, p. 189).

it. It practically rendered the sale of the land impossible, for the necessary consent of all the co-owners, after a few generations, was unobtainable. Nor was it easy to obtain agreement to a proposal to raise money on mortgage for the purpose of improvements which could not benefit equally all the owners. " The measure of industry and enterprise of the co-owners therefore tends to fall to the level of the idlest and most backward among them." [1]

The Transvaal Indigency Commission pointed out [2] that a farm was almost certain to become the subject of undivided ownership as soon as the number of persons entitled to a share in it became disproportionate to its area or value and that the prevention of undivided ownership was the best means of removing the indigency resulting from the existing system of the tenure and disposal of land. It was suggested that the maximum period for which South African testators should be allowed to tie up their property by *fideicommissa* should be that for which the then existing English law permitted property to be settled, namely the period of a life or lives in being and twenty-one years afterwards. Other proposals were also made, following the example of the English Settled Land Acts, for rendering land freely marketable and for preventing such an indefinite increase of the number of co-owners of any particular piece of land as, if permitted, " can in the end only lead, as past experience clearly shows, to the pauperization of the owners and the locking up of the land." [3]

So long as land on the High Veld could be had for the taking the Boer farmer was essentially of the land-owning class, but as soon as the High Veld became fully occupied the " bywoner " system of Cape Colony began to appear in the Transvaal.

The bywoner (bijwoner) class of agriculturists is hardly capable of precise definition. It is enough to say, however, that the position of members of that class resembles that of tenants.[4] Their rights are defined by no written agreement and so are varied, ambiguous, and precarious. The typical bywoner, however, employs himself on the agricultural rather than the pastoral side of the farm. He pays no rent,

[1] *Report of Transvaal Indigency Commission, 1906–8* (T.G. 13–1908), Pretoria, 1908, p. 70.

[2] Ibid., p. 85.

[3] *Report* (*supra*), p. 92.

[4] " Strictly speaking the term should be used to denote any man or family who live on land belonging to another—usually a relative—without any clearly defined rights or duties " (*Report* (*supra*), p. 8).

but he gets only a share of the crops he produces, the rest going to the owner of the farm in lieu of rent.

The vast size of the Boer farms encouraged the growth of a bywoner class. The advent of a few additional white families was no burden to a farmer whose holding was too big for full cultivation by himself and whose domestic economy was self-contained. On the other hand, the new arrivals, especially if, as was most usual, they were relatives, were a welcome addition to the domestic garrison in a country where attacks by natives still had to be reckoned with.

The bywoner has never been an asset to the State. He has no interest in the land on which he lives beyond producing enough from it to keep himself and his family alive, for he has no guarantee that he will not be turned out at a moment's notice. He makes no improvements, for he cannot make sure that he will reap any of the fruits thereof. In a farming industry organized on modern lines there is no place for a bywoner class. If he cannot rent a farm on the ordinary terms of landlord and tenant, the choice before him is to engage himself to a farmer as an agricultural worker, or to leave the land and join the ranks of the industrial workers. Many bywoners did neither and drifted into indigency.

When, on repatriation after the War, the landowning class for the most part returned to their farms, many of their bywoners returned with them on the old conditions of a tolerated existence, but many of the wealthier farmers showed a marked reluctance to take back their former quota of bywoners. A number of those thus dispossessed were collected in the Transvaal and Orange River Colony in Burgher settlements, which were constituted by voluntary associations of farmers out of farms capable of closer cultivation. There they were able to carry on agriculture under improved conditions and by modern methods. The tenants were guaranteed a minimum term of holding and the portion of their produce taken by way of rental was strictly limited.[1] The scheme proved eminently successful and indicated to the bywoner a way out of his helpless position. " It helped to turn men of the bywoner class from comparatively useless hangers-on on large pastoral farms

[1] Papers relating to the Progress of Administration in the Transvaal and Orange River Colony (Cd. 1551), 1903 (*Accounts and Papers*, 1903, xlv), p. 65 et seq.

where most of their time was wasted in doing nothing, into peasant farmers on land suitable for agriculture where, given some security of tenure, they only needed industry and perseverance greatly to improve their economic position and at the same time benefit the country." [1] No longer mere squatters and poor relations, their position was secured by a definite contract with the landowner. For this reason, and as a consequence of the pressure of changed economic conditions on the farms, " the bywoner system has already largely disappeared." [2]

A singularly troublesome consequence of the unfortunate lines on which the farming industry has developed in South Africa is the painfully familiar problem of the Poor Whites. The problem, also, is an interesting illustration of the influence of race character on history.

The Poor Whites are the Ishmaels of South Africa. They constitute a class resembling in some ways the " mean whites " of the plantation States of North America, and their disposal is a problem which seems insoluble, for they are a class of people for whom apparently there is no place in the economic life of the country to which they belong. They are not the stranded immigrants with which every Dominion is so familiar ; nor are they the indigent class which in every country is constituted by those who are by nature inefficient and incapable ; the pathos of their unique position lies in the fact that they are, for the most part, the disinherited descendants of the earliest of the white settlers.

It has already been seen [3] how the Dutch East India Company, in pursuance of their policy of absolute trade monopoly, at first discouraged expansion, and how, through force of circumstances, the first of the trekkers broke bounds and commenced that journey into the unknown which their descendants continued to pursue until land was no longer available for occupation. At that point one of the most important chapters in the economic development of South Africa came to its close, and one of its incidents was the emergence of the class of Poor Whites.

For a time the full emergence of that class was postponed by the accommodation of landless families on farms which

[1] Ibid., p. 8.
[2] *Report of Native Economic Commission, 1930–1932*, (U.G. 22—1932), para. 391.
[3] Chapter 1.

were too vast for cultivation by the owner himself. But families multiplied and game grew scarce, and the time came when this " bywoner " class reached saturation point. The gold discoveries occasioned a further respite, but the advent of the railway brought to an end the period of temporary prosperity which the mining community brought to the farming population around. Then the pressure due to the economic accumulation of population on the farms became apparent. Breaking point was reached when, in 1896, the rinderpest plague fell upon the country.[1] The owner of a small share of a subdivided farm could no longer hold on; the large farmer could no longer support the bywoner on his land; and both these dispossessed classes went to swell the ranks of the poverty-stricken settlers who eked out a miserable existence on the outskirts of the Transvaal towns, especially Pretoria and Johannesburg, where definite settlements of Poor Whites grew up. The general impoverishment brought about by the South African war made their position more hopeless.

The problem that thus emerged has been the constant pre-occupation of successive governments in South Africa. Its importance is not merely a matter of comparative statistics and its interest is not merely the comparison of the degree of indigence and unemployment in the Union with that of other countries. " The importance of the question in South Africa arises from the fact that the European minority, occupying, as it does, in relation to the non-European majority, the position of a dominant race, cannot allow a considerable number of its members to sink into apathetic indigency, and to fall below the level of the non-European worker." [2]

The Poor White has been the subject of exhaustive consideration by successive official inquiries, and the circumstances of his genesis and growth are pretty clearly understood, while his history largely explains the seeming paradox of his existence side by side with a constant demand for more labour in the mines, which for long periods has been unsatisfied, and a great want of intelligent farm labour, " a want which is retarding the development of this country." [3]

The migration of the Trekkers was away from centres of

[1] See Chapter 7.
[2] *Report of Select Committee on European Employment and Labour Conditions*, Capetown, 1913 (S.C. 9—1913), p. iv.
[3] Ibid., p. ix.

population where a reasonable degree of activity and progress was to be found, but where, at the same time, the restraints of civilized life had to be observed to the empty spaces where a simple hunting and pastoral life was led, free from any kind of social, legal, or economic restraint, and where more land could be had without difficulty when family increase or the exhaustion of the land already occupied made further migration necessary. But inevitably the time came when there were no more lands to which migration could take place and when agricultural development meant the application of new methods of farming to territory which had already been appropriated rather than the occupation and clearance of new farms.

To this agricultural revolution the Voortrekker character was singularly unfitted to accommodate itself. That character had been moulded by the early conditions of settlement, conditions among which the large size of the farms and the isolation in which the farmer's life was passed were remarkable. While land was plentiful, " every burgher was entitled to two farms, one on the High Veld and the other in the low country, and he naturally took farms which were amply large enough for all his probable needs. Moreover, the pastoral style of farming which was forced on the early settlers by the absence of markets for agricultural produce made large farms necessary. The usual size of the Transvaal farm was about 3,700 morgen (approximately 7,770 acres)." He did not farm to supply even his own wants. " Except for the small supply of mealies which he grew, he lived almost entirely on the game which fell to his rifle. His stock was not so much the source of his food supply as the only form in which he could accumulate wealth." And seeing that his homestead was usually some miles from that of his nearest neighbour, that there were few strangers with whom he ever came into contact, and that almost his only diversion was the annual trek to the Low Veld for winter grazing, " it was but natural that his outlook should be both circumscribed and essentially uncommercial." [1] Self-reliance, indifference to privation, and independence were admirable elements in the Boer character, but " absence of education and of stimulating contact with his fellow-man and with the outer world engendered narrowness of outlook, and lack of sympathy and plasticity for

[1] *Report of Transvaal Indigency Commission*, Pretoria, 1908 (T.G. 13—1908), p. 8.

progressive measures ".[1] By his upbringing and character he was ill-adapted to turn from pastoral to agricultural pursuits, nor did the old system enable the capital to be accumulated without which the chances of success under the new system were small indeed; scientific agriculture made no appeal to a type which held that the Deity who sent plagues must be trusted to eliminate them from the economics of agriculture; and a nature in which individualism amounted almost to an obsession was a soil which was hopelessly uncongenial to co-operative principles.

In other countries a class whose upbringing had unfitted them for any pursuits except those connected with the land, but who were incapable of adapting themselves to the more complex conditions of that industry, would have become agricultural labourers in the service of the new and vigorous type of farmer who is eager to take advantage of the discoveries of agricultural and veterinary science, who is ever on the lookout for opportunities of establishing new branches of his industry and placing new products on the market, and who appreciates the advantages of organization. But the character of the Poor White makes him an unacceptable employee to the modern farmer who, moreover, has at his disposal a supply of native labour procurable on terms with which no white man can compete.

Thus the circumstances which have produced the Poor White class are peculiar to a country in which there is a large coloured labouring population, and the result has been that which is the common experience of all countries, namely, that the impoverished land-worker drifts to the town in search of work or charity. In the towns the descendants of the pioneers who opened up South Africa were particularly helpless. With the advent of the British, commerce was built up by British traders. Petty trading was in the hands of Jews and Asiatics. The professions were recruited from Europe. " As regards the trades, these, in the old days, were in the hands of the slaves. Later on there was an increased demand for tradesmen, which was met by immigrants, as there were few skilled workmen of Afrikander descent. It is remarkable even to-day how few really good workmen there are in the Transvaal and in the Free State, who have learned their trades in those provinces.

[1] *Final Report of Drought Investigation Commission*, Capetown, 1923 (U.G. 49—1923), p. 137.

The importation of tradesmen has taken the place of tuition in the country itself. This is a factor worthy of note even in our time, and which, so far as a new field of labour is concerned, shut the door against the son of the soil in the past and is keeping it partially shut against him even to-day." [1]

The inability of the dispossessed small farmer or displaced bywoner to turn to skilled or semi-skilled industrial employment was made particularly apparent when the arrival of the railway at the goldfields made transport riding, which had provided that particular class with remunerative employment, superfluous. "The education and training which the early population had been able to obtain was not such as to fit them for getting skilled or semi-skilled employment and . . . the unskilled labour market was closed to white men. The lucrative employment, therefore, which offered itself during the early years of the development of the mining industry was almost entirely obtained by men from Cape Colony or Natal or from oversea, and the transport riders and others who were deprived of their livelihood by the railways were again left to make their living out of the land." [2]

The Poor White, then, has been crowded off the land, and he has no aptitude or training for skilled work; but what of the unskilled labour market to which people so situated would be expected naturally to gravitate? Here, again, is encountered a state of things peculiarly South African and a legacy of South African tradition and history. For the entry of the white man, poor or otherwise, into the unskilled labour market, has all the time been barred by what has been aptly called "the pernicious theory that the line between white man's and black man's work should coincide with the line between skilled and unskilled labour".[2] For historical reasons, mainly the early organization of the economic life of South Africa on the basis of slavery, the white population has been brought up to regard the performance of rough or unskilled labour as the proper role of the native, and supervision and direction the sole function of the white man. The disastrous result has been that the white South African has not had the preliminary training in unskilled work which is necessary for competence

[1] Professor J. E. Holloway, *Final Report of Drought Investigation Commission* (*supra*), Appendix 46, p. 212.
[2] *Report of Transvaal Indigency Commission, 1906–8* (*supra*), p. 32.

in the skilled work on the farm, in the mine, and in many other industries. So even should stern necessity compel him to conquer his prejudice against " Kaffir " work, his inefficiency born of inexperience in such work, together with the higher scale as compared with native wages which he would require, must severely handicap him in competition with the native.

The magnitude of the problem of the Poor White is difficult to determine, for their numbers have never been accurately ascertained. The Economic and Wage Commission of 1925, however, found that " it is generally accepted that they constitute from 8 per cent to 10 per cent of the total white population of the Union ".[1]

The view of the Transvaal Indigency Commission of 1906–8 was that " the essential step towards improved conditions must be for the entry of the white man into the field of unskilled labour ".[2] In most of the Union the climate cannot be held a sufficient reason why white men should not do unskilled work. In the Cape Province, where the white man's prejudice against doing unskilled work has always been less marked than in the Transvaal, it has long been quite usual for the farmers' sons to do manual labour on the family farm. And in railway construction indigent labour was found preferable to native labour,[3] while at Port Elizabeth the work of loading and unloading cargo was done by white men " because they did more work in the time and their handling of the goods was more careful ".[4] The evidence is that the prejudice against undertaking unskilled labour on the ground that it is " Kaffir's work " is gradually disappearing.

Seeing that the Poor White Problem came into existence as a by-product of the land problem, it is apparent that the more effective use of available agricultural land must be a main factor in its solution.

At the same time efforts have been made to train the Poor White so that he may be absorbed as industries develop. An instance is supplied by the boot and shoe industry, which became established in South Africa as a result of the attempt to provide in the Union itself for the shortage which resulted from the outbreak of war in 1914. " The Boot and

[1] *Report of Economic and Wage Commission (1925)*, Capetown, 1926. (U.G. 14—1926), 335.
[2] *Report (supra)*, p. 33.
[3] Ibid., *Minutes of Evidence* (T.G. 11—1908), Qs. 8662–4.
[4] *Report (supra)*, p. 38.

Shoe Industry has been the means of providing employment for a large number of the class generally designated ' poor whites '. Hundreds of these poor people have emigrated from the country to the towns with the idea of seeking a means of livelihood. After training they have become skilled operatives and able to assist their parents in the struggle for existence. From a menace they have become an asset to the State." [1]

The uneconomic system of land tenure in South Africa and the unprofitable use of the land that results are so deeply rooted in the history and tradition of the country that change could only come very slowly. Even at the beginning of the twentieth century, in the words of the Transvaal Indigency Commission, " Conditions in many parts of the country to-day are not very different from what they were when the country was first colonized by white settlers. In some respects a great change for the better has come during the last few years. But society still retains many of the patriarchal features. The rural population is composed of landowners, with a few dependent bywoners, and its outlook on life is dominated by the idea that every man should possess land of his own, and that this land, worked by native labour, should provide him and his family with the subsistence which they need." [2]

Again, according to the official organ of the Union Department of Agriculture : " The curse of South African agriculture is the big farm. The size of the average farm in the Transvaal is 5,000 acres, in the United States 143, in Great Britain 63, and in Belgium 14½. . . . It is appalling to contemplate the vast tracts of land that are owned by single individuals all over the Union. You see a poor, daub cottage, a few starved cattle, a mealie patch, and five acres of green, and you are told that the total area of this property is 5,000 acres. Or, again, you may travel by train over some of the richest land in the world with never an ear of corn nor a tassel of maize, and your fellow-passenger proudly announces that these 50,000 acres belong to his Company." [3]

What the necessary changes should be would be abundantly apparent even if they had not been indicated

[1] *Report of Special Committee appointed to inquire into the position of the Union's Boot and Shoe Industry*, Capetown, 1921 (A. 1—1921), p. 2.
[2] *Report (supra)*, p. 94.
[3] *Agricultural Journal of the Union of South Africa*, 1912, vol. iv, p. 508.

by successive Commissions and Committees of Inquiry. Their ultimate result would be the introduction of a general system of land tenure and land transfer on a commercial basis; the substitution for the bywoner system of a landlord and tenant basis, under which the tenant farms independently and pays a fixed rent; and, in so far as the purpose of such reorganization is the diminution of indigency among the white inhabitants, the growth of a class of white agricultural workers.

The Economic and Wage Commission reviewed the position in 1925.[1] They found that "the prejudice against undertaking unskilled labour on the ground that it is 'Kaffir's work' has diminished and is gradually disappearing", and schemes for employing indigents in afforestation or placing them on the land through settlements had been launched. The Transvaal had also been influenced by the spread of primary education that had been general throughout South Africa and, with the removal of ignorance, greater adaptability to enlightened modern conditions was hoped for. The extension of railway facilities and "the remarkable development in motor transport which has taken place since 1910" had also had considerable effect in removing some of the cause of rural backwardness. But all that had been done to remove the evils arising from the system of land tenure was to pass an Act[2] removing some of the difficulties caused by *fideicommissa*. That Act enabled the Court to remove or modify restrictions on immovable property on certain grounds, one of which is "that the shares which any of the beneficiaries . . . individually hold in such property are so small that they cannot be beneficially occupied" or that "no beneficial use can be made of such property owing to there being a prohibition in the will . . . against the subdivision of such property".

In the view of the Transvaal Indigency Commission a complete change in the rural economy was necessary. The change was summed up in the expression "closer settlement". It did not necessarily follow that a great increase in the number of small landowners or the creation of a peasant proprietorship would be involved. "It rather means

[1] *Report of the Economic and Wage Commission (1925)*, (U.G. 14—1926), Capetown, 1926, pp. 105–120, 334–6.

[2] The Removal or Modification of Restrictions on Immovable Property Act, 1916 (No. 2 of 1916). See also Amending Act, No. 20 of 1924.

such an alteration in the existing system of land tenure and management that land which is fit for agriculture is brought under cultivation, that the ground is put to better use, and that a greater number of people are enabled to share in the products of the soil. The time has come when the old-fashioned methods of farming must be abandoned and a great part of the rural population must reconcile itself to making a living out of the land, not only as owners using native labour, but also as tenants, farm managers, and agricultural labourers." [1]

The Commission, while agreeing that land settlement must play an important part in the development of the Transvaal, yet demurred to the notion that indigency could be prevented by the settlement of the surplus rural population on unoccupied Government lands. It was true that the Government at the time owned 33,746 square miles of the area of the Colony, but the land was mainly in the low veld, unhealthy, and remote from railways and markets. The indigent were not the sort of people to make successful pioneers or settlers in such country. For the colonization of its unoccupied lands the Government must look not to the failures of the high veld, but to the most progressive farmers that could be found.

Nor was settlement on land purchased for the purpose likely to be any more successful. " Experience in Australia and elsewhere shows that the effect of a policy of repurchase is to raise the price of land to such a figure that settlers cannot make a living from it and also pay to the Government interest and redemption." [2] The growth of a white agricultural labouring class was preferable. Experienced and progressive farmers might succeed, but not the ex-pastoralists of the high veld with their slipshod and extensive farming methods and their habit of using native labour instead of their own hands.

Closer settlement does not mean, in terms of acreage, the same thing as in, for example, Canada. In 1914 the Secretary for Lands in the Union of South Africa could find no evidence that there was any demand in the Dominion for small holdings for agricultural purposes similar to the 160 acre holdings that were the unit in Canada. The demand was for land suitable for stock-raising, that is to say holdings of something over 1,000 acres. Under the Crown Colony

[1] *Report* (*supra*), p. 95. [2] Ibid., p. 108.

Government a settlement was established in the Waterberg district of the Transvaal. Holdings of 640 acres were allotted. The Dutch and Australian settlers found that area too small and after investigation by the Land Board it was decided to double the area of the original holdings.[1]

Nevertheless, there has been a perceptible tendency in the more prosperous districts of the Transvaal for the large sheep farmer to turn to a form of farming which could be carried on with a smaller holding, dairying for example, so that several sons might find a living on land which, if retained as a sheep farm, would only suffice to provide a single son with a career.

In South Africa the Government has not had at its disposal the vast areas of agricultural land which have enabled the other Dominions to build up a very definite policy of land settlement. The greater part of the eligible land in South Africa was divided among a comparatively small class of white people in the early days, " and the only land which is left in the hands of the Government is either unhealthy country or desert, like the Kalahari, Bushman Land, and parts like that where from an irrigation point of view nothing can be done." [2] In the Transvaal " a very large amount " of land was found in 1900 by the Lands Settlement Commission to be the property of syndicates or limited companies. Much land had been acquired for the sake of the mineral rights.

[1] *D.R.C. Minutes of Evidence*, 1914 (Cd. 7706), Qs. 265, 266.

[2] *D R.C. Minutes of Evidence*, 1914 (Cd. 7706), Q. 3. It is not easy to get even an approximate idea of the amount of land actually eligible for settlement. The above-quoted statement is that of the Union Director of Irrigation. Equally authoritative and equally general is the finding of the Union Select Committee of 1911 on Closer Settlement that the area of unalienated Crown Lands of the Union was approximately 22 million morgen (70,000 square miles) and that " much of this is or may become suitable for settlement " ; while very large areas of unoccupied land, " much of which land is capable of closer settlement," were held by companies and individuals. (*Report* (Senate S.C. 6–10–11), p. iv.)

The Lands Settlement Commission appointed by Chamberlain in 1900, to inquire into the possibility of a settlement in South Africa of soldiers who desired to remain there after the war, reported that " generally speaking it may be said that while the amount of Government land in the Transvaal is of considerable extent, the quality is, as a rule, inferior ". There was, however, near Pretoria, " a considerable quantity of Government land which is either of actual present value or which can be made valuable by irrigation and by improved methods of communication." A considerable amount of land in the Zoutpansberg district was also " a valuable asset ". In the Orange River Colony the total amount of Government land was small, and of that a portion was being set aside as a Native Reserve and so not available for settlers. (*Report of Lands Settlement Commission*, South Africa, 1900 (Cd. 626), p. 8.)

Before the Land Settlement Act, 1912, which was the first Statute of the Union Parliament to establish uniformity of practice in the four Provinces as to the acquisition and disposal of Crown Lands, each Province controlled its public land under provincial Acts and Ordinances in which are to be found the germs of later Union legislation.

In 1895 a Crown Lands Bill was passed by the Cape Legislature, the object of which was to enable the Cape Government to settle certain portions of the Colony on much easier terms than could be done under any previous Crown Lands Act. Personal occupation was one of the conditions of the settlement, the object being to allow young farmers to come into possession of the land in the north-west portions of the Colony.

Post-war land settlement in the Transvaal began with the formation of the Cattle Preservation Department in 1901, which had for its object the preservation of breeding cattle, so that on the termination of hostilities the Colony should not find itself depleted of stock. The scheme proved impracticable by reason of war exigencies. The troops required the meat or the enemy recaptured the cattle. The Department then turned its attention to agriculture, and developed various farms with the object of supplying the civil population with agricultural produce and vegetables.

Next the Land Board was set up. It took over the assets of the Cattle Preservation Department, though it was primarily an advisory body to the High Commissioner. Then it built up a repatriation organization, and in that capacity imported breeding stock, agricultural implements and plant, and artificial manures. It also assumed control of horse-breeding farms and established cattle ranches. At the same time the Board acquired land for settlement purposes in various districts of the Transvaal.

On the conclusion of peace a camp was formed at Germiston for the accommodation of men, collected from the ranks, who desired to settle in the Colony. Those who proposed to follow agricultural pursuits, and for whom land at the moment was not available, were sent to the preparatory camps known as Squatters' Settlements. Seeds, implements, and draught animals were lent to the settlers in consideration of which they agreed to hand over to the Board one-half of the crops raised. Subsequently those on whom a favourable report was made were provided

with holdings and to these " squatters " pecuniary advances were made for the purpose of erecting houses and buildings and the purchase of equipment.[1]

The Transvaal Land Board came to an end with the passing in 1902 of the Crown Lands Disposal Ordinance and the Settlers' Ordinance. These two Ordinances provided for a Land Department in the Transvaal with a Commissioner of Lands at its head, and to that Department the administration of a landed estate of over 44,000 square miles or about 29 million acres, of which fully 19 million acres were unsurveyed, most was little known, and all was imperfectly developed.[2] In accordance with his practice of drawing on all parts of the English-speaking world for assistance in the reconstruction of South Africa, Lord Milner induced the Minister of Lands in West Australia to resign his portfolio and take the important post of Commissioner.

The Settlers' Ordinance, which was largely based on the Land Laws of New Zealand and Australia, was prepared after advice from experts in South African farming as well as those familiar with settlement problems in other parts of the Empire. In the light of this experience the inelasticity of similar settlement schemes was avoided. " Early Australian settlement failed . . . because of the principle of free selection, by which a settler pegged off claims as in a mining area, without any attempt at proper inspection and survey. A second cause of failure was the extraordinary method of putting a uniform capital value of £1 per acre on all lands. There was no provision for re-valuation and

[1] Further Correspondence relating to Affairs in the Transvaal and Orange River Colony, 1906 (Cd. 3028) (*Accounts and Papers*, 1906, lxxx), p. 15 et seq.

The opinion of the Transvaal Indigency Commission was that the methods of the Repatriation Department pauperized rather than assisted many of the objects of its bounty, but excused it on account of the conditions of hurry and disorder incidental to the end of a long and exhausting war. " The methods of the Repatriation Department combined the disadvantages of direct doles and loans. For months during the war, a large section of the population had been living in the concentration camps on food supplied to them for the trouble of coming to fetch it, thus acquiring habits of idleness and dependence on the Government. As soon as peace was declared they were allowed to go back to their farms, taking back with them food, implements, building material, and draught animals on loan from the Repatriation Department. In 1905, 35,790 persons were indebted to the Department in the Transvaal, most of them heads of families." (*Report of Transvaal Indigency Commission, 1906–8*, Pretoria, 1908 (T.G. 13—1908). p. 178.)

[2] Papers relating to the Progress of Administration in the Transvaal and Orange River Colony, 1903 (Cd. 1551) (*Accounts a*
p. 96.

when bad years came the settler was compelled to give up his holding. The area again was strictly limited, with the result that no provision could be made for the necessary increase in stock and fall in prices which attended settlement." [1]

Under the Transvaal Settlers' Ordinance the determination of the size of the holding was left to the District Commissioner, without defining any limits of area. A holding which proved too small could thus be increased. In cases when the land was improved and when the initial expense might be serious a preliminary lease could be granted at a low rent, so that the purchase money need not be paid until the holding had become revenue producing. Provision was made for allowing neighbours to reside together. But the "Milner Settlers", as they came to be called, had to submit to certain strict provisions. To ensure bona fide settlement sub-letting or transfer was prohibited save with government consent. The settler was required to occupy his land in his own interest only, and accordingly he was not allowed to acquire the freehold until after ten years, and meanwhile residence by himself or an approved member of his family, for at least eight months each year, was insisted upon.[2]

In the Orange Free State, as in the Transvaal, when responsible government was granted in 1907, a Land Board was set up for five years to administer settlement in the Colony, mainly under the Land Settlement Ordinance, 1902. In 1912 there were 556 persons holding land under the Ordinance.

The first of the series of Land Settlement Acts after the Union, that of 1912, worked in a generally satisfactory manner and, with some amount of amendment in detail, embodies the provisions which have since controlled land settlement in South Africa. That country has never possessed Canada's omnivorous appetite for settlers, impecunious or otherwise. Rather the purpose of Union legislation has been to attract the man who possesses the capital and experience necessary for the development of a holding,

[1] Ibid., pp. 95–6.

[2] During the year 1903–4, land was granted to 342 settlers under the Settlers' Ordinance, and 132 under the Crown Lands Disposal Ordinance. Of these, 195 were Squatter Settlers, all of whom received advances in cash or kind ranging from £500 to £700. (Further Correspondence relating to Affairs in the Transvaal and Orange River Colony, 1905 (Cd. 2482) (*Accounts and Papers*, 1905, vol. lv), p. 102.)

but who without assistance would be unable to acquire land on the terms exacted by private owners.[1]

The Acts empower the Minister of Lands, under the advice of Land Boards, to acquire land from private holders for land settlement purposes and, after it has been cut up into holdings, surveyed, and valued, to lease it or other Crown land to applicants for a five-years term at a progressive rental, with the option of purchase.[2] A popular procedure is that by which specific land selected by an applicant who is prepared to contribute one-fifth of the purchase price in cash may be acquired by the Minister for lease to the applicant.[3]

Advances may be made to lessees under the Act for the puchase of stock, seeds, and implements and otherwise for the purpose of the development of their holdings, and there are arrangements for carrying out irrigation.

There are conditions requiring allottees to improve and personally to occupy their holdings, it having been recognized that insistence on these conditions is essential to a successful system of land settlement.

[1] This is the policy adopted by the 1820 Settlers Association, which has arranged, in the interests of possible settlers of the right type, for the provision of tuition with selected South African farmers for a period of two years, during which time the pupil is enabled to acquire, without any expense to himself, the knowledge necessary to select his own holding, and deal with the native labour of the country.

The work of the London committee is to select settlers who are British subjects of character qualified to become successful agriculturists and good citizens. They must possess at least £1,500 if single, or £2,000 if married, with which to take up land on completion of the preliminary term of instruction.

[2] For the period 1912 to 1929, the total number of allotments under these provisions was 5,258, the number of settlers 6,007, and the area 5,264,381 morgen (a morgen being 2·1 acres). (*Official Year Book of South Africa*, 1929–1930, chap. xi.)

[3] For the same period, 1912–1929, the number of lessees under the provisions of the Act was 3,745, the number of holdings 3,076, and the area enclosed 1,551,564 morgen (ibid.).

CHAPTER 4

THE FOUR GOVERNMENTS AND THEIR ECONOMIC RIVALRIES

Cape Colony and its annexations, the last being Pondoland, 1894; British Bechuanaland Colony, 1895.

Natal.

- Annexed in 1843, as part of Cape Colony.
- A Crown Colony from 1856.
- Economic reasons for grant of Responsible Government, 1893, and for support of Union.

Orange River Colony.

- Annexed by Sir Harry Smith, 1848, as the Orange River Sovereignty.
- British government gives the country its independence, 1854, by the Bloemfontein Convention, and it becomes the Orange Free State.
- Reannexed 1900, as the Orange River Colony.

Transvaal Republic.

- Economic and political reasons for re-annexation to British Crown, 1877.
- Pretoria Convention, 1881.

Economic effects of political disunion.

CAPE COLONY became a British possession by its formal cession, in 1814, by the Prince of the United Netherlands in consideration of the payment of £6,000,000, an arrangement which was confirmed the following year by the Congress of Vienna. British troops had been in occupation since the capitulation of Governor Janssens in 1806.

At the time of its cession, the Colony was bounded on the east by the Fish River and on the north by Bushman Land, an almost uninhabitable tract of country south of the Orange River. Gradually it was extended until, by the incorporation of Griqualand East in 1879, Pondoland in 1894, and British Bechuanaland in 1895, it reached its present limits. It has had responsible government since 1872.

The greater part of the native population of the Colony is found in the Transkeian Territories between the Kei and the Umzimkulu Rivers.

The difficulty of maintaining uncontrolled native rule in a territory on the frontiers of countries where there is

settled white government or, in the characteristically blunt words of Rhodes, " the impossibility of a barbarian native existing between two civilized powers," is illustrated by the case of Pondoland, the coastal region south of Natal. It had long been apparent that once the Cape Government had crossed the Kei River it was only a question of time when the boundaries of the Cape and of Natal would be co-terminous. A state of unrest and anarchy which had existed in the country for a considerable time, during which British territory was frequently violated and the property of British subjects, especially in Natal, stolen or destroyed, brought the question of the future of Pondoland to a crisis. Thieves and other malefactors were often able to escape British justice by crossing the frontier into Pondoland and there seeking asylum. The unrest in the country reacted on the natives in the bordering British territories. The government of the Cape decided that for this state of things annexation was the only remedy. The two chiefs of East and West Pondoland were informed that by reason of their inability or unwillingness to maintain peace in their borders, their rule was at an end, and that the country would be governed by the officers of the Cape of Good Hope. The territory was thereupon ceded unconditionally. In 1894 the annexation to Cape Colony was consummated by the Pondoland Annexation Act, an annexation which had been accomplished without recourse to military operations more serious than the massing on the Pondo border of the Cape Mounted Rifles. In the result the Administration of the Cape of Good Hope was able to announce on opening the Parliament of the Colony, in May, 1895, that although there had been some slight trouble in Eastern Pondoland before it settled down under the administration of Colonial Magistrates, in Western Pondoland the Chief and people had " quietly and contentedly accepted Colonial rule ", while in both territories " the great majority of the common people have hailed with joy the establishment of law and order and their consequent relief from oppression and misrule ".[1]

The immediate results of the annexation were political rather than economic. The annexed territory was to be administered on the model of the Transkei, where magistrates governed and not the chiefs, rather than of Basutoland, where the native chiefs could advise but not rule.

[1] *Cape Legislative Council Debates*, 1895, col. 4.

On the economic side Pondoland, as had happened in the Transkei, would involve an immediate loss rather than a gain. The natives of the Transkei had been left in possession of their land; on the other hand, it was pointed out by Rhodes [1] that: "All we did was to give them government at a loss to ourselves. Year by year the Minister for Native Affairs had to ask the House for additional sums for government there. He asked if any civilized nation in Europe could show such a record." Nevertheless the ultimate purpose was to make these native territories self-supporting. "He had thought, after considering the Transkei question, that as they had given those people the best country and had not attached an acre of their land, surely they should be self-supporting. Yet every year they had to give sums for education, for bridges, for scab-inspectors, and so on." [2]

Having established law and order in Pondoland by its annexation, Rhodes turned his attention to the country on another part of the borders of Cape Colony, namely that between the Orange and Molopo Rivers. Here conditions were very different from those which had existed in Pondoland. In Pondoland the rule of Cape Colony had replaced that of native chiefs. Rhodes now proposed to annex a British Crown Colony. As he pointed out, whereas in the case of Pondoland they had annexed natives and not land, in British Bechuanaland they were annexing land, not natives. They had taken Pondoland to suppress disorder on their borders. Chaos had existed in Bechuanaland also, but it had been ended ten years previously by the proclamation of a British Protectorate north of the Molopo River and the establishment of a British Colony south of it. In that ten years the Imperial Government had at a cost of two and a half millions transformed a savage wilderness into a settled community where lived some 12,000 white colonists as well as the 60,000 natives who were so satisfied with British rule that their only fear was that any change of government whatsoever must be for the worse. The Crown Colony had no public debt and already the revenue balanced the expenditure.

When, in November, 1895, the Imperial Government handed over to the Cape of Good Hope a Crown Colony the foundation of which had been so well and truly laid,

[1] *Cape House of Assembly Debates*, 1894, p. 10.
[2] *Cape House of Assembly Debates*, 1894, p. 67.

Rhodes accepted it as a brilliant example of the policy of colonialism through Imperialism.[1]

The territory that was now given over to the custody of the Cape Government was strategically of vast importance. Bechuanaland was the door through which the great hinterland of the north was entered and the key of that door was now in the possession of Cape Colony. Already a railway ran through Bechuanaland and it was of no little importance to the Cape that this link between the Cape ports and the north should run through its own territory. The merging of the Crown Colony with the Colony was a great step in preparation for the union of South Africa which was so soon to follow.[2]

The modern history of Natal begins in 1823, when Francis G. Farewell and his party crossed the Port of Natal bar in their brig *Salisbury* and opened up trade with the natives of the region. This expedition was the outcome of a company which had been formed in Capetown by a number of merchants for the purpose of trading with the south-east coast. The first voyage did not return a profit, but Farewell was impressed with the suitability of the spot as a centre both for trade and colonization, and returning in 1824 with ten companions he concluded a treaty with Tshaka, the

[1] See, generally, *Cape Legislative Council Debates*, 1895, cols. 96–102 and 316–320.

[2] The elasticity and adaptability of British methods of government were perhaps never better illustrated than by the manner in which two South African native territories were dealt with, namely that just considered and Basutoland. Basutoland lies between Cape Colony, Natal, and Orange River Colony. Moshesh rallied around him the remnants of native tribes and welded them into the formidable Basuto nation, and in 1842 Basutoland was recognized as a Native State. Years of intermittent warfare between the Orange Free State and Basutoland ended in the annexation of this territory to Cape Colony in 1871. Later, a period of resistance to the authority of the Cape Government resulted in its disannexation from Cape Colony and the resumption of administration by the Imperial Government in 1884.

As indicated by their possessions in horses and cattle, the Basutos had attained a considerable degree of prosperity by the time Rhodes became Prime Minister of the Cape. A good deal of grain was also grown in the country. The revenue exceeded the expenditure, and there was no public debt. In these circumstances the Cape Government in 1894 took the view that the cost of the administration of Basutoland should be defrayed from the taxes levied in the country itself, and that the Cape of Good Hope should be relieved of the contract with the Imperial Government to contribute to the cost of administration made when the country was disannexed from the Cape in 1884, under which, according to the interpretation placed upon it by Rhodes, " if there was a difference between the revenue and reasonable expenditure, the Cape was bound to pay it up to £20,000." (See *Cape Legislative Council Debates*, 1895, cols. 127–9.)

paramount chief of the region. This treaty, dated the 7th August, 1824, ceded to " F. G. Farewell and Company entire and full possession in perpetuity " of a tract of land including " the port or harbour of Natal ".[1] Very shortly afterwards Farewell hoisted the Union Jack and declared his grant a British possession. The enterprise underwent many vicissitudes. Some of the original traders departed, while others came and filled their places. Farewell was murdered in Pondoland. All this time the traders lived as " kaffir chiefs ", trading with the natives and gathering round them native refugees who fled from the tyranny of Tshaka and his successor Dingaan.[2] In 1834 a number of the Cape-town merchants petitioned the Government, asking that Natal should be made a British Colony. The petition was refused on the ground that the Cape finances would not permit of the extra expense of a new dependency. In 1835 the Natal traders after laying out a town on the site of their settlements and calling it Durban in honour of the Governor of the Cape, sent a memorial to the Governor and asked that the territory they controlled should be proclaimed a British colony under the name of Victoria. To this request the Cape authorities turned a deaf ear. Meanwhile in the interior forces were being set in motion which were ultimately to force the Cape Government to intervene in the affairs of Natal, whether they desired to do so or not. The British trading settlers, now numbering about fifty, had characteristically reached Natal by sea. In 1837 a new body of immigrants entered Natal by land. They were Boers, who poured through the passes of the Drakensberg bringing with them their wives and children and herds of cattle. The effect of the Boer immigration was not as great as at one time promised. About 6,000 Boers entered the country, but a short time after the establishment of British rule over the region their numbers were reduced to about 500 families, and afterwards even less. One great and lasting effect of the Boer immigration was that Natal was annexed to Britain. It was declared a British colony in 1843, made part of Cape Colony in 1844, and given an effective administration in 1845. It remained part of Cape Colony until 1856. In that year it became

[1] F. R. Cana, " Natal," in *Encyclopædia Britannica* (11th edition); J. Robinson, " Natal and South-East Africa," in *Journal of Society of Arts*, vol. ii (1862–3), pp. 425–6.

[2] F. R. Cana (*supra*).

a Crown Colony in its own right, with representative institutions. The Crown Colony phase lasted until 1893, when Natal became a self-governing Colony.

Zululand was annexed to Natal in 1897 and the area known as the Northern District was transferred from the Transvaal in 1903.

When the Dutch settlers arrived they found only about 10,000 natives in Natal proper. The greater part of the original native population had disappeared before the onslaught of Tshaka and Dingaan. After Dingaan's defeat the native element tended to return to the Colony.

There is plenty of evidence since early times of the lack of cordial relations between Cape Colony and Natal. It is to be feared that Rhodes's grandiose ideas and outlook led him to speak contemptuously more than once of the smaller Colony with its " Parochial assembly " and its small white population, and the vanity of " the neighbouring colony with its new-fledged responsibility of Responsible Government " which was prepared not only to suppress the troubles in the neighbouring region of Pondoland but " to deal with the whole continent ".[1] Nevertheless the smallest Province in the Union built up the wattle, the tea, and the sugar industries; it conquered East Coast fever by means of the arsenical dip and showed how to make successful war on the locust with the arsenical spray.

To the demand for self-government economic motives largely contributed. An important factor was the desire to raise loans for the prosecution of necessary public works, such as railways. In 1887 " Natal desired to raise a new loan, for the prosecution of railways and other public works. The Secretary of State pointed out that if such borrowing powers were to be exercised in the future it must be on the individual responsibility of the Colony as a self-governing community ".[2] A second factor was pressure from the officials of the Transvaal Government during the negotiations concerning the building of the Charlestown–Johannesburg railway. The Transvaal put in a strong plea for dealing with responsible Ministers on the spot and not with mere agents who voiced the will of Downing Street.[3] A third factor was the need to secure Natal's economic hinterlands

[1] See *Cape House of Assembly Debates*, 1894, debate on Pondoland, pp. 7–13.
[2] Sir John Robinson, *A Life Time in South Africa*, p. 165.
[3] Ibid., pp. 249–250.

in Pondoland and Zululand. In the Crown Colony stage, all negotiations as to rectification of boundaries between Natal and the Cape on the one hand, and between Natal and the Transvaal on the other, were conducted by the Colonial Office on behalf of Natal. The results in Natal's opinion were disastrous: her interests were "ruthlessly sacrificed".[1] Closely allied to the latter factor was a fourth, namely the desire to control the native problem apart from any interference of Downing Street. In the view of the colonists of Natal the attitude of Downing Street was unduly benevolent. Natal felt that it could formulate a policy based on greater knowledge of local facts than the high-minded officials of the Colonial Office. A fifth and final factor was undoubtedly the nascent feeling that positive measures were required to cope with the growing menace of Oriental competition. It was about 1890 that this fear of the Indians and of their powers of squeezing the English settlers out of their occupations one after another began to grip the imagination of the Natal Government. Obviously it was useless to look to the Imperial Government for help, since the problem was quite local, and in any case the Imperial Government was not uninfluenced by what the India Office said and what Indians thought. Natal determined to cut adrift from such tutelage and work out its own salvation. Doubtless other factors contributed, but the five factors above indicated were the chief economic reasons why in 1893 Natal was granted self-government by the Imperial authorities.

Similarly there were economic motives for Natal's support of the Union of the four states of South Africa into the Union of South Africa. The rivalry between the two coastal Colonies of Natal and Cape Colony for the handling of the export and import trade of the two land-locked states behind them will be dealt with in connection with their respective railway systems. The rivalry was not, however, confined to railway rates, but entered into tariff rates also. Natal at first accepted the challenge of Cape Colony and the Orange Free State to a tariff battle, but being worsted was glad to enter into a Customs Union Convention with its rivals in 1898. The Convention stipulated a uniform tariff on all imported goods consumed within the union, and secondly free trade between the parties in respect of all South African products. The Convention

[1] See ibid., pp. 165, 229–235.

was to run for ten years. Its effect was to benefit Natal trade, and the consequence was that, when the time of expiry drew near, Natal supported the formation of a political Union of the four states. It wished to safeguard its transit trade, and it also desired to acquire an adequate revenue, since throughout its history Natal had been struggling with the incubus of poverty. The best means seemed to be through political Union. So short was its revenue that in 1908 it was compelled to impose an Income Tax and a Land Tax. The Government of Natal negotiated an agreement with the other Governments that in the event of Union its share of the Rand import trade should be 25 per cent before the Union and 30 per cent after the Union. At that time Natal's share was 22½ per cent. The Union was effected, and Natal trade prospered, while the revenue was so satisfactory that the new Income and Land Taxes were abolished.[1]

Orange River Colony was first settled by the Boer trekkers from Cape Colony in 1836. They settled around Winburg and along the Caledon River, but in 1848, as a consequence of the troubles between the settlers and the natives, the territory was proclaimed part of Her Majesty's Dominions.

The Dutch settlers found the territory between the Orange and Modder rivers inhabited by Griquas, a people of mixed Hottentot and slave descent, with a strain of European blood, and Basutos inhabited the eastern regions. In 1866 the Basuto chief Moshesh ceded the fertile territory north and north-west of the present Basutoland as the result of his defeat by the Dutch.

Sir Harry Smith entered upon his campaign of expansion almost as soon as he became Governor of the Cape. By ordaining, in 1847, that the boundary should be the Orange River, he vastly increased the area of Cape Colony. Disorders between the voortrekkers and the natives gave him the opportunity in 1848 to proclaim British rule over the territory between the Orange River and the Vaal River, " with the sole view of establishing an amicable relationship with the chiefs, of upholding them in their hereditary rights and protecting them from any future aggressions." [2]

[1] See F. R. Cana, " Natal," in *Encyclopædia Britannica*, 11th and 14th editions.

[2] See G. E. Cory, *The Rise of South Africa*, vol. v, p. 119.

The Orange River Sovereignty which then came into existence only lasted for six years. In 1854, disliking the prospect of heavy expenditure as the price of maintaining British rule and being persuaded that the settlers of the Sovereignty were themselves able to hold in check the native tribes, the Imperial Government, ignoring the protests of a large proportion of the inhabitants, abandoned the country, and it became a separate unit of government in South Africa. By the Bloemfontein Convention, 1854, the British Government guaranteed the independence of the country, which became the Orange Free State, and its inhabitants were declared to be " to all intents and purposes a free and independent people ". In 1900 it was annexed as a British Crown Colony and became the Orange River Colony.

The Boers beyond the Vaal River had been left to themselves, and in 1852, by the Sand River Convention, their independence had been formally recognized. At that time they were hardly a settled community. Rather they were a congeries of small communities each with its own crude form of government. By 1858 a Republican Constitution (*Grondwet*) had been worked out, but effective unity was only achieved in 1864 when Pretorius was accepted by all the different factions as President. It was a critical event, for it meant that another unit of government had arisen further to emphasize South African disunion. The Transvaal Republic had a troubled career, and the war with Sekukuni finally reduced it to a state of bankruptcy and complete disorder. Then, " whether it was the fear of native wars which might disturb the peace of all South Africa, whether it was the fear that the Transvaal trade might be diverted from the coast Colonies by a railway to Delagoa Bay, whether it was Lord Carnarvon's anxiety to accomplish South African federation, or whether all these reasons operated together, the fact remains that the country was annexed to the British Crown in 1877." [1] But only for four years or so, and in 1881, by the Pretoria Convention, the Transvaal State became, in the words of Bryce, " something between a self-governing Colony and an absolutely independent State." [2]

[1] The Selborne Memorandum, in Papers relating to a Federation of the South African Colonies, 1907 (Cd. 3564) (*Accounts and Papers*, 1907, vol. lvii), p. 17.

[2] Bryce, J., *Impressions of South Africa*, p. 160. Swaziland, lying between the Transvaal, Natal, and the Portuguese possessions, and

There were thus in South Africa four separate Governments, two of them, Cape Colony and Natal, British Possessions, and two independent Republics, the Transvaal and the Orange Free State. None was separated from another by any natural barrier, but no system could have been more cunningly devised for encouraging the erection of economic barriers one against the other and the consequent crippling of the economic progress of South Africa as a whole.

The effects of political disunion in South Africa were seen in every aspect of her common economic life. So long as the different Colonies were independent of each other, their several railway interests were distinct and incompatible, and their railway policies consequently conflicting. Energies which should have been applied to the equipment of the sub-continent with so essential a need as an adequate system of internal communications were dissipated in internecine rate wars. In fiscal policy some sort of union had been attained of which the Customs Union was the outward and visible sign, but, instead of the Customs revenue being gathered into a common purse, "an elaborate machinery involving a positive waste of public funds must be maintained in order to secure that the duty is received by the Colony where the goods are actually consumed," and such inconveniences were by no means limited to the Customs revenue. "Natives are constantly moving across the Transvaal border because native taxes there are heavier than in the neighbouring territory. Similarly the various taxes on general dealers levied in different parts of the country have produced serious inequalities in matters of trade. Commercial travellers must pay licences of varying amounts in each Colony and a patentee to protect himself throughout South Africa must register his patent and pay fees not once but at least five times. The duties paid on the establishment of a Company accrue to the Colony in which it chooses to register itself without regard to the part of South Africa in which its actual operations are carried on." [1]

In no other aspect of economic life in South Africa was

inhabited mainly by Zulus, though never incorporated with the South African Republic, was administered under the Republic's laws. On the outbreak of the South African War it became a British possession and, in 1905, its control was handed over to the High Commissioner for South Africa.

[1] The Selborne Memorandum (*supra*), p. 39.

united effort so essential as in agriculture, yet four Agricultural Departments formulated as many systems of prevention or cure instead of the single scientific department which alone could combat the plagues—scab, rinderpest, East Coast fever, and locusts—which caused the farmer such heavy loss and recognized no boundaries. The prosperity of the mining industry depended on an adequate supply of native labour. But when, as often happened, the demand for labour came from one Colony and the supply from another, " any attempt to bring the supply and demand together could only be made by private individuals who were hampered by the existence of different laws regulating labour questions in the Colony of the demand and the Colony of the supply." [1]

The result of the economic chaos was instability in industrial and business conditions. " So long as railways are divided between a number of jealous administrations, rates will continue to be the sport of political exigence; they will be fixed more in obedience to local agitations than to suit the natural demands of trade. The Customs Convention rests on no foundation of enlightened public opinion, and business men dare not trust to the maintenance of its provisions. The instability produced by the uncertainty of the labour supply has been already mentioned. It follows that everything is felt in practice to be unstable and want of confidence affects every business and industry in the country. . . . The instability of political institutions has reproduced itself in methods of business, until South Africa has come to be regarded more as a place for speculation than the home of serious enterprise." [2]

[1] Ibid., pp. 7, 8.

[2] Ibid., pp. 46–7.

CHAPTER 5

The Farming Industry in the Primitive and Pastoral Stage

From earliest times farms have been pastoral and of vast area, and farming has been conducted on extensive and primitive lines.
Conditions peculiar to South Africa:
- Native labour.
- The competition of the mining interests.
- Handicaps of climate, soil, and pests.

Stagnation until after South African War.
After South African War:
- Farms tend to become more manageable in size and farming methods more intensive.
- Pedigree stock introduced.
- Dry farming.

Advantage taken of experience of Australia and California.
Production before and after 1904.

CANADA is mainly agricultural; South Africa, all through its history, has been primarily a pastoral country. Accordingly, while Canada is the country of the small farmer, the typical South African farm is, comparatively, of enormous extent. Until well on in the nineteenth century the life of the South African colonists was almost entirely pastoral. In 1811 the Commission of Circuit described how: "In the villages, and in the neighbourhood, one only sees, besides agriculture, a beginning made with the learning and exercise of trades, and with the principles of a more or less civilized social life". Graaff Reinet, which had scarcely been established twenty-five years, and was the capital of its district, was spoken of as a quite progressive place: "A strong proof of this is that of the forty-eight houses belonging to individuals which are now in the village, thirty-seven have been built since 1806, all of them provided with outhouses for slaves, cattle, etc., and also with separate and well planted gardens, orchards, vineyards and the like, there being in the village besides the public baker, butcher, and farmer

of the wine licences, twenty-two people who successfully carry on different trades." But in the districts where there was no church, fixed magistracy, or village, the young people " all look forward to become graziers, and no person forms for himself any other plan of livelihood ".[1]

As a stock farmer the Dutch colonist had little interest in the production of meat. " The aim of the Boer in breeding cattle was to procure a supply of trek oxen on the one hand, and of heifers on the other, the heifer being used for breeding or for selling to Kaffirs, who employed them for the purchase of wives, the recognized price for a wife being eight heifers. The sheep were kept chiefly for their wool." [2] Still less was he a dairy farmer. " With regard to milk, a small number of cows were kept for the purpose in the neighbourhood of towns by progressive farmers, but otherwise no steps were taken to stimulate the milking qualities of the animals or to select them for that purpose." [3] It was a system of subsistence farming, and agriculture was pursued only to the extent necessary to supply the individual needs of the farmer and his household.

In the central districts of Cape Colony, so late as at the close of the nineteenth century, " the farms have a general area of some 12,000 acres each, with about 12 acres of cultivated land per farm. This means about one acre of arable land to a thousand acres of pastoral land. The cultivated plots attached to the farm houses contain about an acre of fruit and vegetable garden and some ten or twelve acres under wheat, Indian corn, lucerne, and oat-hay." [4] The veld in these districts of light rainfall could carry one sheep or goat to four acres, or one ox to sixteen acres, the sheep being principally merinos and the goats angoras.

Farther north, in the Transvaal, the farmers were not only pastoral, but nomadic as well. There " the Boer methods were primitive in the extreme; their one idea being to increase the number of their animals with as little trouble and expense to themselves as possible. This being so, the animals were naturally left very much to their own

[1] *Records of the Cape Colony*, vol. viii, p. 299.

[2] Further correspondence relating to affairs in South Africa (Cd. 1463), 1903; Letter from Director of Agriculture, Transvaal (*Accounts and Papers*, 1903, xlv), p. 20.

[3] Ibid.

[4] W. Willcocks, Report on Irrigation in South Africa, 1901 (Further correspondence relating to affairs in South Africa (Cd. 1163), *Accounts and Papers*, 1902, lxvii), p. 47.

resources; they were kept entirely upon the veld and no attempt was made to improve the various breeds either by selection, the introduction of fresh blood from abroad, or by the adoption of enlightened systems of feeding and management; nor were any measures taken to provide shelter or conserve water for the stock, to improve the quality of the veld, or otherwise to improve the carrying capacity of the soil. The farms were, with a very few exceptions, unfenced, and the animals were herded during the day and confined in foul, unwholesome kraals or yards at night ".[1] No provision was made for winter feed; during the summer the animals were kept upon the high veld, the region north of the Vaal River in the Southern Transvaal which " consists of undulating plains of grass with a few hills rising out of the general level. If one were to imagine the Midlands of England without fences, without fields or trees, and without homesteads or villages, one would have a good idea of this veld. The country lies between 4,700 and 5,700 feet above sea level and experiences very cold and dry winters. The average rainfall may be taken at 21 inches, of which much the greater part falls in the months of January, February, and March. The springs are generally feeble. The veld grass is good, and capable of supporting one sheep per acre ".[2]

North of the latitude of Pretoria and the high veld lie the bush veld and the low veld, and thither, when the weather grew cold and keep became scarce, the farmer would trek with his live stock. These regions " are generally covered with scrub and grass, and are feeding grounds of the flocks and herds of the Boers during the winter months. This practice of trekking from the high to the low veld in winter is due to the fact that the winter frosts kill the grass in the high veld, and as the Boers have not as a rule sown any root crops or pumpkins or side oats on their lands in the high veld, they are compelled to travel down to the regions where frosts are unknown. I have, however, been informed by advanced Boer farmers that the trekking results in 10,000 acres of veld having to do the work of 5,000. If suitable crops for feeding stock were sown with the aid of the rainfall on the high veld, and the cattle and sheep folds built between belts of blue gums or pines, it would

[1] Further correspondence relating to affairs in South Africa (Cd. 1463), 1903 (*supra*). Letter from Director of Agriculture, Transvaal, p. 19.

[2] W. Willcocks, Report on Irrigation in South Africa, 1901 (*supra*), p. 67.

be a distinct advantage to the farmers and double the value of their holdings in the high veld", for then their annual trek could be dispensed with.[1]

Unlike the high veld, which is healthy and bracing, much of the bush veld and low country has a climate which is unsuitable for Europeans. "Europeans cannot live and work in the climate, whilst British Indians who could live and develop the country have not hitherto been allowed to enter."[2]

The practice of veld burning is an instance of the primitive methods to which the pastoral farmer resorted when the farms were so vast and so poorly stocked that it was impossible to keep the grass short by grazing, and the problem arose how to get rid of the coarse grass that dried into unpalatable herbage during the late summer months. Mowing such wide areas was impossible, and veld burning was resorted to in order to make way for the growth of succulent young grass wanted for the live stock in the spring. While "the nights are rendered lovely by the ribbons of fire creeping over the hillsides", the firing of the veld is bad farming, inasmuch as it results in gradual deterioration of the quality of the grass. The coarse survives the ordeal, the finer sort perishes. The useful covering of the soil which results from the natural decay of the grass is destroyed. "Instead of lowering it by annually burning off the veld, the progressive farmer rather endeavours to increase it by the laying down of permanent pastures of the most nutritious kinds of imported grasses that will thrive in his district."[3]

At the close of the nineteenth century farming methods in South Africa remained in essentials as primitive as they had always been. It was still, save in the south-west corner, a pastoral country and it was still necessary to import cereals and dairy produce. Farming methods were still so extensive that 5,000 acres remained the minimum area thought necessary for the maintenance of a family. Even an agricultural farmer growing cereals in the south-west thought 2,000 acres necessary. Migrating with the seasons, the Boer pastoral farmer still trekked from the low veld to the high and back again, and had no use for veterinary

[1] W. Willcocks, Report on Irrigation in South Africa, 1901 (*supra*), p. 68.
[2] Ibid.
[3] *Agricultural Journal of the Union of South Africa*, 1913, vol. v, p. 513. See also E. P. Phillips, "Veld Burning Experiments at Groenkloof" (*Science Bulletin* No. 17 of Union Department of Agriculture, 1920).

surgeons ; and the arable farmer in the Cape Town region as a rule saw no virtue in manure or the rotation of crops.

It is no more possible to draw an indictment against a whole race than against a nation. It has always been possible to find progressive Boer farmers, but it remains a fact that the Transvaal Indigency Commission of 1906–8 found that for the general low standard of life among the farmers in the Boer Provinces and their makeshift, unproductive farming, it was not the country that must be held responsible, save to the extent that the climate enabled people to live on the land almost without working at all, but the character and habits of the population.[1] For the early settlers' contentment with the pastoral methods of the patriarchs of the Old Testament there was some excuse, but " most of the population in the remote districts and many of those who dwell near to the railway and the towns continue to live in much the same manner as the earliest immigrants to the Transvaal ".[2] The Commission thus depicts the type found in the rural districts of the Transvaal: " The system of farming of the Boer is still that of the voortrekker. It cannot really be called farming at all. It is unsystematic, primitive, and wasteful. It consists mainly in tending a few cattle and a flock of sheep and goats. The principles of scientific stock breeding are not understood, and their importance is not appreciated. Cattle are simply treated as a convenient form of property and are left mainly to themselves. Agriculture is limited to scratching a patch of ground in which to grow the mealies which form the staple food of the inhabitants of the farm, and of which a few bags may be sold to a neighbouring storekeeper. The whole existence of the backward Boer farmer is arranged on a hand to mouth basis. . . . When he has money it is often spent in tinned provisions inferior to the food which he might grow for himself. Mealie porridge is cooked in large quantities on one or two days of the week and left in a bowl on the table, and the children come in and take some when they feel hungry without ever sitting down to a proper meal. . . . Their whole scheme of life still suggests the trek." [3]

A factor in economic life which has to be taken into account in South Africa as in no other Dominion is the

[1] *Report of Transvaal Indigency Commission, 1906–8* (T.G. 13—1908), Transvaal Legislative Assembly, Annexures to Votes and Proceedings, 1908, ii, p. 63.

[2] Ibid., p. 55. [3] Ibid., pp. 61–2.

presence of a preponderating native population which supplied the farmer with almost all the manual and menial labour that was necessary at so little cost that he was left with but little inducement to acquire machinery. In South Africa the farmer has not, as he has in Canada, so to plan his operations as to economize labour as much as possible. Every white farmer in the Dominion must be an employer of natives in a greater or lesser degree, for there agricultural development depends on coloured labour and white leadership and supervision. There is little or no scope for white farm labourers, for the native works on terms with which the white man cannot hope to compete. Moreover, the immigrant farmer must have a certain amount of capital at his disposal,[1] for South Africa is no "three acres and a cow" country.

The economic history of the country supplies a further potent reason why the development of agriculture in South Africa has been slower than in the other Dominions. The discovery and development of the diamond and gold fields successfully diverted interest from agricultural and pastoral pursuits. In the absence of railways, the equipment of the mines and most of the supplies wanted for the population dependent on them had to be brought up by ox, mule, or donkey transport, and transport riding attracted from the land many recruits. Moreover, for the first time, land in the Transvaal became a saleable commodity commanding substantial prices, and the "option money" offered by prospectors and speculators to farmers for the sole and exclusive right to buy their land or the mineral rights at a fixed price led the latter to regard their land as a speculative asset rather than the means of developing the country's agricultural resources. And when the railways came, the main lines were constructed not for the purpose of assisting the farmer by providing him with means of transport for his products, but with the single object of getting to the mines by the nearest route, with the result that they ran through some of the most barren regions in South Africa.

Nor has nature been too kind to the South African farmer. The soil is naturally poor in plant food, and so is in need of

[1] The 1820 Memorial Settlers' Association, an organization established to commemorate the memory of the "1820 Settlers" by introducing into South Africa suitable settlers on the land, requires intending farmers to have at their disposal capital varying from £2,000 in the case of married men who require training to £600 in the case of trained farmers who are unmarried.

chemical treatment, and while drought and animal and plant diseases are the major difficulties of the South African farmer, he has to contend with more than his share of minor worries as well. Thus jackals are capable of causing such severe loss to sheep farmers that in 1894, for instance, there were in existence over a hundred poisoning clubs, which were being subsidized by the Government to the extent of some £2,000 a year.[1] The Government's offer of a reward for jackal destruction seems, as usually happens, to have resulted in a certain amount of mild fraud. Thus in 1895 it was stated in the Cape Legislative Council that " a great number of jackals' tails are brought to the Public Offices which have never seen a jackal at all. Tails of other animals were brought ".[2] Monkeys and baboons, again, often make themselves a nuisance by, for instance, removing the stones at the bottom of the wire netting fences in their search for scorpions and other attractive morsels and so enabling the jackals to get at the flocks.

Nor are all the nuisances among the fauna. Deterioration of pastures has resulted in many districts from the prevalence and spread of weeds. For example, a troublesome plant that appears to have been accidentally introduced into the Dominion is the jointed cactus. It spreads rapidly and covers the land to the exclusion of edible herbage, and it may be injurious to stock coming into contact with it. It is difficult to eradicate, but the origin of the pest was almost the work of a moment. In 1874 a flowering cactus was growing in a certain front garden in the Bedford district. The owner got tired of it and threw it into the Great Fish River. Shortly afterwards there was heavy rain and the river overflowed, and as a result the farms on the banks below that point became infested with the plant.[3]

It was only after the South African War that agriculture in the different Provinces began to emerge from what was, for the most part, a quite primitive condition. It was only then that the days when the huge farms were expected to " farm themselves " began to pass away.

The old system by which farmers could only get along with farms of enormous area, inasmuch as having grazed one portion of the farm bare they were obliged to move

[1] *Debates: Cape House of Assembly*, 1894, p. 148.
[2] *Debates: Cape Legislative Council*, 1895, col. 19.
[3] See " The Jointed Cactus " in the *Agricultural Journal of the Union of South Africa*, vol. iii (1912), p. 224.

their animals to another part, was a hopelessly extravagant use of land. By 1918 there was apparent "a decided tendency to reduce the size of farms with a consequent impetus towards more intensive cultivation".[1] It was also a system which made farming an exceedingly precarious industry, for the reason that there was no provision for the production of winter feed. "Seven years ago[2] in the most progressive parts of the Union . . . such a thing as winter feeding was comparatively unknown. Ensilage was unknown, and rye—I can well remember when it was first planted—the majority of the farmers had never seen such a plant. But it is now very rarely that you will find a farmer who is not well provided with winter feed. You will now find green fields of rye growing where formerly there were brown plains, and in this way provision is made for the sustenance of sheep in the winter season. . . . As a man cultivates his farm better, he will not allow the moisture to escape from the ground as before, and if he does meet with a shortage of rainfall sometimes he will not come to utter ruin as in the past." Again, at the beginning of the century very little machinery was being used for agricultural purposes, for instance, in the cultivation and cutting of maize. Kaffirs could be got for manual labour for 10*s*. a month with mealies and milk, and it hardly paid to substitute machinery. Machinery only came into general use as a result of the increased wages—£1 to 30*s*. a month—demanded by the native.

It was, however, still accepted that South Africa was primarily a pastoral country. The Director of Irrigation for the Union told the Select Committee of the Senate on Closer Land Settlement that in his view "the standard type of farm is going to be a moderate sized mixed farm with a small amount of agriculture under irrigation as an adjunct to stock farming".[3] After the South African War there was a steady stream of pedigree stock into the Union and with it came a demand for competent veterinary services. Having acquired valuable animals, the farmer was no longer content to attend to their diseases himself.

[1] *Report of Committee on Grain Elevators*, Pretoria, 1918 (U.G. 38—1918), p. 32.

[2] i.e. about 1907. The evidence quoted is that of Senator Byron, given before the D.R.C. in 1914 (Cd. 7706), Q. 348. The district referred to was in the east of the Free State along the Basutoland border.

[3] (Senate S.C. 6–10–11), Q. 117.

It is only necessary to remember the vastness of the region in South Africa with a desert climate in order to realize the importance of the discovery, not made, however, until the twentieth century was well under way, that, by applying the principles of "dry farming", crops could be successfully raised in these dry lands without irrigation. Dry farming may be described as the growth of drought-resisting plants and the conservation of soil moisture by tillage. So not only can maize, wheat, barley, and rye, as well as mangolds and potatoes, be successfully grown in the high arid lands where at the beginning of the century nobody supposed that crops could be raised at all, but melons are made to grow in the Kalahari Desert on a 4 in. rainfall, and the Bushman grass on the strength of a rainfall of 2 inches. As to the initial preparation of the soil: "Suppose you were to go on the bare veldt and intended to plough up 100 acres of land. You must wait, of course, until the rain comes, in order to get your plough into that land, because it is baked hard by centuries of time. Once that land has been ploughed up you must leave it for a whole year with nothing upon it; cross plough it and harrow it. You then wait for the next rains. Instead of the rains running off the bare hard veldt, as formerly, it sinks into the ground. You then harrow again to form the ground blanket or soil-mulch. . . . If we can hold in our soil a moisture savings bank, then we can eliminate the danger of drought, because we are not working on the rainfall of the present year, perhaps a very scanty one, but we are drawing on the rainfall reserves of previous years." [1]

Put briefly, the fundamental principles of the system of dry farming, which was imported into South Africa from the semi-arid west of the United States, are deep ploughing followed by the pulverization of the soil by constant tillage. The main and most valuable effect is to enable the soil to retain the maximum amount of moisture.[2] Students of the history of agriculture will not fail to see in dry farming the modern application of the ideas set forth by Jethro Tull in 1733 in his agricultural classic *Horse-Hoeing Husbandry*. "The chief legacies which Jethro Tull left to his successors were clean farming, economy in seedings, drilling,

[1] D.R.C. *Evidence of Dr. Wm. MacDonald.* (Cd. 7706) Appendix II, p. 268.

[2] For an exhaustive examination of the subject, see *Dry Farming: Its Principles and Practice*, by Dr. Wm. MacDonald.

and the maxim that 'the more the irons are among the roots the better for the crop'." [1]

The Select Committee of 1911 on Closer Land Settlement [2] pronounced in favour of dry farming rather than large irrigation schemes. They expressed the opinion that under dry farming conditions "much of the land hitherto considered agriculturally useless can be made to carry a large white population", and that "a moderate area possessing a fair depth of soil, with a minimum annual average rainfall of say ten inches, if cultivated with energy and intelligence, offers a reasonable prospect of success and prosperity to the occupier".

Irrigation schemes were costly, and their success demanded much more time and experience than dry farming. Moreover, the quality of most crops grown on dry land was superior in many respects. "Being of firmer texture, they suffer less depreciation in transit, possess greater freedom from disease, and are of better flavour."

Fortunately there has always been, in South Africa, a leavening of progressive administrators and farmers who have not scorned to take advantage, for the benefit of their own country, of experience gained from abroad. In particular South Africa has learned much from Australia and California.

In his speech when opening the Cape of Good Hope Parliament in May, 1895, the Administrator referred to the agricultural depression in the Colony, due to the heavy fall in prices resulting from the increased production in other countries. To enable the Colony to cope successfully with its competitors, while every attention should be given to increasing the volume of production, "equal or even greater attention should be devoted to raising the standard of quality." With this in view an officer of the Agricultural Department of the Cape had been dispatched to Australia "to make himself thoroughly acquainted with the latest developments in the dairy, fruit growing, and other industries which have made such great advances in those countries".[3]

The wattle bark industry was introduced from the same country.

Rhodes entrusted the foundation of the fruit farming industry to a young man whose experience was gained in

[1] R. E. Prothero, *English Farming Past and Present*, p. 172.
[2] *Report* (Senate S.C. 6–10–11), p. iv.
[3] *Debates in Cape Legislative Council*, 1895, col. 1.

California, and in 1893 the Cape Government sent the President of the Wellington Fruit Growers' Association to that country to investigate its methods of growing, handling, and marketing fruit. The spineless prickly pear, which is really a cactus, was introduced into South Africa from California in 1909. It has been called the camel of the vegetable world, for it can flourish for long periods without water, yet has a high content of moisture. But it is palatable and makes food for stock when other green foods fail.[1] In the arid regions of the United States it has been found possible to maintain cattle for long periods on prickly pear alone.

Statistics in respect of South African agricultural produce were incomplete until quite recent times,[2] but from figures supplied to the Dominions Royal Commission in 1914, by the Census Director,[3] it is possible to get a general comparative view of the various products in the Cape of Good Hope during the period 1875 to 1911, and in the Orange Free State during the period 1880 to 1911. In the Cape of Good Hope, notwithstanding the annexation of Griqualand and Transkei in 1891 and of Bechuanaland and Pondoland in 1895, the production of wheat, wine, brandy, tobacco, and dairy produce, while showing considerable variations in the different years, yet over the whole period, 1875 to 1904, appears to have been practically stationary. Maize alone showed signs of progressive, though slight, increase. The figures for 1911 show a substantial all-round increase in each of these products, except brandy and tobacco. The return for live-stock shows precisely similar results with the single exception of ostriches. In the Orange Free State the position seems to have been the same, namely stagnation between 1880 and 1904 and a substantial increase both in agricultural produce and live-stock in 1911.

These figures reflect the fact that after the pioneering days there followed a long period during which the South African farmer was content to accept conditions as he found them and the various governments did not feel called upon to interfere with his fatalistic attitude.

[1] See J. Lewis, " Notes on Burbank's Spineless Prickly Pear," in *Agricultural Journal of the Union of South Africa*, vol. iii, 1912, p. 227.

[2] See note 3, p. 102.

[3] *D.R.C. Minutes of Evidence*, 1914 (Cd. 7706), pp. 271–2.

CHAPTER 6

Development of Commercial Farming and Growth of the Agricultural Side

Cattle.

- The Afrikander breed.
- The attempt to evolve a beef-producing animal from the trek-ox.
- The beginnings of export trade in beef.

Early contact with foreign countries through export trade in horses.

- Mid-nineteenth century decline of the industry.

Sheep.

- Early replacement of the native sheep by the Spanish merino and foundation of the wool export trade.
- Drought problems in relation to sheep.

The Angora goat.

- Rivalry with Turkey for the mohair trade.
- United States breaks down attempted monopoly on part of Turkey and Cape Colony.

The nineteenth century boom in ostrich farming.

Lucerne as a legacy from the ostrich.

The happy accident of the discovery of the value of teff to the pastoral industry.

Maize.

- The mealie patch developed into the most important of the cereal crops.
- The local need and the export surplus.
- "The Maize Triangle."
- Average yield comparatively low, although climate favourable.

South Africa a wheat-importing country.

- Unfavourable climatic conditions and low fertility of soil as impediments to greater production.

The sub-tropical products.

- Wine, brandy, and tobacco produced from the earliest colonial days.
- Wine an early export.
- Collapse of the British market for Cape wine after 1833.
- The tobacco area wider.
- Roll tobacco the characteristic product, but Turkish introduced in the twentieth century.

Difficulties in the way of securing a position in the foreign market.
The farmer turns from tobacco to cotton.
The sugar cane in Natal.
Wattle bark.
The latest phase—the fruit-growing industry.
Growing importance of the products of the farm in the export trade of the Union.

WITH the greater restriction of the acreage of farms and the decline of the nomad pastoral farmer there comes an improvement in the quality of the stock and a movement in the direction of greater contact with the commercial world. Agriculture as distinct from pastoral farming spreads outwards from the south-western corner of the Cape of Good Hope, where it had its beginning, and it yields a gradually widening range of products. The South African farmer becomes a competitor in the markets of the world; and with the active help of his Government his purpose is to discover the products which will best enable him to fill that role.

In the case of cattle, this movement has been manifested in the attempt to substitute for the trek-ox animals of beef-producing or dairy quality. To meet the exigencies of South Africa, there has been evolved from the indigenous stock found by the early colonists in the possession of the native races a special breed of cattle, the Afrikander. Red in colour, with wide-spreading horns, intelligent, powerful, and hardy, the Afrikander is first and foremost a trek ox, and it is only in recent years that serious attention has been given to the improvement of its beef-producing qualities.

The Afrikander breed flourishes in all parts of South Africa. In the sour-veld mountainous country of the south-west "its ability to subsist on the sour, coarse pasturage, coupled with its courage to scale rugged mountains and steep hills after food, enabled the breed to succeed where other breeds have repeatedly failed when left to subsist on the natural grazing only. It is also the only breed which can maintain itself on the arid Karroo, subject to severe droughts periodically and supporting a sparse, though rich, pasturage for cattle. The Afrikander not only thrives under these conditions, but develops into a large-framed, heavy-conditioned animal".[1] It also best resists the

[1] T. G. W. Reinecke, "Afrikander Cattle," *Journal of the Union Department of Agriculture*, 1924, vol. viii, p. 586.

various tick-borne diseases. Attempts have been made to replace this breed in the semi-arid parts of the western Transvaal and the western districts of the Orange Free State by European breeds, but such experiments have not been altogether successful unless the grazing has been supplemented by artificial feeding. An animal which was hardy enough to be suitable for draught purposes " may be quite a good beef animal " although it " may not cut up as profitably as in the case of the animal specially bred for beef purposes ".[1] But reasonably good though it may be as a beef animal, it is not good enough for the British market, which demands beef of a consistently good quality.

It is true that South Africa commenced an export trade in beef in 1914, and that during the years of the Great War it reached substantial proportions. It is also true that a South African beef export trade survived the slump that came with the world-wide depression of 1921. The significant fact is that the trade is not with countries which, like Great Britain, demand good quality beef, but with countries on the continent of Europe which have only in recent times begun to show a considerably increased demand for frozen beef. In particular, the opening up by the Imperial Cold Storage Company of a market in Italy for frozen meat from South Africa has done much for the export trade. In 1929 the value of the beef and veal exported by South Africa to the United Kingdom was £51,313. In the same year South Africa exported to Italy beef and veal valued at £225,935.[2] In 1924, of the 3,843 tons of beef exported from South Africa, " only a very small proportion of these shipments was of a suitable quality for shipment to England, the bulk of the exports consisting of a lower grade cattle (including a substantial proportion of cow beef) suitable only for Continental consumption. Of the exports, 3,708 tons were shipped to Italy and 101 tons to Belgium." [3]

On the authority of the Union Department of Agriculture, of the 9¾ million cattle in the Union in 1925, " the bulk undoubtedly consists of animals of a very inferior description —unprofitable as dairy stock and unfit for the export beef trade except to the lowest-priced markets." [4] The trek-ox

[1] *Union Board of Trade and Industries Report No. 54, on Meat, Fish, and other Foodstuffs* (Capetown, 1925), p. 38.
[2] *Official Year Book of the Union of South Africa*, chap. xviii.
[3] *Union Board of Trade and Industries Report No. 54 (supra)*, p. 41.
[4] Report of Department of Agriculture for 1925–6 (U.G. No. 6—1927) Union House of Assembly, *Reports of Select Committees*, 1927, vol. ii.

of the European, fattened for beef only when his career as a transport animal is at an end, and the cattle in native possession, yielding little milk during life and regarded as available for beef only when dying, can hardly be serious competitors in the markets of the world. The obvious problems with which the Union has long been faced are the improvement of beef cattle so that the surplus may be exported to the higher priced markets, and the expansion of the dairying industry by the improvement of dairy stock.

During the period of Dutch rule at the Cape and for a long period subsequently, the only European cattle imported were the Friesland breed from Holland, which have become the most numerous. In recent times the Government has been able to assist the industry to improve the quality of the cattle by arranging for the importation of stud animals and other pedigree stock. Under an arrangement with the Union Castle Steam Ship Company, by which free freight was given for such cattle, between 400 and 500 bulls, and over 700 heifers and calves, were imported into the Union between 1912 and 1914.[1]

In 1904 the number of cattle in the Provinces now constituting the Union of South Africa was 3,500,453. In 1911 an increase to 5,796, 949 was shown. During the three years immediately preceding the Great War, South Africa imported a yearly average of over 8,500,000 lb. of beef. In 1919 there were 7,532,956 cattle in the Union, and during the seven years from 1915 to 1921 an average of over 22,000,000 lb. per annum was exported. The impetus given to cattle breeding by the establishment of an export trade during the Great War continued to gather momentum, and from 1926 to 1930 the numbers of the cattle in the Union each year exceeded 10,000,000.

In the economy of South Africa, horses have always been relatively of minor importance as compared with cattle. Save for Cape carts and other light vehicles, horses have been very little used for draught purposes in South Africa either upon the land or on the roads. Oxen, and to a less degree mules and asses, have been the draught animals ordinarily used wherever practicable except perhaps in the immediate neighbourhood of some of the larger towns. Even mules are less fitted than oxen to drag heavy loads over the steep and rocky tracks which are constantly met with. It is not, therefore, surprising to find that cattle

[1] *D.R.C. Third Interim Report*, p. 31.

have always outnumbered horses, and in a proportion which was approximately eight to one in 1904 and had increased to more than ten to one in 1926; and while down to 1922 mules and asses were rather fewer than horses, since that year the former have increasingly outnumbered the latter. Nevertheless, the horse takes a position of importance in the economic history of South Africa to which he would have no title merely as an animal of domestic use, for in the early years of the Cape of Good Hope, and down to about 1860, horses were among the principal exports of the colonists and one of their chief sources of wealth. Also it was the export of horses that brought the early Cape colonists into contact with other countries, notably India and Australia.

According to Dr. Theal [1] the first horses were brought to the Cape from Batavia in 1653. Others followed from Java in 1659. Soon the Javanese horses had increased to a sufficient degree to enable the Netherlands East India Company to supply them to the farmers. "In 1665 the first troop of sixteen were sold by public auction and brought an average of £4 5s. each." [2] After that the South African farmer became seriously interested in horse breeding. In 1689, to improve the breed, the Netherlands East India Company imported some stud horses from Persia. But it was Lord Charles Somerset, who became Governor of the Cape of Good Hope in 1814, the year when it finally became a British possession, who first saw the possibilities of horse breeding as a contribution to the establishment of an export trade. Thus, in 1816, he writes: "Next to the export of wine, I conceive the soil is best calculated for the export of horses, and were a market once rendered certain it might in a very few years be carried to an extent quite unlimited." [3] He was also soon able to find the certain market, for in the following year he announces the imminent conclusion of "a bargain to export 400 horses annually for the Madras Cavalry exclusive of a proportion of better horses for officers", a bargain which he calculated would bring about £24,000 a year into the Colony.[4] He maintained the position that horse-racing had contributed greatly to the

[1] *History and Ethnography of South Africa before 1795*, 3 vols., 1910; vol. ii, pp. 38, 97, 357.
[2] Ibid., p. 158.
[3] Letter to Earl Bathurst, see *Records of the Cape Colony*, edited by G. McCall Theal, vol. xi, p. 59.
[4] Letter to H. Goulburn, see ibid., p. 331.

improvement of the horses in the Colony and should be permitted to continue, in spite of the deprecation of the sport expressed by Earl Bathurst, the Minister for the Colonies at home, who feared that " the continuance of this practice may lead to much . . . irregularity by its effect on the younger officers of both the civil and military establishments among whom it is likely to encourage a spirit of gambling ".[1] In pursuance of the faith that was in him, Lord Somerset continued his efforts further to improve the breed of horses at the Cape, so that in 1825 he was in a position to express the view that horse breeding was then a more lucrative employment than any other description of agriculture. According to the Report of the Commission of Inquiry upon the Trade of the Cape of Good Hope of 1828[2]: " The general want of enclosures, and the indiscriminate admixture of horses of various breeds and ages in the open pastures, and the necessity which exists everywhere of giving protection to young horses against the attacks of wolves and wild animals, and of confining them frequently to stables, are circumstances which are unfavourable to the development of their early strength as well as their appearance." But, " the improvement that has been effected in the breed of horses by the frequent importation of good stallions from England has not only increased the foreign demand for them, but has excited a greater degree of attention and care than the Cape farmers are generally disposed to bestow upon their live-stock."

It was about this time that certain Indian nabobs visited the Cape of Good Hope and when there were much attracted by the Cape horses, with the result that they took back to India a considerable number of them. It was found that they stood the Indian climate exceedingly well and a valuable trade in horses with India was established. The Indian trade received a great impetus when, in 1849, a demand arose for Cape horses for the purposes of the Indian army. In that year Major Bower was sent to the Cape by the Madras Government to purchase one hundred horses as " a first supply of Cape horses " for the cavalry and artillery. He executed the commission satisfactorily, but not without

[1] Letter to Lord Charles Somerset, Dec., 1914 (*Records of the Cape Colony*, edited by G. McCall Theal, vol. x, p. 464).

[2] Reprinted in *Records of the Cape Colony* (*supra*), vol. 35, p. 371.

difficulty. He first had to convince the conservative-minded farmers of the value of the new outlet for the disposal of their live-stock and he found he had to compete for the best horses with the demands of Capetown dealers on behalf of their Indian private clients, who, at that time, were taking about fifty horses annually for their own use. About 100 went annually to Mauritius from the same source.[1]

Major Bower states that he bought practically all his first consignment of Cape horses for the Indian army within a radius of a hundred miles of Capetown. The Eastern districts of the Colony could not be relied upon as a recruiting ground for horses. That area was better adapted for sheep, and moreover the propensity of the neighbouring Kaffirs for horse-stealing did not encourage the white farmers to breed and keep more horses than were absolutely necessary. Nor was it always possible for the more favoured western area to supply all the horses wanted. There considerable difficulty was encountered in 1852 in purchasing remounts for the 12th Lancers, for one reason because of "the drought, and the desolation caused by the springbucks in the northern part of the colony; the country was absolutely alive with these beautiful but destructive animals . . . they had literally eaten every blade of grass and bush for hundreds of miles in some of the best horse-breeding districts as well as all the crops. Such misery and starvation among the live-stock of all kinds exist in these parts that, in the Hantam, the celebrated horse-country, we could only, on this occasion, purchase one horse in a condition sufficient to stand a journey to Cape Town".[2]

The trade with India reached its highest point and the Cape horse its highest perfection during the period 1850–1860. It was during that period that the Indian Authorities appointed a resident commissioner at the Cape, Lieutenant Colonel Apperly, for the purpose of acquiring horses as remounts. His term of office coincided with the period of the Indian Mutiny and he disbursed over £215,000 in South Africa for horses, mules, and forage, during the period of that outbreak.[3]

[1] See Major Bower's Report in *Papers relating to Purchase of Horses at the Cape of Good Hope for Public Service in the Colony and in India*, Capetown, 1857.

[2] *Papers relating to Purchase of Horses at the Cape of Good Hope for Military Service in the Colony and in India*, Capetown, 1857, p. 18.

[3] W. Grey Rattray, "Horse Breeding in South Africa," in *Agricultural Journal of Union of South Africa*, vol. iii, p. 205.

Various causes contributed to the decline of the horse-breeding industry in South Africa after 1860. By many farmers horse-breeding was abandoned in favour of ostriches, merino sheep, and goats, which were found to pay better. Pastoral conditions were changing about that time, inasmuch as it was no longer possible to trek to fresh territory when pasture became overstocked and over-eaten. Sheep and goats were better suited to the changed conditions of pasturing than horses, nor did cattle deteriorate to the same extent as horses with poorer feeding. " The introduction of the speculator brand of thoroughbred and indiscriminate breeding " [1] also contributed to the deterioration. This deterioration in Cape horses made the customers of the Cape the more readily disposed to go elsewhere, and to do so was made easier by the opening of the Suez Canal in 1869. India could thereafter procure remounts from Europe as readily as from the Cape. Then came the discovery of the diamond fields and the diversion of capital and energy thereto from farming. Moreover, for domestic use in South Africa, big draught or saddle horses were not much wanted, save as luxuries. As was said by a visitor to the Cape in 1849, " The wine farmer is proud of his riding horse, the corn farmer's vanity is his span " ; but most of the ploughing and other farm work was done by oxen or mules, while long journeys were more usually performed in Cape carts than on horseback, and small handy animals did the work required. But, although small and stunted in growth, " of the strength and endurance of the South African horses there is no question, they being capable of performing immensely long journeys over very bad roads in hot weather and on nothing but what they can pick up on the veldt, or a little hay forage." [2]

Thus it came about that when, in 1888, a representative of the Army Veterinary Department was sent to report on the horse supply of South Africa [3] he found that the class of animal that was imported into India before and during the Mutiny period had to a great extent died out and that only a very limited number of remounts of the heavier type, that is to say the type of horse that could compete with those

[1] Ibid.

[2] Reports by Army Veterinary Department of the War Office on the Horse Supply of South Africa, 1888 (*South Africa Pamphlets* (folio), vol. i, No. 8 in D. & C.O. Library).

[3] Ibid.

which were being imported into India from Ireland and Australia, were procurable.

But although the trade had been lost to South Africa it had not been lost to the Empire, for a sister Colony had been ready to take over and to develop with success the trade which South Africa had allowed to pass from her, and by a strange irony it was from South Africa that the successful rival learned it. In 1810 Australia acquired from South Africa the first horses that ever grazed upon the pastures of the island continent. In 1826 it is recorded that some twenty-eight horses went to Australia from South Africa. Thus was established an Australian industry that by 1860 had already outrivalled the South African trade with India in remounts. " The Australians soon found out the class of horses wanted for the Indian market, and bred to procure him, remedying each defect discovered by every means in their power. On the other hand, our breeders pursued their avocation in a listless haphazard fashion paying no attention to the oft reiterated warnings that the stock they were breeding was deficient in size, and it is chiefly to the careless apathy displayed that we owe the loss of our export trade." [1]

The breeding of woolled sheep would never have become South Africa's leading pastoral industry if the farmers of Cape Colony had been content to follow in the footsteps of the early Dutch colonists. The latter were, for the most part, well content with the original Afrikander sheep, probably for the reason that the animal satisfactorily supplied their wants. A traveller into the interior of Cape Colony in the closing years of the eighteenth century found the native sheep to be a long-legged and small-bodied breed, and apparently their only virtue was in the tail, where all their fat was found. The tail was " seldom less in weight than five or six pounds ", and choice specimens could wag a fatty tail of " more than a dozen pounds ". When melted, the tail fat was " frequently used as a substitute for butter and for making soap by boiling with the lie of the ashes of the salsola ".[2] As to the covering of the animals; " The wool of the sheep may more properly be considered as a strong frizzled hair, of which they make no kind of use except for stuffing cushions or mattresses. They

[1] W. Grey Rattray, op. cit., p. 213.

[2] John Barrow, *Travels into the Interior of South Africa* (second edition, 1806), vol. i, p. 67.

neither wash nor shear their sheep, but suffer this hairy coating to drop off on its own accord. . . . The skins are used only as clothing for the Hottentots, aprons for their children, bags for holding various articles and other household purposes." [1]

Prosperity came with the introduction of the Spanish merino breed.

During the enlightened rule of Janssens and de Mist, as the representatives of the Batavian Republic at the Cape (1803–6), its rulers were no longer content to regard the country merely as a port of call, and some amount of attention was given to the possibility of developing it as a colony. As one of the means to this end, Janssens attempted to convert the old Cape sheep into woolled sheep by introducing the merino ram, and the control of all sheep breeding was placed in the hands of a Commission to which drastic powers were given, in order to overcome the conservative prejudices of the Boer farmers and their objection to a breed of sheep which lacked the fat tails of the native breed. He also enjoined the Landdrosts to encourage by every means the exchange of the native Cape sheep for " those that give wool ".

The British Government, on its capture of the Colony for the second time in 1806, found that the Batavian Government, with a view to the improvement of the breed of sheep in the Settlement and the production of wool for export, had imported a considerable number of Spanish sheep, so that at the time of the surrender there were some 11,000 in the Colony, all of which the British Governor acquired in the hope that they would constitute the foundation of a new industry.[2]

Ironically enough, the foundation of the Australian wool industry was the purchase of a number of South African merinos at the end of the eighteenth century.

The progressive policy of the British Governors continued to be thwarted by the stolid obstinacy of the South African farmer in resisting change. In 1808, the Governor, the Earl of Caledon, promulgated an order, with penalties attached, requiring the substitution of wool-bearing Spanish rams for the African breed. But even the threat of making it a condition in land grants that African sheep were not

[1] Ibid., p. 68.
[2] *Records of the Cape Colony*, vol. v, p. 428.

to be kept thereon failed to overcome the farmers' prejudices in favour of native sheep, and the order fell into desuetude.[1]

At the very outset of his career as first British Governor of Cape Colony after its final cession to Great Britain in 1814, Lord Charles Somerset took steps to improve the breed of sheep in the colony and so help to lay the foundations of an export trade. Thus, in 1815, he imported Spanish rams and ewes, the purity of the breed of which was strictly guarded at the Government farm, and their lambs " annually distributed amongst such flocks as are desirous to obtain them with a view to producing an exportation of wool ".[2] Moreover, it was ordered that all Spanish wool brought from the interior to the Cape market should be admitted duty free.[3]

The " 1820 Settlers ",[4] having none of the ingrained prejudices of the old Boer farmer, devoted their attention to the breeding of fine-woolled sheep and laid the foundations of the wool-producing industry of the eastern districts of the Cape Province. During the 1860's, when horse-breeding was in a depressed state, the woolled sheep industry flourished and spread beyond the Cape to the Orange Free State, the Transvaal, and Natal.

South Africa's debt to the merino sheep lies largely in the circumstance that it has turned the semi-arid regions to profitable use. The Karroo has a vegetation which " consists principally of numerous varieties of highly nutritive edible shrubs much relished by sheep, and having great drought-resisting qualities ".[5] The grass veld, which constitutes the bulk of the pastoral area of the Union and includes the whole of the eastern part of Cape Province, has a higher sheep carrying capacity owing to the greater rainfall.

In parts of South Africa when, exceptionally, there is a heavy rainfall, mutton-producing sheep can be successfully

[1] *Records of the Cape Colony*, vol. x, p. 420.
[2] Ibid., vol. xi, p. 331.
[3] Ibid., vol. xxiv, p. 502.
[4] See Chapter 2.
[5] *Journal of the South African Department of Agriculture*, 1924, vol. viii. But in a prolonged period of drought " these bushes are first cropped to the stem and then trodden into the dust by sheep in search of food. . . . The roots of the bush are generally killed or severely damaged ". So one result of the drought of 1934, which was " of a duration and intensity unparalleled so far as official records or long-lived memory can recall ", was that " our sheep veld will not regain its strength for years " (*Times*, 19th October, 1933).

raised, but the pastoral conditions of South Africa generally are such that the breeding of the merinos is likely to remain the favoured industry.

Drought conditions constitute one of the more serious of the many handicaps against which the South African farmer has to struggle and in respect of sheep the losses due to drought are especially severe. The direct causes of such losses are scarcity of grazing and diminished water supplies at the drinking places.

The Drought Investigation Commission of 1923 [1] found that " the prevailing practice of kraaling, that is to say, of concentrating sheep at fixed places during the night mainly as a means of protection against jackals, was instrumental in increasing drought conditions and was detrimental to the well-being of the animal and to the value of its wool ". On the other hand, " experience has shown that the system of running sheep day and night in suitable paddocks is attended by very small drought losses." Kraaling leads to a notable destruction of the vegetal covering by trampling, and the disappearance of such covering results in erosion. The grazing area during a period of drought recedes further and further from the kraal, which means a gradually lengthening daily journey to and from the feeding ground for sheep perhaps already weakened as a result of insufficient food. Again, there is the difficulty of providing sufficient water for the stock. " Through the limited number of drinking places, stock has often to travel long distances to water when in a weakened condition." [2] In the coastal regions of the Union it is common for stock to be driven between 2 and 4 miles to water,[3] while " in the north-west of the Cape Province, the unfortunate animals cannot get water every day but have to go alternate days without water—at such great distances do the drinking places lie from the grazing grounds ".[4]

The Commission estimated that if all the areas devoted in 1923 to sheep-farming were properly paddocked, it would be possible to run 154 sheep where, under existing conditions, there were only 100. Moreover, " not only do sheep under free-grazing conditions produce more wool, but they produce better wool, and owing to their not sleeping in

[1] Final Report (U.G. 49—1923).
[2] Ibid., p. 8.
[3] See ibid., Map ix.
[4] Ibid., p. 37.

kraals, the wool is much cleaner. The result is a higher price per pound for the wool." [1]

But the paddock system is expensive, in that it implies fencing, a water supply in each paddock, and the control of the jackal. To assist the farmer in exchanging the wasteful and destructive kraaling method for paddocking, provision has been made whereby farmers can obtain loans from the Land Bank for the erection of jackal-proof fences on their farms [2]; and the State has put a price upon the jackal's head. The provision of water for stock is part of the irrigation question which has become one of the major matters with which the Government is concerned.[3]

The Angora goat, like the merino sheep, is one of the foreign imports that has helped to bring prosperity to South Africa. It was in 1838 that pure-bred Angora goats were brought into the Caledon District from Turkey, the country which until then held a monopoly of the mohair trade. In 1840 a number of goats were imported from Angora and were crossed with the native goat and further improved by the importation of a few thoroughbreds carefully selected. Soon the Angora flocks of the Karroo were the finest and largest in the world.[4] Joseph Mosenthal, who arrived at the Cape of Good Hope in 1839, and his brother Adolph, the founders of the great South African firm of Mosenthal, Sons, and Co., played a great part in the introduction into South Africa of the Angora goat and the consequent addition of mohair to its products. It is said that Joseph Mosenthal first recognized the suitability of the climate and the veld of the Graaff Reinet district for the pasturage of the animal.

The mohair industry has a record of steady progress. Up to 1886, South Africa was steadily approaching Turkey's output, and for the twelve years following the two countries shared the market in approximately equal proportions. In 1899 South Africa began to get ahead of its only rival, and in 1913 was exporting two and a half times as much as Turkey, " though in the matter of quality the latter still has the lead ".[5] Most of South Africa's output came to England where it was spun into yarn by the Bradford mills.

The predominance of South Africa in the production of mohair and of Bradford in its manufacture was, however, soon challenged by the United States of America. Turkey

[1] Ibid., p. 39. [2] See Chapter 8. [3] See Chapter 7.
[4] See *Journal of the Union Department of Agriculture* (1924), vol. viii.
[5] *Agricultural Journal of the Union of South Africa* (1913), vol. vi, p. 596.

had closed Asia Minor to the exportation of Angora goats, and when the Americans, in 1899, formed a syndicate with a capital of £250,000 for the purpose of securing Angora goats to improve the stock of their own country, Cape Colony's answer was a resolution of the House of Assembly declaring it was "advisable in the interests of Angora breeders to prohibit the exportation of Angora goats for breeding purposes", and then an Act imposing an export duty of £100 on every ram or ewe exported from Cape Colony, except to a South African State or Territory which had imposed a similar export duty. The other South African Governments, including that of Mozambique, co-operated with Cape Colony and adopted similar legislation.[1]

Until 1913 Germany had taken 75 per cent of Bradford's export of mohair yarn, but thereafter for some ten years the United States was Bradford's chief customer. At the end of that period the United States were spinning a good deal of their own yarn, the raw material being obtained from South Africa and Turkey.

South Africa's restrictions on the export of Angora goats remained the settled policy until 1925. It was then realized that the area in the Union that is suitable for Angoras is limited and that in so small a market the demand is apt to be unstable. It was hoped that the surrender of the monopoly and the consequent increase in the output of the raw material, which had become in increasing demand for motor car upholstery and was also used for furniture upholstery and clothes linings, would stimulate the demand for mohair, from which increased demand South Africa would benefit. In 1925 the first consignment of South African bred Angoras was shipped to the United States, and since that time that country has gradually approached the point where its production of mohair equals the demand of its own mills.[2]

Although the breeding of ostriches and the sale of their feathers has been but a temporary phase in South African history, nevertheless, it was an important phase in the development of pastoral farming, inasmuch as it left behind as permanent assets to the country the lucerne crop and many

[1] *Report of Department of Agriculture of Cape of Good Hope for 1908* (G. 31—1909).

[2] See *Farming in South Africa.* H. Stoker, "Review of the Mohair Industry," vol. v, 1930–1; F. J. du Toit, "Future of Mohair," and S. J. de Swardt, "Position of the Angora Goat Industry," vol. viii, 1933; F. J. du Toit, "Fluctuations in the Mohair Industry," vol. ix, 1934.

hundreds of miles of fencing. On the other side of the account it has to be recorded that there was a time when ostrich breeding was a much easier way of making money than general farming, a fact which constitutes one of the reasons why the progress of general farming in South Africa was delayed. So long as the most profitable use to which land could be put was ostrich-farming, South Africa was left to import largely its food supplies.[1]

The beginnings of the ostrich-farming industry go back to the middle of the nineteenth century, when a few farmers caught and domesticated some of the wild birds and bred from them. It is said that from £20 to £30 was paid for the full plumage of one of these early commercialized ostriches.[2]

"The domestic ostrich of to-day produces very far superior plumes than were obtained from the wild bird half a century ago. The reasons for this are not far to seek. The bird is by no means fastidious as regards the nature of its food, but the character of its plumage is highly responsive. Instead of simply letting their feathered stock pick up a precarious existence on the veld, the enlightened farmers now cultivate as much land as can be brought under irrigation by gravitation and pumping, put it under lucerne and divide it into paddocks for the grazing of their birds, giving them at intervals "hard food" in the shape of maize and mealies, and also perhaps, if they have the means of so doing, giving them a spell of veld feeding. . . . Besides providing for careful feeding, the farmer has also applied himself to careful selective breeding. In our district, in natural response to the lucrativeness of feather production, the value of fertile irrigable lands has risen enormously, so much as £200 per acre being not uncommon, and consequently the farmer finds that only birds of superior strain are remunerative."[3]

[1] Giving evidence before the Dominions Royal Commission, a member of the Ostrich Farmers' Association of Middleburg said: "I was of opinion that I could develop a cattle and dairy industry with advantage, and I imported a dozen shorthorns of high-grade milking stock, but my returns from these are a mere bagatelle compared to a similar value invested in ostriches. Among farmers in the Karroo there is a standing joke that cattle are six per cents, sheep ten per cents, and ostriches 100 per cents." (*D.R.C. Minutes of Evidence* (Cd. 7706), Q. 4485.)

[2] *Agricultural Journal of the Union of South Africa*, vol. v, 1913, p. 362.

[3] *D.R.C. Minutes of Evidence, 1914* (Cd. 7706), evidence of Representatives of Oudtshoorn Farmers' Association, Q. 4080. The points of a good ostrich feather are length, width, density, shapeliness, lustre, and strength of flue.

The export of ostrich feathers in any substantial quantity began in the late sixties. The trade reached its peak in the period 1910–14. In the year 1913, exports amounted to 1,023,307 lb., valued at £2,885,748. Thereafter a decline set in. Large hats trimmed with feathers had, at the dictation of fashion, to make way for small hats unadorned by the relics of living creatures, and the appeals sent from South Africa to Paquin and Worth at Paris to make it their business to see that ostrich feathers were written up in ladies journals all over the world seem to have fallen on deaf ears.[1] Perhaps their use still lingered in the stately functions of Court circles, but one result of the Great War was greatly to diminish the opportunities for such displays, and by 1929 the export of ostrich feathers from South Africa had sunk to a mere 77,065 lb., valued at only £42,954.

At the height of his prosperity the ostrich was a veritable thoroughbred among birds. There was a time when a good breeding pair sold for £500, and as late as 1914 good birds could be sold for £100 the pair,[2] the price of an ordinary two-year-old bird then being about £30, while chicks a week old, of unimpeachable parentage, could be sold for £5. Also they were investments at least as permanent as many gold mines, for at 30 years of age an ostrich may still be capable of breeding and producing good feathers. If only their feathers would again come into favour for purposes of adornment the ostrich and his capabilities as a money-maker would be a fit subject for the best efforts of the writer of company prospectuses. " If you have a valuable stallion

[1] The feeling that possibly the plucking of ostrich feathers entailed cruelty to the birds may have assisted in their fall into disfavour. This suggestion of cruelty the South African farmer has been at much pains to dispel. " The process of plucking is as follows: The bird is caught round the neck by a kind of shepherds' crook; as soon as he is caught one man takes hold of him at the tail, and one at each wing. He is then led into a triangular arrangement and the feathers are then removed, the wing or white feathers being clipped and the rest extracted by hand. We only cut the wing feathers and pull out the stumps two months later when they are ripe. We use a pair of pliers to draw them. It is practically painless, just the same as cutting your nails. The reason why we cut the white or wing feathers two or three months before they are ripe is to preserve the points. If you allowed the feather to remain on the bird for eight months, by the time the eight months were over the points would be completely spoiled " (*D.R.C. Minutes of Evidence, 1914* (Cd. 7706), evidence of Representatives of Oudtshoorn Farmers' Association, Qs. 4142–3). African ostriches were excepted from the prohibition on the importation into the United Kingdom of the plumage of birds imposed by the Importation of Plumage (Prohibition) Act, 1921, the purpose of which was to protect birds in danger of extermination or whose feathers were obtained in a manner involving cruel methods.

[2] *D.R.C. Minutes of Evidence* (Cd. 7706), Qs. 3317–9, 3697–8.

and a valuable mare you can only get one foal per annum, but from a good pair of ostriches you can get anything from thirty to sixty chicks, or putting it at a low estimate, you may say from twenty to forty chicks per annum. And within two years those birds may be worth individually almost as much as their parents. So it is easy to understand what large profits can be made in ostrich-farming quite apart from the production of feathers." [1] Moreover, the ostrich had a stud book of his own which, among other uses, served to make effective the Government prohibition on the export of live birds or their eggs. The South African farmer had a monopoly of the best ostrich feathers, and he was determined not to share the birds that produced them with his competitors, whether in Australia, the United States, Argentina, or Egypt.

The Oudtshoorn district in the South Coastal region of Cape Colony was found to be specially suitable for the growth of lucerne. Lucerne is the staple food of the domesticated ostrich, varied in some degree by barley and maize. For this reason and because its dry climate suited the birds, the Oudtshoorn district became the centre of the ostrich farming industry and Port Elizabeth the outlet for the export of the feathers.

The indigenous Central Asiatic forage plant, called lucerne in Europe and by its Arabic name of alfalfa in Argentina and the Western States of America, is the legacy of the ostrich farmer to the live-stock industry. Its migration to South Africa and in particular to the Cape Province was the foundation of the ostrich breeding industry. Then it migrated from the Cape to the Transvaal and the Orange Free State [2] and when the South African farmer had to turn from ostriches to cattle, lucerne hay provided a good proportion of the winter feeding stuff, the use of which marks so great an advance on earlier agricultural methods. " The growth of wheat and maize depends largely upon the amount of available nitrogen in the soil. If it is not in the soil it must be supplied by some artificial fertilizer, or these crops will not thrive. With lucerne it is different, since, as a legume, it has the power of converting the nitrogen of the atmosphere into available plant food. . . . Again lucerne is tap-rooted, that is to say, it has a long central root, which

[1] *D.R.C. Minutes of Evidence, 1914* (Cd. 7706). Evidence of Members of the Ostrich Farmers' Association of Middleburg, Q. 4461.

[2] The Cape Province still produces by far the largest proportion of lucerne. In 1928–9, out of a total of 89,109 morgen under lucerne for the Union, the proportion of the Cape was 78·3 per cent.

sometimes penetrates to an almost inconceivable depth. By means of this strong-growing tap-root the plant is able to draw supplies of water and plant food from depths far below the range of ordinary field crops. In one instance in the State of Nevada, the roots of lucerne were found to have penetrated to a depth of 129 feet." [1] While lucerne is the staple crop under irrigation, and while the better the irrigation the better the crop, its deep roots enable it to dispense with water for long periods. "It can go without water for eighteen months sometimes." [2]

Other attractive characteristics possessed by lucerne are that it is exceedingly prolific and very long-lived. Whereas with maize only one crop a year can be grown, four to six crops of lucerne a year are possible. But for weeds it would be a perennial in the truest sense of the word. As it is, it grows six, eight, or ten years without ploughing.[3]

The Abyssinian grass known as teff has helped the Transvaal to more prosperous times just as lucerne has brought prosperity to the Cape Province. By its virtue as a winter feed for stock, "teff has raised scores of small Transvaal farmers from poverty to comparative comfort and has been largely instrumental in putting the dairy industry of the Witwatersrand on its feet." [4] Lucerne belongs to the Karroo and other arid regions where irrigation is practised. Teff flourishes on the uplands, in particular the Transvaal high veld.[5] In teff, South Africa has an asset peculiarly its own.

[1] Dr. W. Macdonald, *Farming in South Africa*, pp. 93–4. The Director of Irrigation for the Union of South Africa told the Dominions Royal Commission in 1914 that he had seen roots growing 20 feet deep (*D.R.C. Minutes of Evidence* (Cd. 7706), Q. 56).

[2] *D.R.C. Minutes of Evidence* (Cd. 7706), Q. 55. A farm was quoted where there had been no water for nine months, and still the lucerne reached sub-soil water and had grown to 2 feet high (ibid., Q. 4280).

[3] *D.R.C. Minutes of Evidence* (Cd. 7706), Q. 4084. The same witness said he had a couple of fields of lucerne twenty-five years old; and Dr. W. Macdonald refers to an acre of lucerne in Graaff Reinet, one of the most important of the lucerne growing districts, "which was planted eighty years ago." This patch "yields annually a heavy crop and has never been manured". Moreover, "in New Mexico there are fields which have been under lucerne for more than a century" (op. cit., p. 98).

[4] J. Burtt-Davy, "Teff" in the *Agricultural Journal of the Union of South Africa*, 1913, vol. v, p. 27.

[5] In 1929–1930 the areas respectively under lucerne and teff in the different Provinces as follows:—

	Lucerne, morgen.	*Teff, morgen.*
Cape	74,267	4,692
Natal	1,538	5,503
Transvaal	5,864	72,489
Orange Free State	11,786	52,603
	93,455	135,287

The introduction of teff into South Africa took place in 1887, when Kew Gardens sent to the Director of the Natal Botanic Garden at Durban for testing purposes "a small bag of seeds of this plant, which is used in Abyssinia for making bread". In 1889 the Director reported that it was "highly thought of as a quickly growing grass, though as a cereal it proves to have no value in Natal".[1] Its establishment as a farm crop in South Africa, however, only followed after its re-introduction by Mr. J. Burtt-Davy, the Government Agrostologist and Botanist, in 1903, and successful experiments by progressive farmers in different parts of the country. Even then, as so often happens, teff had to wait for a happy accident to disclose its value and possibilities and make it commercially a success. "A farmer, having more teff-hay than he required for the consumption of his stock, decided to sell the surplus and sent it to the Johannesburg market . . . none of the buyers knew the stuff and it finally went for bedding. He and others continued to send small lots, which also were bought for bedding. As bedding, teff is softer than the ordinary bedding . . . and one lot was therefore selected by the buyer for a racing stable, as being superior to the ordinary. Rumour has it that the owner of the stable found that his racers ate their bedding in preference to the hay in their racks. Realizing that the price he had paid for the 'bedding' was much lower than that of lucerne hay or oat forage, he decided to buy more and feed it. To his surprise his horses not only ate all the teff hay but began to put on condition: then he bought up all that was put on the market and called for more. Others got wind of this and the price rose. It was not long before it had risen from 1*s.* per bale or £1 per ton till it commanded the same price as lucerne hay, i.e. 7*s.* 6*s.* per 100 lb., or £7 10*s.* per colonial ton. Once a market was established the production went up by leaps and bounds; the markets were soon flooded and the price fell to a normal figure; but by this time farmers had learned the value of teff-hay for consumption on their own farms, and when it did not pay to rail it to market they fed it."[2]

The value of teff as a hay crop "lies in its palatability,

[1] Quoted by J. Burtt-Davy in the *Agricultural Journal of the Union of South Africa* (*supra*), p. 28.

[2] J. Burtt-Davy, "Teff," in *Agricultural Journal of the Union of South Africa*, 1913, vol. v, pp. 32–3.

high nutritive value, narrow albuminoid ratio (for a grass-hay), heavy yield, rapid growth, drought resistance and ability to smother weeds ".[1] It does not produce the four to six crops a year of which lucerne is capable, but " it makes very rapid growth, maturing in seven or eight weeks from time of sowing, and if cut before the seed develops, a second crop can be obtained from the same stand : it makes an excellent catch crop for hay, two successive cuttings being obtainable during the summer on un-irrigated land ".[2]

One item in the meagre list of products of the early Dutch farms which have developed into staple products of the country belongs to the agricultural, rather than the pastoral, side. The mealie patch has become the maize crop. While far from occupying the dominating position in the national life that is occupied by wheat in Canada, maize is easily the most important of the cereal crops of South Africa. In bulk it is by far the greatest of the grain crops.[3] Whereas in 1929–30 the country produced only about 70 per cent of the wheat required for its own consumption, so that 30 per cent had to be imported,[4] maize not only satisfied the country's own needs but had a surplus for export which in 1929 was valued at over £2¼ millions. For the satisfaction of the country's own needs, maize is indispensable. Although the native acquires a taste for wheat bread when he gets to the towns, mealie porridge remains the staple food for the great bulk of the native population and is consumed, though as a supplemental rather than a staple article of diet, by the white races. And as a cattle food it is the necessary adjunct to successful stock-raising. Indeed, by many it is regarded as " better to make our maize walk to market on four legs " than to export it. As a raw material for industrial purposes,[5] entering as it does into the manufacture of such articles of commerce as starch, glucose, oil-cake, glycerine, and industrial alcohol, it is likely to be the subject of an ever increasing demand.

[1] Ibid., p. 27. [2] Ibid., p. 31.

[3] In 1928–9, the total production of maize in the Union was 3,738,154,000 lb. Wheat, the next largest crop, was 446,088,000 lb., or about one-eighth as much. Next in order came oats, barley, and rye: these are mainly grown to provide green food for stock.

[4] *Official Year Book of South Africa*, 1929–1930, p. 396.

[5] " Over 100 commodities can be wholly or partially manufactured from maize " (*Report on Grain Elevators in South Africa*, Pretoria, 1918 (U.G. 38—1918), p. 56).

Maize is not a naturally dry land crop. The export of maize in appreciable quantities began about 1907, but there was a serious set-back to the new prosperity then thought to have been inaugurated when, between the years 1910 and 1914, there was a period of drought during which " mealies which had been shipped to Europe had to be re-purchased and brought back to this country again to supply the wants of the country owing to the short-fall on account of the drought ".[1] Accordingly, as is to be expected, the maize area is found in the region of greater rainfall in the east. The region of greatest production is that part of the southern Transvaal and the Orange Free State known as the " Maize Triangle ", which is bounded by a line running east and west from Machadodorp through Pretoria to Mafeking and from those extreme points southward to Zastron in the extreme south of the Orange Free State. The only other considerable maize region is the coast strip from approximately Durban to East London. In the Cape Province the only maize-producing region of any importance is the Transkei.

South Africa possesses advantages of climate which enable it to produce a superior grain. It is one of the comparatively few regions where there is a moderate rainfall during the hot season and a dry winter, conditions peculiarly favourable to the cultivation of maize and cotton. " In the maize belt in America the planting season is very short. In the best places I know of they only have three weeks to put in their seed, but here we have three months to put the crop in. Then in America the frosts are severe, and you have to be in a hurry to get the crop off the land. That restricts the output—shorter sowing and shorter reaping. In this country we have a longer season and can reap at any time. In winter we are absolutely dry. Once our maize gets ripe we can take our own time to reap it, and that is partly the reason why we can produce maize of such excellent quality. We have not to kiln-dry it. The sun dries it." [2]

Again, " We have an ample average rainfall at the right season of the year, and phenomenally favourable winter weather for the natural production of the quality of grain most suitable for shipment, whereas the Argentine is always hampered by her autumn rains, which often

[1] *D.R.C. Minutes of Evidence*, 1914 (Cd. 7706), Q. 5441.
[2] *D.R.C. Minutes of Evidence*, 1914 (*supra*), Q. 5682.

seriously damage the crop." [1] The lower moisture content of South African maize makes it specially suitable for export. On the strength of advantages such as these, optimists prophesy that South Africa is destined to become the maize granary of Europe after supplying its own huge domestic demand both for human consumption [2] and for stock-raising.

As with wheat in Canada, so with maize in South Africa, agricultural research has improved the quality of the crop and enabled it to be grown on land which at one time was regarded as hopeless for such a purpose. At the beginning of the present century, to try to raise maize in a region with an average rainfall of only 18 to 20 inches was looked upon as waste of time, and waste of time it would have remained had the old methods been persisted in. "To plough roughly an area of ground, throw around an uncertain quantity of seed in the most haphazard manner, to harrow such seed into the soil and trust to Providence for a heavy crop, is a method which is falling more and more into disuse. To sow seed which has been taken from the cob, irrespective of its quality or its trueness to type, and to expect a paying crop from a piece of land which is literally a forest of weeds, is to demand too much from nature, even in the Transvaal." [3] It has been found that the effects of a small rainfall can be surmounted by deeper ploughing, and this, with less slipshod methods of cultivation, has enabled paying crops to be produced in a region with a 20 in. rainfall only. Moreover, with the introduction of new varieties of maize, it has become possible to determine which varieties flourish best in droughty climatic conditions and which are most profitable in the more favoured regions with the longer growing season.

Notwithstanding her advantages in the way of relatively cheap land, cheap labour, and a climate exceptionally favourable to the culture of maize, right down to 1914 South Africa showed the lowest yield per acre of any maize producing country, with the single exception of Asiatic Russia. Thus in Canada, in that year, the average yield of maize per acre was 54·39 bushels, Argentina 32·55

[1] Ibid. Memorandum, by J. Burtt-Davy, p. 272.

[2] In 1914 the Rand Mines alone were taking over 750,000 muids (2,250,000 bushels) per annum (ibid.).

[3] *D.R.C. Minutes of Evidence*, 1914 (Cd. 7706): Evidence on behalf of Transvaal Agricultural Union, p. 256.

bushels, the United States 25·84 bushels, and Australia 24·89 bushels. In that year the figure for South Africa was 14·29 bushels.[1] This unfavourable comparison was due, in some measure, to the " tendency for farmers to pride themselves on the acreage they have planted, rather than the yields obtained per acre ",[2] and in part to the continuous system, under which the same land is planted with maize year after year. By a growing recognition of the value of intensive cultivation and of the fact that each district has its idiosyncrasies of soil and climate and that the best results follow by ascertaining the varieties of seed best suited to particular districts, as well as by improved methods of cultivation and fertilization and by substituting for the continuous system a system whereby maize is grown in rotation with other crops, the yield per acre has since the period of the war been substantially increased.[3]

The contribution of South Africa to the total maize production of the world is steadily increasing, but as yet is little more than 2 per cent.[4] The comparatively small export that this proportion makes possible renders it difficult for brokers to deal in " futures " as is done in respect of Argentine maize, and prevents the South

[1] *Report of Committee on Grain Elevators in South Africa*, Pretoria, 1918 (U.G. 38—1918), p. 28.

[2] Ibid., p. 32.

[3] For yield per morgen in different years, see *Official Year Book of Union of South Africa*, 1929–30, chap. xiii.

It should be noted that South African agricultural statistics for the early years of the industry are of little value.

The Committee of Inquiry into Grain Elevators in South Africa, which reported in 1918 (U.G. 38–1918), could find, in that year, no reliable statistics with regard to grain production in the union. " Statistics are available showing the quantity of grain dispatched by rail for local consumption and export, but these take no account of the maize which never comes on to the railways, such as grain consumed on the farms (European and native), produced and consumed in the native territories, and carted direct from farm to producer." The reason is that, until the year 1918, no attempt was made to obtain complete statistics of agricultural production for the Union. The first complete census of the agricultural and pastoral industries for the whole of the Union was taken in 1918, under the Statistics Act, 1914, and others from time to time. Now statistics of the main items of agricultural and pastoral production are collected annually and a complete census of agriculture is undertaken quinquennially. The 1930 census was taken in conjunction with the World Census of Agriculture. The annual enumeration of agricultural production was suspended as from 1930–31 but resumed as from 1933–34.

[4] The approximate figure is for the year 1929. For the same year the proportion of the United States was 58 per cent, and of Argentina 7 per cent. Argentina, however, exported by far the largest proportion of its production.

African maize export from influencing appreciably the price of the commodity in the world's markets.

South Africa has never been a wheat-exporting country, save occasionally during the nineteenth century, when periods of shortage, during which wheat had to be imported from abroad, alternated with sporadic periods of surplus, during which the excess over the local demand would be disposed of by exportation. During the eighteenth century the restrictions on foreign trade, and the high cost of transport, prohibited the export of any surplus wheat. From the last decade of the nineteenth century, by reason of the rapid growth of population under the stimulus of the mining industry, South Africa has been a large and regular customer in the wheat markets of the world, and in 1927–8 the position was arrived at that more than 50 per cent of the total consumption of wheat in the Union was imported.[1]

The impediments to the production of enough wheat to satisfy even the domestic demand are indicated by various considerations. In the first place, the only part of the Union where climatic conditions are favourable to wheat-growing is the south-western region of Cape Province, for it is only there, in such specially favoured districts as Malmesbury, Caledon, Piquetberg, and Bredasdorp, that there is an annual average rainfall of over 20 inches and a rainfall more than 50 per cent of which falls in the winter months, that is to say, May to September. By far the greater part of the Union is in the summer rainfall area, having more than 50 per cent of its total rainfall from October to March, and of the winter rainfall area, which is confined to the coastal strip along the west, south-west, and south, a good deal of the western coastal strip is desert, with an annual average rainfall of less than 10 inches. The Orange Free State grows a certain amount of wheat as also does the Transvaal, but as both these Provinces are wholly in the summer rainfall area, the rain comes at the wrong time for the wheat-grower. The quantity of wheat grown in Natal is negligible.[2]

[1] The importation of wheat into the Union (including flour reduced to the equivalent of wheat) during the ten years 1912–1921 indicated an average annual shortage of 1,337,546 bags, each bag of wheat being 200 lb. (*Journal of Union Department of Agriculture*, 1922, vol. iv, p. 429).

[2] In 1929–1930 the percentages for the different Provinces of the total wheat area of the Union were Cape 65; Orange Free State, 25·3; Transvaal 9·6; Natal 0·1.

Another unfavourable factor in the problem of wheat production in South Africa is the low average degree of fertility of the soil in the winter rainfall area. This low fertility is in part a natural condition and in part is " the result of unscientific and haphazard methods of cultivation ".[1] In 1865 the average yield of wheat produced by the Cape was 7½ bushels per acre. By the end of the century, agricultural methods had improved and the use of fertilizers had become more common, with the result that there were increased returns for a number of years " until signs of exhaustion of the soil in the absence of scientific manurial treatment and proper rotation of crops became apparent ", and then the fertility diminished to the 1865 standard.[2]

For the period 1914–1923, when the average yield of wheat per acre for the Union of South Africa was 8·7 bushels, the corresponding figure for Canada was 16·0, and for Australia 11·6. These figures amply demonstrate the comparatively poor fertility of the soil in the wheat-growing area of the western Cape, " especially when it is taken into consideration that in these countries little or no chemical fertilizers are used in the cultivation of wheat, whereas in the Cape the cost of such fertilizers has become an important item in the cost of producing wheat." [3]

But while fertilizers substantially improve the fertility of the soil, they will not alone solve the wheat problem for the reason that the humus content of the grain lands of the south-western Cape needs to be enhanced by the introduction of organic matter, whether animal manure or grain manure—the latter consisting of certain green crops which can be ploughed into the soil.[4]

Nowhere in the Union are the conditions favourable to wheat production found in combination. Where the conditions of rainfall are favourable, the soil is of low fertility. Where the soil has greater natural fertility, climatic conditions are unpropitious. As to the Cape wheat growing area, " in addition to low yields and high cost of fertilizing, the wheat farmers in the western Province

[1] *Report on Inquiry into Methods and Costs of Wheat-growing and Milling* (Board of Trade and Industries Report, No. 67, Capetown, 1926), p. 4.
[2] Ibid.
[3] Ibid.
[4] *Report on Methods and Costs of Wheat-growing and Milling* (*supra*), p. 13.

have to contend with seriously fluctuating returns and unreliable weather conditions." In the other areas, that is to say those with a summer rainfall, " the growing of wheat is undertaken under conditions of very distressing fluctuations and serious risks owing to periodic droughts, locusts, and hail devastation, and other natural disabilities." [1]

Nevertheless, by the extension of irrigation it is accepted that the risks imposed by nature can be considerably reduced and the production of wheat in the summer rainfall and semi-arid regions considerably increased. That produced in the Transvaal is almost wholly grown on irrigated lands. Also the practice of dry-farming methods [2] promises further opportunities for wheat growing in districts where the rainfall during the season of growth is insufficient of itself to develop the crop.

Agricultural research has also played its part in trying to solve the wheat problem. Since 1907 many kinds of wheat have been grown and tested at the Potchefstroom Experimental Farm with a view to finding varieties which were an improvement on the local wheats. Effort has been specially directed to the breeding of strains which are rust-resisting, rust being a plant disease to which wheat in South Africa is particularly subject. The ambition is to produce the *Red Fife* wheat which had been the standard crop of Western Canada before it was superseded by the famous *Marquis*.[3]

The view that intensive and scientific cultivation on the part of the farmer and the imposition of higher duties on imported wheat by the Government will, between them, make possible not only the production of a greatly increased quantity of wheat but also a lowering of its price to the world level is regarded by few as other than too optimistic. " A higher duty in conjunction with improved methods of wheat-growing will undoubtedly lead to a considerable increase in the production of wheat, probably to such an extent as to supply the whole of the Union's requirements, and the improved methods may most likely have the ultimate effect of reducing the cost of production per bag, but the Board feels convinced that, even in the case of such a reduction in cost, the serious limitations of climate and soil

[1] Ibid., p. 6. [2] See p. 77.
[3] See Vol. II of the present work, p. 496.

will keep the cost of production of wheat in South Africa on a higher level than in Australia, Canada, United States, or Argentina. All the experts consulted by the Board concurred in this view and they were very emphatic in denying the possibility of bringing the cost of producing wheat and the price of wheat in South Africa down to the world's level." [1]

From early times South Africa has shown itself able to grow sub-tropical produce, and the modern inclination of the farmer towards the agricultural side manifests itself in the ever-widening range of such products. Wine, brandy, and tobacco are among the oldest of the products of the Cape, and, save for brief and spasmodic periods of prosperity, they have all the time been the most struggling. In the early years of the nineteenth century it seemed that the foundations were being laid of a substantial export trade in Cape wine, but the competition of the older wine-growing countries proved too formidable and vested interests in the mother country too jealous. During the intervening century, the wine, brandy, and tobacco produced have substantially been for home consumption. In the absence of an export trade of any serious dimensions, prices have been very unstable. A year of plenty would attract more growers and bring about an increased acreage devoted to the growing of the vine or of tobacco, as the case might be. Consumption in the Colony could not expand to absorb the increased output and the reaction in prices resulting from the consequent over-production was violent and often disastrous.[2] Suggestions as to possible alternative uses for the produce of the vine and the tobacco plant have not been wanting. Thus, the Co-operative Wine Farmers Association of South Africa, after the disastrous wine glut of 1920–1, advised their members to turn their grapes into raisins, advice which must have been as little palatable to growers, whose ambition it was to produce wine for export, as was the suggestion of the Dominions Royal Commission that a country, whose worthy ambition it was to produce fine tobacco for smoking, should consider " the possibility of South African tobacco

[1] *Report on Methods and Costs of Wheat-growing and Milling* (*supra*), p. 12.

[2] Thus, in 1921, the total production of brandy in the Union was 2,803,914 gallons, of which 50,381 gallons were exported. In 1923, total production was only 1,486,303 gallons, and exports were 42,291 gallons (*Official Year Book of South Africa*, chap. xiii).

for the manufacture of a sheep dip for local use and even for export ".[1]

Government support in the shape of expert assistance to the two industries has been lavish; again and again the statement has been made that in South Africa are found a climate and soil peculiarly favourable to the cultivation of both the vine and the tobacco plant; and the ambition to establish an export trade in both wine and tobacco has long been present; and yet neither viticulture nor tobacco-growing has made any very solid contribution to the general economic development of the country.

The fundamental reason why the ambition to build up an export trade has proved so difficult of accomplishment may be found in the circumstance that probably no two products can display the same great variety of appeals to different tastes as can wine and tobacco. In South Africa, both the wine and tobacco industries were founded in the early days of the Colony and so are old enough for the products to have developed characteristics of their own. To those characteristics the South African consumer has become accustomed; the European has acquired other tastes. It is frankly admitted, on official authority, that "the flavour and aroma of Union-grown tobacco are peculiar and as a rule do not appeal to the consumer who is unaccustomed to them".[2] The same remark could be applied, although perhaps with rather less force, to the produce of the vine. To attempt to build up an export trade in wine and tobacco with countries whose demands for the vintages and brands to which they have grown accustomed have long been fully met from elsewhere is a bold undertaking.

Climatic conditions have localized grape production in the south-west of the Cape Province, for it is there that the determining factors in grape culture, namely temperature and rainfall, are most favourable. Seeing, moreover, that it was in this same area that the earliest settlements were located, it is easy to understand why, in the earliest trade statistics of the Cape of Good Hope, the produce of the vine appears as the chief article of export.

The first vines introduced to the Cape were brought there from the Rhine in 1654–5[3] a year or two after the

[1] *D.R.C. Third Interim Report*, 1914 (Cd. 7505), p. 37.
[2] *Official Year Book of South Africa*, 1927–8, p. 457.
[3] Theal, *History and Ethnography of Africa south of the Zambesi*, vol. ii, p. 46.

ships of the Dutch East India Company brought the first settlers to Table Bay. The Company, in attempting to inaugurate an export trade in wine, met with the familiar difficulties of producing a wine that would carry, but, even in those early days, the wine of Constantia enjoyed a good reputation in Europe.[1]

When the Dutch Government at the Cape, as represented by the Dutch East India Company, capitulated to the British in 1795, a general account of the state of the settlement included a reference to the " wines in great variety ; the most esteemed and best calculated for the European market being the Constantia, a sweet wine of which there are two kinds, red and white ". There was also a Cape Madeira " well adapted for exportation ".[2]

When the British got final possession of the settlement the Government there interested itself actively in the wine industry from the beginning. By a Proclamation of 1811 the wine trade was referred to as " a consideration above all others of the highest importance to its opulence and character " ; and " the most constant support and patronage on the part of the Government " was promised ; and in earnest thereof a Wine Taster and an Examiner of Casks were appointed, while information as to the culture of vines was collected and circulated for the instruction of wine farmers and merchants.

As a result of this encouragement on the part of the Government there was a considerable flow of capital into the industry, and in 1824 the wine growers and merchants calculated that the amount employed by the cultivators and wine merchants was upwards of 20 millions of Rix dollars. They also claimed that " the cultivation of the vine gives subsistence to a larger proportion of the population than any other branch of agriculture practicable in this Colony ".[3] At the same time the Home Government also recognized the importance of the wine trade, and the Governor was strictly enjoined to take all possible steps to bring about such an improvement in the quality of what was described as the Colony's " staple commodity ", as would enable it to compete in England with the wines of Spain and Madeira.[4] The Home Government did its share

[1] Ibid., p. 445–6. [2] *Records of the Cape Colony*, vol. i, p. 137.
[3] See Memorial of March, 1824, addressed to the Treasury by the Cape Wine Growers and Merchants in *Records of the Cape Colony*, vol. xvii, p. 128.
[4] Letter from Lord Bathurst to Lord Charles Somerset in 1817 (*Records of the Cape Colony*, vol. xi, p. 274).

towards increasing the demand for Cape wine by granting it a substantial preference in the duty payable. At the Cape itself, the office of Wine Taster was regarded as " of the greatest importance to the interests of the Settlement ". The duty of this functionary was to prevent the export of bad wine and the Deputy Wine Taster was " of equal importance with his superior ", his particular function being to arbitrate between the wine grower and merchant and to act as gauger of casks.[1]

A rapid falling off in the export of wine from the Cape coincided with, and was to a considerable extent the result of, the abolition of slavery throughout the British Empire by the Act of 1833. On 1st December, 1834, slavery was to cease, and after a short period of apprenticeship the legal subordination of the negro to the white man was to disappear. When, in 1838, the apprenticeship period expired, many farmers found themselves without labour. About the same time such alterations were made in the duties on wines entering Great Britain as to put Cape wines at a disadvantage in competition with those of France. This combination of unfortunate circumstances was too much for many of the Cape wine producers, but it may not have been an unmixed evil from the point of view of the Colony generally, for many of the farmers who abandoned viticulture turned to the breeding of merino sheep,[2] an industry requiring the services of fewer hands, but an industry which brought greater prosperity to South Africa than was ever possible from the produce of the vine.

In the eighties the appearance of phylloxera in the Cape vineyards added yet another incident to the viticulturist's tale of woe. Some years passed before it was found that American vine stocks could be procured which were resistant to the pest.

In 1893 there were eight Government American Vine Plantations distributed over the viticultural districts, one, the earliest, at Constantia, established in 1887, three at Stellenbosch, two at the Paarl, and others at Goudini and Ashton. The observations at these stations as to the successful resistance of American

[1] Letter from Lord Charles Somerset, 1816 (*Records of the Cape Colony*, vol. xi, p. 141).

[2] Theal, *History of South Africa, 1834–1854*, p. 185.

vines to attacks by phylloxera corresponded with European experience.[1]

As with wine, so with tobacco, the story in later times becomes one of patient research and fruitful experiment, of successful accomplishment and of a home market satisfactorily retained.

Tobacco cultivation in South Africa has spread southwards from the regions nearest the tropics. The older plantations were in the north-west Transvaal; thence the industry travelled south to the districts on either side of the boundary line between the Transvaal and the Orange Free State, to Natal, and after 1905, when the first experiments in growing Turkish tobacco in Cape Province were made, that area produced an increasing quantity of that particular brand.

The old fashioned roll tobacco is still made in the Oudtshoorn district, but whereas in the old days the farmers who grew it manufactured their leaf into rolls with which they traded in the Colony, it has now become a factory industry. Little machinery has, however, been introduced into the industry for the reason that consumers manifest a decided preference for roll tobacco that is hand-made. In modern times the tendency has been to experiment with the production of the grades that command the higher prices, namely leaf of fine texture, which is in so much greater demand in recent times by reason of the enormous growth of the habit of cigarette-smoking.

The outstanding landmark in the tobacco industry of South Africa in recent times is the introduction of Turkish tobacco, a development which belongs entirely to the twentieth century. As so often happens, the foundation of the industry followed as a quite fortuitous incident, an incident, however, of which one man had the insight to appreciate the significance. In 1903 Mr. L. M. Stella, a Cape farmer, received enclosed in a letter from Turkey a small quantity of tobacco seed. When the envelope was opened in, as it happened, the homestead garden, a few of the seeds fell out. As to the rest, the envelope was put away and forgotten. The seeds which had thus accidentally planted themselves found their environment congenial and germinated, and Mr. Stella

[1] See *Final Report of the Phylloxera Commission*, 1893 (G. 42—1893), p. 6 (Appendix I to *Votes and Proceedings of Cape Parliament*, vol. i, Session 1893).

was able to mature a number of the plants and with them to found a new branch of the tobacco industry. With these and further seed from Turkey he was able next year to produce nearly 1,000 lb. of tobacco from a couple of acres of sandy loam. Having progressed so far he had little difficulty in interesting the Cape Department of Agriculture, and thereafter the Turkish tobacco industry developed under its care, with Mr. Stella as their expert official. In 1910, 56,500 lb. of Turkish tobacco were produced and by 1920–1 the output was three-quarters of a million pounds.[1]

Until recently, practically all South African tobacco was cured by the air-curing process, the process which has descended from the simple operation of hanging the plant under trees to dry which was followed in Virginia in the early days of the industry. Experiments carried out at the Government Experimental Station at Rustenburg demonstrated the advantages and practicability of the newer method of curing tobacco by the flue-curing process, whereby the curing is done by artificial heat. This process is independent of climatic conditions ; imparts to the leaf a better flavour ; and produces a higher proportion of the desired " yellow " leaf. When tobacco cultivation was introduced into Rhodesia, flue-curing by artificial heat was tried and proved successful, a circumstance to which that country largely owes its success in that industry. The officers of the Union Department of Agriculture were able to say in 1913 that, after experiments over a period of three years, flue-curing could be successfully and profitably carried on in the territory of the Union.[2] In addition to the problem of curing, much in the way of selection and breeding of strains had to be done to produce a leaf possessing good burning quality, aroma, and colour. Data had to be collected as to which type best suited particular districts. Diseases, insect pests, crop rotation, and fertilizers, were other problems which were dealt with, and it was because of the valuable work done in connection with these problems that, under the tutelage of the Department of Agriculture, the Transvaal was enabled to maintain the lead in South Africa in tobacco production, while Natal, where the

[1] *Journal of the Union Department of Agriculture*, 1921, vol. ii, p. 385.
[2] H. W. Taylor, " The Production of Bright Tobacco by the Flue and Air-Curing Processes," *The Agricultural Journal of the Union of South Africa*, 1913, vol. v, p. 881.

industry was left in the hands of Indian growers and until 1914 had no similar attention from the Department of Agriculture, made no progress, but continued to produce coarse tobacco of poor quality.[1]

From the beginning, tobacco has been grown in South Africa, primarily for home consumption,[2] but at the same time South Africans have always looked forward to the time when the Union would be a substantial tobacco exporting country. Until a market overseas is found there is little likelihood of increased production. The failure of the South African tobacco grower in foreign markets, according to his own Government experts, who are accustomed to speak with refreshing candour, is largely due to failure to abandon the notion that methods of grading, packing, and fermenting tobacco, which are good enough for South Africa, are good enough for other countries.[3] Down to 1912, good prices had been obtained for Turkish tobacco leaf, *2s. 1d.* per lb. in 1910, and *1s. 6d.* two years later, prices due to the small quantity of tobacco offered. Then came a much larger crop and the price slumped to less than *7d.* and South African tobacco growers had at last to realize that to dispose of the leaf in an immature state was a wrong system. Its storage in a warehouse, where the leaf would be properly matured, manipulated, and graded, so that a matured article could be put upon the market, was seen to be necessary if tobacco good enough to compete with other countries was to be produced.[4]

Furthermore, it always has to be remembered that the Transvaal and other tobacco-growing Provinces of the Union have to compete with tobacco grown in Rhodesia, where the Government nursed the industry into prosperity, and where, from the first, care was taken to select the best seed, and the plant was competently and carefully handled and properly matured.

One result of the slump in tobacco prices in South Africa just before the Great War was the diversion of the attention

[1] See *D.R.C. Minutes of Evidence*, 1914 (Cd. 7706), Qs. 5060, 5219*a*.

[2] In 1930, about 16,000 acres were planted with tobacco and 15 to 16 million lb. were produced of which less than 10 per cent was exported, the rest being consumed locally (*Official Year Book of Union of South Africa*, 1930–1, p. 396.)

[3] See, e.g., L. M. Stella, "How to Produce good Turkish Tobacco," *Journal of Union Department of Agriculture*, vol. vi, p. 493.

[4] L. M. Stella, "Turkish Tobacco in the Cape Province," *South African Agricultural Journal*, 1913, vol. vi, p. 617.

of a good many farmers from tobacco to cotton cultivation, especially in the Rustenburg district of the Transvaal, for it is commonly said in South Africa that where cotton will not grow nothing will grow. It will withstand drought better than other crops, and in a year of severe drought it has been the only crop that survived.[1]

The success of the sugar cane industry along the coastal belt of Zululand encouraged planters to experiment with cotton in the same region. The industry was started there in 1914 with American varieties. The first yields in the experimental stage gave an average of 576 lb. of seed cotton per acre. Careful seed selection followed and in 1918–19 a yield of 1,308 lb. per acre was secured.[2]

These represented attempts to reintroduce rather than introduce cotton growing into South Africa. Natal was one of the countries within the British Empire to which cotton manufacturers turned as a possible alternative source of supply when, in the middle of the nineteenth century, they realized that they depended on a single country, the United States of America, for over 70 per cent of their raw material. The immigrants into Natal under the auspices first of the Natal Cotton Company, and then of the more notable speculative Irishman, Joseph Charles Byrne, were expected to achieve their promised prosperity by cotton growing. Hardship and failure were their reward until they found salvation in the cultivation of the sugar cane.[3] During the period of the American Civil War it was a profitable industry in the coastal region around East London ; and Cecil Rhodes, soon after his arrival in Africa in 1870, " a tall, lanky, anæmic, fair-haired boy, shy and reserved in bearing," showed that cotton could be successfully grown in Natal.[4] The failure of the industry to take root in those days was no evidence that the natural conditions of the country were incompatible with success. Lack of transport and of ginning facilities hindered development and pests were a constant discouragement, but it was the irresistible attraction of the newly discovered diamond fields that in the early seventies drew the farmers away from their cotton fields—Cecil Rhodes among them—and for the time being put an end to the industry.

[1] *D.R.C. Minutes of Evidence*, 1914 (Cd. 7706), Q. 5884.
[2] A. M. Miller, " The South-east Coast of Africa and its Development " (paper read at meeting of the Royal Colonial Institute, 23rd January, 1923).
[3] See Chapter 2. [4] Basil Williams, *Cecil Rhodes*, pp. 11–12.

According to the Dominion Royal Commission,[1] " It is one of the characteristics of cotton cultivation that a large number of countries appear theoretically suitable, and do, for a period, succeed, or partially succeed, in the experiment of cotton growing ; but for one cause of another, difficult to foresee, they fail to develop into large producers." For one cause or another difficult to ascertain, South Africa is in this category. The British Cotton Growing Association and the Transvaal Department of Agriculture inaugurated a new era of experiment in 1909, which was continued with renewed zeal by the Union Government, the purpose of which was to discover the varieties of cotton which were most likely to thrive under South African conditions of climate and soil. The vast extent of the middle and low veld is suitable for its cultivation. Yet in 1930–1 it was the official view that " the production of cotton in the Union is still comparatively small ".[2]

The importance of the sugar cane industry to South Africa lies in the fact that it has enabled the coastal regions of Natal and Zululand to be turned to economic account. From the Umzimkulu River in Southern Natal to beyond the Umfolozi River in Zululand, cane fields extend more or less continuously over a stretch of coastal territory more than 230 miles in length : " It may be accepted that no other branch of agriculture in South Africa has in recent years put such large areas of virgin land under cultivation in a period comparable with that in which cane growing has attained its present dimensions." [3]

The credit for the foundation of the sugar cane industry in Natal is given to a settler named Morewood who, about 1850, successfully planted the cane at Compensation Flats some 35 miles north of Durban. He experimented with the seed from a variety of canes, but Green Natal, supposed to be an indigenous cane, was the most successful, and for twenty years constituted the staple crop. In 1870 a new variety, China cane, came into favour, and survived for about ten years, when it was attacked by disease and

[1] *Third Interim Report*, 1914 (Cd. 7505), p. 36.

[2] The annual production shows striking variations. In 1910–11 the production of cotton lint was only 13,623 lb. ; in 1920–1 it was 1,169,298 lb. ; in 1925–6 it was as much as 8,152,559 lb., and in 1930–1 it dropped to 3,249,252 lb. (*Official Year Book of the Union of South Africa*, No. 13, p. 395).

[3] *Report on the Sugar Industry by the Union Board of Trade and Industries* (Report No. 66, Capetown, 1926), p. 6.

disappeared. The nature of the disease was not then understood, and the planters directed their efforts to the discovery of a variety of cane that would respond to conditions in Natal and incidentally prove resistant to disease. In the end a variety without any ascertainable pedigree, but since universally known as the Uba cane, established its capacity to flourish when other varieties perished, and it has since successfully asserted its claim to be the staple variety for Natal.

In early days the presence of malaria along the coast belt was a sufficient reason why the settler preferred to go to the higher altitudes rather than to a fertile but low-lying area on the coast, although there his cattle could only with difficulty be fed through the winter and fertilizers had to be brought from long distances if he was to raise any crops. In the year 1869 the medical officer to a sugar plantation in Victoria County, Natal, south of the Tugela River, treated 120 cases of malaria in a single month [1]; but with the discovery that the mosquito and not the "deadly miasma" was responsible for the occurrence of the disease it came to be regarded merely as an inconvenience and now the settlers know that, with only mild precautions and the cleansing of the country by cultivation, malaria need no longer be the bogy that it once was in the low-lying coastal areas.

It then became possible to consider the opening up to the sugar industry of the region on the extreme north-east corner of the Province which gradually broadens from the Umfolozi River in Zululand northwards to the frontier with Portuguese East Africa. Here the rainfall varies between 26 and 40 inches and, since the country is only moderately undulating and the soil is charged with a high content of vegetable mould, the rainfall is infinitely more beneficial than elsewhere in the Union where the run-off meets with no such obstacle.

It was in 1905 that the Natal Government surveyed this territory and marked it off in blocks, and in the same year the first settlers ventured in to found the sugar planting industry which was to transform the region. "In 1902 I rode from Durban to Swaziland through this country. The only whites I saw were isolated Government officials and a few sickly native traders. In 1918 I again travelled this route. For the first 70 miles green cane waved on every

[1] J. W. Matthews, M.D., *Incwadi Yami*, p. 16.

side, beautiful homesteads dotted the landscape, villages had sprung into being, with churches and schools." [1]

During the early years of its career the Natal sugar cane industry was confronted with several discouraging conditions. The market for sugar was unstable, transportation was costly, and prices were subject to severe fluctuations. Moreover, as a rule the planter had his own small mill in which his cane was crushed for the extraction of the juice, and small mills were apt to be but ill-equipped.

The year 1907 marked the inauguration of an era of growth and prosperity for the sugar industry in South Africa. " Improved methods of cultivation began to be felt, also the advantage of modern machinery, which the mills gradually erected. More attention was given to the questions of chemical control and improved methods of manufacture. . . . Prior to 1907 only one mill in the colony had any system of chemical control, whereas now it is becoming the exception for a mill of any size to work without a chemist. The work of cultivation has also been studied and more attention paid to proper systems of manuring, etc., and whereas up to about seven years ago the average crop of cane cut per acre was about 20 tons, this has now increased to about 30, i.e. 50 per cent more." [2]

The result of these improved methods was seen in the production for the first time in 1918–19 of a surplus of sugar for export. Until then domestic sugar production had been insufficient to meet the Union's requirements the shortage being imported mainly from Mauritius and Mozambique.[3] The surplus was produced in spite of an increased domestic demand due to the greater consumption of sugar by the native population.

The production of wattle bark, which has become one of the most important of South Africa's secondary industries, began in Natal. In 1886, the first consignment was exported and its value was £11. That Province remains the leader in the industry and indeed the only country supplying wattle

[1] A. M. Miller, " The South-East Coast of Africa and its Development " (paper read at meeting of the Royal Colonial Institute, 23rd January, 1923).

[2] *D.R.C. Minutes of Evidence*, 1914 (Cd. 7706), Q. 4987.

[3] In 1910–11 production was 82,000 tons (of 2,000 lb.), and consumption 111,531 tons; in 1915–16 production was 113,358 tons, and consumption 115,385 tons; in 1920–1 production was 143,680 tons, and consumption 103,005 tons; in 1925–6 production was 239,851 tons, and consumption 175,324 tons; in 1930–1 production was 393,205 tons, and consumption 188,577 tons (*Official Year Book of Union of South Africa*, chap. xiii).

bark on a substantial scale, but in the Transvaal a substantial acreage is now devoted to wattle-growing and the Cape Province and the Orange Free State share in the industry to a minor extent.[1] In the period 1925–9 the average annual value of the wattle exported from the Union was £709,945 and of the extract therefrom £273,313.[2]

It was in 1864 that the first seeds of the black wattle were planted at Camperdown, Natal, by two brothers named Vanderplank, one of whom had brought the seeds from Australia. There is still plenty of indigenous wattle in Australia, but very little is cultivated and, while at one time Australia exported some 30,000 tons a year to Europe, in 1914 they had ceased to export and were relying on South Africa for supplies.[3]

At first the wattle or, as it was then called, the mimosa tree, was only valued as providing firewood and wind screens, and it was only after twenty years, in 1884, that the value of the bark for tanning purposes was first recognized by Sir George Sutton, who must be regarded as the founder of the wattle industry in South Africa.[4] The tannin content of wattle is four or five times that of oak bark.[5]

About the year 1914 there was apparent a tendency for the supply of the bark to exceed the demand and for the markets to get glutted, with the result that the Natal wattle growers turned their attention to the manufacture of a wattle extract in the hope of reaching fresh markets. Formerly most of the wattle exports were taken by Germany, but latterly the United Kingdom has taken increasing quantities as a consequence of the contraction in the supply of quebracho.

In a year when the Great Drought had halved the Union's maize and tobacco crops, record shipments of deciduous fruits, especially grapes and pears, were recorded; and it was reported that "the largest consignment of fruit ever dispatched from South Africa", consisting of over 250,000 packages of grapes, pears, plums, and apples had arrived in the Port of London.[6] In an agricultural country, as on

[1] In 1930 the respective total areas of the wattle plantations in the different Provinces were: Natal, 179,698 morgen; Transvaal, 52,989 morgen; Cape, 17,073 morgen; and Orange Free State, 1,132 morgen.

[2] *Official Year Book of the Union of South Africa*, chap. xviii.

[3] *D.R.C. Minutes of Evidence*, 1914 (Cd. 7706), Q. 6318.

[4] See *Agricultural Journal of the Union of South Africa*, 1913, vol. vi, p. 897.

[5] *D.R.C. Minutes of Evidence*, 1914 (Cd. 7706), Q. 6371.

[6] *Times*, 6th April, 1933.

the individual farm, it is wise to provide, so far as possible, for alternative crops, so that absolute ruin need not necessarily result from the failure of the principal crop by reason of the occurrence of unkindly natural conditions.

The growth of the export trade in deciduous fruit since the beginning of the century has been remarkable for its steadiness. There has been none of the sudden advance and immediate recoil which characterizes the statistics of say the wine and tobacco industries. In 1900 there were exported 309 tons of deciduous fruit. In 1906 the quantity passed the 1,000 ton mark; in 1911 it was over 3,000 tons, and in 1912 over 4,000 tons left South Africa. The highest figures were shown by pears, grapes, plums, and peaches. Apples, nectarines, apricots, and melons were much less in bulk [1] and this relative importance of the varieties of deciduous fruit has persisted.

One is familiar with the rich man's model farm, organized as a diversion from urban interests with complete indifference to its financial result. Rhodes also had his model farms, but his purpose was to run them not as philanthropic institutions or as a private hobby, but on business principles as profit-making concerns and to make them the foundation of a new national industry.

In March, 1892, there arrived in South Africa a young man with, as he himself has said, "a light heart and 30s. in my pocket," but with a wide experience of fruit culture in California. Rhodes heard of him, recognized him as the man he wanted to help carry out one of his dreams, and arranged to finance a farm for fruit-growing, and thus the names of Rhodes and Pickstone have come down as the founders of the South African fruit industry.[2]

The first of the Rhodes Fruit Farms was that at Nooitgedacht, in the Transvaal, and there, in 1893, Pickstone established a nursery of 50,000 trees which he imported from California. Farm was added unto farm, and in 1897 Rhodes entrusted Pickstone with the management of the Rhodes Fruit Farms, the approximate cost of which had been £250,000. Rhodes's plan was to build up an export trade and to pour, as a beginning, pears, apples, peaches, and plums into the distant markets of less favoured climes. This end he pursued with characteristic thoroughness.

[1] *Agricultural Journal of the Union of South Africa*, 1912, vol. iv, p. 279.

[2] See *Agricultural Journal of the Union of South Africa*, 1913, vol. v, p. 351 et seq.

Expert sorters and packers were brought from America; and plans were drawn up for irrigation and a cannery.[1]

After the Boer War, the fruit industry engaged the attention of another great empire builder. Lord Milner invited Pickstone to establish similar fruit farms in the annexed Provinces. The Ficksburg District of the Orange Free State was chosen: the Imperial Government found the means; and by 1913 some 35,000 trees had been planted.[2]

Everything was in favour of the new experiment. The founders had abundant means at their disposal; there was the climate; and, "Under a mail contract arranged by the Government and Sir Owen Phillips, our fruit farmers have the best sea-borne freight rates in the world."[3] The difference in seasons also helped, for South African grapes, peaches, plums, and apricots are available in the English market during the January to April period. And as to labour costs: "In the packing shed at Meerlust, some coloured women were deftly and quickly sorting pears for the London market. We put the question to the Manager: 'How much do these packers get a day?' His reply was: '1*s.* 6*d.*' Seven years ago we stood in the packing sheds at Riverside in California. A number of American girls were packing fruit with marvellous rapidity for the London market. In answer to the same question the Riverside manager replied 'Two dollars, fifty', namely 10*s.* per day."[4]

The best fruit-growing country in the Transvaal is near Pretoria in the region of the Magalies Bergen, where many miles of the raw veld have been transformed into orchards and small fruit farms. Roughly the mountain range divides the area into the orange zone and the apple zone. To the south is the apple country. Northwards the valley has become famous for its oranges.

The first seeds of the citrus fruits—oranges, lemons, naartjes (tangerines), and grape fruit—planted in South Africa were brought from Batavia by the early Dutch colonists, but it was the Royal Horticultural Society of Great Britain that first made clear to the world the suitability of South Africa for the production of citrus fruits on a large scale. As a result of the Society's exhibition in London in 1906 the export of oranges from South Africa began in 1907 with some 3,000 boxes. In 1920 the number of boxes

[1] Basil Williams, *Cecil Rhodes*, p. 302.
[2] *Agricultural Journal of Union of South Africa*, 1913, vol. v, p. 356.
[3] Ibid. [4] Ibid., p. 359.

exported was 135,184 and in 1923 it was 412,000. By 1931 the number of boxes of citrus fruits exported had grown to over 1¾ millions, of which more than 90 per cent were oranges. The industry has been encouraged by low railway freights in the country of origin and low shipping rates to England. It will be long before South Africa can rival Spain and Italy in the annual output of citrus fruits,[1] but South Africa has the advantage that the fruit ripens at a period of the year different from that of the Mediterranean countries. South African oranges arrive during the English summer from July onwards, when they are most appreciated. Australia also grows and exports citrus fruits which ripen when the Spanish fruit season is over, but Australian oranges arrive in the London market two or three weeks later than those from the other Dominions south of the Equator. For a few weeks each year, accordingly, South African oranges have a monopoly of the English market.

To the lengthy list of fruits which are being grown in South Africa must be added the pineapple, to the cultivation of which many thousands of acres in the eastern districts of the Cape Province, and in particular around Bathurst, as well as in Natal and the northern part of the Transvaal are devoted. A useful export trade in canned pines is growing up to supplement the earlier export trade in the natural fruit. Another branch of the fruit industry which is rapidly becoming more than a mere side-line is that concerned with dried fruits, especially raisins, currants, prunes, pears, apricots, and peaches. This particular industry had its birth in the depression in the wine trade in 1922, when the vine-growers turned their attention to the manufacture of raisins and dried grapes on a large scale.

When, in 1920, observation was made on citrus fruits offered for sale in England, it was remarked that South African packs were extremely unattractive in appearance when compared with those from other countries. Blemished fruit was packed with that which was good : sound fruit arrived side by side with mouldy specimens ; wrapping and packing were carelessly done ; there had been little selection with regard to quality ; keeping qualities were poor ; and no attempt was made to send varieties which would be available when supplies from other sources were scarce.[2]

[1] In 1926 the Imperial Economic Committee reported that for every three South African oranges consumed in England in 1924, fifty-seven were eaten which came from Spain.

[2] See *Journal of Union Department of Agriculture*, 1921, vol. ii, p. 436.

Thanks to investigations by the Division of Botany and Plant Pathology of the Union Department of Agriculture concerning the handling of fruit from the orchard to the London market, the condition of consignments on arrival from South Africa has become vastly different from that which was previously found to exist.

It will be necessary for South Africa to spare no effort to maintain the highest standard of quality in the fruit she exports, for Argentina is becoming a serious competitor with the Union in this particular trade. The South American State is taking full advantage of the experience of South Africa and has placed at the disposal of her growers precooling plants, refrigerator wagons, quick transport, and steamers with cold storage chambers plying to the United States and Europe, and strict government inspection of fruit prior to shipment has been instituted. All these factors which have contributed so materially to the growing success of the fruit-growing industry in South Africa are to be available for their rivals in Argentina. And an expert sent from Argentina to investigate the fruit industry in South Africa encouraged his people with the report that "the Cape soil is poor and stony, requiring costly fertilization, and were it not for the government subsidy paid to the growers and heavy English duties charged on Argentine fruit, South Africa could not compete with Cuyo ".[1]

South Africa's economic foundations have hitherto been wanting in stability for the reason that an undue proportion of its exports have belonged to the luxury trades. The Dominion is the Bond Street of the Empire. To a greater extent than any other Dominion it has sought its customers among the rich with their quickly changing fashions, whose demands for luxury products inevitably contract in times of depression. Latterly the staple and more stable products of the farm in demand by the humbler folk have thrust themselves to the front in South Africa's statistics of production, and as a consequence the economic life of the Dominion has taken on a healthier aspect.

The change has come about since the Great War. During the period 1910–14 the only articles of export the value of which had to be expressed in seven figures were, in order

[1] See *Report* for 1933–4 of Buenos Ayres and Pacific Railway Co.

of total value, gold bullion, diamonds, wool, ostrich feathers, and coal.[1]

For the year 1930 the exports the value of which were stated in millions were (in order of value as before) : gold bullion, wool, diamonds, maize, coal, fruit, sugar, and sheepskins.[2]

Hitherto the prosperity of South Africa has been based on the mines, which at best are wasting assets. As compared with the other Dominions, South Africa shows a low yield per morgen of most crops, a low financial return per head from those engaged in farming, and a low density of population. "The value of the agricultural output per person occupied in 1922 was £420 in Australia, and over £300 in Canada, as against £80 in South Africa."[3] The Dominion's main concern is so to develop the farming side of its national life as to put the country on a permanent economic basis.

[1] The actual average annual values for the period 1910–14 were: Gold bullion, £32,666,162; Diamonds (uncut), £8,688,803; Sheeps' wool, £4,493,747; ostrich feathers, £2,286,386; and coal (bunker and cargo), £1,173,021 (*Official Year Book of the Union of South Africa*, chap. xviii).

[2] The figures showing actual values for the year 1930 were: Gold bullion, £35,890,848 (and in addition gold, produce of Rhodesia, £1,196,632, and gold coin, in which form a considerable portion of the gold output has in recent years been exported, £10,427,728); sheeps' wool, £8,644,490; diamonds (uncut), £4,057,638, and in addition £1,423,574 worth of diamonds cut and polished; maize, £2,428,693; coal (bunker and cargo), £2,237,284; fresh fruit, £1,546,929; sugar, £1,469,947; sheep skins, £1,047,982 (ibid.).

[3] *Report of Economic and Wage Commission* (1925) (U.G. 14—1926), Capetown, 1926 (*Reports of Select Committees*, Union House of Assembly, 1926, vol. iv), p. 116.

CHAPTER 7

THE FIGHT AGAINST DROUGHT, PLAGUES, AND PESTS

Drought.
- Progressive desiccation of the country.
- Irrigation methods and legislation.

Animal Diseases.
- Rhodes's Scab Act :
  - Marks inauguration of effective constructive effort for benefit of farming industry.
  - Damage to the wool-producing industry through scab.
  - Ineffectiveness of existing legislation.
  - The Scab Act, 1894, of the Cape of Good Hope ; Compulsory dipping.
- Cattle Plagues :
  - Endemic diseases : Lamziekte.
  - Epidemics of Lung Sickness, Rinderpest, and East Coast Fever.
  - Inoculation as a preventive.
  - The conquest of the tick by dipping.
- Horse Sickness.

Insect and Fungus Pests.
- The various enemies of cultivated plants and trees.
- The Locust :
  - Defence measures against invasion.
  - Unified effort by the whole of South Africa found necessary.

METEOROLOGICAL conditions alone would justify the South African farmer's complaint that he is engaged in " a gamble with God ". An increase in the export of hides and skins in a particular year is an indication not so much of prosperity in the pastoral industry as of the prevalence of drought and disease, and the consequent impossibility of keeping cattle alive. An increase in the imports of butter and cheese into South Africa is a pretty certain indication of drought and the consequent diminution of the milk supply. The country is singularly prolific in animal diseases and insect pests ; but account has to be taken of the fact that these adverse conditions have called into existence an

organization with a record of chemical, veterinary, and agricultural research of which the Dominion is justly proud.

Aridity and Irrigation

Of all the problems with which the South African farmer has to contend, the general aridity of the country is the greatest. In Cape Province there is an area of 6,500 square miles which has an average annual rainfall of under 5 inches, and 178,000 square miles with from 5 to 15 inches only. In the whole 473,000 square miles of the Union, only some 118,000 square miles enjoys a rainfall of more than 25 inches.[1] The winds from the Indian Ocean bring rain-saturated clouds over Natal which yield a high summer rainfall, and while this region of greater rainfall continues along to the south-west coast belt, where the Mediterranean type of climate prevails with its mild temperature, its winter rainy period, and its nearly rainless summer, this favoured territory is but a small proportion of the whole.

Not only is South Africa a country where the average rainfall is light ; it is also a country where surface conditions seriously reduce the economic value of such rain as actually does descend. Owing to the hardness of the soil, the frequent absence of vegetable covering, and the infrequency of trees, the run-off is very rapid, and this rapid run-off is assisted by the sloots and dongas which have cut up the surface of the veld. Even the tracks made by man and beast have become water courses down which the water flows away much faster and more completely than before, and a railway is apt to provide storm water furrows along which the water runs into the dongas and thence into the rivers, so that it is mostly lost.

The interior of South Africa is a high vast plateau with a rapid descent to the sea level, down which the streams and rivers rapidly flow. The rainfall occurs during a short period of the year and descends in sharp heavy showers. Over vast areas the soil is left to scorching heat, dry winds, and dust storms, and great quantities of it are carried away with each return of the heavy rains. The wastage, erosion, and loss of soil thus caused must, unless arrested, result in a serious extension of the arid regions.

Evidence of the desiccation of extensive areas in South

[1] See table in *Official Year Book of South Africa, 1910-1922*, No. 6, p. 59. In London the mean annual rainfall is about 24 inches.

Africa is found in the disappearance of rivers and water-holes described by travellers in early times, and in the survival of the stumps of indigenous and exotic trees in places now too dry to permit of their growth. The Drought Investigation Commission of 1923 disavowed any desire to be sensational, but accepted the view that, unless desiccation were checked, the country must become " the Great South African Desert uninhabitable by man ".[1]

Furthermore, the subjugation of the wild by man has had the unexpected result of increasing, to an alarming degree, the desiccation due to natural conditions. The natives have for ages been accustomed to burn the plains and to destroy the timber and ancient forests that once covered the mountain slopes, and so the arid region grew steadily wider. The white man has continued the natives' handiwork. The Drought Investigation Commission recorded their conviction, on the evidence submitted to them, " that, as a result of conditions created by the white civilization in South Africa, the power of the surface of the land, as a whole, to hold up and absorb water has been diminished, that the canals by which the water reaches the sea have been multiplied and enlarged, with the result that the rain falling on the sub-continent to-day has a lower economic value than in days past." This diminished capacity of the soil to hold up and utilize the rain falling upon it " has been caused by the deterioration of its protecting vegetal cover and by soil erosion ", and this deterioration and soil erosion, in their turn, " have been caused by bad veld management." The rains of the last generation, falling on unbroken, lightly stocked grazing lands, were more lasting in their beneficial results " than rains of equal magnitude falling to-day on veld overstocked, trampled out, semi-waterproof, hard-baked by sun and veld fires ".[2]

The general aspect of the Karroo, particularly in the western portion, is that of baked ground occupied by low bushes in open order, gnarled and stunted in appearance, and unrelieved by a proper growth of young plants or seedlings. " Between the bushes the soil is bare and stony, and often shows marked signs of erosion by heavy rains. Herds of sheep and goats roam among the bushes, trampling the soil hard, and biting off every green shoot and seedling

[1] Drought Investigation Commission, *Final Report* (U.G. 49—1923), Capetown, 1923, p. 3.
[2] Ibid., p. 5.

within reach. They thus keep open the bare ground between the bushes, reduce the natural vegetation cover to the ground, and thereby favour evaporation and prevent regeneration." [1]

The value of a covering of vegetation is that it not only helps to distribute the moisture in the soil, but also conserves it by acting as a screen against sun and wind and so diminishing evaporation. Its removal results not only in rapidly increased evaporation, but also in soil erosion, for the speed of run-off is thereby accelerated.

The practice of kraaling or concentrating stock at fixed points at night, mainly as a means of protection against jackals, which is very general in South Africa, contributes largely to the destruction of surface vegetation. The continuous concentration of the flocks in the neighbourhood of the kraal inevitably leads to overgrazing and the destruction of vegetable growth by trampling. The remedy is to allow the live-stock to run freely by day and night in paddocks. The internal fencing of their farms, so dividing them into paddocks, enables farmers to exercise proper control over grazing and so to avoid the complete destruction of the vegetal covering of the ground, which results from the system of kraaling. Another well-rooted practice which is attended with similarly disastrous results is veld-burning for the purpose of getting rid of the dead, unnutritious grass of the previous season. Witnesses told the Drought Investigation Commission how, "in order to provide temporary grazing for a few Boer goats, steep mountain slopes covered with a shallow layer of soil are burnt and the natural covering of bush destroyed." The effect on streams rising in the vicinity and supplying neighbouring farmers with water for irrigation was immediate and disastrous. "Within a longer or shorter period the mountain sides become so scoured and eroded that, even for grazing purposes, their usefulness declines." [2]

The timberless condition of South Africa is another condition favouring rapid run-off and soil erosion.

The lack of trees over large areas is keenly felt. The farmer longs for sheltering belts of trees when he sees his live-stock without protection against the biting winter winds of the high veld or the summer heat of the low veld.

[1] Professor Crompton, quoted in Drought Investigation Commission, *Final Report*, 1923 (U.G. 49—1923), p. 76.
[2] *Final Report* (*supra*), p. 54.

And, unchecked by forests, the torrential rains sweep over the naked veld and carry away the fertile soil, dried and pulverized as it is by reason of the deficiency of vegetable cover or forest protection. "The Transvaal may have her gold," remarked a Cape resident as he watched the broad expanse of the Orange River rushing to the sea, "but we have her richest soil—thirty feet of silt."

That forests actually increase the rainfall in their vicinity is now regarded by most experts as a superstition, but that the presence of trees is a protection against soil erosion is generally accepted. Trees intercept rain in the course of its fall to the earth so that it reaches the soil with reduced destructive force. When the rain has reached the earth evaporation is reduced by the shade of the trees themselves and their litter of decaying vegetable matter provides an obstacle to the rapid run-off of the water so that the opportunity of soaking in is increased. All the reasons that can be urged against the destruction of the vegetal covering of the earth are equally relevant in favour of afforestation.

There is evidence that desiccation has already gone so far as to bring about a shifting of population. The Drought Investigation Commission of 1923 found that, in the Midland districts of the Cape Province, population had since 1891 been tending to decrease in an alarming manner. Making every allowance for the attraction of greater prospects of wealth, whether from mining or agriculture, in other parts of the Union, nevertheless the Commission came to the conclusion that the main cause of the decline in population in those older settled regions was the deterioration of the land, resulting from the crude methods of stock-farming that were still persisted in. The veld was over-stocked and over-grazed, so that soil erosion and deterioration of the vegetation became inevitable, the possibility of making a living became more remote, and population moved away.[1]

It is apparent that conditions such as those described can only be ameliorated by impounding and distributing, by irrigation schemes, such water as is available. Nevertheless, in South Africa even this remedy can only be applied within narrow limits.

South Africa is a country with, primarily, a thin soil with but narrow valleys of rich alluvial. Most of the country must be regarded as a grazing country, for the proportion of land that can be converted by irrigation from

[1] Ibid., pp. 32–6.

pasture to crop is limited. "Generally speaking, in the Karroo system, which covers about 50 per cent of the Union, the soil is very thin and does not justify the cost of irrigation works." [1] The Drought Investigation Commission came to the conclusion in 1923 that 1 per cent of the Union must be taken to be "the practical limit to the development of irrigation in South Africa under existing conditions".[2] More than one witness before the Dominions Royal Commission expressed the view that only about 5 per cent of the total area of South Africa was capable of being brought under cultivation, and that the rest, if used at all, was pasture land. The future, accordingly, lay in scientific stock-farming.

Nevertheless over large areas of the Union at one time only capable of carrying a single sheep to every ten acres or so, small dams or bore-holes, yielding an adequate water supply, have made it possible to grow fodder, lucerne, and winter keep, so that now, whenever a drought comes, the farmer can hope to save live-stock which, in the olden days, would have perished almost to the last head.

Irrigation first became the subject of legislation in 1877, when the Cape Legislature passed an Act providing for advances of public money for the purpose of conserving water and promoting irrigation. The Act also laid the foundations of co-operative irrigation enterprise by creating the machinery necessary for the formation of Irrigation Districts and Boards.

The Act was superseded by the consolidating Irrigation Act of 1906. But although legislation became more matured, it had little result in stimulating development, for the majority of farmers continued to view this method of agricultural enterprise with indifference.

The general policy of the Government of the Union, as reflected in the Irrigation Act of 1912, has been to foster private and co-operative enterprise rather than to undertake extensive State schemes. The farmers form themselves into an Irrigation District and elect their own Board, the part of the Government being confined to making a survey and, if necessary, lending the necessary capital on easy terms. By this system the people who benefit are financially responsible for the cost. Shorn of any political interest or influence, co-operative schemes have succeeded where State

[1] *D.R.C. Minutes of Evidence*, 1914 (Cd. 7706), Q. 13.
[2] Op. cit., p. 52.

schemes, exposed as they were to political exploitation, have failed.

The systems followed are of the simplest character. One method is to drill a bore-hole or sink a well, a method which yields a quantity of water which is insignificant for irrigation purposes but invaluable for watering stock. The general method is not storage, but to throw a weir across a river-bed, and when the river comes down in flood the water is distributed over as wide an area as possible by means of furrows. The system is not economical of water, but it has the advantage of being half as cheap as building reservoirs. Also it is a method of irrigation which farmers can themselves undertake without Government assistance.

Save in the maize and cotton belts, the rains over a large part of South Africa come at the wrong time of the year for agricultural purposes. The rains of February and March would, in India, be of great use. Followed as they are over large regions in South Africa by a severe winter, their value to agriculture can only be assured by storage. It follows that no irrigation system could be entirely satisfactory that did not provide for an assured water supply by water conservation, so that crop raising, under irrigation, may be rendered less precarious, and accordingly mere flood diversion has tended to be superseded by systems of water storage. Here Government effort would seem to be more appropriate, but here, still, private enterprise has done most of the work. In the beginning a Government irrigation scheme was only a small affair. Rather than initiate one or two grandiose schemes, it was thought better to start a comparatively small scheme in as many parts of the country as possible, it being anticipated that from these centres larger schemes would radiate. By the year 1930, however, only four schemes of Government irrigation works of any importance had been completed, and of these only one, the Hartebeestpoort scheme, could be described as at all ambitious. For the purpose of this scheme a dam was erected about 25 miles west of Pretoria in the Magaliesbergen. The area of the reservoir is 6½ square miles, and the area which is to be irrigated therefrom is put at 40,000 acres.[1]

The passing of the Irrigation Commission Act, 1926, was

[1] In 1934 the Government took up the ambitious project which had been advocated by Cecil Rhodes, by which some 100,000 acres in the Harts River Valley is to be irrigated from the Vaal.

an indication that the past experience of America and Australia was being repeated in South Africa. Each country must progress in irrigation development by a process of trial and error, according as its peculiar climate, geology, and generally its natural conditions are explored and understood; and the time arrives sooner or later when a general review of past experience is necessary. That moment had arrived in South Africa. Some of the defects of administration which had emerged were thus described by a member of the Union House of Assembly: "The local public come with incurable optimism and draw a beautiful picture of the splendid results that will follow from an irrigation scheme; they get the money from Parliament, and the next step is that the same people come along with a most lugubrious tale of woe and ask the Government to write off a portion of the loan. That this has been possible is due to the fact that we have no strong commission of experts able to go into these optimistic forecasts and sort out facts from hopes. The trouble has been that the Irrigation and Land Departments have worked in water-tight compartments. . . . The Irrigation Department has looked in the past too much to the mere engineering aspect and too little to the land settlement side. The result has been that, after the dams have been built, only then are inquiries started as to the adequacy of the water supply and the extent of irrigable land available, and so on." [1]

Accordingly the Irrigation Commission came into existence as the result of the 1926 Act, charged primarily with the task of bringing about a greater measure of co-ordination in irrigation administration.

Plagues and Pests

"In many respects our farmers are in a worse plight now than they have ever been, for owing to lack of care in dealing with contagious diseases of animals and plants, new diseases have been allowed to enter this Colony, and diseases native to certain parts of it permitted to spread, until a collection of pests has been accumulated that for variety and virulence could scarcely be equalled, and certainly not surpassed, by any country in the world." [2] In these words

[1] *House of Assembly Debates, 1926*, vol. vii, col. 2196.

[2] F. B. Smith, *Some Observations upon the Probable Effect of the Closer Union of South Africa upon Agriculture* (South Africa, Pamphlets, vol. iii, No. 60, in D. & C.O. Library), p. 4.

the Director of Agriculture for the Transvaal, in 1908, indicated one of the main reasons why the pastoral industry and agriculture had not, in the past half-century, made the same progress in South Africa as in Canada, Australia, and New Zealand, and why South Africa did not show the improvement in the range and quality of her farm products and the increased yield that had been accomplished in the sister Dominions.

The circumstance that there is no natural barrier against the advance of diseases and pests from tropical Africa makes the Dominion peculiarly vulnerable. The political organization of the country down to the time of the Union must also bear its share of responsibility. Before 1910 the area of the present Union of South Africa was divided into self-governing Colonies, each with artificial boundaries, each with a separate administration and each with a different conception of the part it ought to play in the fight against plagues and pests. One colony might be prepared to make full use of the means of protection against one of the various cattle plagues that have swept the country from time to time, but it knew that its own efforts might be largely nullified because its neighbours pursued a different policy, and by reason of the impossibility of effectively preventing carriers of infection from crossing the frontier. Some years before the Union, the four Provinces found it necessary to set up a central organization to fight the locust. None of South Africa's problems so urgently demanded collective action by a strong central administration as that presented by its animal diseases, and its insect and fungus pests. Already Milner had infused a new spirit into administration in the Transvaal and Rhodes had ridden rough-shod over fatalism and lethargy in the Cape Province when, with Union, the opportunity came for setting up the strong central organization that was so necessary. Of that opportunity full advantage was taken, and soon the farmers of South Africa had at their disposal a body of men of outstanding ability and specialized training, while thousands of miles of vulnerable frontier disappeared.

Animal Diseases

As a pastoral country, South Africa labours under a severe handicap from which the other Dominions are free. It is the country of animal diseases. Each domestic animal

has been visited by its particular scourge; none escape. There are diseases which are always present in a greater or less degree, others suddenly blaze up into an epidemic which threatens the whole economic life of the country. Such conditions are especially unfortunate in a country where the pastoral industry is always of primary importance and where, in many districts, cattle constitute the chief wealth.

The end of the Boer War found the annexed Provinces with very little of the native live-stock surviving, and that little was heavily impregnated with disease. In addition to those which were endemic in the country, such as horse sickness and gall sickness, the war left a legacy of "almost every other form of contagious disease known to modern science", so that "glanders, mange, rinderpest, pleuro-pneumonia, redwater, scab, etc.", were rife throughout the region.[1] For the purposes of war operations, "vast numbers of imperfectly inspected animals were imported from all parts of the world, and they and the stock already in the country were kept constantly moving from place to place, regardless of the simplest veterinary precautions."[2]

The wholesale clearance of native stock which resulted from the War, was, in one aspect, a blessing in disguise. Just as the Great Fire of London, which swept away whole areas of plague-impregnated houses, cleared the ground for a fresh start with sanitary buildings, so the paucity of animals left in South Africa after the War gave Lord Milner and his officials an excellent opportunity of grappling with the various diseases. Just as disease-producing germs which get into the human system attract the attention of the phagocytes which rush to the centre of infection for the purpose of overwhelming the enemy organism, so South Africa's animal disease museum has attracted some of the ablest veterinary research scientists in the world. Again and again only their devoted labours have stood between South Africa and economic disaster.

A Statute with a rather forbidding title marks the close of the Dark Age in South African agricultural history. Rhodes, with his Scab Act, inaugurated in the Cape of Good Hope the era of constructive effort by the Government on

[1] Letter from Director of Agriculture, Transvaal, to Governor, 30th October, 1902, in *Further Correspondence relating to affairs in South Africa* (Cd. 1463), p. 20.

[2] Ibid.

behalf of agriculture, which was continued by Milner for the benefit of the whole of the Union. The issue was definitely joined between the farmers, among whom lethargy and fatalism had hitherto been dominant, and the enlightened sections of the farming class and the rest of the community who desired to invoke science, organization, and efficient administration in aid of the country's greatest industry.

Scab is a disease which selects sheep and goats for its victims. It is a contagious disease of the skin and has a purely parasitic origin, the cause being mites called *acari*.[1] The irritation and itching which are symptoms of the complaint mean much suffering by the animals attacked : the farmer on whose flock the disease gets a grip must expect heavy loss ; and, left to itself, the infection spreads rapidly. An infected flock is not a pleasing picture, nor a desirable asset, as will appear from a description of a miserable flock of sheep seen by the members of the Scab Disease Commission : " Some of them were almost bare of wool, covered with hard crusts of scab, and presented a most disgusting appearance. The owner stated that he had bought the sheep some few weeks before at a public sale in the district, and that since then some fifty had perished from scab, some dying on the road in process of removal. He did not seem to consider it a very unusual thing to be the possessor of such a flock, and gave us to understand that it was not a great rarity in that district to meet with sheep in such a miserable plight." [2] Furthermore, as was pointed out by those who described this forbidding sight : " As these sheep were freely moved through the country, naturally scattering contagion in their path, how can it be expected that scab can be anything else but prevalent where such things are possible."

The evidence given before the Scab Disease Commission in 1892–4 was conflicting, but nevertheless, after weighing all the evidence and personally inspecting flocks in different localities, the Commissioners declared themselves as " convinced that scab is prevalent to an alarming extent in the various sheep and goat flocks of the country, especially in the north-western and western districts, and causes enormous losses to the farming community, particularly in seasons of

[1] See " Scab, its Nature and Treatment ", by A. G. Davison (Principal Sheep Inspector), in *Agricultural Journal of the Union of South Africa*, vol. iii, 1912, p. 182.

[2] *Report of Scab Disease Commission, 1892–4* (G.I. 1894), p. 10 (Appendix I to *Votes and Proceedings of Cape Parliament*, vol. 5, Session 1894).

drought." [1] Indicating the various items making up the annual pecuniary loss suffered by the Cape as the result of the prevalence of scab among the flocks, the Commissioners say that " taking one scabby flock with another, the yield of wool of all such flocks would be diminished by at least 1 lb. per head ; that all else being equal a scabby wool is worth at least ½d. per lb. less than a sound wool, that scabby merino skins are deteriorated in value from at least 1d. to 1½d. per lb. and scabby goat skins still more, and when badly affected are absolutely valueless ; that vast numbers of sheep and goats perish annually from the disease, especially when subjected to privation ; and that the increase of such flocks is much less than that of healthy ones." [2]

The problem which Rhodes made up his mind to solve, the delivery of South Africa from the scab pest, was in his time at least 200 years old. It certainly existed under the regime of the Dutch Government of the seventeenth century, for in the year 1693 Simon van der Stel, Governor on behalf of the United Netherlands Chartered East India Company at the Cape of Good Hope, issued a Placaat pointing out that " heavy mortality has occurred among the sheep of the Company and the residents, to the inconvenience of the Company's outward and homeward bound vessels and loss to this Colony ; and that it has mainly been caused by *scab*." Even then the contagious nature of the disease was recognized, for the Governor went on to say that they had the disease among the flocks " because people have been negligent in segregating the scabby sheep from the healthy ones, so that in consequence of the sheep of one infecting those of another, whole troops have died off and become carrion for the wild beasts ". Accordingly he saw fit " emphatically to command and order " that all shepherds and others in charge of sheep should at once warn the master as soon as any sheep was found to be afflicted with scab, " that the throats of every such sheep or all such sheep may be cut and further contagion prevented." For every one who " should be found to have shown the least carelessness in this " there was a fine of 25 rix dollars.[3]

[1] Ibid., p. 3.

[2] Ibid., p. 5. See also *Cape House of Assembly Debates, 1894*, p. 154, where Dr. Smartt, who had been a member of the Commission, accepted £500,000 as a fair estimate of the annual loss from this cause.

[3] A translation of the Placaat is given in Appendix D to the *Report of the Scab Disease Commission, 1892–4* (*supra*).

The decrees of the Dutch Governor fell into desuetude, and there was no repetition of his vigorous methods until Rhodes took charge of affairs 200 years later.

Fortunately the remedy need not be so drastic as that prescribed by Governor Van der Stel. Since his time it has been shown that the disease is not difficult to cure nor is the method of cure expensive. The *acari* can be destroyed and the disease eradicated by immersing the sheep twice in the appropriate dip, the two immersions being separated by an interval of a fortnight or so.[1]

To the minority of the Cape colonists who were in touch with international trade conditions and to the more enlightened of the farmers, it was becoming apparent during the last decade of the nineteenth century that the wool producing industry in the colony was approaching a crisis. There had been a gradual but persistent fall in the price obtained for Cape wool. In 1876 the price of a bale of wool was £18 15*s*. In 1894 it was £12 10*s*.[2] And it had to be realized that Australia and Argentina had become strong competitors with South Africa in the wool markets of the world. The Scab Disease Commission had no doubt that the continued presence of the disease of scab in the Colony was largely responsible for the declining fortunes of the Cape wool industry. "The Chairman of the East London Chamber of Commerce, who has been connected with the wool trade for sixteen years in this Colony, and three years previously with the Australian and South American trade in London and on the Continent, considers that when he first went into the trade nineteen years ago the relative value of Cape wools as compared with Australian and South American wools was 10, 15, and, in some cases, 20 per cent more than now in favour of the Cape, and attributes this very largely to the fact that for years this Colony was without any Scab Act at all, while the competing countries named have been most industrious in stamping out scab."[3] The same witness told the Commission how,

[1] Lime and sulphur or caustic soda and sulphur are the dips recommended by the Agricultural Department of the Union (*Agricultural Journal of the Union of South Africa*, vol. v, 1913, p. 392). The Scab Disease Commission thought tobacco mixed with sulphur equally efficacious, and they recommended it for the reason that, inasmuch as tobacco was a product of the country, a good part of the £60,000 or £70,000 annually paid for imported dipping materials might go into the pockets of colonial tobacco growers.

[2] *Debates of Legislative Council of Cape of Good Hope, 1894*, col. 240.

[3] *Report of Scab Disease Commission, 1892–4, supra*, p. 5.

when he attended the London wool sales in 1886, he saw some thousands of bales of wool which had been exported from a scab-ridden district in South Africa, lying at the London Docks. "A buyer comes to a bale, cuts it open, and pulls out a couple of handfuls of scabby wool, and he says at once, what is the good of his buying scabby Cape wool when he can buy good Australian and American?"[1] Another aspect of the matter was illustrated by a witness who was appointed by the Chamber of Commerce to give evidence before the Commission, a member of the Legislative Council and a member of a firm which exported large quantities of skins, especially for glove making. "Dent & Co., perhaps the largest glove manufacturers in the world, showed me when I was in London last year, the whole process they put our first class skins through. . . . They told me positively that if they could reckon upon the entire absence of scab from South Africa, there is no reason why they should not pay 70*s*. a dozen for our Cape skins; they assured me that out of every hundred dozen pairs of gloves ordered from Cape sheepskin, they were able to execute no more than ten dozen pairs, and because the scab in the skin gives so much trouble they are trying to keep the Cape sheepskin trade in the background as much as possible as it is too much trouble to be bothered and worried with the scabby Cape skins. They further said they were making all sorts of imitations for the purpose of taking the place of the Cape sheepskins." Meanwhile, however, the firm were obtaining goat skins from Russia for which they were paying as much as 70*s*. a dozen in comparison with the 40*s*. a dozen paid for Cape sheepskins of larger size, and although the Russian skins were smaller than those from the Cape and less suitable for their class of trade, yet "they are absolutely reliable as regards freedom from scab, and in that way Dent & Co. have no difficulty with them, and no fear in putting forward any of these Russian goat-skins as an article which would maintain their reputation".[2]

There is the more difficulty in understanding any reluctance on the part of South African farmers to adopt a stringent Scab Act, in that Australia, the competition of which in the wool industry was becoming more and more formidable, had successfully emerged from similar troubles, so that her experience was available for the benefit of others. "A strict law, sharp penalties and

[1] Ibid., *Minutes of Evidence*, Q. 423. [2] Ibid., Q. 16462.

enforced dipping," had been the means by which scab had been eradicated from that country many years previously. In New South Wales " scab in sheep was completely wiped out in 1868 " ; Victoria had been " free from sheep scab since 1876 " ; South Australia had been free of the disease since 1871 ; it had been eradicated from Queensland thirty years previously ; Tasmania was proclaimed a clean Colony in 1881.[1] It was apparent that South Africa must fall hopelessly behind in the race for wool markets unless the Colony followed the example of its competitors and cleansed its flocks.

An Act dealing with the matter was passed in 1874, but it was merely permissive, and the expectation of Mr. Molteno, the Prime Minister of the time, that its educative influence would prepare the farmers for a compulsory Scab Act was not altogether realized. The Act was found to work unsatisfactorily and attempts were made from time to time to amend it. In 1886 it was replaced by an Act which was compulsory in regard to the eastern districts of the Colony. Thereafter, down to the appointment of the Scab Commission in 1892, an amending Scab Act, designed to give the principal Act a wider application but largely ineffective by reason of its mainly permissive character, was an annual event.

While the members of the Scab Disease Commission of 1892–4 were satisfied that " there is much less scab among the flocks in those districts where the Act is in operation than in those outside the area of scab legislation ", it was obvious that the existing legislation was a mere palliative and not a cure. One reason for its failure to accomplish what was expected was found by the Commission to be " the lax and uncertain administration of the law in many districts ", and the freedom and ease with which the requirements of the Acts could be evaded. It was proved over and over again that even when dipping was done to satisfy the letter of the law it was not properly done and was quite ineffective. The half-yearly returns as to the prevalence of scab in the different areas had been compiled " in the most careless manner " and seriously understated the prevalence of the disease. Small wonder, for, " that some inspectors have been grossly incompetent has been fully proved." But beyond lax and incompetent administration, there were inherent weaknesses in the Acts so far

[1] Ibid., Appendix E.

passed, weaknesses mainly due to failure to appreciate fully the contagious nature of scab and the hopelessness of trying to deal with it in piecemeal fashion. A system was useless whereunder " one farmer with scabby sheep dipped them in one month, and his neighbour dipped his say three or four months afterwards, when perhaps they had been a cause of contagion to the flock just dipped ". There was also " the constant danger of infection from travelling stock ". The only result was " an endless routine of dipping, cleansing, re-infecting and re-dipping from year's end to year's end, without any possiblity of stamping out the disease ". What was wanted was united and simultaneous action throughout the Colony.

The outcome of the revelations and recommendations of the Scab Commission was the measure which became, in spite of determined opposition, the Scab Act, 1894, of the Cape of Good Hope. Provision was therein made for the appointment of an adequate and competent staff of Sheep Inspectors and Dipping Inspectors. Every owner of land was required to have a dipping tank for dipping all sheep and goats on his land, whether his own or those of people residing on his farm, unless he had the use of tanks elsewhere. If the tanks were not constructed as provided, an Inspector could have them constructed at the owner's expense. All sheep and goats in the Colony were to be dipped during the period of the four summer months commencing with November, 1895. It was considered that dippings so conducted might for all practical purposes be considered as sufficiently simultaneous ; and there was to be a second similar dipping in the following year unless a certificate could be produced showing the animals to be free of scab. Infected animals were to be dipped at all necessary times without reference to any particular period. Severe restrictions were imposed on the movements of scabby sheep and goats to avoid the risk of spreading infection, and they could only be landed from overseas at the prescribed ports and when so landed were to be put in quarantine until a clean certificate was granted in respect of them. In order to facilitate as much as possible the carrying out of these requirements, it was provided that sheep dips, dipping receptacles, and " all tobacco and sulphur intended for dipping sheep " should be carried free on the Government railways. It having been objected that in some parts of the Colony water was so scarce, especially

in times of drought, that none would be available for dipping purposes, the Governor was given power to suspend the operation of any part of the Act during a time of drought in any part of the Colony.

Among a large section of the farmers there was the feeling that a compulsory Scab Act was an unwarranted interference with individual liberty. One of their representatives in the House of Assembly declared that "the Africanders were a free nation, and now the merchants and the attorneys and advocates were trying to take their freedom from them by this Bill". Another warned the Government that "they had, like King Rehoboam, neglected the advice of their old councillors and listened to their younger ones and they would, as did King Rehoboam, reap the bitter fruits that would result". But the Afrikander Bond Congress, seven-eighths of whom were farmers, had declared in favour of the principle of the Bill, and in the end it was given a second reading in the House of Assembly by a more than two to one majority, and among those voting for the measure appeared such names as Merriman, Molteno, Schreiner, and Smuts.[1]

With the growing tendency of the farmers of South Africa to meet in conference and to form associations for the furtherance and protection of their common interests there goes a growing appreciation of the advantages of legislation of which the Scab Acts are instances. Thus, at the Congress of the Cape Province Agricultural Union in 1921, it was decided to form Vigilance Committees from among members of the local Farmers' Associations to co-operate with the Department of Agriculture in its efforts to eradicate scab. Primarily their purpose was to deal with

[1] It was an indication of the importance of the subject that one of the first of the many legislative measures after Union harmonizing and consolidating the legislation of the various Provinces was the Diseases of Stock Act, 1911, by which the Scab Act, 1894, was, with a number of other Provincial Acts, repealed and its substance re-enacted with the modifications shown desirable by experience. The new and consolidating Act, however, applied to other forms of stock as well as sheep. The means for securing compulsory dipping was made the subject of the more elastic procedure of Regulations which the Minister of Agriculture was empowered to make instead of direct enactment, and dipping tanks for stock of all kinds—cattle, sheep, pigs, goats, horses, mules, and dogs—were required. There were included drastic powers for controlling the entrance of stock into the Union, for the isolation of infected areas, and for the destruction of diseased stock. The provisions as to the method of dealing with stock at the port of entry were repealed and re-enacted with modifications by the Diseases of Stock Act Amendment Act, 1916.

a certain percentage of the farming community who, by their neglect or deliberate action, handicapped the authorities in their efforts to eradicate the disease from their midst.[1] The greater influence of a strong central Government has, moreover, been invoked in order to push out farther and farther afield—to Swaziland and to Basutoland for example —the barriers against infection.

In South Africa horned cattle have suffered more than their fair share of affliction from animal diseases and more than once it has seemed that only the epic fight of veterinary science against the invasion has saved the herds from extermination.

Among the stock diseases which are to a greater or less degree endemic in South Africa are anthrax, tuberculosis, gall-sickness, and redwater. Those which have from time to time assumed epidemic proportions are lung-sickness, rinderpest, and East Coast fever. When, after enormous effort, these had been brought under control, there still remained the unsolved problem presented by the two diseases, or rather as was thought as the result of investigations pursued down to the year 1912 the two different forms of the same disease which have been known to afflict cattle in South Africa at any rate for over a hundred years, that is to say, the diseases known as *Lamziekte* (lame sickness) and *Stijfziekte* (stiff-sickness). The diseases are a form of paralysis, principally of the hind quarters. According to native reports, *Lamziekte* had prevailed throughout Griqualand West three times during living memory, each time carrying off nearly the whole of the cattle, each visitation having been during a period of exceptional drought. The story lends colour to the theory arrived at by investigators that the disease is due to some special condition of the soil and its vegetation in certain localities, such conditions varying according as the weather is normal or droughty.[2] The discovery of the cause and nature of the disease has proved a baffling problem.[3] In 1914 the Dominions Royal

[1] According to the *Report of the Union Department of Agriculture for 1923–24*, the percentage of scab infection among flocks in 1922 was 6·88 and 3·25 in 1924.

[2] See generally, as to the stage at which investigation into these diseases had arrived in 1912, article by Dr. A. Theiler in *Agricultural Journal of Union of South Africa*, 1912, vol. iii, p. 463.

[3] Research has disclosed strong reasons for supposing that *Lamziekte* occurs in cattle with a depraved appetite which leads them to pick up any decomposing animal matter they may come across. In certain parts of the country such decomposing matter is invaded by a definite bacterial

Commission were told that *Lamziekte* was increasing in certain districts of the Transvaal and the Orange Free State at an alarming rate and had been responsible for the death of many thousands of cattle.

Lung sickness is the contagious disease among cattle known in modern times as pleuro-pneumonia. It was brought to Cape Colony in 1854 by a bull from Holland which was landed in Mossel Bay. The disease spread with great rapidity, and it was estimated that before March, 1856, fully 100,000 head of horned cattle had died from the disease in Cape Colony alone. It spread from the Cape into Kaffraria where it helped to inflame feeling against the white man, whose witchcraft was supposed to be the cause of the disaster. Continuing its march as far as Natal, the disease had economic results of some importance, for it there caused such appalling losses that many of the farmers were induced to turn from cattle to woolled sheep breeding, and it was only when inoculation was demonstrated to be a preventive of lung sickness that they returned to cattle breeding, although sheep farming survived side by side with it.[1] A later epidemic was that of 1893, when over 36,000 cattle were reported to have died of pleuro-pneumonia in Cape Colony[2]; and the need for constant vigilance is demonstrated by the outbreak of 1922 on the borders of the Waterberg and Zoutpansberg districts which was traced to the illicit movement of cattle into the Union from Bechuanaland.

Rinderpest, a highly infectious febrile disease, first invaded South Africa in 1896. The evidence points to the Sudan as its place of origin, whence it marched south through the Orange Free State and Basutoland. The Government made strenuous efforts to prevent the pest from crossing the Orange River, but nothing could stay its relentless

infection which develops a powerful poison. These factors in the causation of the disease can be removed by eliminating from the farm the matter in which the toxin appears and by supplying the animals with phosphorus, the deficiency of which in their pasture is responsible for the depraved appetite. (See *Journal of the Union Department of Agriculture*, 1923, vol. vii, p. 316, and 1924, vol. viii, p. 460.) The isolation of the bacteria which produced the toxin eluded the investigators until 1925, when an organism from the *Botulinus* group was isolated from infected material, pure cultures of which produced a toxin which, when injected, gave rise to typical cases of the disease. (See "Report of Union Department of Agriculture, for 1924–5", in *Journal of Union Department of Agriculture*, vol. xi, p. 515.)

[1] Theal, *History of South Africa since 1795*, vol. iii, pp. 145-6, 190, 251.

[2] R. Wallace, *Farming Industries of Cape Colony*, p. 284.

march southward, and in 1897 there were outbreaks in the eastern districts of Cape Colony. It is difficult to realize, without experience, the meaning of such a visitation to a people who relied so largely as the people of South Africa on oxen for transport as well as sustenance. The day of humiliation, fasting, and prayer which was appointed in October, 1896, and the general day of fasting which was observed by agreement between the South African Governments when it was known that the rinderpest had crossed the Orange River are some indication of the impression made on a pastoral people by this calamity. A witness of the ruin and desolation left behind by the plague by its southward march thus describes what he saw: "Thirty wagons at one outspan, loaded wagons, loaded with stores of all kinds—I have come across this scene more than once. Hundreds of wagons, tens of thousands of pounds worth of stores, machinery, goods of all kinds, abandoned on the road. The cattle died within a few hours, died in the water if possible, poisoning the whole countryside." And when the visitation had spent its fury, "ninety per cent of the oxen on the high veld had been wiped out. A whole breed, the Matabele cattle, had practically ceased to exist." [1]

Resort was had to various methods before effort was concentrated on the serum method for the purpose of stamping out rinderpest.

When the disease appeared in South Africa it was natural that advantage should be taken of European experience and especially the experience of Great Britain during the great epidemic that visited the country in 1865–6. Accordingly, infected herds were shot and, in substitution for the natural defence from invasion enjoyed by an island country, a wire fence was erected and a cordon of guards organized to keep the disease from crossing the frontier. Such methods could at most only delay the spread of the disease. The extent of the frontier line was too great to be successfully defended by such means. Nevertheless, temporary as was the success in holding up the enemy, it gave time to Dr. Koch, the eminent German bacteriologist, to get to South Africa and to make the investigations which were so fruitful of results.

Dr. Koch's first discovery was the Bile method. How a discovery was made which proved of such service to South

[1] S. P. Hyatt, *The Old Transport Road*, p. 293.

Africa was thus described by Dr. Koch himself: "I was testing the virulence of the various fluids of an animal dead of rinderpest, and amongst others used gall from an animal which had died of rinderpest, fully expecting that it would communicate the disease. I injected 10 c.c. into an animal and it was none the worse; on the contrary, when it was subsequently inoculated with rinderpest blood it resisted its action. I immediately tested the bile from six animals and obtained a similar result." [1] It was progress in the right direction. It could check rinderpest but it did not cure the disease. Its operation was slow, so that after inoculation animals remained liable for about a week to infection. The immunity it bestowed was short. Nevertheless bile inoculation saved large numbers of cattle.

At first Dr. Koch's process of bile inoculation for rinderpest was regarded as only a qualified success. The most conflicting reports of success and failure arrived. But there were bound to be failures when many of the operators were untrained and others careless. Moreover, often cattle were inoculated when already suffering from the disease, or the operation was carried out in the neighbourhood of infection. Later it was found that, if Dr. Koch's advice that inoculation should take place before rinderpest had entered the district had been followed, a large proportion of the cattle would have been saved.

The use of the Bile method was made compulsory in Basutoland where the country was heavily infected. "The Basuto chiefs made bile inoculation compulsory, and out of 100,000 animals operated on, 70,000 were saved, whereas the uninoculated cattle died with very few exceptions. For more than a year since the general inoculation the country has been free." [2]

Dr. Koch devoted most of his attention to the development of the Bile method, but he remained in South Africa long enough to lay the foundations, at any rate, of a still better method of dealing with rinderpest, namely the serum method, and to train an able South African official, Dr. G. Turner, to carry on the work that had been so successfully

[1] Quoted by Dr. G. Turner in "Rinderpest", read before the British Association, 1905 (*South Africa, Pamphlets*, vol. 2, No. 47, in D. & C.O. Library), p. 8.

[2] G. Turner and Wilhelm Kolle, "Report on the Cure and Prevention of Rinderpest," Capetown, 1898 (G. 67—1898) (*Cape of Good Hope, Pamphlets*, vol. ii, No. 37, in D. & C.O. Library), p. 82.

begun. By that method of protection from the plague the cattle are inoculated with virulent blood, so that the healthy animals become infected with the disease in a modified form: then a dose of serum is injected. Its advantages are that the serum can be prepared in large quantities; it can be kept; it does not communicate any other disease; it is cheaper and more effective and imparts immunity for a longer period than the Bile method; and it can be used by persons of normal intelligence but without special training.

In the Mafeking district, where the disease appeared before preventive inoculation was available, so that less than 1 per cent of the animals were inoculated, 95 per cent of the cattle were lost. Cape Colony had time to organize defence measures. Of the seventy-seven districts of Cape Colony, twenty escaped the visitation entirely, but of the total number of cattle in the Colony, namely 1,639,435, before the epidemic, 575,864 died of rinderpest.[1] So that in Cape Colony, while the losses were immense, yet nearly two-thirds were saved which would almost certainly have perished had precautionary measures not been taken.

Instances illustrating the general experience were given in the Cape Legislative Council by members, one of whom said that he inoculated his cattle and lost only two out of 180. On another farm the cattle were dying at the rate of ten to twelve a day until a veterinary surgeon was called in to inoculate the herd and by this means the rest were saved.[2]

South Africa was entitled to say that it was the only country where rinderpest has been arrested and eradicated without the necessity of the wholesale slaughter of the cattle.

When the rinderpest had spent itself, the stock farmer and the transport rider settled down to retrieve their shattered fortunes, buoyed up by the thought that at last their troubles must be at an end. But their trials were not yet over, for with the opening of the twentieth century the East Coast Fever arrived, a disease resembling rinderpest only in its deadliness. It seemed as though Africa was determined to show how infinite were her resources in plagues.

[1] *Rinderpest Statistics for the Cape Colony, 1896–7–8* (prepared by the Agricultural Department of the Cape), quoted by Dr. G. Turner in "Rinderpest" (*supra*), pp. 22–3.

[2] *Cape Legislative Council Debates, 1898*, vol. 18, col. 20.

East Coast Fever is a disease peculiar to bovines, the immediate cause of which is a characteristic parasite found in the blood of the infected animals. It is not immediately contagious as is rinderpest. The agent of infection is the tick, which conveys the causal blood parasites from the infected to the healthy animal, as was established by Lounsbury when working on the disease in Rhodesia.[1] For this reason the introduction of susceptible cattle into a pasture over which " salted " animals have grazed and dropped ticks may suffice for infection, although there has been no actual contact. Dr. Koch differentiated it from Texas Fever with which it had hitherto been identified.

The disease is characterized by an appalling mortality rate. When Dr. Koch arrived in Umtali in February, 1903, to investigate the disease, he " saw the first case of the disease in a calf, the survivor of a large herd ". Proceeding to Salisbury, " the epidemic, after having killed off nearly the whole stock of the township, had temporarily abated." [2] Brought to Victoria by transport cattle from the north, the disease became established on the Commonage, and " made a clean sweep of most of the cattle grazing there ".[3] The mortality among infected animals was commonly 90 per cent.[4]

The first recorded outbreak occurred amongst a herd of about 1,000 cattle which were landed at Beira from New South Wales at the end of 1900. As they could not be sent immediately by rail into Rhodesia, for which they were destined, they were grazed on the veldt for a few weeks. There the disease broke out amongst them, and thence they were sent to Umtali, carrying the disease with them. New South Wales had not exported the disease with the cattle, for there the disease was unknown. The generally accepted explanation was that the highly susceptible Australian cattle had been landed in a district where the disease had long existed and had there succumbed as apparently was the habit of most imported cattle along the East African

[1] H. E. Laws, " Cattle Dipping at Short Intervals," in *Agricultural Journal of the Union of South Africa*, 1913, vol. v, p. 871.

[2] Dr. R. Koch, " Interim Report on African Coast Fever," Southern Rhodesia, 1903 (*South Africa, Pamphlets*, vol. ii, No. 38, in D. & C.O. Library), p. 21.

[3] Dr. R. Koch, " Fourth Report on African Coast Fever," Southern Rhodesia, 1904 (A. 4–1904) (ibid.), p. 2.

[4] Ibid., p. 6.

coast north of Beira.[1] That the disease secured a foothold in the Transvaal by similar means, that is to say by being carried inland from the infected coastal districts, was Dr. Koch's opinion.[2] In the Transvaal over 14,000 animals died from East Coast Fever in 1904 and outbreaks continued there in serious numbers for several years.[3] The plague crossed the border into Natal and swept the Province for 200 miles. "All our cattle were wiped out. We lost 400 head," was the simple but illuminating statement of one Natal farmer.[4] The loss that the visitation could inflict on a single transport rider is best described in his own words: "In the last days of the Boer War, the African Coast Fever came. . . . I suppose that, in one way and another, we owned some six thousand pounds worth of property when the disease broke out. A few months later, we were only just able to pay our fares out of the miserable country. I am glad to say that, personally, I saw very few of our cattle die. . . . I know that the whole of the black span died at Selukwe, and that their wagon was left on the hills; and I know that the red span's wagon was abandoned, fully loaded, near the Tebekwana Drift. I am not sure when the rest came to grief; but, in the end, everything we had was left on the veldt, for the natives to loot or the white ants to destroy." [5]

To individuals the epidemic could bring ruin. Infinitely more serious was the collective economic disaster which it could bring to a land where only oxen could meet the transport requirements of many districts and where the disappearance of such means of transport "would entail the wholesale curtailment or closing down of farming, mining, and other industrial operations in many parts of the country".[6]

The methods of defence of which experience had been

[1] Dr. R. Koch, "Interim Report on African Coast Fever" (*supra*), pp. 24–5.

[2] It was for the reason that the disease was ultimately regarded as having penetrated inland from the coastal districts that the name by which it was first known, Rhodesian Fever, was abandoned. He thought African Coast Fever was the more accurate term. The Government of Southern Rhodesia in its turn adopted the term East Coast Fever when appointing the Commission of Inquiry of 1910.

[3] *D.R.C. Minutes of Evidence, 1914* (Cd. 7706), Q. 5541.

[4] *Agricultural Journal of the Union of South Africa*, 1913, vol. v, p. 12.

[5] S. P. Hyatt, *The Old Transport Road*, pp. 297–8.

[6] Report of Committee of Inquiry on African Coast Fever, 1910, Southern Rhodesia (A. 14–1910) (*South Africa, Pamphlets*, vol. iii, No. 77), p. 4.

acquired in the earlier epidemic were again put into operation. Infected cattle were slaughtered and their movement from place to place was restricted. Dr. Koch's assistance was again invoked and he developed a system of inoculation as a protective measure, but he did not claim that it was curative,[1] and it was clear that the weapon with which rinderpest was successfully opposed would not be equally effective against a tick-borne disease such as East Coast Fever.

It was from Cape Colony that Australia got the first sheep and horses, the descendants of which have brought such prosperity to the latter Dominion.[2] In return Queensland taught South Africa how the tick-borne diseases that ravaged her cattle could be exterminated by the simple and inexpensive process of dipping. The successful development of this method of fighting the worst of the plagues that beset the live-stock of the South African farmer was the outcome of the enthusiastic and unselfish co-operation of a practical farmer with an able scientist. The story has been officially recorded.

"In the year 1901 Mr. Baynes dispatched an agent to Queensland to purchase a shipload of cattle from the tick-infested areas for his dairy farm at Nels Rust, Natal. It was supposed that these cattle would prove immune to South African redwater. It was soon seen, however, that this idea was erroneous. On arrival, the Australian cattle were found to be suffering from both redwater and lung-sickness, and practically all succumbed to those diseases. Nevertheless this unprofitable venture proved to be the most profitable speculation that Mr. Baynes ever undertook, as it turned his attention to the methods of tick destruction then in vogue in Queensland. Learning that the Government of that State were eradicating the tick by means of dipping, he straightway set to work, erected a dipping tank, the first in South Africa, and prepared to dip according to Queensland formula. In all this work Mr. Baynes was ably assisted by his manager, Mr. C. D. Alexander, who drew up the plan of the dipping tank and constructed a perfect model. The success of these experiments was instantaneous."[3] Where

[1] See the series of four Reports on African Coast Fever by Dr. R. Koch, which were presented to the Legislative Council of Southern Rhodesia in 1903–4 (*South Africa, Pamphlets*, vol. ii, No. 38, in D. & C.O. Library).

[2] See pp. 88 and 89.

[3] *Agricultural Journal of the Union of South Africa*, vol. v, 1913, pp. 1–2.

dipping has been systematically carried out "redwater has been virtually eliminated".[1]

But when, in the latter days of the Boer War, East Coast Fever began its devastating sweep through the country, it became necessary to find a dip that could be used more frequently than the Queensland dip which was used to combat redwater. "At this moment there came on the scene a man who was destined to complete the trinity of workers and, at the same time, to close the final chapter in the conquest of the tick—Lieut.-Colonel Watkins-Pitchford, formerly Government Veterinary Bacteriologist to Natal. Watkins-Pitchford was a welcome visitor at Nels Rust, and began his observations there, which, with his laboratory experiments at Maritzburg, three years later gave him the key to the problem. . . . He evolved the now well-known Laboratory dip, sometimes called the Short Interval or Three-day Dip."[2] Baynes had the satisfaction of knowing that by his introduction of dipping he had made South Africa one of the greatest cattle countries in the Empire. He also enjoyed a material reward, for "all through the ravages of East Coast Fever, out of a herd of 1,300 at Nels Rust, only five succumbed to the disease".[3]

Horse-sickness is a deadly and virulent disease which appears to be peculiarly African. The name by which it is known indicates the particular animals it specially singles out for attack, but the morbidity of mules approaches that of horses. Donkeys, however, are much less susceptible to the disease.

At one time horse-sickness was looked upon as entirely a South African disease, but it has been found that it occurs much farther north. It would equally be a misconception to suppose that it is universal in South Africa. On the authority of Sir Arnold Theiler, whose work in connection with South African diseases is outstanding: "Generally speaking, the Southern Cape is now free from it. It is not known in the greater portions of the Free State and Basutoland. It is but rarely found in the high veldt of the Transvaal and Natal."[4] It is the general experience that it is

[1] Ibid., p. 8.

[2] Ibid., pp. 2–4, and see Watkins-Pitchford, *Tick Destruction and the Eradication of East Coast Fever and other South African Diseases by Dipping* P. Davis and Sons, Maritzburg). The original three-day dip consisted of arsenite of soda, soft soap, and paraffin.

[3] Ibid., p. 8.

[4] Sir Arnold Theiler, late director of Veterinary Education and Research, Union of South Africa, "African Horse Sickness (*Pestis equorum*)" (*Science Bulletin* No. 19 of Union Department of Agriculture, 1921), p. 2.

the low lying districts such as are found in the Eastern and South Eastern coastal belt that the disease specially haunts. Furthermore, there appears to be a direct relationship between rainfall and the prevalence of horse-sickness. From data carefully collected during the 1923 outbreak and correlated with previous experience, the conclusion was arrived at that "almost invariably the months of February, March, and April are the worst for horse-sickness, the actual climax varying with the period of maximum rainfall".[1] The first recorded severe epidemic, that of 1719, was observed to come to a sudden end in July with the arrival of frosty nights[2] and the termination of the visitation with the occurrence of frost has since been the common experience.

The organism responsible for horse-sickness is elusive, but, according to Sir Arnold Theiler, writing in 1921: "the observations made show in a very definite manner that horse-sickness is insect-borne, in particular is the fact of the safety of horses stabled in insect-proof houses. Whilst therefore doubts no longer are entertained about the mode of infection, no proofs have been brought forward as to which insect is the actual carrier."[3]

The German term for the disease is *Pferdesterbe*, and that expressive term is entirely justified, for when once the disease has been contracted there is no cure and the chances of a natural recovery are remote. The few animals that do recover have a particular name and a quite special value. A horse or mule that has recovered from horse-sickness is termed "salted". In the closing years of the nineteenth century a "salted" horse usually fetched from £70 to £90.[4] The high value placed upon "salted" animals was due not only to their comparative rareness but also to their considerable degree of immunity from further attacks of the disease.

While the quest for a method of treatment for horse-sickness has so far had no satisfactory result, research has made substantial progress in the discovery of means of prevention. Since it is now generally accepted that the transmitters of the disease are insects that fly by night—

[1] Dr. P. J. du Toit, Deputy Director of Veterinary Education and Research, "Horse Sickness in 1923," in *Journal of the Union Department of Agriculture*, 1924, vol. viii, p. 371.
[2] G. McCall-Theal, *History and Ethnography of South Africa before 1795*, vol. ii, p. 448.
[3] Theiler, op. cit., p. 5.
[4] S. P. Hyatt, *The Old Transport Road*, p. 294.

mosquitoes in particular being under suspicion—an obvious precaution is to take steps to prevent the animals from being bitten by such insects. It has been found that if horses are kept in fly-proof stables between the evening and the morning they have every chance of escaping infection.[1]

The Veterinary Research Branch of the Union Department of Agriculture has with assiduity and skill developed inoculation as a preventive of horse-sickness, and its officers are entitled to claim that they have developed a technique which is imparting to horses an increasing immunity. The heavy outbreak of the disease in 1922–3 gave the Department an opportunity to collect valuable data, and one of the conclusions arrived at was that " it is impossible to arrive at an accurate estimate of the total losses, but in some parts of the country 70 per cent and more of the susceptible horses seem to have died of this disease ". During the same period, " as far as could be ascertained, 17·6 per cent of the horses inoculated during 1922 and returned to their owners died of horse-sickness." In arriving at this figure full weight was given to every factor that was unfavourable to the view that inoculation gave increased immunity.[2]

While inoculation was in the early stages of development as a preventive of horse-sickness, many farmers, Joseph Baynes among them,[3] believed in dipping as a valuable means of combating the disease, the idea being that a dip, applied with sufficient frequency, left a sufficient amount of poison on the animal's skin to make it uncongenial to the insect that transmitted the disease. A witness giving evidence before the Dominions Royal Commission of his experience during the 1913–14 epidemic said: " I have thirty mules and horses which I used not to dip. Three months ago, when the horse-sickness started, I lost two mules in a week, and then I started putting the mules and horses through the cattle dip and then stabling them closely. Since then I have not lost one. A near neighbour of mine during the same period has lost nineteen out of forty." [4] Interesting evidence of an even earlier date is that of a soldier who was attached to a mounted column in the

[1] See *Journal of Union Department of Agriculture*, 1925, vol. x, p. 12, and Theiler, op. cit., p. 3.

[2] Dr. P. J. du Toit, op. cit., pp. 381, 382.

[3] *D.R.C. Minutes of Evidence, 1914* (Cd. 7706), Qs. 5369–5371, and see p. 147.

[4] Ibid., Q. 4465.

military operations of 1901. Applying notions brought with him from England, he had every horse and mule in his charge thoroughly washed once a week with an arsenical dip as a means of keeping horse-sickness away, with the result that he lost only 5 per cent of the animals for which he was responsible, while the column lost over 40 per cent.[1]

South African records of the visitations of horse-sickness provide an interesting study in the periodicity of disease, for through the eighteenth and nineteenth centuries it seems to have assumed epidemic form at intervals of approximately twenty years.[2] The twentieth century has so far been unfortunate in that it has seen a second epidemic of horse-sickness in 1922–3 after a severe one in 1913–14.

The seriousness of the loss to the farming community and the importance of research for the purpose of controlling the disease is apparent from the Cape of Good Hope record showing that, during the record epidemic of 1854–5, 64,850 animals perished from it, the mortality being over 40 per cent of the whole number of horses in the Colony.[3] Nor has the virulence of the disease decreased in modern times, for recorded incidents of the 1922–3 outbreak are the loss of fifty-three out of fifty-seven horses on one farm, and of 250 out of 400 on another in the same district, while in Johannesburg there was " hardly a milk vendor round the city who had not lost one or more of his horses, and many stables have been depleted ". On this occasion, too, losses in mules throughout the Transvaal were heavy, and the mortality spread to donkeys.[4]

Insect and Fungus Pests

Addressing the Conference of Union Entomologists in 1925, the Chief of the Division of Entomology of the Union Department of Agriculture referred to the increasing gravity of the problem of insect pests. Advancing civilization, with its quick transport by sea, by land, and now through the

[1] See letter in *Agricultural Journal of the Union of South Africa*, 1913, vol. v, p. 473.

[2] Visitations of the disease are recorded in 1763, 1780, 1801, 1819, 1839, 1854–5, 1870, 1891–3, and 1913–14. See Theal, *History and Ethnography of South Africa before 1795*, vol. ii, p. 448; vol. iii, p. 100; *History of South Africa since 1795*, vol. iii, pp. 145–6; Theiler, op. cit., p. 1; Schreuder, " The Cape Horse," (*South African Pamphlets*, vol. 3, No. 75, in D. & C.O. Library).

[3] T. B. Bayley, *Notes on the Horse-sickness at the Cape of Good Hope in 1854–5*, Capetown, 1856, p. 105.

[4] Dr. P. J. du Toit, op. cit., p. 370.

air, was rapidly building up some terrific problems for the human race, and one of the most serious of them was that of insect pests. The fear that man may yet be conquered by insects was felt by not a few well-informed economic entomologists. To prevent calamity more rapid progress in devising means of offence against these tiny foes was necessary, immensely formidable as they had become owing to their rapid multiplication under the increasingly favourable conditions created for them by man's interference with the checks provided by nature.

Few of the cultivated plants and trees are without their special enemy. South Africa's potential yield of wheat is substantially reduced by certain insect pests and fungous diseases. Wheat aphis and the grain bug have been found especially troublesome. Of the fungous diseases, the most serious are rust and smut. Rust has been checked to some extent in the wheat belt of the Cape by the introduction of rust-resisting and early maturing varieties of wheat. In other parts of the Union the campaign against the diseases of wheat has not made the same progress.

The Division of Botany and Plant Pathology of the Union Department of Agriculture has also investigated the rusts that are parasitic on maize. It found in 1912 that the alternate host of maize rust was the sorrel and accordingly the remedy was to get out that particular weed wherever it appeared. The entomologists also have busied themselves in the study of the life history of the Maize Stalk-borer, a grub which bores in the stalk of the maize plant and is the most serious pest to which the plant in South Africa is subject, and have been able to indicate to farmers various ways of checking it. Then again for some years a series of experiments have been conducted in the attempt to discover a Jassid-resistant cotton. If the problem of that small winged bug which breeds on the under side of the leaf and sucks the sap could be solved one of the most serious obstacles to the successful development of cotton growing, especially in the low veldt areas, would be removed. The Boll-worm, being an internal feeder, is a formidable enemy, for to the ordinary spraying and dusting with poisons it is indifferent and the losses for which it is responsible among cotton growers have been enormous. To prevent the addition of foreign pests to those already in South Africa, a close watch is kept on the small amount of cotton seed that can legally be imported into the Union.

The Eucalyptus Snout-beetle, a serious insect pest which was imported from Australia and became widespread in the south-western districts of the Cape Province about 1925, has also engaged a good deal of attention, and much work has been put into the discovery of the best method of controlling the Codling moth, the most serious insect pest of apples, pears, and stone fruits.

The Wattle Bag-worm, an insect native to South Africa, defoliated hundreds of acres of the wattle plantations of Natal. A fungus was cultivated in the laboratory which attacked the insect and it was distributed throughout the plantations to spread disease among these destructive little creatures.

The manner in which diseases have become internationalized is illustrated by the ravages suffered by the tobacco plant in South Africa from two imported pests, one a bacterial organism and the other an insect.

The bacterial disease is termed Wildfire. It has played havoc with the tobacco crop, notably in the Transvaal in 1922–3 and in 1923–4 it appeared in the Turkish tobacco growing districts of the western Cape Province. Previously it had caused heavy loss in the tobacco growing regions of America, notably in North Carolina where it was noticed in 1917. The organism, which is very minute, is easily spread, and by 1922 it was found in practically all the tobacco growing areas of the United States.[1]

Wildfire may be introduced into a seed bed by infected seed. "A system of treating tobacco seed with formalin as a check to Wildfire was inaugurated by the Division of Tobacco and Cotton, but only a small percentage of farmers took advantage of the facilities, notwithstanding that the work was done free of charge." [2]

The insect pest is the Tobacco Slug or Beetle. It apparently came from South America, and was probably introduced into South Africa during the Boer War with the large quantities of forage and the military supplies which were shipped from Argentina where it was already known but was so little harmless as to give rise to no anxiety.[3] It was observed in Natal, in the Piet Retief district of the Transvaal

[1] *Journal of the Union Department of Agriculture*, 1924, vol. ix, p. 211.
[2] "Report of Union Department of Agriculture for 1923–4," in *Journal of Union Department of Agriculture*, 1924, vol. ix, p. 489.
[3] *Journal of the Union Department of Agriculture*, 1923, vol. vi, p. 380; vol. vii, p. 295.

and near East London in the Cape Province. In 1918 the visitation was so serious that " whole fields of tobacco in the Piet Retief district were virtually destroyed by this insect ".[1] A remedy is to spray the seed beds constantly with arsenate of lead.

But the locust is, of course, by far the most formidable foe and the destruction wrought by it is wholesale.

In the middle of 1923 flying swarms of locusts from the Kalahari spread eastwards and southwards to Utrecht, Harrismith, Barkly East, and Oudtshoorn. It was the heaviest infestation known for years, and for the campaign against the invasion a vast organization was called into being. Over 2,000 field officers were appointed and farmers and native chiefs were pressed into the service. But destruction of the invaders in the territory of the Union was only followed by fresh swarms from the Kalahari, their apparently inexhaustible breeding place, and it was realized that the locusts must be dealt with " in areas hitherto considered beyond human effort ", even though resort to the use of aeroplanes should become necessary.[2]

When, accordingly, in the 1924–5 season, the previous invasion was repeated on an intensified scale, the Union Department of Agriculture organized an expedition of administrative, technical, and field officials into the region of the locusts' apparent headquarters, the Kalahari. The border was protected by motor lorries suitably equipped with means of offence against swarms showing an intention to penetrate the territory of the Union. In the two campaigns of 1923–4 and 1924–5, the expense incurred was over £700,000 and the number of swarms destroyed was nearly two millions.[3]

What a single swarm amounts to may be gathered from Bryce's description of " a strange sight, beautiful if you can forget the destruction it brings with it. The whole air, to twelve or even eighteen feet above the ground, is filled with the insects, reddish brown in body, with bright gauzy wings. When the sun's rays catch them it is like the sea sparkling with light. When you see them against a cloud they are like the dense flakes of a driving snowstorm. You

[1] W. H. Scherffius, " The Future of the Tobacco Industry in South Africa," *Journal of Union Department of Agriculture*, 1922, vol. iv, p. 224.

[2] Report of Union Department of Agriculture, 1923–4 (*Annual Departmental Reports*, 1923–4 (U.G. 15–1925), Pretoria, 1925), p. 100.

[3] " Report of Union Department of Agriculture for 1924–5," in *Journal of the Union Department of Agriculture*, 1925, vol. xi, p. 488.

feel as if you never before realized immensity in number. . . . The myriads of insects blot out the sun above and cover the ground beneath and fill the air whichever way one looks. The breeze carries them swiftly past, but they come on in fresh clouds, a host of which there is no end, each of them a harmless creature which you can catch and crush in your hand, but appalling in their power of collective devastation ".[1]

The serried ranks of an army of voetgangers—locusts in the wingless stage—on the march is an equally impressive sight. To quote the description by an eye-witness of one such advancing army: " These locusts, as far as I could ascertain, formed a swarm at least three miles long by a hundred yards wide . . . as the vanguard rèached me it merely divided into two portions at that point, passing on either side of me as closely as possible and rejoining beyond me." [2] During the great visitation of 1934, trains as far south as the Cape Province were seriously delayed by the swarms they encountered; and one of the poison-spraying trains sent to patrol the line between Bloemfontein and Naauwpoort fell in with a swarm of hoppers, south of Colesberg, " covering an area approximately fifteen miles by six almost in one solid mass." [3]

An instance in illustration of the powers of devastation to which Bryce refers is that of a swarm seen to settle on 50 acres of maize 3 feet high in the late afternoon, which did its work so thoroughly and expeditiously that next morning only the bare stalks were left.[4]

When it is realized that two prolonged invasions had already occurred since the beginning of the century when in 1927–8 another appeared, the campaign against which was still going on in 1931–2; that the visitation which began at the end of 1933 had assumed such terrifying proportions by the beginning of 1935 as to call for the greatest anti-locust campaign in the history of South Africa; and that no part of Africa south of the Zambesi has escaped except the coast belts, it will be understood that General Smuts was not speaking in extravagant language when he said that the locusts were " a far greater scourge than

[1] James Bryce, *Impressions of South Africa* (3rd edition), p. 229.
[2] "Locusts," by C. E. M. C. (*South Africa, Pamphlets*, vol. 4, No. 101 (1926), in D. & C.O. Library).
[3] *Times*, 4th December, 1934.
[4] "Locusts," by C. E. M. C. (*supra*).

either Rinderpest or Tick Fever", and that the effects of their invasions were more dreadful and far reaching.[1]

From time to time various methods of destroying the locusts have been tried, among them trampling with sheep, driving the swarms of voetgangers into pits or traps, burning, and spraying with soap and water. About the year 1894 Gilbert Wilkinson, a Natal sugar planter, noticed that the insects were attracted by the waste molasses of the sugar mill and he conceived the notion of mixing some such sweet stuff with poison and using it as a bait. This method was found to give the best results.

The material found to be most effective was a poison made by mixing sodium arsenite solution with either treacle or a solution of sugar. When required for use this concentrated poison is heavily diluted with water and sprayed over and around the swarm.[2] A little of the poison goes a long way, for if the advance guard of a swarm devour the herbage which has been sprayed for their benefit, those following devour their stricken comrades and themselves succumb. The introduction of the dusting process, in which finely powdered arsenite of soda is used, has made it possible to deal with the pest by poison in districts where water is not available.

It also made possible the use of aeroplanes, the effectiveness of which for spraying swarms of locusts with poison dust was demonstrated in South Africa in 1933–4. In Natal, however, which is closely cultivated, this method of attack has its difficulties; moreover it has been found that the danger of damage to the cane crop by the use of the poison against locusts is considerable.

The latest ally in the campaign is an insect, the larvæ of which attack the eggs of the pest.

The development of a Natal planter's discovery into an efficient weapon for combating a plague was the result of long and careful scientific research directed by the Division of Entomology of the Union Department of Agriculture.

[1] Report of Conference at Pretoria in May, 1907, to discuss Concerted Action for dealing with the Locust Pest (*South Africa, Pamphlets*, vol. 2, No. 59, in D. & C.O. Library).

[2] See Dr. Ernest Anderson, "The South African Locust Poison," *Science Bulletin*, No. 15, 1920, of the Union Department of Agriculture.

An illustration of the magnitude of a locust campaign is the fact that, during the 1924–5 visitation, 550,000 gallons of this concentrated locust poison and 75 tons of arsenite of soda powder were used in destroying 832,896 swarms ("Report of Union Department of Agriculture for 1924–5," in *Journal of Department of Agriculture*, 1925, vol. xi, p. 587).

It is an interesting illustration of the value of a properly equipped and efficiently staffed public department in the service of a great industry.

The obligation is placed by statute [1] on the occupier to deal with any locusts that appear upon his land, and the Government supplies, free of charge, the materials necessary for their destruction. These are legal requirements that are not always willingly obeyed. Nor is it surprising that the farmers become dispirited and dismayed when again and again, having fought one invasion, they were called upon to deal with another coming out of the Kalahari with its 168,000 square miles of area. In an appeal in 1925 to the farmers of South Africa to continue their efforts the Minister of Agriculture, while claiming that they had been able "under Divine guidance to rid every part of the Union of voetganger locusts" and so save the crops, yet admitted that they had not been able in the Kalahari successfully to grapple with the pest "owing to the vast area involved and the scarcity of water", with the result that flying locusts were continuing the invasion.

One result of the locust plague, and in particular the problem of attacking them in the Kalahari, was to provide a strong argument in favour of Union. As early as 1906 it was recognized that the common enemy could never be defeated so long as the separate colonies were left to conduct their individual campaigns, and Lord Selborne, then High Commissioner, put forward a project for establishing a Central Bureau at Pretoria the principal function of which would be to collect reports of locust swarms which, when tabulated and mapped, would provide information that would enable particular districts to be warned of probable invasion and to take steps in advance to deal with them. At a conference in August, 1906, at which all the British Colonies and Territories in South Africa were represented except Southern Rhodesia and the Bechuanaland Protectorate, the proposal was approved, and later the Administrations of the last two countries concurred.[2] The Central Locust Bureau was consequently set up and the information there collected made a substantial addition to

[1] See Agricultural Pests Act, 1911 (No. 11 of 1911), and amending Act No. 12 of 1922.

[2] See Correspondence relative to co-operation between the South African Governments on the Destruction of Locusts, Pretoria, 1907 (*South Africa, Pamphlets*, vol. 2, No. 56, in D. & C.O. Library).

the previously existing knowledge of the life history of the insect.[1]

The fact that the exploration of the sandy desert of the Kalahari, hitherto an unknown region, was one of the results of the attack on the region whence the locusts drew their reserves for the invasion of the settled country to the south, is yet another indication of the seriousness of the locust problem. Whether the Kalahari is an area where the locust has its permanent habitat or whether as has been supposed the desert is merely their invasion area, or at most a breeding ground for swarms that migrate there from some permanent habitat elsewhere,[2] it is clear that the problem presented is one which would have been quite beyond the resources of an organization less powerful than the Government of the Union. The growing appreciation of the advantages of central control in dealing with such a problem is illustrated by the decision in 1925 to bring the Mandated Territory of South West Africa within the jurisdiction of the Union Government for the purpose of organizing the war against the locust in South Africa.

[1] See *Reports of Committee of Control of S.A. Central Locust Bureau*, 1907–1911.

[2] For a full discussion of this and allied problems, see Jacobus C. Faure, "The Phases of Locusts in South Africa," *Bulletin of Entomological Research*, September, 1932, vol. xxiii (London: Imperial Institute of Entomology), pp. 293–428.

CHAPTER 8

FARMING AS AN ORGANIZED AND STATE-FOSTERED INDUSTRY

Assistance by Fiscal measures.
Early wine preferences in the home market.
Import duties on wheat.
The Dumping Duty.
Beef bounties.
Sugar and high protection.
Assistance through the Department of Agriculture.
Lord Milner's post-war reconstruction schemes.
Pooling of effort as a result of the Union.
Agricultural education.
Assistance through the Union Land Bank
Constitution of the Bank.
Advances to farmers.
Co-operative organizations.
Agricultural credit.
Distress relief.
The organization of distribution.
Grain elevators.
Cold storage.
Control of quality of wool and wine.
Halting progress of dairying and attempt at organization.
Government control in the sugar industry.
Grading and Government inspection.

THE campaign waged against the forces of nature on behalf of the South African farmer has been described. It remains to indicate the manner in which the attempt has been made to direct and control the economic conditions of his calling.

Assistance by Fiscal Measures

In the attempt to maintain the South African farmers' market for his produce resort has been had from quite early times to various fiscal expedients.

In return for the preferences given to English goods in accordance with the principles of the Old Colonial System, the Cape received a preference for its wine in the home market just in the same way as Canadian lumber, Australian wool,

and West Indian sugar received preferences there. After 1806, Cape wines entered England on the same privileged footing as Spanish and Portuguese wines, paying a duty of 9*s.* 1¼*d.* per gallon, while Rhenish wines paid 11*s.* 3*d.*, and French wines paid 13*s.* 8½*d.* per gallon. Not only so, but proclamations at the Cape in 1811, 1812, and 1813 promised encouragement and sought to improve the quality of Cape wines. An official wine-taster was appointed, and "certificates of the age, quality, and soundness of the wine intended for exportation were required from him to enable the exporter to obtain a permit". Instructions and premiums were offered by the Cape Government to the wine farmers. As a result the number of vine stocks planted increased from 18½ millions in 1811 to 20 millions in 1814 and to 27 millions in 1819.[1] In 1813 the Imperial Government conceded a very generous measure of preference to the Cape wines, as against all foreign wines, even Spanish and Portuguese. The duty on Cape wines was reduced from 9*s.* 1¼*d.* per gallon to 3*s.* 0½*d.* while that on French wines was raised from 13*s.* 8½*d.* per gallon to 19*s.* 8½*d.* (lowered in 1814 to the old rate), while the duties on Spanish and Portuguese and Rhenish wines were maintained at the old rates, 9*s.* 1¼*d.* and 11*s.* 3*d.* respectively. For eighteen years the wine farmers flourished. Even a reduction of their preference in 1825–6 by which the Cape wines paid 2*s.* 5*d.* per gallon as against 4*s.* 10*d.* on Spanish, Portuguese, and Rhenish wines and 7*s.* 3*d.* on French wines did not impair their prosperity seriously. In 1826–9 wine exports amounted to 50 per cent of the total Cape exports, averaging annually £124,700 out of £244,259.[2] Towards 1830 wine farmers were reckoned the most prosperous of the Cape farmers.[3] In 1831 the preference was further reduced, although it still remained considerable at 2*s.* 9*d.* per gallon on Cape wine as against 5*s.* 10*d.* per gallon on foreign, including French wines. Thereafter the Cape wine trade slid towards the abyss. Exports dwindled, quality deteriorated, and Cape wines got a bad name. J. R. McCulloch said of the preference: "The Act enforcing it should have been entitled, an Act for the adulteration of wines in Great Britain, and for

[1] Report of the Commissioners of Inquiry upon the Trade of the Cape of Good Hope, in *Parliamentary Papers*, 1829, v, p. 265.

[2] *Official Year Book of the Union, 1910–1922*, pp. 705–6.

[3] Cited by S. Evans, "Preference and Protection in British South Africa," in *Burden of Protection*, p. 91. The varying rates of the wine preference are summarized, ibid., p. 90.

encouraging the growth of bad wine in the Cape Colony." [1] A slight alteration in the rates in 1840 did not alter the relative position appreciably. There was a final flicker in the wine trade before 1860, when Cobden extinguished the preference finally by negotiating the Commerical Treaty with France, whereby French wines received equality of treatment with Cape and other wines. After 1860–4 the Cape wine trade virtually ceased, at any rate, for the time being. The wine preference has been condemned on the ground that it simply put money into the pockets of English merchants and wine-mixers. Undoubtedly it did that, but it also put money into the pockets of the Cape farmers—at the expense of English consumers.

The steps taken to assist the Cape wine trade in Great Britain seem to have been reasonably successful, for whereas in 1813 the quantity of Cape wine imported was only 37 tuns in 1815 it was 341 tuns, and in 1817 as much as 1,621 tuns. And in the latter year, of a total value for all imports from the Cape of £58,981, Cape wine represented as much as £51,071.[2]

This encouragement of the consumption of Colonial wines does not seem to have been altogether acceptable to the wine merchants at home, who are found pressing for the imposition of an increased duty on imported Cape wines, one of the grounds being the prejudice to the import of Spanish and Madeira wines which had resulted from the favour shown to the product of the Colony.[3]

To render the outlook for the wheat farmer in South Africa a little less bleak and to make the Dominion a little less dependent upon wheat imports, especially from Australia and Canada, the most obvious measure was the imposition of import duties, in later days as modified by the application of the principle of Imperial Preference. As early as 1826 a duty of 8*d*. per bag of 200 lb. was imposed on wheat imports, a rate which later was increased first to 2*s*. and then to 4*s*. a bag.[4] From 1906 to 1925 there was a

[1] *Dictionary of Commerce and Commercial Navigation*, 1882, p. 1532. Another pointed out that Gresham's Law applies to wine as well as money: "Bad wine drives out good."

[2] See Return to House of Commons, in 1817, reprinted in *Records of the Cape Colony*, vol. xi, p. 293.

[3] Letter from Lord Bathurst to Lord Charles Somerset in 1818, ibid., p. 488.

[4] *Report on Methods and Costs of Wheat-growing and Milling by Union Board of Trade and Industries* (Report No. 67, Capetown, 1926), p. 10.

customs duty on wheat which, if imported into South Africa from the sister Dominions was 2*s.* per 200 lb. bag, and if from other countries 2*s.* 4*d.*[1]

The special customs duty, which is levied in addition to the normal duties and has come to be known as the Dumping Duty, was applied in 1921 to wheat and flour imported into the Union from Australia. A Dumping Duty was first introduced into the customs legislation of the Union in 1914,[2] the general principle being that, if the export price to importers in the Union of goods produced in the Union be less than the current value of the same goods as sold for home consumption in the exporting country, there is to be levied in the Union a special duty equal to the difference between such selling price for export and such current value for home consumption. The reason for the inclusion of Australian wheat within the ambit of the Dumping Duties was that country's organized policy of selling for export at a lower price than for domestic consumption. In 1921-2 Australia exported to the Union of South Africa 1,331,417 bushels of wheat[3] and, seeing that Australia's total yield was more than twenty times that of South Africa, there was abundant room for further dumping in the latter country. The amount of wheat from Australia actually dumped was sufficient to make it the most important factor in determining the price of South African wheat. A duty assessed on the difference between the domestic and the export price would, it was believed, afford some measure of protection to South African wheat farmers.

The Dumping Duty was soon found troublesome, especially to dealers in wheat " futures ", inasmuch as it imported a serious element of uncertainty into a method of dealing which, by its very nature, must be based on the maximum degree of certainty and stability. Accordingly, when the tariff system of the Union was completely overhauled in 1925,[4] wheat was excepted from the general provisions of

[1] By the Customs and Tariff (Amendment) Act, 1926 (No. 34 of 1926), these duties were increased to 1*s.* 5*d.* and 1*s.* 7*d.* respectively per 100 lb. In 1930, there was a further increase of 2*s.* and 2*s.* 2*d.* By Proclamation of 23rd June, 1930, under powers given by s. 3 of the Customs, etc., Act, 1925, a suspended duty, i.e. a duty only to be imposed if necessary, at the rate of 6*d.*, was added.

[2] Act No. 26 of 1914, s. 8.

[3] *Official Year Book of Australia*, No. 20, 1927, p. 648.

[4] Customs, Tariff, and Excise Duties Amendment Act, 1925 (Act No. 36 of 1925). The Customs Tariff (Amendment) Act, 1931 (No 44

the statute which authorized the imposition on goods of a class or kind produced or manufactured in the Union of the ordinary Dumping Duty based on the difference between the export price and the domestic value; and it was provided that there may be levied in lieu on wheat imported into the Union special Dumping Duties at rates such as "would in the circumstances meet the object of the ordinary dumping duty". This provision should be considered in association with the increased import duty on wheat above referred to, the disposition, in the light of experience, being to increase the ordinary customs duty on wheat, the Dumping Duty being kept as a weapon to be used in emergencies.

The policy of giving the responsible Minister a wide discretion as to the action to be taken for the purpose of counteracting any abnormal dumping of wheat was continued and amplified in an Act of 1930, which simply authorizes the Minister of Finance from time to time to prohibit, control, or regulate the importation of wheat into the Union.[1] At the time there was an accumulation of wheat in the country and "there are instances in parts of the Western Province where as low a figure as 19*s*. has been offered for local wheat, whereas at the same time the price of Australian wheat would be in the neighbourhood of 24*s*."[2] The intention was to allow the importation only of certain grades of wheat necessary for blending purposes, during such time as existing conditions continued.

A further measure of protection which was accorded to South African wheat down to 1920 took the form of substantial preferential railway rates in favour of home produce as against imports. For example, in 1914 the rate on South African wheat from Caledon to Johannesburg (1,013 miles) was 30*s*. per ton, as compared with 55*s*. 10*d*. for imported wheat from Durban to Johannesburg (486 miles). In 1920 there was a threatened wheat shortage in the Union and it was found expedient to relax conditions which

of 1931), applied still another remedy. By s. 3 a special Customs Duty was imposed on wheat equal to the difference between 11s. 3d. (approximately the price of wheat in South Africa in 1930) and the cost per 100 lb. to the importer.

[1] Wheat Importation Restriction Act, 1930 (No. 10 of 1930). By regulations made under this Act, it is declared that no person shall be allowed to import any wheat into the Union without a permit in writing given by the Minister (Notice No. 493 in *Government Gazette Extraordinary*, No. 1857 of 18th March, 1930).

[2] Minister of Finance, *House of Assembly Debates, 1930*, vol. 14, col. 925.

discouraged imports. The result of the readjustment of railway rates then and subsequently made was that in 1926 the rate on South African wheat from Caledon to Johannesburg was *22s. 6d.* per ton, and on imported wheat from Durban to Johannesburg, *23s.* a ton.[1]

In an attempt to alleviate the effect on the South African beef export trade of the general depression, which began in 1920,[2] the Union Legislature passed the Beef Export Bounties Act, 1923. Bounties at the rate of a farthing per pound in the case of slaughter cattle and a halfpenny per pound in the case of beef were authorized to be paid on exports from the Union overseas. But the Act was of too limited an application, and under its conditions many old-established live-stock and meat firms failed to qualify for the bounty. Of the £72,000 provided in the Estimates for payment of the bounty in 1923–4, only £1,225 was actually paid out. Of the £40,000 provided for 1924–5, only £4,093 was paid out in the first nine months.[3] Moreover, the Act " did not limit the payment of the bounty to good or fair average quality beef. The Union should not look to foreign markets as a means by which it can get rid of its surplus cattle without at the same time taking steps to export a quality of beef that will permanently win those markets."[4]

The history of the sugar industry in South Africa illustrates the application of the principle of protection to an extreme degree.

The Dominion sugar planters and millers have in effect built up their industry at the expense of the Dominion consumer. The cost of production of sugar in Mozambique has all the time been much below that of Natal, but the South African Government has, to the end that there may be no effective competition with the Natal sugar producers, deliberately shut its doors against this cheaper supply, save to the extent that it has been necessary to admit it when the local production has fallen short of the domestic demand.

In 1922 the position was as follows: " The protection

[1] *Report on Methods and Costs of Wheat-Growing and Milling*, 1926 (*supra*), p. 10.

[2] During the four years 1918–1921, the declared value of exported beef averaged £2 10*s.* per 100 lb. During the next three years the average was £1 4*s.* 6*d.* per 100 lb. (*Union Board of Trade and Industries Report*, No. 54, on Meat, Fish, and other Foodstuffs, Capetown, 1925, p. 39).

[3] Ibid., p. 41.

[4] Ibid., p. 42.

enjoyed by the sugar industry on ordinary sugars is 3*s.* 6*d.* per 100 lb. . . . South African sugar also enjoys a preferential rate over the Union railways, which, so far as trade with inland centres is concerned, is a further measure of protection.

"The benefits which may be claimed as having resulted from the policy of protecting sugar are the opening up and settlement of large tracts of land in Natal and Zululand, where some 600 European planters are growing cane and employ large numbers of natives and Indians as labourers; the establishment of a sugar milling and refining industry, which employs over 800 Europeans and a considerable number of natives and Indians; and the increasing production of sugar until a tonnage of well over 150,000 tons per annum has been reached.

"Against this, the consumption of sugar in South Africa was given in evidence as being about 130,000 tons per annum, so that the country is to-day paying indirectly to the industry (including Mozambique) about £450,000 per annum by forgoing the Customs duty which would accrue to the Union Treasury if sugar were imported and not produced here. Reckoning in the additional amount paid indirectly through preferential railway rates, it may be said that not less than ½*d.* per lb. on all sugars consumed in South Africa is given up to the sugar industry at the expense of the Union Treasury and the South African railways—
—in other words—of the consumer who has to make up the amount." [1]

Moreover, under the Mozambique Convention of 1909, Mozambique sugar was allowed free entry into the Transvaal just as if it were the product of the Union and in the Transvaal it also enjoyed preferential railway rates. In 1917–18 the amount imported into the Transvaal from Mozambique was as much as 16,760 tons.[2] Since 1923 this supply of cheap sugar to this particular Province has been cut off, for after that year Mozambique sugar has had to pay customs duty and has not been allowed preferential railway rates.

It is to be supposed that so long as South Africa was only producing enough sugar to supply its own wants, South Africans were content to pay the higher price made necessary by protection for the reason that at least the

[1] *Report of Sugar Inquiry Commission* (U.G. 22–1922), Capetown, 1922 (*Annexures to Votes and Proceedings, House of Assembly, 1922*, vol. iii), p. 27.
[2] Ibid., p. 30.

money was retained in their own country. When, however, the time came, as it did in 1919, when the Dominion produced a surplus for which a market overseas had to be found, the matter took on another complexion. The price abroad was less than the price in South Africa and every ton exported was sold at a heavy loss. The comment of the Sugar Inquiry Commission [1] was that "unless the South African industry can produce sugar to compete abroad with foreign sugar without having to look to the South African consumer to make up at least some of the difference between the home and export price, the expansion of the industry beyond South African requirements may be a very doubtful blessing to the Union".

State Assistance through the Department of Agriculture

The import into South Africa of new methods, new men, and new Departments was made necessary by Lord Milner's programme of post-war reconstruction. The new Department of Agriculture for the Transvaal, which was built up under the control of the Cambridge man whom Lord Milner made Director, was conspicuously successful. The Department was formed in August, 1902, and a Report of March, 1903,[2] disclosed a Department organized in Divisions on the lines which its Director had recommended, and already hard at work with a staff possessing experience and training drawn from various quarters of the globe.

South Africa being primarily a stock-raising country, and animal diseases being both numerous and virulent, one of the first duties of the Department was to organize a thoroughly efficient Veterinary Division. Its chief came from the Indian Veterinary Service. Its main duties were to be to prevent the introduction of animal diseases into the Union, to control outbreaks when they occurred, to conduct investigations into the diseases peculiar to the country, and to endeavour to discover methods for their prevention or cure. To improve the quality of the stock, experimental and stud farms were planned in various parts of the country at which experiments could be made with the different breeds of stock. The managers were to be "not only thoroughly competent to conduct the farms

[1] Ibid., pp. 28-9.

[2] *Papers relating to the Progress of Administration in the Transvaal and Orange River Colony, 1903* (Cd. 1551), *Annexure* (1) to No. 3, p. 120.

on the most up-to-date methods, but they must be able to give skilled advice to farmers on matters connected with their special branches ". Intending settlers would be able " to ascertain what varieties of stock, and what methods of management are most likely to succeed in that particular neighbourhood and also what diseases and other features are to be specially guarded against ", while it was hoped that " by setting before him the advantages to be derived from the adoption of newer and more enlightened methods ", the Boer farmer would be inspired to become a reformed character.[1] The first of the experimental farms had already been started on its career at Potchefstroom.

Dr. Theiler, who had been in charge before the war, was continued as head of the Veterinary Laboratory and Station for the manufacture of vaccine and serums which had been established by the late government. For the Chemistry Department, among the duties of which were analysis of all kinds, the investigation of soils, and the testing of manures and feeding stuffs, a Chief Chemist was brought out from the Yorkshire College, Leeds. An Englishman trained at Kew with, in addition American experience which had given him " special knowledge of grasses and forage plants and familiarity with the characteristic conditions obtaining in semi-arid regions ", had been made Head of the Botanical Department. An officer of the Cape Forestry Department was placed in charge of the corresponding Department under the Union and " a native of Somersetshire, with considerable Californian experience and until recently manager of Mr. Rhodes's fruit farms at the Cape " was put at the head of the Horticultural Branch. The Poultry Organization Society of England furnished a poultry expert. An officer who had assisted to clear Cyprus of locusts was appointed to deal with the pest in South Africa. Finally " a Scotchman with Continental experience and a graduate of Cornell " was appointed Editor and Librarian to the Department with instructions to build up a much-needed agricultural library.[2]

It was apparent that, in the Transvaal at any rate, the agricultural industry could no longer rely on being bolstered up by subsidies, taxation exemptions, preferential railway

[1] *Further Correspondence relating to affairs in South Africa, 1903* (Cd. 1463), Enclosure in No. 13 (Letter from F. B. Smith, Director of Agriculture, Transvaal, dated 30th October, 1902), p. 23.

[2] *Papers relating to the Progress of Administration in the Transvaal and Orange River Colony, 1903* (Cd. 1551), *Annexure* (1) to No. 3, p. 120.

rates, and increased customs duties. Such a makeshift policy was to be displaced by " the conception of an organized agriculture based upon science ", which the President of the Section of Agriculture at a long subsequent meeting of the British Association, namely that of 1929, said should be part of the mental equipment of every statesman and administrator.

It was not so much the idea of a central Department of Agriculture that was new under the Milner regime, as the conception of its functions. In the Transvaal, Orange River Colony, and Rhodesia it is true that the establishment of such a Department was a post-war measure, but, soon after taking office as Prime Minister of the Cape in 1890, Rhodes had " created a Ministry of Agriculture and took great pains to improve the methods of that hitherto neglected industry ".[1] In 1895 a similar Department had been established in Natal. The beginnings of a Department of Agriculture in Orange River Colony were contemporaneous with the early stages of the Transvaal Department, but its separation from the Land Board was delayed, and it was not until 1904 that its first Director was appointed and its organization on the lines of the sister Department in the Transvaal undertaken.

In the older Colonies especially and in their early years clearness of aim or continuity of policy could hardly be looked for. " It is probable that during the past twenty years more money per head of the rural population has been devoted to the relief of the farmers in South Africa than in any country in the world. . . . Not only is there little to show for this expenditure as regards advances in the theory or practice of agriculture or in other directions that make for progress, but it is to be feared that in some respects actual harm has been wrought, for instead of fostering a spirit of independence and initiative and thrift amongst the farmers, they have been induced to rely upon the Government for everything." [2]

Progress was bound to be slow so long as South Africa was politically organized on the basis of separate Provinces with separate administrations each differing from the

[1] Basil Williams, *Cecil Rhodes*, p. 193.

[2] F. B. Smith (Director of Agriculture, Transvaal Department of Agriculture), " Some Observations upon the Probable Effect of the Closer Union of South Africa upon Agriculture," 1908 (*South Africa, Pamphlets*, vol. 3, No. 60, in C. & D.O. Library), p. 20.

other in its degree of enlightenment. The position in 1908 in regard to the main problem to which any Department of Agriculture would have to address itself has been described in the following terms : " One Colony has made good headway against scab, another has spent over £1,000,000 on the same disease in the past twenty years, and has but little to show for it ; a third has eradicated lung-sickness, but is continually being re-infected by cattle introduced from other Colonies. In Rhodesia, East Coast Fever has been nearly overcome and in the Transvaal is well under control and is being gradually eradicated, whereas in Natal it is spreading." [1]

The obvious need was that the new outlook and driving power which had been applied in the Transvaal should be made available for the whole of South Africa. The opportunity came in 1910 when the Cape of Good Hope, Natal, the Transvaal, and the Orange River Colony were united in the Union of South Africa under one Government. General Botha, when, on the grant of responsible government, he became Prime Minister and Minister of Agriculture in 1907, had retained the Director of Agriculture for the Transvaal in the appointment he had filled so successfully and which he had continued to hold after Lord Milner's relinquishment, in 1905, of the High Commissionership of South Africa and the Administratorship of the Transvaal and Orange River Colony. When, in 1910, the same statesman was called upon to fill the same offices in the first Union Government, the Director of Agriculture for the Transvaal became Secretary for Agriculture for the Union, and for ten years controlled the Department of the Union in which were merged the Agricultural Departments of the Transvaal and the other three Colonies.

The programme laid down by Lord Milner's scheme of reconstruction has been faithfully carried out and, indeed, expanded, as appears from the history of the Veterinary Division. The importance of the work of investigating animal diseases and discovering methods of prevention or cure was early recognized and a separate Research Division was organized. The Institute of Veterinary Research which was erected at Onderstepoort, near Pretoria, was later expanded in order to serve the whole of South Africa. In 1919 it was decided to establish a veterinary training

[1] F. B. Smith, op. cit., p. 28.

college and the Division then became the Division of Veterinary Education and Research.

An important part of the work of the Division is the manufacture of the vaccines and sera used in the prevention or treatment of stock diseases. The Research Division having discovered the method of control, the parent Veterinary Division then undertakes the application of that method. An instance of this dual administration is the valuable work which has been and is being done in the inoculation of horses and mules as a preventive of the dreaded horse-sickness. The serum is prepared in the research laboratory of the Department and the inoculation of the animals is field work carried out by the officers of the Department.

It is the policy of the Department to give farmers no excuse for failing to take advantage of its work on their behalf. The manner in which the problem of anthrax is dealt with is an instance in illustration. Realizing that the disease had become a serious menace to the stock farmer in South Africa, the Union Government authorized the free issue of anthrax vaccine to all stock-owners in the Union. "The privilege of being able to draw upon an unlimited supply of free vaccine is not enjoyed by any other farming community in the world." [1]

The examination of blood-smears is also undertaken free of charge. The development of this particular piece of work has done much to help the diagnosis of bovine diseases.

In South Africa even the fowls have a disease of their own which, when it assumes epidemic form, sweeps them away in a wholesale manner. Its diagnosis was for a long time a baffling problem, but, as the result of prolonged and intensive "clinical, pathological, and bacteriological study of five epidemics within a 500 mile radius, involving the Transvaal, Natal, and East Griqualand", the disease was found to be fowl typhoid and not, as had hitherto been suspected, fowl cholera. Here again the remedy, fowl typhoid vaccine, is issued free of charge to owners.[2]

[1] Dr. P. R. Viljoen, Sub-director of Veterinary Education and Research, Onderstepoort, "Anthrax: Its Nature and Control," in *Journal of the Union Department of Agriculture*, 1924, vol. viii, p. 285.

[2] G. Martinaglia, Veterinary Research Officer, Pietermaritzburg, "Fowl Typhoid," in *Journal of the Union Department of Agriculture*, 1926, vol. xii, p. 298.

On the other hand, the Department has considerable coercive powers. Indeed its attitude towards the South African farmer is that of a benevolent tyranny.

Two diseases which afflict the flocks and herds in South Africa require the constant vigilance of the officers of the Department. Scab, which attacks the sheep and goats, and East Coast Fever, which has in not very remote times swept away the cattle wholesale, were between them in 1923 costing the Government £250,000 a year, or about one-third of the whole of the annual expenses of the Department.[1]

One of the duties of the Veterinary Division is to enforce the Scab Acts, which prescribe dipping as a remedy for the disease of scab and generally to check infection from this highly contagious affliction.[2] Thus one year its officers caused to be carried out simultaneous dipping of the flocks over the whole of the Transvaal, the whole of Natal, and certain districts in the Orange Free State.[3]

In another year we read that: "Out of a total of 44 million sheep and goats in the Union, over 7 million were dipped under the supervision of inspectors . . . while nearly 9 million were dipped by inspectors in districts in which simultaneous dipping was applied", and the comment is made that "this is eloquent of the extent to which inspectors have to step in to do work which might fairly be required of farmers themselves."[4]

Many thousands of pounds are spent on pedigree stock for the Department's experimental and stock farms, merino sheep for the upkeep of their stud flocks, stallions to be leased to farmers in the various Provinces, cattle of distinguished lineage, and prolific pigs.

So soon as the animal diseases which at one time might at any moment become epidemic had been brought under control, the import into South Africa of valuable pedigree stock was no longer the rash speculation that it used to be and there was hope at last that stock-breeding might become an industry worthy of the Dominion.

On the agricultural as distinguished from the pastoral side the Department's activities are widely comprehensive. Thus valuable work has been done by the Division of

[1] *Journal of Union Department of Agriculture*, 1923, vol. vii, p. 238.
[2] See p. 133.
[3] Report of Department of Agriculture for 1924–5 (see *Journal of Union Department of Agriculture*, 1925, vol. xi, p. 476).
[4] *Journal of Union Department of Agriculture*, 1923, vol. vii, p. 241.

Chemistry in soil analysis and its manurial treatment. For instance, it was found that the soil in the wheat belt was deficient in phosphoric acid, in nitrates, and in lime and, to a less extent, in potash. The diagnosis being effected, it remained for the remedy to be determined, and the Elsenburg School of Agriculture, Cape Province, was set to work to discover in what proportions commercial fertilizers should be mixed and applied in order to provide the necessary plant food and secure the most profitable wheat crop possible under the existing conditions.

Generally it may be said that the branch of the Department of Agriculture which is now the Division of Plant Industry[1] has developed, as in the case of the Division of Veterinary Services and Animal Industry, on the lines laid down under Lord Milner, that is to say : " To investigate and determine the merits of economic plants at present existing in the country, to obtain and publish information regarding poisonous plants and weeds, and to endeavour to discover methods for their extirpation. It would also investigate problems connected with plant nutrition and diseases. . . . Another important part of its duties would be the introduction of promising varieties of seeds and plants from other parts of the world with a view to determining their suitability or otherwise for this country; and the raising of new and improved varieties of plants by selection and cross-fertilization . . . the study of grasses and forage plants will be an important branch of the Department for the improvement of the veld; the treatment of poor, light soils so as to render them capable of producing crops or carrying stock; the introduction of grasses and other plants capable of withstanding the heat of summer and the cold and drought in winter, are problems of vital import. The horticulturist would have to obtain and publish information relative to fruit-growing; to study different varieties of fruit and their adaptability to various localities; to obtain and test new varieties from abroad; to improve existing varieties and to instruct fruit growers on the best system of management and marketing. The conducting of a seed testing station framed somewhat on the lines of those at Zurich and at Washington, and the employment of experts to supervise special branches such as tobacco

[1] For details of the work of this and other Divisions, see *Official Year Book of the Union of South Africa*, chap. xiii.

growing, etc., would be included in the duties of this Division." [1]

The reconstruction plans formulated under Lord Milner fully recognized the importance of setting up a liberal scheme of agricultural education in a country where farming was the means of livelihood of more than half the white population and where it was necessary that the white man, by his superior accomplishments, should be able to retain his position of leadership in the midst of a vast and increasing native population. It was hoped " that before long a complete system of agricultural education, such as obtains in leading countries of Europe and in the United States and Canada " would be established. While, however, collegiate and higher education could stand over until more pressing matters had been disposed of, " some means of instructing the numbers of men, many of whom have a very limited knowledge of agriculture, who are now commencing farming in this country " were seen to be an immediate necessity ; and a second urgent matter was the establishment of experimental farms, the object of which was to be the provision of object lessons for the farming community.[2]

The intention having been from the first to take the student of agriculture into the field and to make the practical farmer something of a student, there has taken place the natural fusion of the work of the agricultural college with that of the experimental farm, and there has been built up a remarkable extension system designed to bring to the farmer in his home some degree of knowledge of the results of the experimental and investigation work that has been achieved at the centres and to persuade him of the desirability of improved methods in farm practice.

South Africa has two Universities with Faculties of Agriculture, namely Stellenbosch, near Capetown, and the Transvaal University College at Pretoria, and five Schools of Agriculture. The distribution of these institutions has been carefully planned in order that the different districts with their different climatic conditions and their respective suitability for particular types of farming may have at their service agricultural experts who have a particular knowledge of local conditions. Stellenbosch University serves

[1] *Papers relating to the Progress of Administration in the Transvaal and Orange River Colony, 1903* (Cd. 1551) (*Report* by F. B. Smith, Agricultural Adviser, dated 31st July, 1902), p. 375.

[2] *Papers relating to the Progress of Administration in the Transvaal and Orange River Colony, 1903* (Cd. 1551), pp. 128–9.

a district with a temperate climate and a winter rainfall. The Transvaal University College is situated in a region with a sub-tropical climate and a summer rainfall.

Stellenbosch is the pioneer centre of agricultural education in the Union. A school of agriculture for the training of students was started there as early as 1889. It was striking evidence of its necessity and, at the same time, a serious handicap that instructors from overseas had to be imported, who, of course, had no practical knowledge of South African conditions. In 1898 the school was removed to Elsenburg, 6 miles away, where it has since carried on its special work of training farmers for the western and south-western districts of the Cape Province, in which region deciduous fruits, winter cereals, and vineyards are of special interest. In 1926 the Agricultural Faculty of the University of Stellenbosch and the School of Elsenburg were merged into one institution, the Stellenbosch-Elsenburg College of Agriculture of the University of Stellenbosch. With its farm and its experimental stations and plots it is well equipped to carry out its threefold programme of giving scientific and research training in agriculture of a university character, of giving courses of instruction for students other than university students, and of conducting extension, experimental and investigation work.

The wide range of the assistance of which the schools of agriculture are capable is illustrated by the Viticulture Branch of the School at Elsenburg. "It advises viticulturists or intending grape-growers on all matters relating to viticulture, wine-making, and raisin making. For new growers it inspects farms, advises as to the best soil and sites to plant vines, and suggests the best varieties for planting in such areas. In its laboratories are carried out experiments with regard to yeast cultures and methods of fermentation. It advises viticulturists as to the best methods to adopt in wine-making, and undertakes also the examination of wines, informing growers as to condition and, when necessary, prescribing treatment." [1] There is, moreover, at Paarl, a viticultural experimental farm where grapes are tested, so that growers may get advice on the merits of each variety; and Groot Constantia, once the residence of the Dutch Governor of the Cape, has been a Government viticultural station since 1885, in which year

[1] *Journal of the Union Department of Agriculture*, 1924, vol. viii, p. 109.

it was acquired for the purpose of educating growers in improved methods of wine production and for experimental work.

The school at Cedara, in Natal, serves that Province and Griqualand East, where the principal types of farming are sugar growing, sub-tropical fruits, maize, and dairying. The institution began as an experimental farm in 1902 and the school was added four years later.

Potchefstroom, the Transvaal School, is another instance of an institution commencing as an experimental farm only, and adding a school at a later date. The farm was established soon after the Boer War and it became a teaching establishment in 1909. Maize growing, cattle ranching, and generally the forms of farming pursued under high veldt conditions are its special care.

Farming under arid and semi-arid conditions, and in particular sheep farming, is the special concern of the school established in 1911 at Grootfontein, near Middelburg.

The Orange Free State only acquired a school of agriculture in 1919, when tutorial work was added to the work of the experimental farm which has existed at Glen, some 18 miles north of Bloemfontein, since 1912. It specializes in the science and practice of dairy farming. Maize growing and crop production under irrigation are other matters with which it is specially identified.

"As first constituted, the School staff rarely came into close contact with the farmer, who knew little of the work being carried out at the Schools. Then the practice grew of School officers giving lectures and demonstrations and judging exhibits at agricultural shows. Farmers' associations also began to request School officers to deliver addresses at their meetings on various farming matters. Thus farmers and officers were increasingly brought into closer touch." [1]

Nevertheless, it was one of the findings of the Drought Investigation Commission in its Report of 1923 that there was still a lack of contact between the technical staff of the Department and the farmer and that the bridging of the gap was essential.[2] Largely as a result of this recommendation, the Division of Agricultural Education and

[1] "Agricultural Education in South Africa," *Journal of the Union Department of Agriculture*, 1924, vol. viii, p. 117, p. 122.

[2] *Final Report of the Drought Investigation Commission*, Capetown, 1923 (U.G. 49—1923), p. 17.

Extension was created as a new Division of the Department of Agriculture, its purpose being to send advice and information on agricultural matters into the remotest parts of the Union. For this purpose itinerant officers of the Department are sent out as agricultural missionaries. The Railway Administration has, since 1924, assisted in this work by means of the Demonstration Train, which enables the lecturers of the Department of Agriculture to take the road fully equipped with films and exhibits representing all the principal branches of farming. The more permanent link between the Department and the farming community is the Extension Officer. In between twenty and thirty districts such officers have been appointed, their main duties being to give advice on agricultural matters, to arrange for lectures and demonstrations and to assist generally in agricultural organization. Among their miscellaneous duties is the supervision of the demonstration plots which have been established on between 300 and 400 farms and private holdings throughout the Union for the purpose of bringing to the notice of farmers the results of the Department's experimental and research work. It remains to mention broadcasting as the latest means placed at the disposal of the Department for its assistance in the work of showing the farmers how best to help themselves in the solution of their many problems.

Assistance through the Union Land Bank

The channel through which financial assistance in the form of advances is conveyed from the Government of the Union to the farmer is the Union Land Bank or, to give the institution its full title, the Land and Agricultural Bank of South Africa, which, in 1912, under the authority of the Land Bank Act of that year [1] took over the assets and liabilities of the Land Banks hitherto existing in the Transvaal, Orange Free State, and Natal.[2]

The Union Land Bank is not a Government Department, although magistrates, field cornets, police officers, and postal officials are its duly accredited agents and although its capital includes large sums which the Parliament of the Union has provided [3]; but public control is present in the

[1] Act No. 18 of 1912.

[2] The Cape of Good Hope had allowed the Agricultural Credit Bank Act of 1907 to remain in abeyance.

[3] Up to 1929–1930 the total sum thus voted was £9,838,000, on which the rate of interest paid has varied between 3¾ and 6 per cent.

person of the Managing Director who, with the ordinary members, constitute the Central Board and are nominated by the Governor-General. That it is a Dominion and not a Provincial institution is emphasized by the facts that the members of the five advisory Local Boards are also appointed by the Governor-General, and that, in fixing the areas of those Local Boards, Provincial boundaries have been ignored.

The main purpose of the Bank is to make pecuniary advances to farmers on mortgage of land within the Union. The purposes for which ordinary loans under the Land Bank Act, 1912, can be granted are improvements on the farm, the purchase of stock and plant, the discharge of liabilities on the land, and the purchase of land. By various other statutory provisions the Bank is authorized to make advances to farmers to enable them to erect fences, to construct dipping tanks and silos, and to provide water supplies. In these cases the advance is secured by a charge upon the holding in favour of the Bank. The Bank also plays an important part in the agricultural co-operative movement in that it makes advances to co-operative societies and companies and guarantees their contracts. The machinery of the Bank has also been used for distributing government relief to farmers in distress through loss of stock or crops occasioned by drought or even through conditions of agricultural depression which are not peculiar to South Africa. The purpose of the Bank is not to subsidize the agricultural industry, nor does it exist to make large profits.

The part played by the Union Land Bank in the development of agriculture in South Africa through the fulfilment of the Bank's primary purpose, that of advancing loans to farmers, is in itself a striking record. From the inception of the Bank in 1912 to the end of 1929 the ordinary mortgage loans to farmers numbered 33,907, involving a total sum of £18,927,238, the average loan being between £500 and £600.[1] From 1912 to 1929 the length of fencing erected with loans from the Land Bank amounting to £1,786,859 was 34,854 miles.[2] This money is well spent, for among the advantages of fencing are the preservation of pasture and the prevention of soil erosion, and it enables a check to be

[1] *Report of Central Board of the Land and Agricultural Bank of South Africa for 1929* (U.G. 16—1930), Schedule I.

[2] Ibid., Schedule J. The cost per mile worked out at from £31 for ordinary fencing to £56 for vermin-proof fencing (ibid., p. 6).

put on stock disease and the quality of wool to be improved. For dipping-tank loans, a total of £305,912 was paid out down to 1929.[1] During the period 1924 to 1929, loans for water supply amounted to £187,778.[2] On the other hand, applications for advances for silos have been negligible, although the conservation of fodder is practically the only means of combating recurring droughts with the resulting ruinous loss. The explanation appears to be that the farmer is able to construct a pit silo at little cost.[3]

Methods of marketing as primitive as the methods of cultivation survived so long that so late as 1922 an official publication [4] thus described the then-existing system in which the Dominion's most valuable crop was disposed of: "The larger grain merchants employ agents at the chief rail-heads, and either purchase or hire storage accommodation there. These agents buy partly from farmers, but chiefly from the storekeepers, who buy direct from the farmers. As the risk undertaken is very great, the difference between wholesale price and that obtained by the farmers is frequently considerable. As a matter of fact, the storekeeper often takes the maize as payment for goods purchased by the farmer during the previous year. Thus are seen the effects of insufficient working capital, as they operate against the farmer. The storekeeper makes advances to the farmer, the farmer pays in kind and is insufficiently recompensed owing to the risk attached to the marketing of the produce." The system was officially condemned as the embodiment of "wastefulness".

Primitive and unorganized methods of marketing have similarly handicapped the wheat farmer. On the other hand, "there has been a growing tendency on the part of the big millers and certain produce merchants to co-operate and minimize open competition as far as possible." [5] Buying is organized and selling is not, and as a consequence the seller is at the mercy of the buyer. Thus inquiry in 1926 led the Board of Trade and Industries to report that "in the absence of co-operative control and adequate means for financing the marketing of their crops to the best advantage, the wheat producers of the Union have been placed in a very

[1] Ibid., Schedule K. In 1929, the average loan for this purpose was £96 (ibid., p. 7).
[2] Ibid., Schedule L. [3] See ibid., p. 7.
[4] *Official Year Book of South Africa*, No. 5 (1922), p. 523.
[5] Report on Methods and Costs of Wheat-growing and Milling (*Board of Trade and Industries Report*, No. 67, Capetown, 1926), p. 15.

weak, uncertain, and unstable position ". In areas outside the main producing districts it was still possible to find cases where the farmer was in the toils of the primitive system under which he lived on credit until he could deliver his wheat to the local storekeeper in payment of his debt.[1] Four years later the position was the same, " their lack of organization hits them in this way—they have no storage for their wheat, and they have in consequence to sell it out of hand as they cannot keep it on their farms where it is liable to deteriorate on account of damp and vermin ; and in addition they have no organized system for getting credit on their wheat. Consequently they have to sell." [2]

Gradually, however, ideas on marketing have been revolutionized. Co-operative societies began to displace the local storekeeper, and state-managed elevators avoided the necessity of disposing of the crop for what it would fetch as soon as it was reaped.

During the pastoral stage of South African agriculture, when the stock farmer, trekking with his cattle from place to place, led a half-nomadic life, conditions were peculiarly unfavourable for the germination of ideas about co-operation and this mode of life emphasized the passion for an independent and untrammelled existence that characterized the descendants of the Dutch Afrikanders of the Great Trek. " Before the rise of the mining industry, the policy was one of *laisser-faire*, and beyond combining for the purpose of offensive or defensive action against the natives, and later for maintaining the integrity of the separate States, the farmers were individualistic to a degree ; each farm was a self-contained and independent unit, and amongst their owners there was no attempt at joint action in order to protect their live-stock or crops from contagious disease, or to provide funds to enable the State to take action on their behalf " [3] ; and at the very end of the nineteenth century it was observed that the sons of the early trekkers " retained a passion for solitude that even to-day makes them desire to live many miles from any neighbour ".[4] To such a temperament submission even to so mild a degree

[1] Ibid., p. 14.

[2] E. R. Roper, *Debates of Union House of Assembly*, 1930, vol. 14, col. 978.

[3] F. B. Smith (Director of Agriculture, Transvaal Department of Agriculture), " Some Observations upon the probable effect of the Closer Union of South Africa upon Agriculture," p. 17 (*South Africa, Pamphlets*, vol. 3, No. 60, in C. & D.O. Library).

[4] James Bryce, *Impressions of South Africa*, p. 57.

of discipline as that contained in the rules of a co-operative society was unthinkable. Moreover, unlike Canada, where the pursuits of the settlers, climatic conditions, and the need for organized defence against Indian aggression made necessary a life of close organization, in pastoral Africa villages were very small in size and few in number. Sparseness of population was the condition responsible for many of the early troubles of the Maize Co-operative Societies, for the mistake was made of organizing them on the Danish model, forgetting that Denmark is a country with a comparatively dense population and farming conditions which bring in regular and steady returns.[1]

When, however, the pains and penalties of civilization could no longer be avoided by trekking away into the wilderness and the policy of closer settlement made it necessary for the farmer to find a means of making a livelihood within the confines of the farm itself, the notion gradually took root that by co-operative methods of marketing the farmer would obtain a better price for his produce. Co-operative methods for other purposes have proved much less attractive, but, nevertheless, the indirect benefits arising from co-operation are important. An illustration is furnished by the Magaliesberg tobacco planters who, in 1909, when the growers of Transvaal tobacco were experiencing great difficulty in disposing of their produce, formed a co-operative society with a membership of 277 for the purpose of marketing and trading. "As a result of the greatly increased prices obtained, the membership is to-day 3,546 and the society has accumulated a reserve fund of £42,866. By its distribution of good seed and insistence on careful grading, it has done much to better the quality of tobacco produced and to deal with the problem of overproduction." [2] Another advantage flowing from the application of the co-operative principle was indicated by the Minister of Agriculture in the House of Assembly when he told how, at a congress of millers and wheat farmers, "they clearly said it was easier for them to deal with the farmer co-operatively so that they could buy through one channel and it would not be necessary for them to send agents about the country in motor cars." [3]

[1] E. P. Jacklin, "Maize Co-operative Societies," in *Farming in South Africa*, vol. iv, 1929–1930, p. 285.

[2] *Year Book of Agricultural Co-operation in the British Empire*, 1928, pp. 113, 430.

[3] *Debates of House of Assembly*, 3rd February, 1930, vol. 14, col. 350.

Before the Union, although not before the South African War, co-operative societies had been established under statutory authority and control in each of the Provinces, their main purpose being to enable farmers to dispose of their produce at reasonably remunerative prices and to eliminate the middleman. The first step in this direction was taken in 1905 in the Cape of Good Hope, when an Act was passed authorizing loans for agricultural purposes to co-operative associations of farmers. In 1908 the Transvaal passed the Agricultural Co-operative Societies Act and in 1910 the Orange Free State passed a similar Act. Natal's pre-Union efforts in the same direction were somewhat half-hearted. The Transvaal alone was able to make even a moderate success of the movement. With the help of the Transvaal Government an agency was instituted through which distribution was made to purchasers and which successfully accomplished its further object, which was " to enable societies to participate in large contracts and to avoid competition with one another ".[1] At one time, thirty societies were registered under the Transvaal Act, most being concerned with the sale of produce (especially maize) and with the collective supply of farming requisites.

For some years after the Union the co-operative movement languished [2] but after 1917 a progressive increase in the number of societies began. By 1921 it had become obvious that farmers in all parts of the Union were becoming more interested in the organization of co-operative marketing associations and the Government deemed the time ripe for comprehensive legislation putting the societies on a proper legal footing and augmenting the impetus of the movement by Government encouragement.

The Co-operative Societies Act, 1922,[3] which applies to all the Provinces in the Union, followed the carefully drafted Act of Queensland which, while co-operative in character, applied machinery and safeguards suggestive of the joint stock company. By its provisions seven or more farmers can be registered as an agricultural co-operative society with unlimited liability or as an agricultural

[1] *Official Year Book of South Africa*, No. 6, p. 546.

[2] In 1911 there were in the Transvaal and Orange Free State thirty registered co-operative agricultural societies. By 1916, they had dropped to nineteen. In 1921, the number of societies in those two Provinces was forty-five.

[3] Act No. 28 of 1922. Legislation on the same subject has also been adopted in the Rhodesias, Bechuanaland, and South-west Africa.

co-operative company with limited liability. Among the principal objects to which the societies and companies may apply themselves are " to dispose of the agricultural products and live-stock of its members in the most profitable manner "; to acquire and distribute information as to farming practice and markets; to recruit labour; to carry on banking and insurance under a co-operative system; and to purchase farm stock, machinery, and implements on the most advantageous terms. The first of these objects has remained the most attractive.

The co-operative organizations have no State grants, but the Land Bank Act, 1912,[1] provides that the Land and Agricultural Bank of South Africa thereby established may make advances to co-operative societies for any of the purposes they are legally entitled to pursue. Such advances are made on the joint and several liability of the individual members and such other security as the Bank may require.[2] By an amending Act of 1922,[3] advances to agricultural co-operative companies were similarly authorized, but in such cases the liability of members is limited to the nominal value of the shares held.[4]

This legislation gave the agricultural co-operative movement new vitality, so that, at the end of June, 1930, there were in operation in the Union 429 agricultural societies and companies with a total membership of 49,326.

The main purpose for which the South African farmer joined a co-operative society being to maintain prices, it became the interest of speculators to dissuade agriculturists from giving such organizations their support. In October, 1924, when the wholesale price of wheat was 32*s.* 3*d.*, " speculators travelled through certain districts and bought up the prospective crops on a number of farms at 25*s.* per bag." [5] The South African farmer, with his ingrained hatred of all forms of compulsion and literally ploughing his lonely furrow, so that he was deprived of the opportunity of discussion with his fellows which agricultural communities enjoy in other countries, was peculiarly susceptible to such

[1] Act No. 18 of 1912.

[2] On 31st December, 1929, the amount owing by co-operative societies to the Bank was £916,186 (*Report of Central Board of the Land and Agricultural Bank of South Africa for 1929* (U.G. 16—1930), Schedule R).

[3] Act No. 4 of 1922.

[4] On 31st December, 1929, agricultural co-operative companies owed the Bank £466,333 (*Report of Central Board for 1929* (*supra*)).

[5] *Journal of the Union Department of Agriculture*, 1926, vol. xii, p. 178.

influences. There was, accordingly, left outside a minority whose existence was a serious drag on the co-operative movement. To remove this weakness, amending legislation was passed in 1925 [1] which entirely set at naught the voluntary principle in co-operation, inasmuch as provision was made for the compulsory sale of produce by non-members through a society or company. When it is shown that in any district at least 75 per cent of the producers of any kind of such agricultural produce are the producers of at least 75 per cent of such produce produced in that district, and are members of a registered co-operative agricultural society or company, the Minister may declare that each producer of that kind of produce in such district shall sell such produce produced by him through the said society or company whether he be a member thereof or not, and if a non-member he will be subject to conditions and obligations as though he were a member of the society or company.

These provisions were passed primarily for the benefit of the tobacco industry, but machinery is provided whereby other products may be brought within the meaning of the expression " agricultural produce " for the purposes of the section.

But agricultural co-operative organizations serve other useful purposes than merely that of maintaining prices.

There is nothing in South Africa resembling the extensive cotton plantations made possible by the long stretch of flat country which makes up the cotton belt in America. In the territory of the Union, cotton is grown in separate plots of comparatively small extent situated in hilly country, and so the industry is to a considerable extent in the hands of small growers to whom co-operative ginning and marketing are essential.

The Rustenburg Co-operative Society was the first to add cotton ginning and marketing to its other activities, and when three co-operative ginneries were actively functioning private enterprise abandoned its early reluctance, and the undue optimism generated by the satisfactory prices obtained for cotton during the twelve years following the Great War brought into existence more ginning machinery than could be employed.

To enable the co-operative societies to market their cotton there was formed the Central Co-operative Cotton

[1] Act No. 38 of 1925, s. 17 ; and see *Debates of House of Assembly*, 14th July, 1925, vol. 5, cols. 6003 et seq.

Exchange. The Exchange is financed by the cotton export levy of 1s. per 100 lb., and represents a majority of the cotton growers. Nevertheless, it is run mainly in the interests of the smaller growers, for the larger growers hold aloof and less than half the total crop is handled by the Exchange.[1]

Up to 1926, when the Union Government passed the Agricultural Credit Act,[2] the South African farmer had depended on commercial banks and storekeepers for any short term loan that he might require. The farmer who wanted long credit facilities and could furnish first class security in the form of a mortgage of fixed property was already catered for by the Union Land Bank. The banker [3] and the storekeeper were not philanthropists and it often happened that they had to call upon the borrower to meet his obligations at highly inconvenient times. The statement was made in the House of Assembly [4] that oxen worth £15 had been sold at £3, £4, and £5 to pay such debts; and according to Sir Thomas Smartt,[5] "the majority of the farmers depend to a large extent on crops or produce which matures only once in a twelvemonth. . . . They have to take advances on their produce and so commit themselves to buying their requirements from the people who make the advances, but at a price which is dictated by the trader who advances the cash. I know many cases in which, through the want of rural credit, a farmer dare not buy an article except in the store of the person who has made him advances." Obviously what was wanted was a credit system which would provide for short term loans to give the farmer the opportunity of sowing, reaping, and marketing his produce in the most advantageous way. Instead of being compelled, through shortage of cash, to dispose of his crops the moment they were harvested, he should, if enabled to get credit, be able to get the advantage of the advance in prices which generally occurs some months later.

[1] See Report of Board of Trade and Industries on the Cotton Growing Industry, 1929 (Report No. 92, in Printed Annexures to *Votes and Proceedings of House of Assembly*, 1929, vol. ii).

[2] Act No. 40 of 1926.

[3] It should be mentioned that the Central Board of the Union Land Bank, in their Report for 1929 (U.G. 16—1930) say: "The commercial banks have been of great assistance to this institution, not alone in providing short-date funds on overdraft, but in many other directions, and their willingness to help in every possible way is much appreciated."

[4] *House of Assembly Debates*, 10th March, 1926, vol. 6, col. 1433.

[5] *House of Assembly Debates*, 10th March, 1926, vol. 6, col. 1409.

When the Union Legislature set out to adapt the co-operative principle to the giving of credit to agriculturists and to transfer the business from the commercial banks, the merchants, storekeepers, and attorneys to the Land Bank, they had the advantage of the experience of Germany, the United States, and Australia. Moreover, whereas in Canada [1] such matters were the subject of Provincial legislation, South Africa had the advantage of being in a position to put upon the Statute Book a measure comprehending the whole of the Dominion and based upon a strong central organization. The measure was the Agricultural Credit Act, 1926.[2] At the centre of the scheme is the Union Land Bank, the Central Board of which was given the duty of dividing the Union into areas called Agricultural Loan Circles and of establishing within the Circles Agricultural Loan Companies, managed by directors, themselves practical farmers. The Loan Companies are really farmers' banks. The whole organization is brought into touch with the individual farmer by the Rural Credit Societies, formed on what are broadly co-operative lines by not less than seven persons who "devote their attention to farming in the Union". The business of the Rural Credit Society is to grant accommodation to its members against their bills, which are endorsed by the Society and discounted with the Loan Company in the Circle in which the Society is established. Such accommodation is available for general farm purposes but not for the discharge of existing debts. It is an organization controlled by farmers for farmers, and is a sounder arrangement than one by which direct loans are advanced by the Land Bank, in that those who control the Societies know to whom loans can safely be made; and since each member is jointly and severally responsible for the debts and obligations of the Society, so that the men who authorize the advance are liable should the borrower not repay, it may be assumed that loans are not recklessly sanctioned.

What happens in practice is that if a particular member of a Rural Credit Society wants financial accommodation to enable him to sow, reap, and dispose of his crop to the best advantage, to purchase agricultural implements, seed, or stock, to erect farm buildings, or for some other purpose incidental to farming, he will sign a bill and take it to the

[1] See vol. ii of the present work, pp. 521–26.
[2] Act No. 40 of 1926.

Rural Credit Society. That Society will endorse the bill and it will be discounted by the Agricultural Loan Company. If the Loan Company is without sufficient funds it will in its turn discount the bill with the Land Bank.

There are, however, farmers who are not prepared to accept the liability attached to membership of a Rural Credit Society and who are not enamoured of the co-operative principle. To such agricultural individualists the Loan Companies are empowered to grant loans on the security of their produce as represented by elevator [1] or warehouse receipts. The recipients of such loans must, however, swallow their anti-co-operative prejudices to the extent of having to submit to the condition that the produce is to be sold through a co-operative society. The rule is made in the interests of the farmers themselves, the intention being to prevent ruinous competition and low prices.

The Act requires each Loan Company to have a minimum subscribed capital of £5,000. The public may subscribe and the Land Bank provides the balance.

The public contribution has been negligible and the Bank has provided the bulk of the capital. Also a Credit Society, when discounting a bill, must subscribe 1 per cent of the amount of the bill to the capital of the Loan Company.[2]

It will have been seen that for each Agricultural Loan Circle there is an Agricultural Loan Company and an unlimited number of Rural Credit Societies. At the end of the year 1929 there were in existence seventeen Loan Companies and 840 registered Credit Societies with an aggregate membership of 7,499, or an average of approximately nine members each.[3] Their distribution shows that the Transvaal and the Orange Free State have found most use for the Agricultural Credit Act, progress in Natal and the Cape being very slow.[4]

From the inception of the several Loan Companies to the end of 1929, bills discounted for members of Credit

[1] See p. 192.

[2] As at 31st December, 1929, of a total capital for all the Loan Companies of £97,565, the Bank had subscribed £84,886, the public £114, and the Credit Societies £12,565 (*Report of Central Board of Land and Agricultural Bank of South Africa for 1929* (U.G. 16—1930)).

[3] Ibid., Schedule P.

[4] Of the seventeen Loan Companies formed, eleven were in the Transvaal, three in the Orange Free State, two in the Cape Provinces, and one in Natal (ibid.).

Societies represented a total amount of £834,163.[1] The manner in which the advances were utilized make it clear that South African agriculture was still mainly pastoral, for three-fourths of the total went to purchase sheep and trek oxen.

The paternal attitude of the South African Government to the farmer is nowhere more clearly apparent than in its readiness to render financial help to agriculturists in time of trouble. The Drought Distress Relief Acts of 1924, and 1927,[2] were designed, as their title implies, to relieve distress among farmers which was due to uncontrollable circumstances and disasters to which parts of South Africa are peculiarly liable. But the principle having been once conceded, similar relief was forthcoming when adversity came upon the South African farmer by reason of circumstances and conditions which affected him in common with agriculturists the world over. By the passing of the Farmers' Special Relief Act, 1931,[3] the objects of which were, in the words of the Union Minister of Finance,[4] " to give financial assistance to enable them to pay their pressing debts without being obliged to sell their stock at uneconomic and ruinous prices," South African farmers became a specially favoured class.

The Drought Distress Relief Acts advertise perhaps the most serious of the many troubles that beset agriculture in vast areas of the Union. The 1927 Act was the consequence of the drought then prevailing, especially in parts of Cape Province, " where no rain has fallen for nearly two years and terribly large losses have been suffered." Without Government help " many would be driven from their farms and the ranks of the poor whites swollen ".[5] The remedy was similar to that applied by the earlier Statute and again it was applied with the instrumentality of the Union Land Bank.

By similar provisions in the two Acts a Committee was appointed in each " proclaimed " area by the Minister of Agriculture for the Union to carry out, under the control of the Managing Director of the Union Land Bank and out of moneys appropriated by Parliament, the authorized

[1] *Report of Central Board of Land and Agricultural Bank of South Africa for 1929* (U.G. 16—1930), p. 13.
[2] Act No. 16 of 1924, and Act. No. 25 of 1927.
[3] Act No. 4 of 1931.
[4] *House of Assembly Debates, 1931*, vol. 16, col. 269.
[5] Minister of Agriculture, ibid., 1927, vol. 9, col. 3174.

measures of relief. The funds of the Union Land Bank were not involved. In 1924 Parliament voted £500,000 for the purposes of the Act [1] and £626,000 under the 1927 Act,[2] which sums were administered by the Land Bank.

Applicants for relief must be farmers who can show that they are suffering loss by drought to such an extent that they are "unable to continue or resume farming operations", and each must further satisfy the Committee that "the assistance applied for would afford him a reasonable prospect of maintaining himself and his dependants by the carrying on of such operations". Actual money is not paid to successful applicants. Instead they are supplied by the Managing Director of the Union Land Bank with such live-stock, implements, seed, or fertilizers, as may be necessary up to the value of £300 in any one case. The value of the things thus purchased and supplied by the Land Bank is debited to the farmer as an advance which he is required to pay back in instalments with interest.

Such relief in kind was most frequently in the form of sheep. Goats were also supplied in considerable numbers; cattle, donkeys, mules, and horses to a less extent. Seed supplied under the 1927 Act had, up to 1929, cost £30,559.[3]

It is the policy of the Land Bank to enforce payment of debts due in respect of relief or credit given under the various Statutes, but its association with the Government makes it possible to grant extensions of time to debtors who suffer loss from drought, hail, or other causes over which there can be no control. This benevolent attitude on the part of the creditor has often been invoked. Thus, "in the case of seed, the advance is repayable on demand after the crops raised from the seed have been reaped. Unfortunately, little rain fell during 1928 and most farmers reaped practically nothing."[4] The difficulties usually associated with the recovery of relief loans are considerable, and magistrates, sheep inspectors, and police, as well as special officials, are pressed into the service to report on distressed debtors and their stock.

Specific instances show how very real is the benefit of

[1] Under the 1924 Act, grants amounting to £418,355 were made to 6,053 farmers up to the end of 1929 (*Report of Central Board of the Land and Agricultural Bank of South Africa for 1929* (U.G. 16—1930) p. 9).

[2] Under the 1927 Act, 7,053 applications were granted, representing £639,657 (ibid., Schedule N).

[3] Ibid., Schedule N.

[4] Ibid., p. 9.

the system to the farmer. Thus, in a case where 156 merino ewes were supplied in 1928, the increase was 210, giving the debtor a flock of 366. In another case in the same year, relief took the form of 400 Angora goats. The increase was 690, so that the debtor then had a flock of 1,090, " and he has realized over £300 for his mohair ".[1]

The purpose, in general, of the schemes already referred to for giving credit and financial assistance to farmers did not provide for advances to pay existing debts. The Special Relief Act, 1931 (*supra*), was designed to fill the gap. As already indicated, the measure was occasioned by the distress caused by the drop in agricultural prices which was as disastrous in South Africa as in other countries. In the case, for example, of the Union's chief agricultural export, wool, in 1924 there was sold overseas 174 million pounds at an average price of 1*s.* 9*d.* per pound, producing an aggregate yield of £15,700,000. In 1930, South African farmers exported the vastly greater bulk of 275 million pounds, but the aggregate receipts for it were only £8,500,000, for in the meantime the average price of wool had dropped to 7½*d.* per pound.[2]

The scheme was based on principles resembling those governing the administration of drought distress relief. A Board consisting of the Managing Director of the Union Land Bank and two members appointed by the Minister of Finance are authorized to grant loans out of moneys provided by the Union Parliament to farmers of good character who owe debts they were justified in incurring, but who have no reasonable means of paying those debts, and are " likely to suffer serious and irreparable loss unless the debt is paid ". Further conditions are that it must be a case where the farmer " has a reasonable prospect of overcoming his financial difficulties if the debt is paid wholly or in part ", and where adequate security can be given. The maximum loan to one person is £1,000, and it must be repaid with interest by instalments. Just as the beneficiary under the Drought Distress Relief Acts was given relief not in cash, but in kind, so here the loan granted is not paid over to the borrower himself but is used, on his behalf, to pay his debts.

[1] Ibid., p. 10.

[2] Minister of Finance in the *House of Assembly Debates, 1931*, vol. 16, col. 269.

The Organization of Distribution

The introduction of grain elevators into South Africa for the purpose of the bulk handling of the maize trade furnishes an excellent example of the advantages of collective action in the distribution of a commodity produced by individual effort. The date of their inauguration illustrates the belatedness of South Africa's serious interest in its agricultural side. In 1907, the date generally accepted as that of the inauguration of the export maize trade in South Africa, the Dominion exported rather less than half a million bags. In 1911, when the first representations to the Government urging the erection of elevators were made by the organizations interested in the maize industry, South Africa was exporting over one million bags of maize.[1] In 1917, when the South African Government directed their General Manager of Railways to convene a Committee to inquire into and report upon the desirability or otherwise of establishing elevators for dealing with the export maize trade, there were already in Canada 3,059 elevators with a total storage capacity of over 180,000,000 bushels. In Australia the Government of New South Wales had in 1916 passed a Grain Elevator Act and other States were considering silo storage schemes.[2]

The wastefulness consequent on the primitive system of putting the maize on the market in bags was directly apparent. In the first place, there was the initial expense of the bag itself. Before 1914 each bag cost the farmer about 8*d*. before he could market the 200 lb. of grain it was made to contain. In 1918 the cost had more than doubled.[3] Then each of the numerous handlings of the bagged grain, whether by officials for grading purposes or by potential buyers, resulted in a loss of grain through samples taken only to be wasted or actual leakage through holes in the bags. The lack of the means of safe storage enabled insects, rodents, and the weather to take further toll of the farmers' produce. After one particularly wet season the chairman of the local Farmers' Association told the Committee on Grain Elevators how " he could smell the stench of the rotting maize at his house, although 1½ miles away from the stack at the railway station ".[4] In the eleven

[1] A bag normally contained 200 lb. of grain.

[2] See *Report of Committee on Grain Elevators in South Africa* (U.G. 38—1918), Pretoria, 1918, Annexures J and K.

[3] Ibid., p. 14.

[4] Ibid., p. 15.

months ended May, 1918, between 9 and 10 per cent of the maize examined by the Government graders at the ports was rejected on account of wet, weevil, mustiness, or other defects.[1] Moreover the handling of grain in bags is a slow process, and the delay caused to railway trucks being loaded or unloaded by hand results in considerable expense for sidings and terminal accommodation, and every day's delay suffered by a vessel in port is a costly item. Lastly, much more labour must be employed in handling the maize in bags than under the elevator system.

The economic effects of the system were more remote, but easily ascertainable. The lack of adequate storage accommodation, added to the want of facilities for financing the crop, forced large quantities of maize upon the market immediately after reaping. The inevitable resulting tendency was to depress prices. Also the farmer was compelled to accept prices below the market price for the reason that the risks of open storage were taken into consideration by the buyer in fixing his price. Moreover, the steady market capable of absorbing whatever maize was offered, which is so necessary if production is to be encouraged, was impossible under a system which presented to the producer the alternative of leaving the grain stacked without proper protection or of selling it to the local storekeeper on the best terms procurable, and required the purchaser to stand out of his money until grain thus liable to deterioration every day could be resold.

Elevators are of different types and varying capacity, but all have for their objects the handling of grain in bulk by mechanical means and the provision of safe storage. "The principle on which elevators work is that the grain is deposited in bulk into the 'boot' of the elevator 'leg'. The 'leg' is the device used in all elevators, large and small, for elevating the grain. It consists essentially of two pulleys, over which runs a belt. At regular intervals along the belt metal buckets are attached, and, as the pulleys revolve, these buckets scoop up the grain from the boot and carry it to the head of the elevator, where the grain is turned out by the inversion of the buckets into a spout placed there to receive it. Through this spout the grain is fed on to a conveyor belt which delivers it into the silos (storage bins). When discharging the grain from the

[1] Ibid., p. 16.

elevator the procedure is that the grain is drawn from the bottom of the silo, lifted by the means described above and delivered on to a belt conveyor, when it is discharged by gravity through spouts into ships or railway trucks. The broad principle is ' up by power and down by gravity '." [1] Appliances for cleaning and weighing grain are generally associated with elevators as also can be drying plant. In South Africa the provision of elevators was decided upon for the purposes of the maize trade, but by the provision of separate storage bins, wheat, oats, and kaffir corn could equally well be accommodated.

Of the two classes of elevators, the " country " elevator is the feeder of the larger " terminal " elevator. " Country elevators are established at the principal dispatching stations in the grain belts, and large terminal elevators at the ports. The farmer brings his grain to the country elevator, either loose in a box cart or in bags. From his wagon the grain is tipped loose into the receiving hopper of the elevator, whence it is mechanically transferred to the elevator storage bins, being cleaned, weighed, and graded before deposit in the latter. Separate bins are provided for each different grade; but grain of the same grade belonging to different owners is merged in the same bin, its individual identity being then lost. From the storage bins the grain is spouted loose into special railway box trucks and conveyed to the port, where it is mechanically transferred from railway trucks to the port elevator storage bins. From these bins the grain is spouted into the ship's hold and conveyed loose in the ship to the European ports." [2]

The services for the benefit of the farmer provided by the elevator system are not confined to storing, cleaning, weighing, and grading the grain. The system in effect operates as a grain Bank. " When the farmer deposits his grain in the elevator, he receives in exchange a negotiable elevator receipt which is issued in the terms of the Agricultural Warehouse Act, 1930, on which are inscribed the weight, description, and grade of the grain. The elevator authorities absolutely insure the grain against all losses of whatsoever description whilst in the elevator system and undertake (without any reservation) to deliver, on presentation of the elevator receipt, the exact weight and grade

[1] Ibid., Annexure A, p. 60.
[2] *Official Year Book of South Africa, 1929-1930*, p. 404.

described thereon. . . . The elevator receipts are recognized by the Banks as first class security, on which they advance loans. Buying and selling of grain under the elevator system is done entirely through the medium of the elevator receipts. . . . This receipt may be presented at any elevator in the country and will ensure delivery of the weight and grade shown in the receipt, subject to any charges due."[1] A free market, in which the producer could choose his own time for turning his maize into cash, took the place of methods of marketing comparable only with the truck system. The farmer, in his own words, became " baas " of his own grain.

The Committee on Grain Elevators convened in the beginning of 1918 reported in the same year. They had no difficulty in coming to the conclusion that " the disabilities inseparable from the present system are so pronounced, that the substitution of the elevator system for the present system is essential to secure a sustained large increase in the grain production of South Africa, the possibilities of which are enormous." They recommended a scheme providing for port elevators and for small country elevators at each station handling a large maize traffic. They also recommended without hesitation that the elevator system should be owned by the Government and operated by the Administration of Railways and Harbours : also that, " in view of the necessity for encouraging farmers to increase production and to compete with other countries in the European markets, no profits should be made out of the elevator system."

The circumstance that in South Africa the railways and harbours were already owned and operated by the Government was a strong economic argument in favour of the public ownership of the grain elevators. The Committee were also impressed by the evidence before them setting forth the many grounds of complaint made against the elevators in private ownership in Canada and the United States.[2] Furthermore, the Committee recommended that " the principle which has hitherto been observed of lower railway rates for export grain than for grain for local consumption should be extended to the tariffs levied for the use of the

[1] Ibid., p. 404.

[2] See *Report of Committee on Grain Elevators, 1918* (U.G. 38—1918), Annexure I, for a full statement on this aspect of the subject ; also vol. ii of the present work, pp. 510–14.

elevator system ", and that " in order to alleviate the disadvantage suffered by farmers at places not provided with elevator facilities, the Railway Administration should grant a low tariff to the nearest country elevator ", a principle which had been generally adopted elsewhere.

The Government accepted the main recommendations of the Committee and in 1921 the construction of terminal elevators at Durban and Capetown was commenced, the third port terminal elevator at East London which the Committee had recommended being deferred for the time being. The Durban elevator was not completed until 1927, but the Capetown port elevator and thirty-four country elevators were completed in 1924 and with them the elevator system was formally inaugurated in that year.[1]

What elevators are to grain, cold storage is to meat.

The meat trade, of which Johannesburg is the centre, has, since the middle of the nineteenth century, been in the hands of large concerns, the earliest of which, Combrinck and Co., established in 1861, has been prominent both in the public life and the economic development of South Africa. Among its prominent politicians has been the Graaff family. Its great contribution to economic development was the introduction into South Africa of refrigeration for meat preservation. An important scheme for which the firm was responsible was the reclamation from the sea at Capetown Harbour, under an agreement with the Government in 1895, of nearly 40,000 square yards of land on which were erected cold storage accommodation for fruit, dairy produce, fish, and other foodstuffs. When in 1895–6 rinderpest swept the country and denuded the greater part of it of cattle, the calamity led to the importation of frozen meat into South Africa. The trade rapidly increased from that time " and was solely in the hands of Combrinck and Co. prior to the Boer War ". The dangers incidental to the concentration of such an important trade in the hands of a single firm became a first class political issue, and " the conditions prevailing during the Boer War gave the cold storage interests a position that made their power a matter of serious importance to the whole country.

[1] In 1929–1930, there were still only the two port elevators, but the country elevators had been increased by one to thirty-five. The port elevators have a total storage capacity of 72,000 tons, and the country elevators an aggregate capacity of 110,950 tons, the capacity of the largest being 5,800, and of the smaller 1,750 tons (*Official Year Book of South Africa, 1929–1930*, p. 404).

. . . The demand for meat to victual the British troops added to the market created by the ravages of rinderpest made Army contracts very profitable. . . . The men in control of the cold storages were in command of the trade ".[1] In 1899 Combrinck and Co. had disposed of their business as purveyors and live-stock dealers to the South African Supply and Cold Storage Co., Ltd., a new concern with a capital of £450,000. Its career was brief but prosperous, and in 1902 it disposed of its business and assets for £1,000,000 to the South African and Australasian Supply and Cold Storage Co., Ltd. In the same year the predominating position of this concern was challenged by the Imperial Cold Storage and Supply Co., Ltd., behind which were such powerful names as De Beers, Barnato Bros., and other Johannesburg interests. The public expectations that from this rivalry the consumer would derive considerable benefit were quickly disappointed, for within a few months there was an amalgamation of the two concerns under an agreement whereby in the hands of the Imperial Company " the principal meat interests in the country were once again consolidated but in a more powerful form ".[2] Powerful as it was, however, the Imperial Company now entered upon a period of adversity. By now " the trade was suffering from over-capitalization and very severe competition ",[3] but following on the fusion in 1910–11 of the interests of the Imperial Co. and the Cold Storage Trust, prosperity returned to the Imperial Company and " at the end of 1920 the book value of the Company's assets stood at £1,348,589 " and they were paying annually £212,000 in salaries and wages.[4] The company gradually extended its control of the cold storage facilities at the ports of the Union until, " with the exception of the Union Fresh Meat Company's premises at Durban, there is now no coastal plant of any importance outside the control of the Imperial interest." [5] Finally the Transvaal Koelkamers Beperkt, a cold storage company founded in that Province with Government assistance in 1898 as " an independent cold storage company that would serve to protect the consumer from exploitation and to stabilize meat prices " [6] became a virtual subsidiary of the Imperial Company.

[1] *Union Board of Trade and Industries Report*, No. 54, on Meat, Fish, and other Foodstuffs (Capetown, 1925), p. 6.
[2] Ibid., p. 7. [3] Ibid. [4] Ibid., p. 8.
[5] Ibid., p. 13. [6] Ibid., p. 17.

In certain industries organization has been developed not only for the purpose of securing more satisfactory marketing conditions, but also to the end that higher prices may be justified by the production of a better commodity, and the government has shown ready willingness to assist the latter purpose by legislation. Thus the primary aims of those who have been working for the better organization of the South African wool trade have been not only the securing of a better market price for the product but also an improvement in its quality.

The central wool markets of the Union vary in their practice. At Durban wool must first be offered at public auction, after which, if it is not sold, it may be sold privately or put up to auction again. At Port Elizabeth, East London, and Capetown sale is either by public auction or privately, mostly by the former method.[1]

The advantages claimed for sale by public auction are that the seller secures a quick turnover and gets a price fixed by open competition, and its advocates in South Africa are backed by abundant authority, for the system of obligatory public auction is common to all the main wool markets of the world, and the Empire Wool Conference, held in Australia in 1930, declared "that in the opinion of this Conference the best method of selling wool is by public auction".

In 1922 a Wool Growers' Association was formed at Graaff Reinet, "to gain the absolute confidence of buyers of wool at the coast and marketing centres, not only by producing the right type of wool, but also by preparing clips in the most efficient, honest, and attractive manner." Later a joint conference was held at Graaff Reinet by the Association, wool buyers and brokers from Port Elizabeth, and officials of the Grootfontein School of Agriculture, at which a uniform system of wool classification was adopted which was accepted with slight amendments by subsequent wool growers' Associations and afterwards by the National Wool Growers' Association of South Africa.[2]

A special congress of wool growers, organized and unorganized, convened in 1929 at Bloemfontein by the South African Agricultural Union, appealed to the Minister for

[1] *Report of Commission on Co-operation and Agricultural Credit*, 1934 (U.G. 16—1934), p. 106.

[2] "Wool Growers' Associations in the Cape Province," in *Farming in South Africa*, vol. ii, 1927–8, p. 612.

Agriculture to levy a special tax per bale for the purposes of extending research work, organizing the wool growers, and general propaganda. The Government thereupon imposed a shilling levy as from January, 1930, and appointed an Advisory Wool Council of practical wool growers with the Secretary for Agriculture as Chairman, which set up special committees to investigate defects in the system of wool marketing, to ascertain foreign requirements, and to work out a proper organization for wool growers.[1]

Government intervention has been especially apparent in the organization, in recent years, of the country's oldest export industry.

The Dominions Royal Commission were confronted with figures which showed that while in the wine industry "the output is increasing, the exports are very small and show little sign of advance".[2] They found that the popularity of the wine was bound to suffer from the absence of any standard of quality even in wine of the same brand[3] and they could only recommend that the Union should concentrate on the export of a pure light brandy made entirely from wine.

In 1924 the Union Government made a great effort to rescue this ancient industry from the slough of despond in which it had so long been struggling. They accepted the view of the Dominions Royal Commission that the way of salvation was to use their wine for the manufacture of a pure brandy and so acquire a reputation for the production of the best article of its kind. They furthermore recognized that improved conditions were unattainable unless the industry was effectively organized. Under the Act which was passed in 1924[4] spirit was to be distilled wholly from pure wine and it was made necessary that the Government Brandy Board should give their certificate that this requirement had been met before the brandy could be disposed of. In effect there was to be a national guarantee of the purity of this particular product.

The work of organization was left to the wine producers

[1] F. J. du Toit, "Work of the New Wool Council," in ibid., vol. v, 1930–1, p. 95.

[2] *D.R.C. Third Interim Report, 1914* (Cd. 7505), p. 34.

[3] According to one witness before the Commission, "The wine varies with each vintage and each manufacturer gives you a different wine each time. If you call for 'Hermitage' of different merchants out here, you will get a different kind each time." (Q. 6486.)

[4] The Wine and Spirits Control Act (No. 5 of 1924).

themselves. In 1917 the situation of the wine trade in South Africa was so desperate that a large majority of the wine growers had formed themselves into the Co-operative Wine Farmers' Association of South Africa, which applied a method of maintaining prices which has since been adopted in other industries, whereby a puzzled world, conscious on the one hand of the existence of vast bodies of people barely able to sustain life, sees, on the other hand, the produce of the earth deliberately destroyed as being surplus to the requirements of the trade. The method of the South African wine producers was a minimum price, depending on the season's output, and the destruction of the surplus.

To this organization the business of the Cape wine growers was handed over by the 1924 Act. It acquired all wine destined for distilling purposes and disposed of it at the minimum price fixed by itself. Since this pure wine brandy was not to be sold unless it had matured for three years, it was hoped that any not wanted in the Dominion itself could be sold abroad and the destruction of surplus wine so avoided.

In this way the production of Cape brandy has been brought under control and the trade therein regulated. The producers of wine not meant for distillation were left to look after themselves, but in effect the great bulk of the produce of the Cape vine grower comes under control, for according to the statement of the Prime Minister, when introducing the Bill which became the 1924 Act, about 80 per cent of the wine produced in the Cape was turned into spirits and mostly into brandy.[1]

The limited contribution made by the dairying industry to the economic progress of the Dominion is indicated by the fact that only during a few years has the home production of dairy produce been equal to home consumption. The year 1915–16 was the first year in which the butter produced in the Union equalled the consumption there. This state of things continued until 1923–4, when consumption again exceeded home production and continued to do so until 1929–1930. The production and consumption of cheese closely followed the same course. Immediately before the year 1915 the Union had been paying to Australia well over £100,000 a year for butter, and butter for which the Australian exporter was getting 9*d*. per pound was being

[1] *Debates of Union House of Assembly, 1924*, vol. i, p. 105.

sold to the consumer in South Africa at 1*s.* 2*d.* per pound. There was an import duty of 2*d.* and freights were high.[1] This was hardly a satisfactory state of things in a country which was primarily pastoral.

In part, at any rate, psychological reasons account for the slow progress of the dairying industry in South Africa. " Dairying possesses every desirable element for successful co-operation, and co-operation in this agricultural branch has been most successful in Denmark, Holland, New Zealand and other important dairying countries. And yet development in this respect in South Africa has been almost stationary." [2] One reason was " the lack of a truly co-operative spirit among South African farmers " [3] as is evidenced by the fact that in 1927, of seventy-three creameries in active operation, only fifteen were co-operative.[4] What South Africa lacked was " a uniform manufacturing and marketing organization " comparable to that of New Zealand or Denmark. Its manufacturing section was marked by " an unhealthy competitive spirit ", causing " a wasteful hostility between various creamery and cheese factory interests ", leading to " an industrial superstructure " out of keeping with the extent of the dairy industry, and giving rise to fluctuating prices for the farmers and " a distinct sense of insecurity ".[5] From haphazard beginnings, " South Africa had evolved ' a patchwork creamery system ' when, in order to build up an export trade, what was wanted was ' co-ordination in butter manufacture and distribution '."[6] As a result of the Report by the Board of Trade and Industries on the Dairy Industry in 1927, the Dairy Industry Control Board was set up to aid development, promote exports, and disseminate ruling prices. To promote exports the Control Board imposed a levy on all production, the proceeds of which are distributed in the form of a bounty on exports. Further, by a licensing system the Control Board prevents the establishment of unnecessary dairies the effect of which is to increase the cost of production.

[1] *D.R.C. Minutes of Evidence, 1914* (Cd. 7706), Q. 3307.
[2] *Report of Commission on Co-operation and Agricultural Credit, 1934* (U.G. 16—1934), p. 70.
[3] *Report of Board of Trade and Industries on the Dairy Industry*, No. 81, 1927 (in Printed Annexures to *Votes and Proceedings of House of Assembly, 1927–28*, vol. iv), p. 5.
[4] Ibid.
[5] Ibid., p. 4.
[6] Ibid., p. 6.

In this way the Control Board has brought to the trade a greater measure of stability.

The circumstances of the sugar industry require the planter and the miller who crushes the cane to be in close association. In Natal, where the industry is an old one, the miller has, as a rule, been the grower of the cane which he crushes, and even now, when mills are larger, this condition still survives, the miller only taking cane from other planters when his own stock needs to be supplemented. In Zululand the relationship between growing the cane and crushing it is somewhat different. When, in 1905, the Natal Government threw open the Zululand coastal belt to sugar growers, it was recognized that it would be futile to settle planters in a new territory unless they could be assured of a market for their cane. The method adopted to ensure this result involved Government control of the industry in that particular region.

An agreement was entered into between the Government and Sir J. Liege Hulett, in 1905, whereby the latter was to erect and operate a milling plant. A further agreement was entered into between the Government and the individual planter relative to the lease of the ground and the lessee's obligations. A third agreement between miller and planter required the planter to sell and the miller to buy all the cane grown by the planter on the lessee's land, a definite scale of prices being laid down. The method adopted in respect of the Zululand area known as " Hulett's Concession " was, with but slight modifications, put into operation in two further " concession " areas.

In Zululand, accordingly, the cane is crushed in " central " mills situated in the centre of large plantations but not themselves concerned with the cultivation of the cane. As a result of this separation of planter and miller, there has emerged a conflict of interest between the two branches of the industry and interminable disputes as to the proper division of the profits, from which Natal, where the sugar firm is both planter and miller, has been comparatively free. The scale of payment to be made by miller to planter which the Government imposed in the " concession " area was a source of much discontent, the planters' constant complaint being that they were not paid enough for their cane. But the mischief of which the Zululand agreements were the cause was much more serious than that. " The insertion of clauses fixing a scale of payment for cane and stipulating

that all planters had to be paid the same price had for its purpose to ensure that planters should not be at the mercy of the mills . . . but experience has shown that in certain respects they have led to anomalies and to a state of affairs which is neither just to the miller nor to the grower of good cane, besides being detrimental to the best interests of the industry in Zululand. The mills have to pay the same for well-grown cane of high sucrose content as for poor quality of cane with low sucrose content." [1] Under such a scheme there was obviously no inducement to the planter to grow good cane, or to purchase fertilizers. The inevitable result was that the planters were living on their capital as represented by the plant foods in the soil and " the yield of cane per acre is steadily decreasing ".[2]

It was not until 1926–7 that a system became effective which had long been seen to be essential to the progress of the industry, namely payment for cane on sucrose-content instead of according to weight of cane.

The greater success in the marketing of South African agricultural produce has synchronized with a tighter system of Government supervision and insistence on grading. At first self-interest was relied upon as the motive for the abandonment of the " take it or leave it " principle in marketing. Thus it was found that loss from the " blue mold " which attacked citrus fruits could be avoided if the fruit was kept at a low temperature during transport. Accordingly the shipping companies concerned with the traffic fitted their vessels with cool chambers, which were available to shippers provided they submitted to inspection of their fruit by a Government inspector to ensure its compliance with regulations and packed their fruit properly graded as to size in uniform boxes of standard size, for uniformity in the size of boxes makes for economy of space in railway truck and ship. Uniformity of size in the fruit itself avoids loose packing and consequent bruising.[3] Later a series of Acts gave greater efficacy to the application of the principles of inspection and grading to agricultural produce intended for export. A beginning was made in 1914, when the export of fruit was prohibited unless inspected

[1] *Report of Sugar Inquiry Commission* (U.G. 22—1922), Capetown, 1922 (Annexures to *Votes and Proceedings, House of Assembly, 1922*, vol. iii), pp. 8–9.

[2] Ibid., p. 10.

[3] See R. A. Davis (Government Horticulturist), " Export of Oranges," *Agricultural Journal of Union of South Africa*, vol. v, 1913, p. 452.

to ascertain that its condition was up to the prescribed standard and that it was graded in accordance with regulations. These requirements were later extended to agricultural produce generally, and to articles produced or derived from fruit or agricultural produce.[1] An instance of this application of the legislation is furnished by the regulations promulgated in 1921 for the export of dried fruit, similar to those already existing in respect of maize and fresh fruit.[2] It had been found that unscrupulous exporters had sent forward speculative shipments of inferior dried fruits, especially raisins, which constituted the bulk of the dried fruits exported, with the result that the reputation of that particular branch of South African merchandise was being undermined. Henceforth no dried fruit was to be exported overseas unless it conformed with specified requirements as to quality, grading, packing, and marking.

[1] See Fruit Export Act, 1914 (Act No. 17 of 1914); Agricultural Produce Export Act, 1917 (Act No. 35 of 1917); Agricultural Products Grading Act, 1922 (Act No. 16 of 1922), and Agricultural Products Packing and Marketing Act (Act No. 6 of 1930).

[2] Government Notice No. 715 of 1921. The Regulations were made under the Agricultural Produce Act, 1917.

CHAPTER 9

THE MINES

Of the variety of mineral wealth, only diamonds, gold, and coal as yet developed on a comparatively substantial scale.

Diamonds.

The pioneer period, 1867–1871.

Discovery of first diamond, 1867; the river diggings.
First dry diggings at Du Toit's Pan, 1870.
Annexation of Griqualand West, 1871.

Diggers working individual claims superseded by joint stock companies.

Open diggings superseded by underground working.

I.D.B.; the Diamond Trade Act, 1882.

Gold.

Outstanding economic importance of the industry.

The early discoverers: Mauch, Lys, Struben, and Walker.

Witwatersrand discoveries in 1886; public diggings proclaimed; Johannesburg founded.

The cyanide process inaugurated, 1890; effects.

Coal.

The Cape as pioneer in coal production, but soon superseded by Natal coal.

Natal.

Large scale production begins, 1889, with arrival of railway.

Transvaal.

Large scale production follows gold discoveries.

Supplies the mines and the Cape.

Export trade important after 1910.

THE concentration of interest on diamonds and gold has tended to obscure the immense variety of the mineral resources of South Africa. In 1930 the value of the minerals produced in the territory of the Union amounted to £59¼ millions, but of this total, £54 millions represented gold and diamonds. The only other mineral, the annual value of which is expressed in millions, is coal, and that only reached some £3½ millions. From time to time the lid of this South African treasure chest is lifted and some new mineral is brought forth to be given a place in the statistics of production. Thus it was not until 1926 that platinum appeared in the list of products. In 1930 the value of the platinum

produced was £328,000. The value of the asbestos produced was more than quadrupled between 1924 and 1929. In 1922 enormous deposits of manganese were discovered at Postmasburg, over 100 miles west of Kimberley. But the deposits were 70 miles from the nearest railway and it was nearly ten years before South African manganese was made available to the steel-producing world. The significant fact is that the metals which would constitute the foundation of a manufacturing industry in the Union have hitherto not been seriously exploited.

Diamonds

" Gentlemen, this is the rock on which the future success of South Africa will be built." Such was the prophetic remark of the Colonial Secretary of the time when, one day in 1867, he laid upon the table of the Cape House of Assembly one of the earliest of the diamonds discovered in South Africa and identified as a genuine stone.

The story of the finding of the first diamond is thus related by Dr. Matthews, once Member for Kimberley in the Cape House of Assembly. He had it from a former patient of his, who was the principal actor in the drama [1]: " I was trading around as usual, when in October, 1867, I outspanned at a farm belonging to a Boer named Niekerk, close to the Orange River. His youngsters, when I came there, were playing with pebbles and their father was standing alongside watching them. Seeing me looking on, he pointed out one stone prettier than the rest in the hand of a little Griqua servant boy who was minding his children, and said : ' There's a pretty stone for a woman's brooch.' I had a diamond ring on my finger, and I fancied I could see some resemblance to the cut stone ; and taking it from the boy I tried to scratch my initials on the window pane. As soon as I found that the stone would cut glass, I offered to give Niekerk, if he would allow me to take it away, one half of what I might get for it, supposing it proved to be a diamond. This he jumped at. I at once inspanned and went to Hopetown, our trading centre at that time. When I got there I showed it to Solomon, the storekeeper, who chaffed me and, laughing, bet me a dozen of beer that it wasn't worth anything. From Hopetown I trekked on to Colesberg. I asked the Resident Magistrate this time.

[1] J. W. Matthews, M.D., *Incwadi Yami or Twenty Years Personal Experience in South Africa*, p. 129.

He wasn't sure which it was . . . so I sent it to Grahamstown where Dr. Atherstone lived, who knows all about such things. When I arrived there myself shortly afterwards and saw him he said there was no doubt it was a diamond and a good one too. Dr. Atherstone sent it to Sir Philip Wodehouse, then Governor, who bought it for £500."

Fortune hunters arrived and the search was continued along the banks of the Orange and Vaal Rivers, but the next landmark in the history of the diamond mining history was the discovery of the first dry diggings at Du Toit's Pan in 1870. Then " a young man of the name of Rawstorne was out shooting and, becoming somewhat weary, rested himself under the shades of a thorn bush, and, scratching the ground from force of habit, unearthed a beautiful diamond. . . . Next day, the news having got abroad, the locality was rushed and hundreds of claims pegged out. . . . Men packed up their belongings, moved their tents, and sought the 'New Rush', and in the very place where but a few days before deer had been quietly browsing, hundreds of diggers could be seen. The famous kopje is now the Kimberley Mine." [1]

The river diggings were soon practically deserted in favour of the dry diggings, for the labour of winning diamonds from the latter was much less than from the former.

" No more wretched existence can be imagined than that endured by the early diggers. A malarial fever raged, water was dear and bad, being carted in barrels from adjacent farms (after even wells were dug it was sold for as much as 10*s*. per barrel) and so scarce that I have seen diggers wash in soda water which has been imported 700 miles from Capetown. Vegetables were also extremely dear and almost unprocurable, cauliflowers being retailed at 20*s*. each and cabbages at 8*s*. Fleas and flies abounded ; sand-storms blew in blind fury ; and of amusements there were none." [2]

By July, 1870, there were 1,000 diggers at the alluvial diggings which stretched out almost 150 miles, from 40 or 50 miles below the junction of the Vaal and the Orange, to 100 miles up the Vaal above the confluence. By September, 1870, there were 5,000 diggers, while hundreds more were on the way or ready to go,[3] the impetus being due

[1] Ibid., p. 131. [2] Ibid., p. 132.

[3] Dispatches of Lieut.-Governor C. Hay to Earl Granville, 4th August, 1870, and to Earl of Kimberley, 19th September, 1870, in " Correspondence respecting affairs of the Cape of Good Hope, 1871 ", C. 459, pp. 28–9, 36 (*Parly. Papers*, 1871, xlvii).

to the discovery of the dry diggings with their immensely more wealthy and more certain prospects as compared with the alluvial diggings. Half a century after the discovery of the first diamond it was estimated that only 10 per cent of the total diamonds produced in South Africa had come from the alluvial diggings, while the remaining 90 per cent had come from the dry diggings and their successors, the mines. Each digger working a claim required three or four natives to work for him, and by December, 1871, there were thought to be 7,000 whites and natives working at the New Rush alone.[1] Less than a year later it was reported that the 1,300 claims at the New Rush were being worked by 2,500 claim-holders, assisted by some 9,500 natives, or 12,000 in all, out of a total of 40,000 for Griqualand West. In its first year the New Rush had produced some 300,000 carats, worth about £1,000,000,[2] which would make the total production of the diamond field about £1,500,000 probably. Writing in June, 1875, Lieutenant-Governor Southey reported that the estimated annual export of diamonds was £3,000,000, and a total annual import of products into the diamond diggings estimated at £2,500,000. Population was thought to total 45,000, consisting of 15,000 whites, 10,000 coloured, and 20,000 natives. Wages were high: skilled artisans received 30*s.* to £2 per day, good coloured workmen £2 to £4 per week "with quarters", and raw natives 25*s.* to 30*s.* per week.[3] Natives were very migratory, only stopping long enough (generally five months) to buy guns and powder horns, and, when the Government stopped the gun traffic, buying brass, copper, or iron wire, a knife, a hatchet, stealing all the old files and tools left about and going home thoroughly content.[4]

With this increase of population and flow of money, traders and farmers did uncommonly well. Things formerly unsaleable now fetched high prices. And the local farmers had a virtual monopoly of whatever they cared to supply,

[1] A Digger, "The Great Camp at Colesberg Kop—December, 1871," in *Notes on Natal*, edited by J. Robinson, 1872, pp. 210–12.

[2] Dispatch of Sir H. Barkly to Earl of Kimberley, 29th October, 1872, in "Further Correspondence respecting the affairs of the Cape of Good Hope, March, 1873", C. 508, pp. 129–130 (*Parly. Papers*, 1873, xlix).

[3] Lieut.-Governor R. Southey to Governor Sir H. Barkly, 30th June, 1875, in "Further Correspondence relating to the Colonies and States of South Africa", C. 1401, pp. 2–3 (*Parly. Papers*, 1876, lii).

[4] Evidence of F. Ingle (with thirty-three years' experience of mining and native labour from 1869 onwards), Transvaal Labour Commission, 1904 (Cd. 1897, Qs. 3832–3, 3836).

since the only form of transport from the outside world was the ox-waggon. Thus in 1871 beef and mutton sold at 4*d.* per lb., chickens and ducks at 2*s.* 6*d.* to 3*s.* 6*d.* each, eggs at 2*s.* 6*d.* to 4*s.* per dozen, butter at 2*s.* 6*d.* to 5*s.* per lb., white flour at 6*d.* per lb., sugar and tobacco at 9*d.* to 1*s.* per lb., oranges and onions at 10*s.* per 100, potatoes at 5*s.* to 7*s.* per bucketful, small cabbages 2*s.* 6*d.* each, and firewood at £3 per load.[1]

The pioneer period may be said to have closed when, in October, 1871, Sir Henry Barkly annexed the diamond diggings in Griqualand West and a new era to have opened in November, 1871, when Cecil Rhodes, then aged 18, having left cotton planting in Natal, arrived at the diggings " in a Scotch cart drawn by a team of oxen, carrying with him a bucket and spade, several volumes of the classics and a Greek lexicon ".[2] Eighteen years later this unknown youth was to bring to an end the second period of the diamond industry, marked by great growth and increasing competition, and to usher in the period of amalgamation and controlled marketing, which was associated with the names of the De Beers Consolidated Mines and the London Diamond Syndicate.

It was generally thought that the dry diggings would soon be exhausted, but the discovery of the diamond pipes, which meant that diamonds were to be found not only near the surface but to great depths, made diamond-mining a comparatively permanent industry. This raised fresh problems in the technique of mining. Even in 1872 claims at the De Beers' New Rush were sunk to the depth of 50 and 100 feet and roadways between the claims began to fall in. This immediate problem was solved by doing away with the roadways and installing a system of bucket haulage. The deeper the pit, however, the greater became the cost of haulage and the greater also became the difficulty of drainage. In 1874 the Kimberley Mining Board was established to cope with these problems and keep the workings clear. Caving-in became increasingly serious. In 1882 more than £500,000 was spent in removing " reef " or debris, and even then the task was incomplete. In 1883 the Board had a deficit of £250,000.[3] The real solution

[1] G. F. Williams, *Diamond Mines of South Africa*, 1906, vol. i, pp. 209–210.
[2] Sir L. Michell, *Life of Cecil J. Rhodes*, 1910, vol. i, p. 34.
[3] Reports of De Beers Consolidated Mines, Limited, quoted by W. B. Worsfold, *South Africa: A Study in Colonial Administration and Development*, 1895, pp. 139–140.

was to abandon open quarrying and to substitute subterranean mining, which began to be practised about 1883.

As the expense of winning the diamonds grew greater as the result of the greater depths of the workings, the cost of the machinery which became necessary, and the extra white labour that had to be employed, so the individual digger tended to become superseded by the joint-stock company. The earliest companies were merely partnerships of diggers who found it convenient to pool their claims. The success of the early companies, especially of the dozen or so companies which were interested in the Kimberley mine, lighted up the great diamond share mania of 1881. "When once the idea that the joint stock system was the most advantageous method for working the mines gained a hold on the community, the excitement became intense. Company after company was formed and the shares in every case were eagerly taken up by the public. . . . The various offices of the companies in formation were simply stormed, and those who could not get in at the door threw their applications for shares (to which were attached cheques and bank notes) through the windows, trusting to chance that they might be picked up. . . . Business of every kind was neglected, mining operations were all but suspended, the sole topic being the share market and the profits to be made there." [1]

Before the inevitable slump came, the number of diamond mining companies had soared to over seventy and their nominal capital to over eight millions. The reaction was correspondingly violent. Confidence in the industry was for the time being destroyed and South Africa realized that permanent prosperity could not be built on a foundation of financial pyrotechnics.

Meanwhile the greater concentration of capital was enabling the sound concerns greatly to improve their methods. Heavier and more powerful machinery was sent out from England. The open diggings were superseded by underground working, whereby the diamondiferous soil was the more easily reached and the more safely worked. Wells were sunk and a reasonably satisfactory water supply secured until later the Kimberley Waterworks Company brought water to the town from the Vaal River. The fuel supply proved a most difficult problem. Before the completion of the railway in 1885, whereby coal was made available, wood had to be used for engine and domestic

[1] J. W. Matthews, M.D., op. cit., pp. 246–7.

purposes. The lamentable result was that the country around Kimberley was completely cleared of trees and conditions of drought correspondingly increased.

One of the results of the march of civilization into this hitherto neglected corner of Africa was to turn many an honest barbarian into a criminal. In the early days of the diamond diggings the digger and the native lived in a semi-patriarchal community and law and order were maintained by an extemporized Committee of Safety. "Crime was nearly unknown. The fields were too far inland and the cost of travel too great to induce any not honestly inclined to suffer the privations and incur the expense necessary to get there. Men would leave their tents for hours, even days, and yet find everything intact on their return, such was the quiet and order which reigned through the camp. But as time went on and as transport became easier, cheaper, and quicker, the fields became the rendezvous of, I should say, nearly all the light-fingered gentry and desperadoes that Africa contained; and as a consequence instances of illicit diamond buying, robberies, and assaults became comparatively numerous, in fact Kimberley became 'civilized'." [1]

The diggers woke up to the fact that they were being robbed extensively by their native servants, and then it became clear that behind the black thief was the white receiver. Soon illicit diamond buying became an extensive trade and I.D.B. the most serious crime in the calendar. In Griqualand West, Proclamations and Ordinances succeeded one another, the progressive severity of which made manifest the difficulty of stamping out the trouble. They culminated in the Diamond Trade Act of 1882, passed by the Cape Legislature after Griqualand West had been annexed to that Colony. Perhaps the most notable provision of that law was the *onus probandi* clause, which threw on the person found in possession of any rough or uncut diamond the onus of showing that he was lawfully possessed of it.[2]

[1] Ibid., p. 132.

[2] Transvaal Ordinance to regulate the Trading in Diamonds, 1903 (No. 63 of 1903). This notorious provision appeared in the following terms:—

"It shall not be lawful for any person save as in this Ordinance is excepted to have in his possession any rough or uncut diamond; and any such person who shall be found in the possession of any rough or uncut diamond and shall be unable to account satisfactorily for or prove his rights to the possession of such rough or uncut diamond or to produce his proper permit for the same . . . shall on conviction be liable to the penalties provided by the next succeeding section."

Gold

Easily the most important fact in the economic history of South Africa is the attainment of its predominating position as a gold producing country. Half a century ago the presence of gold in South Africa in large quantities was little more than suspected. Of this metal, the symbol of wealth in all countries and all down the ages, the durability and comparative scarcity of which give it a unique position as a medium of exchange, South Africa has from 1920 onwards produced annually more than fifty per cent of the world's total output.[1] The gold mines give employment to more than a quarter of a million workers, of whom 90 per cent are natives, and the Low Grade Mines Commission of 1919 estimated that directly and indirectly the gold mining industry supported 250,000 whites and 1,000,000 natives. The gold mines were found in 1930 to be spending about £35,000,000 a year in the Union, of which over £14,000,000 went in salaries and wages.[2] Among the industries of South Africa gold-mining is the wealthy member of the family, to which the others turn for constant support. The direct and indirect contributions of the industry to the public revenue have enabled the Union Government to vote many millions in aid of agriculture.

The existence of gold in South Africa was definitely known in the seventies. The German explorer, Carl Mauch, the discoverer of the ruins of Zimbabwe, the supposed Ophir of scripture history, had indicated certain localities in the Transvaal as gold-bearing. He had been taken by Robert Lys, an Englishman who was a member of the Transvaal Raad, to a spot where, when crossing the Witwatersrand—soon to become notorious as the Rand, simply—he had picked up some interesting-looking stone. The German geologist at once recognized the rocks as auriferous. The capital of the Transvaal was popularly said to be founded on golden earth. "The writer was shown at Pretoria by Mr. Lys a small vial of the previous metal that had been washed by his young son from the earth of the watercourse that supplied the town."[3] There had long been rumours that the Transvaal Boers were aware of the existence of

[1] Except in 1922, the year of the serious labour troubles, when the percentage fell to 45·4.

[2] Low Grade Mines Commission, *Final Report*, 1932 (U.G. 16—1932).

[3] J. W. Winter, "The Diamond Fields of South Africa," London, 1877 (*South Africa, Pamphlets*, vol. i, No. 5, in D. & C.O. Library), p. 9.

gold in their territory, but they were believed to prefer to keep their knowledge to themselves lest the Englishman should be led to cast covetous eyes on their country.

The earliest gold-mining centre was some 30 or 40 miles east of Lydenburg in the eastern Transvaal. It was not, however, until the discoveries took place a little farther south, in the Barberton region, in 1884–5, that the world really began to awaken to the rich promise of the Transvaal as a gold mining country, and even then none dreamed of the astonishing events that were imminent farther west.

Fred Struben, at one time adjutant to President Burgers, was a man with a genius for geology, and year after year he applied his gift to the exploration of the rocks of the Transvaal in the hope of discovering the rich gold deposits which he felt sure existed there. Then at last, in 1883, he accepted the invitation of one Geldenhuis to accompany him to his farm at Wilgespruit on the Witwatersrand near the present Roodepoort, west of Johannesburg, and there he recognized the presence of gold in all directions.

One day in 1886 George Walker, with his companion Honeyball, turned up at Langlaagte farm where the widow Oosthuizen was contemplating building operations, and there the two men were given jobs. While wandering about there on an unoccupied Sunday, Walker came upon an outcrop which seemed to be richer in gold than anything yet found. But Walker had neither the character nor the resources with which to exploit his discovery and the Langlaagte farm, with the fabulous wealth hidden in its rocks, was acquired by J. B. Robinson, whose financial skill had already enabled him to make a fortune at Kimberley.

Whether the glory of the discovery of the Witwatersrand goldfields belongs to Struben or Walker is one of those questions which those who like to wander in the by-ways of history and biography have long debated.[1] The material fact is that in 1886 the rush to the Rand began and South Africa entered upon its career as the greatest gold-producing country in the world. In September, 1886, Langlaate and

[1] Whether or not Struben was the real discoverer of the Rand, his early work was undoubtedly of the greatest importance. It was the opinion of Hedley A. Chilvers, who knew the Rand pioneers well, that "the tracing of the gold reef for many miles in all directions, and the proof generally that conglomerate pudding stone or banket as it was variously called was in these districts of great importance as a gold-bearing formation", was the work of Fred Struben. "It was his work which in the language of the mining engineer 'proved the fields'." (*Out of the Crucible*, p. 14 n.)

a number of other farms were proclaimed public diggings by President Kruger and in the following month the township of Johannesburg was modestly founded.

In those early days mining methods were primitive and the results wasteful. "A man shot out a cross-cut. He unrolled a coil of fuse to its end and built a small heap of dried grass round it. Then he yelled 'Pas Op' ('look out'), lit the grass, the fuse spat through the flame and the groups bolted to cover." [1] This crude phase did not last long and then came the call for the big financiers. Hermann Eckstein and Lionel Phillips were among the first to bring out the scientists and the highly-skilled engineers to begin the development of deep-level mining.

In 1886 the Rand was in the pioneer stage of development, but "according to the best statistics available, 19,080 oz. were produced in 1887, and 171,789 in 1888." [2] In the following year there were boom conditions in the South African gold share market. Then came the first slump. "The reef had reached a pyritic zone; it had gone into rock from which it was very difficult to extract gold. The old crude processes were no longer answering and everybody said that it was the beginning of the end, that the reef was nothing but a river-bed after all, and that the wisest folk were those who got away quickest." [3] Meanwhile J. S. MacArthur had arrived in Johannesburg and had demonstrated the cyanide process for gold extraction which he and two brothers, named Forrest, had been developing in Glasgow.

The method was to use cyanide of potassium as an agent for dissolving the gold in the ore, the gold being recovered by a combined mechanical and chemical process in which zinc played the principal part. The demonstration was convincing, for it was shown that a 98 per cent extraction of the gold could be obtained as against the 60 per cent yielded by the process hitherto employed. The cyanide process was seriously inaugurated in 1890 for the Robinson mine, and from that time the Rand entered upon a new era of prosperity. The inevitable boom in gold shares arrived in 1895 and in 1898 there was a yield of 3,564,581 oz. of gold, worth over £15 million.[4]

The general use of the new process of extracting gold

[1] H. A. Chilvers, *Out of the Crucible*, p. 33.
[2] J. G. Lawn, in *The Times Gold Number*, 20th June, 1933, p. xiv.
[3] H. A. Chilvers, op. cit., p. 65.
[4] J. G. Lawn, (*supra*).

had reactions far beyond the goldfields themselves. The resulting increased output brought about a fall in the value of gold. The prices of commodities expressed in terms of gold correspondingly rose and it was the rise of prices thus inaugurated that helped to rescue the world from the economic depression of the nineties.

South Africa has since 1919 been a country enjoying a "gold premium", its own currency being at a discount in relation to gold parity. An increase in the premium means that more is received in South African currency for the gold the country produces so that, unless working costs are unfavourable, the lives of low-grade mines are prolonged.

The departure of the Union from the gold standard and the linking up of the Union currency to sterling brought a new era of prosperity to the gold mines in 1934, just as the adoption of the cyanide process had saved the industry in the nineties. The new chemical process of extraction increased output by saving a large quantity of gold hitherto wasted. The economic measure which was forced on South Africa by world conditions, by increasing the price of gold, brought within remunerative limits vast quantities of low-grade ore and by expanding ore reserves substantially lengthened the life of the mines.

Coal

Coal to-day is mined in all four provinces of the Union.[1] Its importance in the economic development of South Africa is manifest. Without coal the gold, and the diamonds, would have been much less easily won; and proximity of coal to the Rand has been an important factor in maintaining low working costs. Without coal railways could not have been built so readily nor run so economically; and a considerable part of the export trade through Durban and Delagoa Bay would never have arisen. The presence of coal and iron ore in close proximity in the Transvaal and Natal gives promise of a big iron and steel industry, and the foundation of an industrialized South Africa.

The Cape may be regarded as the pioneer of coal-mining in South Africa on a substantial scale. There the demand for coal for the steamers calling at Capetown drew forth

[1] Output for 1933: Transvaal, 6,977,246 tons; Natal, 3,116,708 tons; Orange Free State, 1,429,228 tons; and Cape, 4,979 tons (*Annual Report of the Government Mining Engineer for 1933* (U.G. No. 21—1934), table No. 13). In South Africa tons are short tons—comprising 2,000 lb.

the supply. In 1852 a prize of £100 was offered for the discovery of coal " sufficiently near Capetown to be cheaper than importing it ".[1] As a result coal was struck in 1859 at Cyphergat in the north-east of the Colony, and some years later collieries were opened at Molteno, near Cyphergat, and at Indwe in the region of the Stormberg Mountains. The development of diamond mining at Kimberley after 1870 increased the demand for Cape coal, but the lack of rail transport held up supplies until both Natal and Transvaal coals were in the field. By 1885 the output of the Cape was 16,483 tons, and in 1899 it rose to its maximum of 208,655 tons. Thereafter it sank steadily until in 1920 it was only 5,700 tons and it has remained at about that figure ever since. The reason for the decline of the Cape coal is the poor quality, and once the railways enabled the coal of Natal, the Transvaal, and the Free State to come into competition with it, the Cape collieries were bound to suffer a severe setback. Even before the Union, the Cape railways ran on Natal coal,[2] and since the Union it is Natal and Transvaal coal that has been stocked at Capetown for bunkering purposes.

The existence of coal in Natal has been known from early days, visibly outcropping as it did in kloofs and on hillsides in the interior and in cliffs along the sea-shore between Durban and the mouth of the Tugela River. Natives are said to have used outcrop coal in pre-white days for smelting iron and fashioning assegais. About 1880 F. W. North came across traces of " primitive forges " in the Klip River country and elsewhere, but reported that there were no native traditions as to the primitive iron workers.[3] The early Boer trekkers, entering Natal in 1837–8, soon discovered coal, and one of them secured permission from the Volksraad to prospect for it.[4] Shortly after the Imperial Government took over Natal in 1843, the Surveyor-General, as the result of a rough and ready survey, reported that he had come across two beds of coal in the interior, one bed 9 inches thick near the Bushman's River about

[1] P. A. Wagner and L. Reinecke, *Mineral Deposits of Union of South Africa*, 1930, p. 231.

[2] Speech of C. Hitchins, Minister of Railways and Harbours, 4th December, 1906, reporting that Natal had contracts to supply the Cape with 275,000 tons of coal (*Natal Legislative Assembly Debates*, vol. xli, p. 148).

[3] *Report on Coalfields of Klip River, Weenen, Umvoti, and Victoria Counties*, September, 1881, Natal Department of Mines, pp. 12–13.

[4] E. A. Walker, *The Great Trek*, 1934, p. 257.

63 miles from Pietermaritzburg, and another "six feet thick and of good quality", near Biggar's Berg.[1] The early importance attached to the coal measures of Natal is evident, as the need for the development of the abundant natural resources of the Colony, "coal, iron, lead, ivory, hides, grain, cotton, etc., etc.," was made the basis of a plea, in 1848, by the inhabitants of Natal, chiefly landowners and merchants, for the grant of representative government.[2] So far the coal and coal measures referred to and reported on in Natal were in the interior, but in 1849 the Surveyor-General, surveying the region between the Umvoti and Nonoti Rivers from the point of view of settlement, reported the presence of anthracite coal, unfortunately, however, fit solely for blast furnaces.[3] This coastal coal was reported on in detail in 1852 by the Acting Surveyor-General. A trader, named Dickson, agent of Messrs. Chiappini and Co., of Capetown, reported coal in the cliff-face at Compensation, some 40 miles north of Durban. The Acting Surveyor-General surveyed it and reported it to be a seam 2 feet thick and of poor quality, but expressed the hope that farther inland it would be workable, being probably thicker and of better quality. It was already used at a smithy at Compensation for all branches of smithing, and six waggon loads were sent to Durban to be tested for steam navigation.[4] Gradually a small trade in coal grew up, helped by the circumstance that Natal, like the rest of South Africa, was short of timber. The demand for coal was for domestic use, for smithing, and after 1850 for sugar-crushing mills near the coast.[5] Bishop Colenso, visiting the house of a trader named Watson on the bank of the Tugela River, in 1854, was surprised to see "excellent bituminous *coal* piled in his yard", which

[1] Report of W. Stanger, 3rd April, 1846, enclosed in Dispatch from Governor Sir P. Maitland to Rt. Hon. W. E. Gladstone, 8th June, 1846, in "Correspondence relative to Establishment of Natal," July, 1848, p. 79 (*Parly. Papers*, 1847–8, xlii).

[2] Petition from District of Pietermaritzburg, 18th November, 1848, enclosed in Dispatch from Governor Sir H. G. Smith to Earl Grey, 15th January, 1849, in "Correspondence relative to Settlement of Natal," 14th August, 1850, p. 2 (*Parly. Papers*, 1850, xxxviii).

[3] Report of W. Stanger, enclosed in Dispatch from Governor Sir H. G. Smith to Earl Grey, 31st August, 1849, in "Correspondence relative to Settlement of Natal," 14th August, 1850, p. 71 (*Parly. Papers*, 1850, xxxviii).

[4] Report of John Bird, 21st July, 1852, enclosed in Dispatch from Lieut.-Governor B. C. C. Pine to Sir John S. Pakington, 19th August, 1852, in "Further Correspondence relative to Settlement of Natal," 1853, p. 70 (*Parly. Papers*, 1852–3, lxii).

[5] *Colony of Natal*, compiled by Natal Land and Colonization Company, 1861, p. 41.

sold at Pietermaritzberg for £5 per ton.[1] The great obstacles to the development of the Natal coal trade were the costliness and inadequacy of the means of transport. The railway line from Durban only reached Pietermaritzburg in 1880, Estcourt in 1885, and Charlestown in 1891, and the chief means of transport for coal before 1890 was the ox-waggon. Throughout the period the ox-waggon increased its carrying capacity from 2–3 tons to 5 tons, but it remained a costly method of transporting such a bulky commodity. As late as 1880 coal, which sold for 10*s.* at the pit mouth at Dundee, fetched 70*s.* at Pietermaritzburg, which meant a transport rate of about 6*d.* per ton mile.[2] Not only was ox-waggon transport costly, it was also highly seasonal. During the four winter months, when there was little pasture, ox-waggon transport virtually ceased and the price of coal rapidly mounted. After 1860 Natal began to discuss railway projects seriously, with a view to opening up its trade and its coal measures.

In 1862–3 David Smith, an experienced coal-viewer, went out under the auspices of the Natal Land and Colonization Company to survey the Natal coalfields. As a result a private company, called the Natal Coal Company, was formed, consisting of seven members, four of whom were Directors of the Natal Land and Colonization Company. The Natal Coal Company, through David Smith, proposed to the Natal Legislative Council to build a railway to the inland coalfield in return for the exclusive right of carrying and exporting coals and other minerals in Natal for thirty years, and for the grant of a block of land, which worked out finally as being 4 miles deep, on either side of the railway. The Natal Legislative Council enthusiastically accepted the proposals, only to find that the resultant Bill was reserved by the Lieutenant-Governor and finally vetoed by the Colonial Secretary, Mr. Cardwell, under pressure from Sir Clinton Murdoch, the Secretary of the Emigration Board, who especially opposed the granting away of something like 500,000 acres.[3] In 1867 David Smith made modified proposals for a Natal Coal, Iron, and Railway Company,

[1] *Ten Weeks in Natal*, 1855, pp. 170–1.

[2] *Report on Coalfields of Klip River, Weenen, Umvoti, and Victoria Counties*, by F. W. North, September, 1881, Natal Department of Mines, p. 17.

[3] "Correspondence relating to projected Railways in Colony of Natal," 6th July, 1865, No. 488, pp. 4, 7, 12, 14, 16–17, 68–9 (*Parly. Papers*, 1865, l). "Correspondence on proposed Construction of Railways in Colony of Natal," July, 1872, C.—618 (*Parly. Papers*, 1872, xliii), p. 9.

offering again to build a railway from the coast to the coalfields, a pier, and a breakwater, and also to purchase 1,000,000 acres of Crown land. This project fell to the ground, largely because the proposed railway line was to run along the north-eastern border of the Colony, skirting native territory.[1] A third scheme was put forward in 1871 by J. W. Welborne, who proposed to build railways in Natal in return for a grant of £40,000 per annum for twenty years, a grant of 3,000,000 acres of Crown land, and, amongst other things, "the exclusive right of working coal on any of the Crown lands of the Colony during a period of twenty-five years from date of opening of the line to Newcastle, free from all royalties or other charges."[2] A Select Committee was appointed to consider this and other railway projects, and it came out in evidence that it cost twice as much to transport coal forty miles to Durban overland, as to send it 7,000 miles overseas from London to Durban.[3] The resultant "Bill for the making of a Railway within the Colony of Natal" (No. 28, 1871) was not welcomed by the Colonial Secretary, the Earl of Kimberley, who feared the consequences of such wide monopolistic powers, and ultimately he suggested that the Natal Government would be better advised to build the railway itself.[4] Welborne's scheme, therefore, fell to the ground and Natal had to wait nearly another twenty years before its coalfield was finally linked with the coast by rail. Till then such Natal coal as was used in smithies and mills and for domestic purposes continued to be brought to market by ox-waggon.

The growth of the coal trade in the pre-railway period was slow. To the bitter disappointment of Natal people in general and of Sir John Robinson in particular, the coal seams on the coast were found not to be worth working

[1] Report of Select Committee on Railway Projects, 3rd November, 1871, enclosed in Dispatch from Lieut.-Governor Keate to Earl of Kimberley, 23rd December, 1871, in "Correspondence on proposed Construction of Railways in the Colony of Natal," July, 1872, C.—618, p. 9 (*Parly. Papers*, 1872, xliii).

[2] Bill No. 28, 1871, enclosed in Dispatch from Lieut.-Governor Keate to Earl of Kimberley, 23rd December, 1871, in "Correspondence on proposed Construction of Railways in Colony of Natal," July, 1872, C.—618, pp. 30–5 (*Parly. Papers*, 1872, xliii).

[3] Report of Select Committee on Railway Projects, with Evidence, Q. 81, enclosed in "Correspondence of Lieut.-Governor Keate," Natal, 1871, vol. iv, December (C.O. 179/104).

[4] Dispatch of Earl of Kimberley to Lieut.-Governor Musgrave, 21st May, 1872, in "Correspondence on proposed Construction of Railways in the Colony of Natal," July, 1872, C.—618, p. 44 (*Parly. Papers*, 1871, xliii).

on account of their thinness, faultiness, and poor quality, and mining was gradually concentrated inland near Dundee and Newcastle.[1] A successful, but small-scale, colliery was worked from 1865 by Peter Smith on his farm at Dundee, using a seam 6 ft. 3 in. thick. At first he only produced about 75 tons during the transport season, but by 1881 he was producing about 750 tons per annum "in primitive fashion but very economically", and F. W. North calculated that in fifteen years Smith's total output must have been about 7,000 tons.[2] The biggest colliery at the time of F. W. North's survey in 1881 was one at Newcastle which had been opened and worked by the Commissariat for the Imperial troops stationed on the frontier. The mining was not very skilful and North was glad that there was a strong rock roof, "for the soldiers being unpractised miners would be in considerable danger if working beneath a roof of a broken or irregular shape."[3] Despite this incursion of the military the bulk of the mining was carried on by farmers who worked the outcrops or quarried shallow seams in their spare time and carried the little coal they obtained to neighbouring markets.

In the early eighties Sir John Robinson had not given up all hope that workable coal seams would be discovered on or near the Natal coast. On 28th October, 1880, he moved in the Legislative Council for a Select Committee to report on coal deposits near York in Umvoti County, emphasizing the need for finding coal nearer the sea and the centres of population than Newcastle and declaring his belief that coal existed in greater quantities and greater commercial value nearer the coast.[4] Underlying the whole discussion was obvious annoyance with Nature in putting the Newcastle coalfield so far inland, coupled with the determination to find a bigger and better coastal coalfield. Another member, speaking on the presentation of the Report of the Select Committee on 21st December, 1880, said despairingly that "we might just as well from a commercial point of view try and bring coal to Durban from the moon as from Newcastle".[5] After the presentation of

[1] J. Robinson, *Notes on Natal: an Old Colonist's Book for New Settlers*, 1872, pp. 162–3.
[2] *Report on Coalfields of Klip River, Weenen, Umvoti, and Victoria Counties*, September, 1881, Natal Department of Mines, p. 17.
[3] Ibid., p. 26.
[4] *Natal Legislative Council Debates*, vol. ii, 1881, pp. 32–5.
[5] Ibid., p. 493.

F. W. North's Report in 1881 Sir John Robinson seemed to weaken in his faith in a workable coalfield near the coast, saying that they all hoped that "other coalfields, not so valuable but still of considerable value, are to be found nearer the port than Newcastle", but adding that the urgent matter was the building of railways to reach the inland coalfield. "The coal question is at this moment a railway question in this Colony." [1]

Just about that time an unexpected ally came to the aid of the Newcastle coalfield. In 1886 the railway had reached Ladysmith, and in the same year gold-mining began seriously on the Rand. Before 1886 the important market of South Africa had been the diamond diggings of Kimberley, and the Natal railway had been planned to reach Kimberley via the Van Reenen gap in the Drakensberg and the Orange Free State. Now the goldfields of the Rand beckoned, and the Natal railway turned north and made for the Transvaal via the Newcastle coalfield and Charlestown.

Large-scale coal-mining may be said to have begun in Natal in 1889 with the arrival of the railway. In 1888 the output of coal was estimated at 8,000 tons,[2] but in 1889 seven collieries with a staff of 50 whites, 359 natives and 42 Indians produced 28,682 tons.[3] Capital flowed into the industry with the possibility of a wider market for coal, new pits were opened, and the output of coal increased to 159,219 tons in 1892, and 434,348 in 1898, when the staff of the Natal collieries consisted of 118 whites, 1,753 natives, and 854 Indians.[4] About that time only half the output was retained for home use.[5] The big demand for home use was on the part of the Natal railways, which could now buy home coal at 10*s.* per ton at the pit-mouth, instead of imported coal at 43*s.* per ton, thus effecting a saving of £100,000 per annum.[6] Unfortunately the demand for Natal coal on the part of the Transvaal did not grow as was expected, since the gold-mines discovered coal in their

[1] *Natal Legislative Council Debates*, vol. vi, 1883, p. 14.
[2] *Natal Legislative Assembly Sessional Papers*, 1898, p. 6 (C.O. 181/45).
[3] Evidence of S. O. Samuelson, Under-Secretary for Native Affairs in Natal, Transvaal Labour Commission, 1904 (Cd. 1897), Q. 12,565. Figures of output from 1889 are from *Official Year Book of the Union* and *Annual Reports of the Union Government Mining Engineer.*
[4] Evidence of S. O. Samuelson, ibid., Qs. 12,580, 12,582.
[5] *Annual Report on Natal for 1891–92*, 1893, (C. 6857—11), p. 10.
[6] *Natal Legislative Assembly Sessional Papers, 1898*, p. 6 (C.O. 181/45). J. Wilson, "Coal Industry in Natal," in *Twentieth Century Impressions of Natal*, 1906, p. 629.

own neighbourhood and only a small tonnage of Natal coal crossed the border. Natal coal found its way to the Cape, but shipment trade through Durban was hampered by burdensome railway rates and the inadequacy of port facilities.

The question of coal railway rates was raised in the Natal Legislative Assembly on 2nd June, 1898. After the railways were built, the first rate that was charged for coal was 2*d*. per ton mile. This rate was later reduced to 0·5*d*. per ton mile, but even that reduced rate meant an average addition of 10*s*. per ton for the carriage of coal to the coast and it was felt to be excessive.[1] In September the Natal Government appointed a Commission to examine into the coal trade. As a result of the Commission's recommendations, the rate on internal coal was lowered to 0·45*d*. per ton mile and on shipment coal to 0·3*d*. per ton mile,[2] and the shipment trade, apart from the period when the Transvaalers overran the coalfield during the South African War, at once responded, growing from 359,316 tons in 1901 to 787,214 tons in 1905 and to 1,757,794 tons in 1910.[3] After a fifteen years' struggle the Natal Minister of Railways and Harbours was able to report triumphantly on 4th December, 1906, that at last the old enemy, Welsh coal, was shut out of Durban.[4] That, however, was merely the bunkering trade. Export trade was still small out of Durban, for in Capetown Welsh coal still held its own, aided by cheap ocean freights, whereby the rate from Wales to Capetown was no more than from Durban to Capetown.[5]

Coal was known to exist in the Transvaal from the days of the earliest trekkers, who, as in Natal, raised it for domestic use. Coal was mined near Bethel in 1868 and discovered at Vereeniging in 1879, but even the demand of the diamond mines did little to further coal-mining in the Transvaal, some 10,000 tons being sent annually by ox-waggon 300 miles to Kimberley.[6] Large-scale coal-mining really began following the discovery of gold on the

[1] *Natal Legislative Assembly Debates*, vol. xxviii, 1898, pp. 236, 241.
[2] J. Wilson, "Coal Industry of Natal," in *Twentieth Century Impressions of Natal*, 1906, p. 629.
[3] Report of Coal Commission (U.G. 33—1921), p. 5, in Printed Annexures to *Votes and Proceedings of House of Assembly*, 1921, vol. v.
[4] *Natal Legislative Assembly Debates*, vol. xli, 1906, p. 148.
[5] J. Wilson, "Coal Industry of Natal," in *Twentieth Century Impressions of Natal*, 1906, p. 630.
[6] A. C. Graham and P. N. Lategan, *Coals of the Witbank District*, 1931, p. vii.

Rand in 1886. At first in the absence of railways the poor coal near Johannesburg was mined and used by the gold-mining industry. When the railway reached Witbank, the excellent coal of that neighbourhood speedily captured the market. The Transvaal output of coal rapidly increased from 548,534 tons in 1893 (the first officially recorded year) to 791,358 tons in 1894, to 1,133,466 tons in 1895, to 1,907,808 tons in 1898, to 2,606,799 tons in 1905, and to 3,974,376 tons in 1910. In the decade before the formation of the Union the coal measures of the Orange Free State also began to be worked, and the output increased from 164,639 tons in 1905 to 469,762 tons in 1910. By the time of the Union the coal-mining industry of South Africa supplied the needs of the home market, monopolized the bunkering trade at Durban, had a secure foothold in the bunkering trade at Capetown, and was endeavouring to increase its export trade by widening its foreign markets. The Union Government, on coming into being, strengthened those endeavours to increase coal exports, but at the same time by fostering home industries, especially the iron and steel industry, attempted to widen the home market for coal.

In the beginning of the twentieth century a trade in coal from Natal was establishing itself throughout the Cape, but strikes and railway troubles gave an opportunity to Transvaal coal sent via Delagoa Bay which was quickly seized. Before many years were over, Transvaal coal had found two further outlets, namely the mines and Capetown, and at the latter port it almost entirely superseded Natal coal.

While the Transvaal has been the chief coal producer in South Africa ever since the nineties, it is only since the Union that the Province has become an important exporter, since before 1910 the bulk of the Transvaal output was needed within the Province itself, particularly for the gold-mining industry and the railways. In 1910, the Transvaal sent across its border 155,296 tons of export and bunker coal, against 1,757,794 tons by Natal, but in 1920 the Transvaal sent 1,122,500 tons against 1,774,912 tons by Natal. Even then internal demand absorbed 84 per cent of Transvaal supplies against 42 per cent in the case of Natal.[1] This growth, of course, was largely occasioned by the War, which brought to an end for the time being the rivalry of British, Australian, Indian, and Japanese coal.

In 1912, that is to say shortly after the Union, the total

[1] Report of Coal Commission (U.G. 33—1921), *supra*.

output of coal in South Africa was 8,117,000 tons.[1] Of this total the Transvaal contributed more than half, which mainly came from the Middelburg and Witbank area. Natal contributed about one-third of the total, mainly from the Dundee region in the Klip River County. Of the coal exported, India and Ceylon took 58 per cent, and East African ports and Egypt 24 per cent. Of the Natal output, nearly one-half was shipped as bunker coal at Durban.

Since the Union, coal output has fluctuated considerably. Transvaal output rose from 3,974,376 tons in 1910 to 7,180,124 tons in 1920 and 7,545,167 tons in 1930, but shrank to 6,977,246 in 1933. Natal output rose from 2,570,116 tons in 1910 to 3,321,606 tons in 1920 and 4,454,854 tons in 1930, but also shrank to 3,116,708 tons in 1933. Orange Free State rose from 469,762 tons in 1910 to 966,034 tons in 1920, 1,101,695 in 1930, and 1,429,228 in 1933. Despite increasing output in the good years before 1930 there has been a tendency towards decreasing man-power in coal-mining due to the ever-growing use of machinery. The whites employed in coal-mining have decreased from 1,818 in 1920 to 1,578 in 1930 and 1,351 in 1933, the Indians from 2,816 in 1920 to 1,026 in 1930 and 621 in 1933, while the natives after increasing to 33,162 in 1925 have decreased to 21,894 in 1933.[2] Most of the Indians are employed in Natal, and their displacement can be understood by a comparison of wage-rates: Indians receive average monthly wage of 61*s.* 11*d.*, while natives receive 46*s.* 1*d.*[3]

While Natal coal-mining is handicapped by thinner, deeper seams than the Transvaal and by more dangerous working conditions, the Transvaal has all along had to bear the burden of heavier wage-rates due to the proximity of the gold-mines.[4] On the other hand, the Transvaal is in a stronger position with its expanding internal market due to the growth of industries subsidiary to gold-mining, its ready access to Delagoa Bay,[5] and with its strongly

[1] The precise figures for the respective provinces were as follows: Transvaal, 4,751,850; Natal, 2,765,068; Orange Free State, 525,459; and Cape, 74,701 tons.

[2] *Annual Report of Government Mining Engineer for 1933* (U.G. 21—1934), table 2.

[3] Ibid., table 8.

[4] *Natal Legislative Assembly Debates*, vol. xxviii, 1898, p. 237.

[5] Railway rates from Witbank to Delagoa Bay (286 miles) are 5*s.* 3*d.* per ton on export coal and 7*s.* 6*d.* per ton on bunker coal, and to Capetown (1,045 miles) are 14*s.* 3*d.* per ton on export coal and on bunker coal, which work out respectively at 0·22*d.*, 0·31*d.*, and 0·16*d.* per ton mile. A. C. Graham and P. N. Lategan, *Coals of the Witbank District*, 1931, p. 86.

organized association of coal-owners who can act together in any emergency and can pay for research to meet the changing needs of the market. Put shortly, the obvious and normal markets are the railways, the gold-mines, and ordinary domestic demand. Here the demand is a fairly fixed quantity. Markets capable of indefinite expansion are foreign countries and ships calling at Delagoa Bay, Durban, and Capetown. For the purpose of the latter markets, however, the Transvaal coal-mines are handicapped by their distance from the sea. During, and immediately after, the Great War, Transvaal coal was able to compete at Indian Ocean and South Atlantic ports, but the high prices then obtained went largely in railway and shipping charges and the increase of prices at the pit was relatively small. When the fall in prices came the coal-owners were faced with the necessity of reducing the cost of output if they were to retain their hold on the export and bunker trade, and their attempt to do this by reducing wages had its share in bringing about the grave disorders in South Africa at the beginning of 1922.

CHAPTER 10

THE MOVEMENT TOWARDS RATIONALIZATION IN THE MINING INDUSTRIES

The Diamond Industry.

Rhodes builds up the De Beers and Barnato the Kimberley Mine Amalgamation.

The duel between Rhodes and Barnato ends in 1889 in the amalgamation of the two mines (De Beers Consolidated).

The market controlled by means of the London Diamond Syndicate (later the Diamond Corporation).

Competition of the unregulated but State supported alluvial diggings.

The slump of 1929 and following years met by drastic limitation of output.

The Gold-mining Industry.

The Group system of control.

The Coal Trade.

The effective activities of the Transvaal Coal Owners Association.

The individualistic tendencies of the Natal Coal Industry.

WHILST in the mother country the coal-mining industry is constantly being urged by the Government to supersede the individualistic system which has brought it to chaos, and to make a collective effort to reconstruct the industry by the methods which have come to be known as rationalization, and the coal industry waits fruitlessly and indefinitely for the Government to indicate how reform is to be brought about, in South Africa the mining magnates have themselves and of their own initiative rationalized their industry. In the diamond-mining industry amalgamation was largely the result of the duel between Rhodes and Barnato. By 1897 methods of concentrated control had been applied to the gold-mines with such success that a Commission appointed in that year by the Transvaal Government was able to report that "most of the mines are controlled by financial and practical men who devote their time, energy, and knowledge to the Mining Industry and who have not only introduced the most up-to-date machinery and mining appliances, but also the greatest perfection of method and process known to science. But for these, a good many mines now producing gold would not have reached that

stage ".[1] The reputation thus established has been maintained, for the Low Grade Mines Commission, reporting in 1932,[2] placed on record their finding that the gold mines were well and efficiently managed. Last of all the application of a system of collective organization to the Transvaal coal-mining industry has been found practicable and proved beneficial.

In the diamond industry the supersession of open quarrying by subterranean mining and the I.D.B. problem were two factors that hurried on the movement towards the amalgamation of competing interests and united and centralized action. There was also the problem of marketing, which would only be intensified by each mine becoming a strongly centralized unit, able to compete with its rivals. Diamonds are a luxury and subject to non-elastic demand. Thus, any tendency towards over-production led to a ruinous drop in prices, and it was realized that what was required was not merely the amalgamation of all interests within each mine but the consolidation of all diamond mines, so as to control marketing and achieve reasonable prices by equating supply with demand. All these factors then drove towards amalgamation and consolidation, and the chief amalgamator and consolidator was Cecil Rhodes.

In the beginning the law on the diamond field was one man, one claim. This was soon relaxed, and in 1876 one man could own as many shares as he liked. In 1880 De Beers Company was floated by Rhodes with a capital of £200,000 and the aim of buying up all conflicting interests in the De Beers mine. On 1885 its capital had risen to £841,550, and through it Rhodes controlled the bulk of the mine. By May, 1887, he had bought out all the remaining independent claims. This process of amalgamation reduced working costs, and it was as well, since the prices of diamonds had been nearly halved. Thus, between 1882 and 1886, working costs had decreased from 16*s.* 6*d.* per carat to 7*s.* 2*d.*, but selling prices had fallen from 30*s.* per carat to 18*s.* 5½*d.*[3] While Rhodes was busy amalgamating De Beers mine, his great rival, " Barney " Barnato, was busy amalgamating the Kimberley mine, formerly De Beers' New Rush. Beginning in the same year as Rhodes, 1880, Barnato had floated the Barnato Mining Company which aimed at uniting

[1] Quoted in address by John Martin at 1929 meeting of British Association (see p. 232 note (*post*)).

[2] *Final Report* (U.G. 16—1932). [3] B. Williams, *Cecil Rhodes*, 1921, p. 94.

the Kimberley mine under one control. He did not make such rapid progress as Rhodes, and in 1887 there was still a big rival interest, la Compagnie Française, right in the heart of the Kimberley mine. This was the weak point that Rhodes attacked. But first he tried to make an arrangement with Barnato, for Rhodes always preferred to negotiate rather than fight. Barnato refused to come to terms for the consolidation of the two leading diamond-mines, feeling sure that the Kimberley mine could over-produce and undercut the De Beers mine. "Kimberley mine! Why it is worth three times what the De Beers is worth," was his constant refrain.[1] The only course left for Rhodes then was to fight Barnato, for the trickle of diamonds was becoming a flood, diamond prices were falling, and there was no knowing how far prices would fall with improved technique and growing competition, unless some degree of consolidation came about. The output of diamonds between 1873 and 1880 was estimated at 1,000,000 to 1,500,000 carats annually, but in 1883 output had risen to 2,319,234 carats and in 1886 to 3,047,640 carats, and the figures were still rising.[2] De Beers mine had only begun subterranean mining in 1887, its engineers immediately promising a doubling of output.[3]

In May, 1887, Rhodes had completed the amalgamation of De Beers mine. In July, 1887, he opened the attack on Barnato's plan of amalgamating the Kimberley mine by buying out la Compagnie Française for £1,200,000. When Barnato made difficulties to prevent the deal being carried through, Rhodes accepted common stock in the Kimberley mine in lieu of la Compagnie Française stock and thus got a holding of one-fifth of the Kimberley mine stock. Further he began to buy Kimberley mine stock in the open market, aiming at acquiring a majority of the stock and control of the mine. All the while the rivals were flooding the market with diamonds, output rising from 3,047,640 carats in 1886 to 3,646,889 carats in 1887. Unfortunately for Barnato, the soaring prices of Kimberley mine stock induced his friends to sell out, whereas Rhodes's friends remained loyal and held on to theirs. Rhodes's holding

[1] Speech by C. J. Rhodes at special meeting of De Beers shareholders at Kimberley, 31st March, 1888. (See "Vindex": *Cecil Rhodes: his Political Life and Speeches, 1881–1900*, 1900, p. 749.)

[2] B. Barnato, quoted by G. F. Williams, *Diamond Mines of South Africa*, 1902, p. 305.

[3] Speech by C. J. Rhodes. (See "Vindex" (*supra*), p. 748.)

continued to increase and at last Barnato, realizing that the game was up, agreed in March, 1889, to a consolidation of the two mines. An adverse decision of the Supreme Court delayed matters, but in January, 1890, the De Beers Consolidated Mines was at last floated. Small rival mines were either bought out or squeezed out, and production was virtually concentrated under one organization.

The problem of marketing remained to be dealt with, and that problem was solved by Rhodes who, in 1889, negotiated on behalf of De Beers an agreement with the London Diamond Syndicate, whereby the Syndicate agreed to purchase a certain quantity of diamonds at an agreed price, amount and price to be arranged periodically, thus regulating output and maintaining reasonable prices.[1] In other words, sales were to be through one channel and at one price. Rhodes himself defended this monopolistic arrangement by the argument that, taking one year with another, the demand for diamonds represented about £4,000,000 per annum, that, if diamonds were dear, people bought less and, if cheap, people bought more, but always about £4,000,000 worth, so that the aim of the company should be to achieve reasonable profits on that £4,000,000 demand.[2]

The agreement with the Syndicate was remarkably successful in maintaining the price of diamonds. With the trade slump of 1891–2 in the United States, which normally took one-third of the total diamond output, and in South America, the demand for diamonds fell off, but then supply was shortened correspondingly.[3] In 1896 the agreement with the Syndicate was 200,000 carats per month at 27*s.* 6*d.* per carat, which meant an annual output of £3,300,000.[4] Rhodes declared to his shareholders that "our only risk is the sudden discovery of new mines, which human nature will work recklessly to the detriment of us all".[5] He was right. The only real danger was the break-up of the monopoly of production and marketing by big new discoveries. That came about, but not till after the War. For thirty years the great problem faced

[1] Sir L. Michell, *Life of Cecil J. Rhodes*, 1910, vol. i, pp. 275–6.
[2] B. Williams, *Cecil Rhodes*, 1921, p. 95.
[3] *The Times*, 22nd July, 1892.
[4] Speech of C. J. Rhodes at eighth ordinary general meeting of De Beers Consolidated Mines, Limited, 28th December, 1896. (See "Vindex": *Cecil Rhodes; his Political Life and Speeches, 1881–1900*, 1900, pp. 809–810.)
[5] Speech at fifth ordinary general meeting of De Beers Consolidated Mines, Limited, 30th June, 1893, ibid., p. 805.

by De Beers, its allied producers, and the Diamond Syndicate, was the periodic slump resulting from trade depression. There was the slump in 1891–2, the slump of 1908–9, again due to depression in the United States, the world's greatest consumer of diamonds, and the slump of 1914–15, consequent on the outbreak of the Great War. All these contractions in demand were met by the restriction of output or the closing down of production altogether. Yet the demand for diamonds had been steadily increasing with the increasing prosperity of the diamond-using countries, the United States and England, so that Rhodes's £4,000,000 in 1890 had become twice and thrice that total in the years before the War.[1]

After 1920 the diamond-mining industry in South Africa fell into the depths of depression. In 1919 the average price of rough stones was almost double that of the price before the War. Then came the general slump in world trade which led to a serious fall in the price of diamonds, a fall which was intensified by Soviet Russia throwing large quantities of cut stones on the market, and the diamond mines began to close down.[2] In the years that followed, the strong position of the " Big Four " under the leadership of De Beers and their ally, the London Diamond Syndicate, was undermined by the development of competing diamond producers outside and inside South Africa. This became manifest when, in spite of the fact that the recovery of diamond prices in 1923 had enabled the mines to re-open, the overwhelming slump in world trade in 1930 once more involved them in serious difficulties. The increase in competition from producers outside South Africa, principally Angola, Belgian Congo, and British Guiana, is revealed by the fact that, whereas in 1920 South Africa had produced 71 per cent of the world's supply of diamonds, in 1930 its share was only 42 per cent. This meant that the South African mines and the allied Syndicate had lost their hold on the world market and could no longer dictate world prices.

Still more serious was the internal competition of the alluvial diggings. The discovery of the dry diggings in 1870–1 had pushed the alluvial diggings into the background,

[1] Output in 1909, £7,802,000; 1910, £9,345,700; 1911, £9,722,000; 1912, £11,430,000; 1913, £13,854,100; 1914, £6,654,700. Speech of Sir Ernest Oppenheimer, quoted in *Department of Overseas Trade Report on South Africa, 1929*, by N. Elmslie and J. W. Brigden, 1930, p. 29.

[2] *Department of Overseas Trade Report on South Africa*, July, 1922, by W. G. Wickham, p. 22.

but throughout the years the alluvial diggings had continued to exist. Unlike the dry diggings, which, on account of their peculiar conditions, developed into great capitalistic enterprises, the alluvial diggings, which can be worked by individuals, remained the subject of small enterprise. The alluvial digger, never very prosperous, had been quite poverty-stricken for many years before the War. It was reported in 1912 that over 5,000 whites and some 14,000 coloured workers were employed at the alluvial diggings, most of them in a " state of the very greatest poverty " and " unable . . . to get away " unless they had a lucky strike. One digger had made over £10,000, many had made £1,000 to £3,000, but the average earning was the bare living of £10 per month, which meant that many were below the poverty line. Drunkenness was rife, and ordinary family life was declared to be impossible, children being " dragged up in an atmosphere of dust, heat, liquor and hardship in pretty equal proportions ". The diggers were defrauded by thieving employees and were handicapped in dealing with the buyers who could corner the market and keep prices down.[1]

Despite the bad conditions it became the policy of the Union Government to maintain the alluvial diggings as an employment for " poor whites ", and to keep out capital organized in syndicates and companies. For a spell after the War they enjoyed a burst of prosperity, but when the slump came, the unorganized alluvial diggings were unable to restrict output [2] as did the organized mines, so that the price of alluvial stones fell in 1920–1 from 213*s.* 3*d.* per carat to 117*s.* 8*d.* while the price of mine stones fell only from 99*s.* 9*d.* to 64*s.* 8*d.*[3] In 1922 the alluvial diggings actually produced more diamonds than the mines, £1,471,300 as against £1,003,700, a thing unheard of apart from very recent years and the abnormal year of 1915.[4] Then came the discovery of the rich alluvial diggings in

[1] Annual Report of Mines Department for 1912 (U.G. 40—1913), pp. 19–20, 177, in Printed Annexures to the *Votes and Proceedings of the House of Assembly*, 1914, vol. i.

[2] Professor W. M. Macmillan shows that output of alluvial diamonds is determined partly by agricultural conditions independently of diamond prices, that a bad year in agriculture drives farmers to the diggings to increase their income. *Complex South Africa*, 1930, p. 105.

[3] *Annual Report of Government Mining Engineer for 1933* (U.G. No. 21—1934), p. 37.

[4] Speech of Sir E. Oppenheimer, quoted in *Department of Overseas Trade Report on South Africa, 1929*, by N. Elmslie and J. W. Brigden, 1930, p. 29.

1926 at Lichtenburg on the Harts River in Western Transvaal to upset once more, as one report piteously said,[1] "the balance of the system," the output from alluvial diggings increasing from £2,364,600 in 1925 to £4,545,900 in 1926, and to £6,331,600 in 1927.[2] However, the extra alluvial output was partly absorbed by the prosperous world of 1925–7 and partly held up by buyers, so that the mines were able to maintain their output round £7,000,000 and £8,000,000. Then came the Diamond Control Act of 1927, which gave power to limit alluvial production, and so enabled the general position to be consolidated.[3]

In the meantime all previous alluvial discoveries had been eclipsed by the rich discoveries in Namaqualand, near the mouth of the Orange River, in 1926. These discoveries excited the keenest controversy amongst the diamond interests in South Africa. The mining companies urged that the Namaqualand diggings should be closed down to prevent the world market from being glutted. The Diggers' Union pressed for them to be thrown open, so as to give increased employment. The Union Government pursued its own counsel and so pleased neither side. In 1928 it declared State diggings in Namaqualand. Diamond mining was run as a State industry, at first under the Government Mining Engineer, assisted by a management committee of three officials, and then under a General Manager supervised by the Government Mining Engineer. Diggers were engaged as State employees, working 48 hours per week, receiving a fixed wage plus a bonus for satisfactory service, together with free board, lodging, working clothes, and medical attention, and being entitled to 14 days' holiday with pay for every 150 days' service. The resources of the Government were fully invoked to check the malpractices incidental to the early diggings. Inner and outer fences and barbed wire entanglements guarded by police surrounded the diggings and searchlights were employed at night to prevent any breaking in or out. Change-houses and the use of X-ray apparatus render thieving exceedingly difficult. Digging actually began on 15th May, 1928, and on 19th June, 1928, the first parcel of diamonds was dispatched from

[1] *Department of Overseas Trade Report on South Africa*, June, 1928, by N. Elmslie, p. 33.

[2] Speech of Sir E. Oppenheimer, ibid., p. 29.

[3] In 1927, alluvial stones were actually lower in price than mine stones. *Annual Report of Government Mining Engineer for 1933* (U.G. No. 21—1934), p. 37.

the diggings to Capetown by air.[1] Output increased swiftly until 1929.

The world slump beginning in 1929 found the diamond mines in a weak position for meeting a shrinking demand. The small diggers, unable to limit output, arrived at new depths of poverty.[2] The Union Government, representing the State diggings, was unwilling to limit output,[3] and continued to market its diamonds independently of the diamond mines and their allied Syndicate, aiming apparently at controlling the market by itself becoming the largest producer.[4] The diamond mines, in desperation, attempted through their new and more comprehensive selling agency, the Diamond Corporation, which had replaced the Syndicate, to buy up the surplus diamonds and hold them off the market, and by 1932 it was estimated that diamonds worth £20,000,000, equal to about two years' sales, a stock which would require two or three good years to liquidate, were being thus held.[5] Finally, on 31st March, 1932, the diamond mines closed down. Total numbers employed in South African diamond mines decreased from 21,037 in 1929, to 18,924 in 1930, to 12,430 in 1931, and to 3,400 in 1932, whereas in the diggings numbers jumped from 20,678 in 1932 to 26,372 in 1933; and while alluvial output increased from £1,302,346 in 1932 to £1,551,356 in 1933, mine output decreased from £377,254 to £9,048 in the same years.[6] By 1934 the situation had become so serious that at last the Union Government agreed to limit its own sales of diamonds proportionately to the sales of the Companies.[7]

The burdens which the gold mining industry has been compelled to carry have grown progressively heavier. Conspicuous among the factors making up the great increase in the costs of working are higher wage rates, the miners' phthisis compensation scheme, higher railway rates, and

[1] *Annual Reports of Government Mining Engineer for 1928* (U.G. No. 33—1929), pp. 110–11; *for 1929* (U.G. No. 21—1930), p. 119; *for 1932* (U.G. No. 13—1933), p. 94; *for 1933* (U.G. No. 21—1934), p. 105.

[2] *House of Assembly Debates, 1931*, vol. 16 cc., 1070–1101; 1933, vol. 21, cc. 406–8, 421–3.

[3] *The Times*, 22nd August, 13th November, 1930.

[4] *The Times*, 31st March, 1932.

[5] Ibid.

[6] *Annual Report of Government Mining Engineer for 1933* (U.G. No. 21—1934), pp. 11, 36, and table No. 2.

[7] *The Times*, 12th June, 1934. The agreement included not only the "Big Four" and the Union Government, but Kaffyfontein Mines and Cape Coast Exploration. Some agreement with outside producers was still required.

the greater depth of the workings. These adverse conditions could only be met by increased efficiency in mining methods, the avoidance of unnecessary expenditure by co-operation, and development by large-scale planning. By means of what has come to be known as the Group system all this has been successfully accomplished.

The essential characteristics of the Group system have been authoritatively defined in the following terms: "There are on the Witwatersrand . . . thirty-three gold producing Companies. . . . Each of these Companies is a separate entity having its own body of shareholders electing its own Board of Directors. But the control and administration of all the Companies, with one or two minor exceptions, are in the hands of one or other of a few large Corporations possessing strong financial resources, long and intimate experience of mining enterprises and efficient technical and administrative staffs. . . . Although there are superimposed upon the individual managements, firstly the decisions of the Directors and the general policy determined from time to time by the Board, and, secondly, the advisory and supervisory services of the Group organization, individual managerial authority and responsibility are jealously safeguarded and upheld, there being no attempt to cause the Group administration to function as a sort of super-manager or in any way that might tend to discourage the initiative of, or undermine the authority exercised by, the individual manager in discharging the duties of his important and responsible position." [1] The Group organization exists to guide and assist rather than to dictate to the individual company and to place at the disposal of individual enterprises, whether large or small, the fruits of the latest technical investigation and the resources of the best administrative experience, which individually it could not hope to command; while existing companies are able to obtain financial assistance in time of stress through the Group on terms for which they would look in vain to their own backers.

Nor is the Group organization in a position to dictate its policy to any particular company, for while it is a substantial shareholder, with its own nominees on the boards of directors, it does not aim at and generally does not hold a majority interest on the boards of the companies

[1] John Martin, "Group Administration in the Gold Mining Industry of the Witwatersrand." An address before the Economic Section of the British Association at its 1929 meeting at Johannesburg.

it controls. The influence it wields is a moral rather than a shareholding influence. Its moral influence is effective for the reason that it has the confidence of the general body of the shareholders constituting the subsidiary companies. The knowledge that it must retain that influence is itself a guarantee of efficiency and integrity on the part of the Group organization itself.

The services placed at the disposal of the individual company by the Group organization are numerous and varied, but all have the common characteristic that they aim at the achievement, through centralized effort, of greater efficiency and economy. Thus the Group organization does for the individual company the work of a head office. The advantages of the specialized knowledge and wide experience which a large organization can place at the disposal of a smaller one in dealing with questions concerned with taxation, workmen's compensation,[1] and administrative practice are apparent. The buying department enables the smallest mining company to secure the advantage of the favourable prices which purchases on a large scale can command. "The Group maintains staffs of consulting mining engineers, consulting mechanical and electrical engineers, consulting metallurgists and other technical experts whose energies are devoted to the major technical problems of the mines under their supervision, to co-ordination of practice and to the introduction of improvements in methods and appliances that the experiments and investigations constantly in progress frequently succeed in producing." The full strength of the Group's technical organization is available to the individual company "whenever a difficult problem arises, whenever large questions of the expansion or curtailment of operations are under consideration, and whenever there have to be decided such matters as the opening up of new mining areas, involving decisions as to the sinking of shafts, the layout of workings, the installation of machinery and equipment, and the undertaking of capital expenditure programmes that are often of great magnitude".[2] The Low Grades Mines Commission summed up this aspect of Group organization in these terms: "It tends to make available to all the

[1] The insurers in respect of workmen's compensation claims are the Rand Mutual Assurance Company, which is managed by directors representing the mining groups. The "mutual" covers practically the whole of the Rand companies.

[2] John Martin, op. cit.

mines of the Group the services of those men who have shown themselves most capable of their profession, and, if central control is not overdone, must be a more efficient and economic system than the maintenance of a similar but probably inferior staff by each mine."

In 1897, when the Group system was in its infancy, working costs in the gold mines averaged 29*s.* 6*d.* per ton milled. In 1930 the figure was 19*s.* 5*d.* per ton milled.[1] This reduction in working costs has resulted in a great increase in the quantity of ore which can profitably be worked. The Low Grade Mines Commission, reporting in 1932, stated that a reduction in working costs of 2*s.* per ton milled would increase the future average life of the mines by 50 per cent. It is more than coincidence that this revolutionary change has occurred in the industry in the period during which the Group system has been in operation. Clearly but little of the gold-mining industry as it is known to-day would have been in existence had the methods of 1897 not been improved upon, and there is solid foundation for the claim that it was the Group system that imparted to the young industry stability, healthy growth, and efficient development.

The Transvaal Coal Owners' Association, first formed in 1907 and reconstituted in 1910, comprised nineteen out of the thirty-four collieries in the Transvaal and the Orange Free State and controlled 89 per cent of the output. Its aims were to prevent cut-throat competition and to secure orderly marketing. The shipment trade was supplied by the nine Witbank collieries, and the Association bought the coal from them, canvassed and sold it at Delagoa Bay and Capetown, and distributed the surplus among the nine collieries. To maintain quality the Association also instituted a grading and inspection system, whereby Witbank District was guaranteed to have a certain calorific value, and deliveries were tested at Delagoa Bay to see that they were according to guarantee and deliverers were suitably rewarded by bonuses or punished by fines as they exceeded or fell short of the standard. The coal trade in the home market was similarly controlled.

In Natal the coal-owners had no such system : despite a smaller output the Natal coal industry was marked by a persistent individualism. For a number of years the Natal

[1] *Official Year Book of the Union of South Africa for 1930–1*, p. 444, the figures being taken from the annual report of the Transvaal Chamber of Mines.

Coal Export Association attempted to control the export trade by a system of quotas. Unlike the strongly centralized sales agency of the Transvaal system, the Natal organization simply allotted quotas to members and left members to get their orders as best they could. Thus overhead costs were not reduced and abundant chances of bickering over the amount of quotas and their observance were left. In 1909 the Export Association broke up. In 1913 and onwards further attempts were made to evolve order out of chaos, and the Natal Coal Owners' Society was established to control the bunkering trade and the Natal Associated Collieries to control the coal trade in the home market. In 1921 Natal's twenty-one collieries were linked into ten shipment coal-selling bodies, four of which were inside the Society and six were outside. A system of quotas and price-fixing was pursued and was effective since the outside bodies followed the lead of the Society.[1] Unfortunately this controlled bunkering trade is catering for a shrinking market due to the growing use of motor and oil-burning ships, and in 1933 was thought to have little future before it.[2]

[1] Report of Coal Commission (U.G. 33—1921), pp. 10, 11, 13–15, 20, in Printed Annexures to *Votes and Proceedings of House of Assembly*, 1921, vol. v.

[2] Report of V. H. M. Barrett, Natal Inspector of Mines, in *Annual Report of Government Mining Engineer for 1933* (U.G. 21—1934), p. 131.

CHAPTER II

THE LABOUR PROBLEM IN THE MINES

The early shortage of native labour.

Recruitment from Portuguese East Africa.
Lord Milner's *modus vivendi*.

Whites in the mines.

Rigid division of work into skilled and unskilled.
White opposition to encroachment of black labour in the more skilled branches.

Wage rates.

Why native labour is more economical than white, and therefore essential.

The revolutionary outbreaks of 1913–14 and 1921–2.

Health conditions in the mines.

Pneumonia brought under control.
Compensation scheme for miners' phthisis.

IN South Africa the native labour question has its difficulties, but the existence of cheap coloured labour is a unique condition which gives the mining industry in the Union a great advantage in competition with the mines in the other Dominions. One of the most important factors determining the success or failure of a mine is the possibility of obtaining a constant supply of unskilled labour, and in South Africa unskilled labour means native labour. In the earlier days of the industry the native labour shortage was a constant difficulty. The complementary and equally vital problem is the skilful direction of the work of the native labourer, and direction and supervision have always been white man's work. The division of work in the mines into that in which the white man claims a monopoly and that which he leaves to the native presents to South Africa a problem which is unique, and South Africa's acute sense of colour makes it a problem of great difficulty.

Even when in later years the shortage had become less acute, there still remained, as a disturbing factor, the fluctuating nature of the native labour supply. During the fourteen years down to 1922 it ranged from 158,272 in 1907–8 to 201,873 in 1916.[1] More often than not the

[1] *Report of Mining Industry Board* (U.G. 39—1922), Capetown, 1922, p. 29.

supply was less than the demand, but on occasion, as when there had been a more than usually severe drought in the Native Territories, or the diamond or other mines had fallen on a period of comparative inactivity, or the demand in other industries had fallen off, there was an excess.

It was early realized that a necessary preliminary to the solution of the labour problem was the mastery of certain deadly diseases which are specific to the mining industry. The issue of the campaign which was undertaken against those diseases has been as successful as the fight against the plagues and pests which afflicted South African agriculture.

The companies found themselves faced with a labour shortage as soon as the gold-mines of the Rand began to reach the producing stage, with the consequent increase in the proportion of unskilled labour employed. The Transvaal Labour Commission, reporting in 1904,[1] stated that of the 197,000 labourers required for the mines, only 68,000 were at work, the shortage accordingly being 129,000. Some of the methods resorted to before the South African War for the purpose of making good the shortage were not a little questionable. There was, for instance, the "touting" system, under which each mine or mining group sent its own agents on recruiting expeditions up and down the country. The result was often costly. Natives were recruited under agreement for one employer, "but if on arrival a better price was to be got, they were sold to another employer, and, having been sold, they were induced to desert and go through the same agent to another employer, for whom they would be paid again. In this way desertion, though a criminal offence under the law, was inspired and made easy." [2]

The supply of native labour in the British regions of influence having proved inadequate, the mines found they had to rely on a supply from among the numerous but poverty stricken tribes of Portuguese East Africa from which source, before the War, about 70 per cent of the black native labour employed was drawn.[3] "The province of Mozambique thus came to hold the Transvaal with both hands.

[1] (Cd. 1896), pp. 18, 42.

[2] Papers relating to the Progress of Administration in the Transvaal and Orange River Colony (Cd. 1551), 1903 (*Accounts and Papers*, 1903, xlv, p. 151).

[3] Ibid.

On the one hand it had an arrangement with the Netherlands Railway Company by which the railway rates on goods from Delagoa Bay to Johannesburg were less by 13*s.* 4*d.* to 15*s.* a ton than those on goods from Durban (the nearest British port) to Johannesburg, and it had all the interests of the Netherlands Railways and the government of the South African Republic behind it in maintaining this arrangement. On the other hand, the mining companies entered into arrangements with the Portuguese authorities for recruiting labour in their territory, a source of supply which was absolutely necessary to them if works and equipment on the mines, representing millions of pounds of capital, were not to lie unused for want of hands to break the rock for the mines." [1]

The various treaties between the South African Republic and the Portuguese Government were abrogated when, as a result of the South African War, the Republic became part of the British dominions, among them the arrangements which had been made with the railways in the Transvaal and with the mining companies. It was essential that arrangements, so far as they related to the recruiting of native labour, should be revived in some form or other under the new conditions which came into existence after the war. The arrangement entered into by Lord Milner with the Portuguese Government was a comprehensive one, but provisions relating to railway rates and labour recruiting were among the more important of the matters dealt with. How impossible it was to restart South Africa's most important industry without such an arrangement is understood when it is realized that 90 per cent of the natives employed underground on the Rand were obtained under its terms.[2] Its importance enabled Portugal to exact terms relating to the railway question extremely favourable to the Delagoa Bay line and induced British South Africa to help in the development of a foreign port at the expense of her own ports.

By the provisions of this document—the *modus vivendi*, as it has been called—the mining companies were collectively authorized, subject to regulations framed by the Portuguese Government, to recruit natives in their territory for periods not exceeding twelve months. The engagement might

[1] *Papers relating to a Federation of the South African Colonies, 1907* (the "Selborne Memorandum") (Cd. 3564), p. 25.
[2] Ibid., p. 28.

then be renewed at the option of the native. In consideration of this privilege, goods were to be carried from Delagoa Bay to Johannesburg by rail at rates which preserved the same relation to the rates charged on goods from the British ports as existed prior to the war.[1] Under a further convention of 1928 the maximum number of Portuguese East Coast natives who may be employed in the Union at any one time was fixed at 80,000 from the year 1933 onwards.

The cost of recruiting native labour is a substantial item in the expenditure of the companies. In 1922, when the Mining Industry Board investigated labour conditions in the mines,[2] they found that there were two separate organizations for securing labour for the Transvaal gold and coal mines—the Native Recruiting Corporation operating in the Union and Protectorates, and the Witwatersrand Native Labour Association operating in Portuguese East Africa. According to the Director of Native Labour, the cost to the mining industry was, in the year to June, 1921, about £489,000, which sum was paid in approximately even amounts to the two recruiting organizations. For 1930 the corresponding figure was £435,784 or 1·78*d.* per native per shift worked.[3] In the Cape Province recruiting operations are conducted mainly through traders in the native Territories, who are employed as agents by the Corporation, and who recruit from amongst their customers and their families, a capitation fee of from £1 10*s.* to £2 2*s.*[4] being paid for each native secured for the mines.

In the early days the white miners of the Witwatersrand came mainly from overseas, a minority coming from the South African diamond or copper mines. They were skilled men, and in most cases possessed a sound all-round knowledge of mining, but were at first lacking in knowledge of the natives and in the art of managing and controlling gangs. The Mining Industry Board, when inquiring into labour conditions in 1922,[5] found that in 1922 "the flow of overseas miners has practically ceased, owing mainly to the fear of miners' phthisis and to the necessity of passing

[1] Ibid., p. 27.
[2] See *Report of Mining Industry Board* (U.G. 39—1922), Capetown, 1922.
[3] *Report of Native Economic Commission, 1930–2* (U.G. 22—1932), para. 805.
[4] Ibid., para. 806.
[5] See *Report of Mining Industry Board* (U.G. 39—1922), Capetown, 1922.

a strict examination for physical fitness by the Miners' Phthisis Medical Bureau before being permitted to work underground. The ranks of miners are, therefore, today replenished almost entirely from South African born men ". Under conditions prevailing in South Africa, where the white man supervises and the native does the unskilled work, it is impossible to train young miners by letting them work under the supervision of an experienced miner of their own race, as is done elsewhere. " The white lad in this country refuses to do what is termed ' kaffir work ' alongside of the native, and since he can only learn by actually doing the work, conditions have to be created under which he need not be associated with the native. The Government Miners' Training Schools seem to have solved this difficulty." [1]

Occupations in the South African mines are classified into three categories, namely unskilled, semi-skilled, and skilled. Since the departure of the last of the Chinese labourers in 1911, the unskilled occupations in the mines " have all been followed by native labourers, to the exclusion entirely of Europeans ".[2] The encroachment, as it is regarded, of the native worker on the semi-skilled employments, of which drill-sharpening, winch-driving, loco-driving, and the work of pumpmen are instances, and the threat that " the native's almost phenomenal advance in efficiency during recent years " [3] will carry him into the skilled occupations among which are included turning, carpentering, fitting, the higher grades of timbering, boiler-making, engine-driving, and general mining, have been among the principal matters in contest between white and coloured labour.

That the proportion of coloured labour had been steadily and regularly increasing at the expense of the whites was made abundantly clear in figures supplied to the Mining Regulations Commission of 1924–5. " On the producing gold-mines in the Witwatersrand area in the year 1911 there were employed 23,272 European and 181,100 coloured or native workers, the ratio between them being 1 to 7·7. Twelve years later, in 1923 . . . these numbers are respectively 17,357 and 176,180, and the ratio 1 to 10·1. . . .

[1] Ibid., p. 24.
[2] *Report of the Mining Regulations Commission*, Capetown, 1925 (U.G. 36—1925), p. 19.
[3] Ibid., p. 21.

Thus though the amount of tons treated increased during the period by approximately 11·6 per cent, the number of European workers who handled it shows a decrease of approximately 25·4 per cent, that of native workers one of only 2·7 per cent." [1]

The ruling wage rates for native labour tend to be the amount which will induce them to leave their kraals. In 1914 the lowest wage at which natives could be obtained for the Witwatersrand gold-mines was 50*s.* to 60*s.* a month, in addition to board and lodging. Substantially higher wages were paid in the diamond-mines—the most popular service among the natives by reason not only of the wage rate, but also of "the sympathetic and able compound management steadily persisted in at Kimberley for 30 years".[2] Also at the diamond-mines natives feed themselves, but get free quarters. The lowest pecuniary wage was paid on the farms, but their real earnings were probably higher.

The total amount of wages paid to natives on the Witwatersrand mines amounted in 1914 to £5,154,454 and in 1921 to £5,819,710, an increase of 13 per cent; and the average earnings per shift rose from 1*s.* 11·7*d.* to 2*s.* 2·1*d.* This increase could not be called excessive when the rise in the cost of living was taken into account. In 1930 the wages paid to natives in the Transvaal gold-mines amounted to £7,055,729, an average of 57*s.* 6*d.* per employee per month.[3]

The earnings of European employees "rose from £6,932,970 in 1914 to £10,456,112 in 1921, the rate per man per annum being £324 in the former year and £495 in the latter".[4] In 1930 the average pay of European employees in the Transvaal gold-mines was £376 7*s.* per annum.[5]

In 1922 the Mining Industry Board found that the rates of pay to natives in the gold-mines varied considerably according to their work, but the minimum for the lowest class of work was 1*s.* 6*d.* a day and the average 2*s.* 2*d.* In addition they were fed and housed in the companies'

[1] Ibid., p. 16.
[2] *Report of Economic Commission* (U.G. No. 12—1914), Pretoria, 1914, p. 35.
[3] *Report of Native Economic Commission, 1930–2* (U.G. 22—1932), para. 824.
[4] *Report of Mining Industry Board* (U.G. 39—1922), Capetown, 1922, p. 14.
[5] *Report of Native Economic Commission* (*supra*), para. 825.

compounds ; and a bonus of 5*s.* a month was given to every native who continued to work after having done 180 shifts.[1] Later the period after which the bonus was paid was increased to 270 shifts, and in June, 1930, the average earnings were found to be 2*s.* 1·7*d.* per shift.[2]

These figures make it abundantly clear that in his contest with the European as a wage-earner the native has many economic advantages. Other factors which tell in favour of the native are the living-in system, under which the employers house their native workers in compounds and feed them at a much less cost than would be incurred if the latter had to obtain their board and lodging in the only way available to Europeans, a condition which is, of course, reflected in the lower wages paid ; the indenture system, which binds the worker more closely and for more definite periods than European employees ; the scale of compensation for injuries suffered as a result of the employment, which, in the case of coloured workers, is on a lower scale than that applicable to whites ; and the coloured worker's greater amenability to discipline and control than his white competitor.

Clearly also the improved efficiency of machinery had resulted in the elimination of a certain proportion of white workers, particularly in connection with drill-sharpening and rock-drilling. By way of illustration, the introduction of the drill-sharpening machine in 1914 not only enabled 600 drills to be sharpened when only 100 had been sharpened before, but also enabled work to be done entirely by natives for which hitherto a European and two native assistants were thought necessary.

The grounds for anticipating the enlargement of the area of encroachment by native labour were thus indicated by the Government Mining Engineer[3] : " I have no reason to doubt that, as natives become more skilled in various occupations, economic law will in years to come operate as it always has, and that the more expensive white man will be replaced to an increasing extent by native labour. The refusal of the white man to do what is called kaffir work

[1] *Report of Mining Industry Board* (U.G. 39—1922), Capetown, 1922, p. 32.

[2] *Report of Native Economic Commission, 1930–2* (U.G. 22—1932), para. 818. In addition to cash wages, free board and lodging, medical attendance, and other privileges were supplied, the value of which to the native was calculated to be 1*s.* 4*d.* or 1*s.* 5*d.* per day (ibid., para. 819).

[3] *Report for 1923*, p. 55.

accelerates his own displacement. By letting the native do the work he also lets the native get the training, and when he is sufficiently trained, the temptation to the employer to put him in the place of the more expensive white man is irresistible"; and the Low Grade Mines Commission, reporting in 1932,[1] found that certain operations underground which were reserved for white men could and should be carried out by specially trained natives.

The Commission of 1924–5, however, were not disposed entirely to allow economic law to take its natural course. They found a variety of occupations in the mines which in their opinion must, for the time being at least, continue to be strictly confined to Europeans, for to place natives in positions of responsibility and control spelled danger to all those working under them. In support of that view the Commission were "content to rely upon the evidence of common experience, which, we venture to think, shows that they are as yet unfitted to exercise either; not responsibility, because of the deficiencies of their training, and not control, because Europeans will not submit to it at all and other natives only very unwillingly".[2] If, for example, the driver of a locomotive is a native, the white man who wants, in breach of the regulations and at the risk of a serious casualty, to ride on the locomotive or the train it propels, simply does so and takes no notice of the black driver's protests.

Trade unionism was of slight importance in South Africa before the outbreak of the South African War. Trade unionism really began in the eighties and nineties as branches of British trade unions, founded by British workers who had gone out to South Africa. The first branch was that of the Amalgamated Society of Carpenters and Joiners opened in 1881, and branches of the Amalgamated Society of Engineers, the Iron Moulders' Society, the Engine Drivers' Society, and the Typographical Union followed. A number of small strikes occurred, including a strike of the engineers at Johannesburg in 1889 for 25 per cent advance of wages and a reduction of weekly hours from fifty-four to forty-eight.

After the South African War the organized workers of the Witwatersrand drew together in the Witwatersrand Trades

[1] *Final Report* (U.G. 16—1932).
[2] *Report of the Mining Regulations Commission, 1925* (*supra*), p. 21.

and Labour Council, and this organization was virtually replaced in 1911 by the Transvaal Federation of Trades. At the same time, paralleling their British fellows, the South African trade unionists had established the Labour Representation Committee to secure the political representation of organized labour.[1]

All over the world the mining industry has been the fruitful parent not only of social and industrial legislation, but of civil strife as well, and to this experience South Africa has been no exception.

Each of its two periods of serious social disorder, namely 1913–14 and 1921–2, originated among the white workers in the mines. The disorder and consequent loss were serious enough in themselves on each occasion, but the native rising that might very well result, should white disorder get the upper hand, was the spectre that haunted South Africa.

The first of the two outbreaks was in reality a trial of strength between the Government and the principles and methods of the school of syndicalism which advocated the class war fought with the weapons of sabotage and the general strike. In the later outbreak the matters in issue between the miners and their employers covered a very wide field; some of the more serious involved questions concerned with the relationship in mining economy between white and native labour.

The first serious overt act in the troubles of 1913 was the strike in May in the New Kleinfontein mine near Benoni. In the following month the strike spread all over the Rand and soon the Strike Committee had assumed, unchallenged, some of the functions of Government. "It gave its *placet* to persons whose property it thought should be protected and inferentially therefore the absence of a permit left men at the mercy of the mob. The owners of property went to the Strike Committee for protection, and even men in the position of clerks of the National Bank preferred a permit of the Strike Committee to Police protection."[2] The water supply, power, and sanitary services of Johannesburg functioned under the authority of similar permits.

[1] See *Official Year Book of Union of South Africa*, No. 9, 1926–7, pp. 212–13, and, for further particulars, J. D. Rheinallt Jones, "The Worker in Industry," in *Coming of Age: Studies in South African Citizenship and Politics*, 1930, chap. 3.

[2] Report of Judicial Commission on the Witwatersrand Disturbances, quoted by General Smuts in *Debates of House of Assembly*, 4th February, 1914.

At one stage, in its endeavour to arrange a settlement, the Government accepted what the Minister of Defence in the House of Assembly frankly recognized as the humiliating condition that they should pay a sum amounting to some £50,000 as compensation to the men who had been taken on in the New Kleinfontein mine to replace the strikers, so that the strikers could be reinstated. This, however, failed to end the trouble, and burning, looting, intimidation, and collisions between strikers and the troops and police continued unabated. Mine after mine was closed down and businesses closed up under the threat of a general strike. That extreme step was not taken at the moment, but meanwhile plans were being made by the leaders of the disorders to paralyse the nerve centres of the community and to starve the country into submission by stopping transport. The railwaymen were none too willing to join the forces of disorder, but intimidation aided by dynamite at length prevailed. In January, 1914, the railways were involved in the strike, and for the moment the syndicalists had triumphed. But in the meantime the Government had been able to organize its forces and now the terrorists, who had organized themselves on a military basis, were to be met by the whole of the armed force at the disposal of the Government. In the words of General Smuts, who was then Defence Minister : " This country in order to preserve life, to protect property, and to prevent the country from sinking into anarchy, has had to call out and mobilize a larger military force than was mobilized by the late Republics at the beginning of the late war." [1] The terrorists were now ruthlessly dealt with, and early in 1914 the Government was in a position to go to the Union Parliament with a Bill of Indemnity in respect of acts done in the name of law and order during the recent troubles. By the same measure martial law was withdrawn and legislative approval given to the action of the Government in deporting the five Scotsmen, two Englishmen, one Australian, and one native of Holland who, having been the leaders in the late disturbances, had, in the words of the preamble, " become undesirable inhabitants of the Union."

The political seriousness of the outbreak which reached its culminating point in March, 1922, lay in the fact, as was found by the Martial Law Inquiry Commission set up by the Government, that an industrial dispute developed

[1] *House of Assembly Debates*, 4th February, 1914.

into a political movement with the establishment of a Republic as its object, and that control was taken out of the hands of the more moderate of the labour leaders by armed commandos dominated by leaders who advocated revolutionary methods.

In their industrial aspect, the troubles were in the beginning the consequences of the economic upheaval which was the aftermath of the Great War in all parts of the world. The position of a number of the low-grade mines had become exceedingly precarious as a result of the fall in the price of gold from 130*s.* in February, 1920, to about 95*s.* in December, 1921, and the employers intimated that measures would have to be taken to check the continuous rise which had been taking place in working costs. These proposed alterations in conditions the South African Industrial Federation would not listen to. In South Africa, as was to be expected, the Reef was the storm centre.

In January, 1922, there was a general strike of miners. The period of violence was ushered in when his incendiary speeches brought about the arrest of a prominent leader. By March the violence had assumed the aspect of a revolutionary outbreak to which the Government's necessary reply was martial law. There were thousands of arrests; two of the revolutionary leaders committed suicide when they found their last ditch, the Trades Hall in Johannesburg, was no longer defensible against the Government forces; and in little more than a week after the declaration of martial law there was a general and unconditional return to work. At the end of April, 1922, the Government got their Indemnity and Trial of Offenders Act, effecting the withdrawal of martial law and providing indemnity in respect of acts done in good faith for the prevention and suppression of disorder and in the interests of public safety.

The result of the upheaval was a heavy reverse for the strikers. An instance of the changes rendered possible " as a result of the strike and emancipation from interference by stewards " has thus been described : " Formerly the ' one man one job ' principle was adhered to so closely that the miner refused to undertake or supervise pipe-fitting, track-laying, rough-timbering, or pack-building, in his stope, although none of this work may have been beyond his skill or have made an excessive call upon his time. A number of redundant men had thus to be kept engaged to perform these other classes of work. Since the strike the

miner is required to undertake the work of these men." [1] From the point of view of the industry generally, however, the outcome of the troubles was not entirely loss, inasmuch as one result was the overhaul by the Mining Industry Board of Labour conditions in the mines.[2]

The Board accepted the fundamental principle that "the mining industry in the Transvaal, like all industries of any magnitude in South Africa, is built upon the basis of cheap native labour for unskilled work"; and "in the unskilled occupations, for economic reasons, it is impossible for the white man to compete with the native". The employment of white unskilled labour in the mines in substitution for native labour was accordingly economically impracticable. On the other hand: "In the skilled branches of work the European is safely entrenched by his superior ability and intelligence and the skill acquired mainly by the discipline of a long apprenticeship." Only in the semi-skilled occupations was there any likelihood of an encroachment by natives upon the sphere of white labour, and there was a distinct inducement to mine managers to effect such substitution in view of the great disparity in wages, and it was an aspect of the question that had constituted one of the several points in issue.

Certain semi-skilled work had been done by white men in some mines and by natives in others. From time to time there had been demands that work of this kind should be reserved for white workers, and in 1918 what came to be known as the *status quo* agreement was arrived at whereby it was agreed between the Chamber of Mines and the South African Mine Workers' Union that no billets then held by European workmen should be given to coloured workmen and vice versa.[3]

After the strike the *status quo* agreement was put an end to by the Chamber of Mines. The Board could find no justification for closing to natives the door to semi-skilled occupations; they thought such restrictions as that contained in the agreement interfered with those economic principles on which a lasting solution of the labour problem

[1] *Report of the Mining Industry Board, 1922* (U.G. 39—1922), p 22.
[2] See *Report of Mining Industry Board,* dated 29th September, 1922 (U.G. 39—1922).
[3] The *status quo* agreement is to be distinguished from the statutory colour bar prescribed by Regulations under the Mines and Works Act, 1911, confining certain skilled occupations in the mines to white workers.

must depend and they came to the conclusion that the abolition of the *status quo* agreement was fully justified.

The sanitary conditions of the natives employed in the mines is a record of progressive improvement. The Reports of the Native Affairs Department show that for natives employed in mines and industrial work in the Transvaal during 1903 the death rate was 71·7 per thousand. This high rate steadily dropped to 26·84 in 1912, but seeing that during the same year the death rate among the negro employees working on the Panama Canal [1] was only 10, there was obviously still room for further improvement in South Africa.

The diseases mainly responsible for this death rate were pneumonia, phthisis, meningitis, and enteric fever—all more or less infectious.

Pneumonia takes heavy toll of the newly imported native for the reason that he has not acquired the white man's degree of resistance to the pneumococcus, the infecting organism of the disease. In Panama, General Gorgas brought down the pneumonia death rate very strikingly by the abolition of crowding in the native barracks.[2] Roomy quarters were also found to be the best means of reducing the number of cases of tuberculosis. Miners' phthisis or silicosis is a disease to which the South African Government has devoted special attention and its officers a great deal of pioneer investigation work.

The problem how to secure a permanently adequate supply of native labour is a matter about which the mine-owner and the Government have more than once been at issue. Thus the Immigrants Regulation Act of 1913 prohibited the importation of natives from the territory north of latitude 22 degrees South, the latitude of the most northerly point of the Union, the reason for the prohibition being the heavy mortality, particularly from pneumonia, amongst natives from Central Africa. But the Mining Industry Board, on examining the matter in 1922,[3] agreed that the discovery of Dr. Lister's pneumococcal vaccine and the advance in general hygienic conditions had entirely

[1] Surgeon-General W. C. Gorgas, "Recommendations as to Sanitation concerning Employees of the Mines on the Rand" (Johannesburg, 1914, p. 3) (*South Africa, Pamphlets*, vol. 3, No. 95, in D. & C.O. Library).

[2] Ibid., p. 9.

[3] See *Report of Mining Industry Board* (U.G. 39—1922), Capetown, 1922, p. 31.

altered this aspect of the question and that it was extremely unlikely that the mortality would any longer be abnormal, so that there was no longer any reason for maintaining this particular bar upon the free importation of native labour. This did not mean, however, that natives from the Union were not to be preferred before those from foreign territory. For instance, the mere fact that natives from Portuguese territory as a rule engaged for a year whereas the native from the Union engaged for only six months, was no sufficient reason why mine managers should employ the former rather than the latter. Moreover, the Low Grade Mines Commission in 1931 reported in favour of permission being granted for engaging natives from the region north of latitude 20 degrees South, on condition that natives from the Union and the three Protectorates should have a preferential claim for employment in the mines ; that special health precautions should be prescribed ; that they should be allocated primarily to the mines earning low or no profits ; and that they should be repatriated on the conclusion of their service.

The lung diseases to which miners are specially liable have for many years been the subject of the special solicitude of the South African Government and, the machinery of the Workmen's Compensation Act being found inadequate, an elaborate special scheme for providing compensation for underground workers in the mines of South Africa who suffer from what is, in popular but not quite precise language, termed " miners' phthisis " has been worked out in a series of statutes extending from 1911 to the consolidating statute of 1925.[1]

The effect of the disease on the industry is manifold. It decreases the efficiency of the miner after contracting the disease but while still working ; it deprives the mines of experienced workers mostly in the prime of life and burdens them, as well as the country at large, with the upkeep of hospitals when the miner becomes too weak to continue work. To combat the disease a medical organization has been built up in South Africa, the brilliant work of which is worthy of comparison with the results achieved by the veterinary and scientific officers of the Union Department of Agriculture in their efforts to control animal diseases and plant pests.

The term " phthisis " has long been understood to mean

[1] Miners' Phthisis Acts Consolidation Act, 1925 (Act No. 35 of 1925).

tuberculosis of the lungs; but when abnormal conditions in the lungs of miners have been under discussion the term "Miners' Phthisis" has been used with the intention of including both the changes due to dust and the changes due to the tubercle bacillus. Fibrosis and tuberculosis are, however, two different conditions; different in their essential pathological natures; different in their causation; different in the conditions under which they manifest themselves.

Fibrosis of the lungs has been thought to be due to the action of dust; a man suffers from fibrosis through being exposed to the continued inhalation of fine mineral dust. Tuberculosis of the lungs, on the other hand, must be regarded as an infectious disease.

"The amount of industrial fibroid phthisis seems to bear direct relation to the amount of free silica present in the stone, such as quartz, flint, ganister, sandstone and granite. What appears to be more important for production of fibrosis even than the actual proportion of free silica in any mineral dust, is that the silica should be in a state of minute sub-division with very fine sharp-edged and insoluble particles. In the gold mines of South Africa the immense majority of the particles are very fine and have usually been recently fissured as a result of blasting. . . . Silicosis therefore, is to be anticipated, especially from siliceous dust of this minute size. . . . A lung affected with silicosis becomes prone to be affected by tubercle when tuberculo-silicotic changes take place. Tuberculosis, combined with silicosis, is the usual terminal stage of the disease." [1]

In the Miners' Phthisis Act, 1925, three stages of silicosis are recognized. There is the ante-primary stage "when it is found that the earliest detectable specific physical signs of silicosis are or have been present whether or not capacity for work is or has been impaired by such silicosis". There is the "primary stage", when it is found that "definite and specific physical signs of silicosis are or have been present and that capacity for work is or has been impaired by that disease though not seriously and permanently". In the "secondary stage" there are "definite and specific physical signs of silicosis" and "capacity for work is or has been seriously and permanently impaired by that disease".

In 1911 South Africa passed the first of the series of

[1] Sir T. M. Legge, M.D., *Industrial Diseases and Industrial Poisons.*

Acts, the fundamental purpose of which is to provide compensation for the victims of silicosis. The scheme was highly experimental and by 1918 no less than five amending Acts had been necessary. In that year it was thought desirable to reconsider the whole question. A Commission was appointed for that purpose and as a result of its recommendations the Miners' Phthisis Act, 1919, amending and consolidating the previous legislation relating to miner's phthisis, was adopted. A new amending and consolidating Act was passed by the Union Legislature in 1925.[1]

The purpose of the scheme embodied in the Act is best gathered from the list of the main functions of the Miners' Phthisis Board by which the scheme is administered. These main functions are to grant and pay the prescribed benefits to the persons entitled to receive them ; to provide for the training of beneficiaries in trades or industries ; to conduct an employment bureau for the benefit of beneficiaries and their dependants ; to assist financially in establishing or carrying on undertakings which undertake to employ beneficiaries or their dependants ; and to provide half the cost of maintaining sanatoria for silicotic patients. The Board is also empowered to establish co-operative workshops for beneficiaries.

The cost of the maintenance of the Miners' Phthisis Compensation Fund is imposed upon the " scheduled mines ", that is to say on the mines in the Union included in the Government list as being mines " wherein the mineral dust produced by mining operations is or has been of such a nature as to cause silicosis ". A subsidiary fund called the Trades and Industries Fund is established to enable the Board to carry out the provisions of the Act as to training beneficiaries for alternative occupations or assisting them to other employments.

The contributions to the Compensation Fund are assessed upon the immediate holders or lessees of scheduled mines, or the persons working such mines, as follows : 30 per cent of the required amount in proportion to the wage roll for underground work in the mine ; 50 per cent in proportion to the " silicosis rate ", that is to say, broadly speaking, according to the relative prevalence of silicosis in the particular mine ; and 20 per cent in proportion to the employer's assessment to income tax.

[1] The Miners' Phthisis Amendment Act, 1934 (No. 60 of 1934), amended this principal Act in considerable detail.

" As fibrotic change is the sign of reaction to a foreign irritant, it is in the nature of a healing process. If, therefore, by periodic examination of the workers, those in the early stages are removed from the dusty atmosphere, there is no reason why they should not, in time, completely recover with lives unshortened. This is the principle on which the Miners' Phthisis Act of South Africa, largely administered as it is by a Medical Bureau, is based." [1]

To conduct the necessary medical examinations and to advise the Board on medical questions, there has been established the Medical Bureau consisting of medical practitioners appointed by the Government.

An initial medical examination has been described as " the main entrance portal to the leading industry of the Union ", and no person may start work underground in a scheduled mine unless he has been medically examined and given a certificate that he is free from lung disease. Moreover, a medical examination of every person employed underground in a scheduled mine is to be made at intervals of not more than six months in the case of miners, and not more than three months in the case of natives. A notification that a person so examined is suffering from tuberculosis must forthwith be followed by the sufferer's discharge from underground work, the exclusion from the mine of a means of tuberculosis infection being regarded as vital Men who are notified that they have silicosis are practically compelled to take compensation and cease work underground in mines within three months, for otherwise they bar themselves from benefits should the disease progress to the more serious stages. To work underground in a scheduled mine without a valid " initial " or " periodical " certificate is an offence.

The statute recognizes three stages of silicosis and regulates the benefits payable accordingly. To a miner in the " ante-primary stage " a lump sum is payable. To a miner in the " primary stage " the above lump sum is increased by 50 per cent, and the same benefit is payable in a case of tuberculosis not complicated by silicosis. To a miner in the secondary stage or if he is suffering from tuberculosis complicated by silicosis, a monthly allowance is paid which may include an allowance for his wife and a further allowance in respect of each child under 16. To the dependants of a deceased miner monthly allowances are paid.

[1] Sir T. M. Legge, M.D. (op. cit.).

In the case of native labourers and their dependants benefits take the form of lump sum payments in all cases, which sums are paid over to the Director of Native Labour on behalf of the native concerned.

"During their existence, gold mines have produced gold to the value of £850,000,000, they distributed in dividends £177,000,000, and have paid £7,100,000 as compensation to sufferers from miners' phthisis—which is 4 per cent of the dividends. There are now 7,000 miners, 1,500 widows, and 500 orphans who are drawing compensation and every month that total is increased by another 50. Every month the Miners' Phthisis Board pays out £60,000." [1] The Government Actuary, giving evidence before the Miners' Phthisis Commission of 1929–1930, put the cost at that time of phthisis compensation "in the neighbourhood of £1,000,000 per annum".[2] In the light of facts such as these the Low Grade Mines Commission, reporting in 1932,[3] came to the conclusion that the South African scheme of compensation for miners' phthisis was in excess of any scheme for industrial accidents or disease elsewhere.

[1] Minister of Mines and Industries: *Union House of Assembly Debates*, 26th March, 1925, col. 1458.

[2] Report (U.G. No. 38—1930), p. 27 (Annexures to *Votes and Proceedings of House of Assembly, 1931*, vol. i).

[3] (U.G. 16—1932) *Final Report.*

CHAPTER 12

COMMUNICATIONS

Absence of inland waterways.

The roads.

The days of the ox-wagon.

Railways.

- Beginnings of State System in Cape, 1873.
- Mineral wealth makes railway construction possible.
- Lines converge on Kimberley and Johannesburg from Cape ports.
- Kimberley reached, 1885.
- The Cape to Johannesburg line :
  - The Vaal reached by Cape and Free State system.
  - Johannesburg reached, 1892, by means of Netherlands Railway Co.
- President Kruger establishes independent connection with coast by means of line to Delagoa Bay, 1894.
- Competition between Cape and Transvaal for Rand traffic results in rates war.
- The Drifts crisis.
- Durban linked by rail to Johannesburg, 1895.
- The Rhodesian lines.
- Advantages to agriculture from railways.
- Emerging problems.
  - Transvaal holds key to Cape prosperity.
  - Lines follow shortest route to the north to the neglect of fertile districts.
  - Lack of east to west communications.
- First steps to amalgamation as result of South African War.
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- Inter-provincial rivalry continues, it being interest of C.S.A. Railways to attract traffic to Delagoa Bay route.
- The Mozambique Agreement.
- Evils of provincialism in railway policy.
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Shipping.

- Effects of opening of Suez and Panama Canals.
- Disadvantages of Cape Route.

Freight rates as a dominating question.

The story of the Union-Castle Line.
The South African Shipping Conference.
The deferred rebate system.
Reasons for high freight rates in South African commerce.
The abolition of deferred rebates and the new mail contract of 1912.

The Italian shipping subsidy, 1933.

IN the early years of the British occupation of the Cape, commerce between the capital town and the interior of the Colony was much hampered by the difficulties of communication. Capetown was the seat of government and it had practically a monopoly of such import and export trade as the Colony possessed. The husbandman in the country districts looked to Capetown for a constant and ready market for his produce and there alone he could supply his principal wants. There was a total absence of internal water communication, whether by river or canal, and the coasting trade was precarious. The course of the rivers of Cape Colony is short, and their character is that of mountain streams, being liable to become swollen torrents after the rains, but subsiding into brooks during other seasons of the year. Even on the Orange and Vaal rivers navigation is out of the question by reason of their steep slopes and torrential floods. The few coasting vessels plied principally between Capetown and Algoa Bay, but the coast between offered no shelter in bays or harbours from stress of weather.

At first the Post was carried by Dragoons. The mail was then carried as expeditiously as possible, " dispatches from the Cape being received within five days at Graaff Reinet if not impeded by the swelling of rivers." [1] The Batavian Government instituted a system which was continued by the British Government when the Cape finally passed under its control, by which the Post was sent forward between the capital and the country districts by relays, certain of the inhabitants along the route being appointed Postholders for the purpose of carrying out this duty, at remuneration which they regarded as very inadequate compensation for the time and trouble involved in forwarding the mail to the next stage, a journey of four to five hours. The Postholders were not so satisfactory as the Dragoons. " The greatest neglect is observable on inspecting the Post Bills. The mail to and from Uitenhage, which might be conveyed

[1] *Records of the Cape Colony*, vol. vii, p. 141. Lieut.-Colonel R. Collins to the Earl of Caledon, 1809.

within four days, is very seldom received in less than a fortnight or three weeks, and is often more than a month on the road." [1]

The overland route was obstructed by mountains. The range which most seriously obstructed communication with the interior was that of the Holland Mountains, which separated Capetown from eight-ninths of the Settlement. There were only two passes giving access to the interior for wagons. The pass near the southern end of the chain was that most frequently used, notwithstanding its difficulty. " In 1822 it was given in evidence before a Commission . . . that the number of wagons which passed this kloof in the preceding year was about 4,500 ; and that the proportion was 800 which, either in the carriages themselves or in the gear, or cattle, sustained such damage in the passage as to occasion a loss of time and an expense in making good the injuries." [2] One of the earliest mountain roads in the Colony was constructed by Governor Lord Charles Somerset across the French Hoek Pass, and what had been a mere cattle track became a road broad enough for two wagons, and it is recorded how the Dutch farmers then showed their contempt for what had been " this dreaded range of mountains " by " galloping their horses at full speed up and down the steepest parts of the road without difficulty or accident." [3] Later roads to be constructed were the Montague Pass road, which crossed a range of mountains that had constituted a serious barrier between east and west. The Zuurberg Pass road gave access to the north from the eastern coastal region. The Howison's Poort road led from the south over the hills to Grahamstown.

The ordinary means of transport was the ox-wagon drawn by its eight to ten pairs of oxen. To the South African pioneer it was " home, conveyance, and fort " ; and when the Commission of Circuit journeyed through the Colony in the early years of the nineteenth century to try civil and criminal cases, it was the business of the local landdrosts and fieldcornets to see that the necessary relays of cattle were forthcoming for the journey. From what in later years became railhead towns, the ox-wagon continued the journey beyond the railway terminus and provided the transport rider with an adventurous living. Bulawayo

[1] Ibid.
[2] *Records of the Cape Colony*, vol. xix, p. 243.
[3] Ibid., p. 252.

enjoyed its greatest prosperity when it was railhead. " Scores of wagons left the town every day, loaded with stores of every conceivable kind, from boilers weighing 8,000 lb. to parcels of millinery." [1] A full summer load for a properly trained span of cattle was 8,000 lb.[2]; and the speed 10 to 12 miles a day. But in bad weather, when the track was deep mud, the distance accomplished became an entirely uncertain quantity. The transport rider " never agreed to deliver loads within any specified time. It would have been lunacy to do so ".[3]

Oxen were still the chief means of heavy transport in 1896, when the calamitous visitation of rinderpest fell upon South Africa, with the result that there was a more complete stoppage of transport than could be brought about in England by a general strike of transport workers. The whole of the goods traffic and, in places, even the stage coaches between such relatively important centres as Kimberley and Mafeking were drawn by oxen, and " ox wagons could be seen on the main road stranded and deserted, because the oxen had died and there was no other means of traction".[4]

Even the railway failed to vanquish the ox-wagon, and it must have been a humiliating task for a twentieth century railway general manager to have to include in his annual report the complaint: " During the year ox-wagon competition continued adversely to affect the receipts of the Midland and Eastern Systems. . . . In my reports for some years past I have strongly advocated the introduction of legislation with a view to imposing a tax on wagons competing in districts served by railways, and I am pleased to say that Parliament has recognized the very serious nature of this competition and during last session action was taken in this direction, Parliament having approved the principle that when the State has provided means of transport with the money of the general taxpayer, it is incumbent on the public to make use of the facilities provided." It was hoped that the action taken would " relegate the ox-wagon to its legitimate sphere, that is to act as a feeder to the railways not as a competitor ".[5] This was, perhaps, the earliest

[1] S. P. Hyatt, *The Old Transport Road*, p. 30.
[2] Ibid., p. 32.
[3] Ibid., p. 255.
[4] G. Turner, M.B., " Rinderpest," read before the British Association, 1905 (*South Africa, Pamphlets*, vol. 2, No. 47, in D. & C.O. Library, p. 4).
[5] *Report of General Manager of Railways for 1908* (G. 5—1909), Capetown, 1909, p. 13.

indication that the time was approaching when something more than haphazard attention must be given to the problem of the roads. The heavy cost of oil for motor fuel in South Africa is a severe handicap to the development of road motor transport, but such development has reached a degree sufficient to bring into prominence the organization of the highway system and the co-ordination of road and railway transport.

Railways

The story of railway development in South Africa has little of the romance which characterizes the history of the construction of the Canadian trans-continental lines. In South Africa there was none of that faith in the future which enabled private enterprise to drive trans-continental lines through the Canadian wilderness in the hope and expectation that settlers and settlements would follow in their wake. Rhodes's dream of a Cape to Cairo route alone compares with the heroic enterprise of Donald Smith of the Canadian Pacific. In South Africa the story is rather one of laggard enterprise only undertaken when the need was urgent and the demand emphatic, and almost from the beginning the railway builders were for the most part the self-centred governments of the different Colonies and States and not independent pioneers capable of envisaging the transport needs of the whole sub-continent.

When in 1873 the Government of Cape Colony took over all the then existing railways in its territory, the transaction was one of small magnitude, for only 64 miles of line were involved, made up of the lines from Capetown to Stellenbosch and Wellington, and to Wynberg, all built during the period 1859–1864. The only other railway in South Africa at that time was the little 6 mile line in Natal, also built by private enterprise and in 1876 also purchased by the Colonial Government. Thenceforth railway development in South Africa was carried on by the four Governments without co-ordination and with conflicting aims. Co-ordinated effort in railway policy and political union marched side by side. One result of the South African War was the merging of the railways of the Transvaal and the Orange Free State into one system and, with the proclamation of the Union of South Africa, came the end of provincial dissidence in railway policy.

The first impetus to railway construction in South Africa came with the discovery in 1870 that Griqualand West was an enormous diamond-bearing territory. At that time, except for the merchants, agents, and retailers in the towns, the population was almost entirely pastoral and agricultural, a population without the means or indeed the desire for railway construction. The mineral wealth of South Africa alone made it possible to equip the sub-continent with railways connecting the different Colonies and States with the coast and with one another. The traffic created by the diamond-fields made possible the railway to Kimberley, and that of the goldfields the line to Johannesburg. Without the mineral wealth of Rhodesia it is doubtful whether the railway to Bulawayo would have been worth while. The extension to the Congo border was the result of the mineral wealth of the Katanga.

The magnet that first attracted to itself converging lines of railway was Kimberley, the diamond-field's headquarters. The advance from Port Elizabeth began in 1873 and from East London in 1874. The line from Capetown reached Beaufort West in 1880 and completed the distance of 650 miles to Kimberley in 1885. In 1886 when the Witwatersrand gold-fields were opened and Johannesburg founded, there were no railways to the Transvaal. The necessary equipment for the mines and the supplies for the population beyond the meat, forage, and mealies which would be provided by the farmers in the district around, had to be brought up by the transport riders. When the line from Port Elizabeth via Naauwpoort reached Colesberg near the Orange Free State's southern boundary, it became apparent that access to the Transvaal markets could only be obtained by traversing the Free State. Many in Cape Colony were opposed to building lines beyond their own frontier, but a majority recognized that great railway developments must come and that it would be to the advantage of the Cape if their own Government kept control of that development.

In pursuance of that policy, Conventions were entered into between the Cape and the Free State by which the Cape Government were to build and operate the lines, the Free State becoming a sort of sleeping partner in the business, with little else to do but take its share of the profits.

The first Convention, that of 1889, provided for the building of a line by the Cape Government between Norvals Pont, on the Free State frontier north-east of Colesberg

and Bloemfontein. By virtue of a second Convention of 1891, the Cape was able to push the line farther north until it reached the Vaal River.

For the Free State the transaction proved to be highly profitable. "At the end of the present financial year (1894) their share of the profits would amount to £235,000 —about half the seven-year agreement which would expire in 1897. The meaning of that was this, that we had furnished the Orange Free State with a railway, given them all the advantages of a railway, worked the railway for them, and we had given them in addition £235,000." [1]

But the seven years' agreement did not run its full course. A third Convention between Cape Colony and the Orange Free State in 1896 was the result of the decision of the latter to take over the railways within its own borders, as it had a perfect right to do, a right, however, which probably would never have been exercised but for the strained relations between the Cape and the two Republics which followed the Jameson Raid.

The progress of the Cape line to Johannesburg met with its most serious check at the Vaal River. When, with the gold discoveries and the rise of Johannesburg, the economic aloofness of the Transvaal became no longer a possible policy, it was open to President Kruger and his Government to direct the flow of traffic southward by linking up with the Cape railways, or eastward by a route which would render the Transvaal independent of the lines of the neighbouring British Colonies. Had the Republic chosen the former alternative, the common interests of commerce might very well have prepared the way for political union, or at least friendly co-operation, with the result that the chances of war between the Republic and the Colonies would have been substantially diminished. But the Transvaal Government chose the other course. President Kruger saw in the Johannesburg traffic a ready means of relieving the financial embarrassments of his own country and he was determined to secure the largest possible share of the profits of that traffic for his own people. Moreover, he was fully aware that without economic independence there could be no political independence and he hoped to secure both by possessing his own system of communications with the outer world by way of Delagoa Bay.

[1] Sir G. Sprigg, Treasurer of the Cape of Good Hope (*House of Assembly Debates*, 1894, p. 110).

The Netherlands Railway Company came into existence in 1887, having received a concession from the Volksraad for the construction of a line eastwards. One of Rhodes's earliest acts, when he became Prime Minister of the Cape, was to negotiate an agreement in 1891 under which, in exchange for bonds guaranteed by the Transvaal Government, the Cape Government advanced to the Netherlands Railway Company the sum of £600,000 to enable that company to lay down the 52 miles of line that were necessary to link up the Cape Colony and Orange Free State system with Johannesburg, and in 1892 the Cape ports were in direct railway communication with the coveted goal.

It was not until two years later that the line with which President Kruger hoped to snatch the best of the Transvaal traffic from the Cape system was completed and railway communication between Delagoa Bay and Pretoria established. The immediate overt act which made his purpose manifest was the raising of rates from 2·4*d.* to 8*d.* per ton per mile on the section of the railway between the Vaal and Johannesburg.

This was the first step in the economic war which speedily brought the country to the verge of an armed conflict. To circumvent the Transvaal Government's manœuvre the Cape merchants unloaded their goods from the train at the Vaal River and hauled them the 52 miles to Johannesburg with trek-oxen as the motive power. "The 'drifts' on the Vaal must have been a wonderful sight, for there were often as many as 120 wagons to be seen crossing the drift at Vereeniging in a single day." [1] President Kruger's retort was a proclamation closing the fords of the Vaal at Viljoen's Drift and Zand Drift against the import of goods from overseas. The legal advisers both of the Crown and of the Cape Government gave it as their opinion that the action of the Transvaal was an infraction of Article 13 of the London Convention of 1884 between the United Kingdom and the South African Republic, under which "no other or higher duties shall be imposed on the importation into the South African Republic of any article coming from any part of Her Majesty's dominions than are, or may be, imposed on the like article coming from any other place or country". In November, 1895, the Imperial Government, by the voice of Joseph Chamberlain, intimated its readiness to support the Cape Government with an armed expedition

[1] Ian Colvin, *The Life of Jameson*, vol. ii, p. 27.

to enforce observance of British rights under the Convention. Believing that a policy of *reculer pour mieux sauter* was true wisdom in the face of a Rhodes-Chamberlain combination, the President gave way. But it was a truce, not a settlement. The " Drifts crisis " was an ebullition of the forces that were soon to drag the country into war. It was the " Agadir incident " of South African history.

During the immediately succeeding period the Cape railways passed through a period of great prosperity, mainly resulting from the Transvaal market and in particular the Johannesburg traffic. For the calendar year 1896 the net revenue from the railways showed a return of about 9 per cent on the capital cost.[1] But to get to that market the Cape had to go through the Free State and to make use of the Netherlands Company's line. The increase in traffic had been immense, so much so that a state of things arose which came to be referred to as the " Transvaal block ". The Commissioner of Public Works, referring to the total of the traffic with the Transvaal from Cape Colony, made the statement that " in a fortnight of 1896 they were carrying about the same quantity as they carried during the whole of 1889 ".[2]

To Natal the completion of direct railway communication between the Cape lines and Johannesburg was disastrous. So long as there was a 50 mile zone between the Rand and the Cape and Free State railways, Natal could still compete successfully for Transvaal traffic from its terminus at Charlestown, although 130 miles distant from the market. But goods landed at a Cape port and carried straight by rail to their destination enjoyed an obvious advantage over goods landed at Durban, carried by rail to Charlestown on the Transvaal border, and there unloaded and conveyed the rest of the way by ox-wagon. In three years the import trade of Natal dropped from £4,417,085 to £2,236,738.[3]

To stave off the ruin threatened by the successful stroke of the sister Colony, Natal opened up negotiations with Pretoria for the extension of its own line. Negotiations were successful, and at the end of 1895 the line from Charlestown to Johannesburg was completed. In January, 1896, a train service between Durban and Johannesburg was

[1] So stated in the Governor's speech when opening the Cape Parliament in April, 1897. See *Cape Legislative Council Debates, 1897*, col. 2.
[2] *Cape Legislative Council Debates, 1896*, col. 213.
[3] Sir John Robinson, *A Lifetime in South Africa*, p. 248.

inaugurated, and the journey accomplished in twenty-four hours or thereabouts, which before the days of railways took two to three weeks.[1] Natal could now recover its diverted trade for it was on an equality with its competitors.

Next the railway was pushed farther and farther northward mainly as a result of the driving power of Rhodes.

In 1908 the position with regard to the Rhodesian Railways was that the line was operated by the Cape Government Railways for the length of 588 miles from Vryburg to Bulawayo, the remainder of the system being worked by the Mashonaland Railway Company. The most northerly point was at Broken Hill, 655 miles from Bulawayo, and from Bulawayo eastward to the port of Beira the distance is 676 miles. At this period traffic was so limited that the expedient was adopted of a relief engine crew travelling on the train and the round trip was made with the same engine.[2] On the Bulawayo–Wankie section—the busiest part of the system—the maximum number of trains per day was two. Above the Victoria Falls there was only one train a week to Broken Hill. From Bulawayo to Salisbury, Umtali, and Beira, the booked trains averaged from one to one and a half a day. The speed was very moderate. The "Zambesi Express" to the Victoria Falls, which ran once a week, averaged 16½ miles per hour from Vryburg. Nor was there much to beguile the long hours of a journey on the line. There was "the illimitable and most uninteresting veldt" and "for some considerable distance before reaching Bulawayo the line skirts the border of the Kalahari Desert and every compartment of the train becomes filled with sand".[3]

The result of South Africa's awakening during the closing years of the nineteenth century to the importance of railway developments was thus summarized by Sir Walter Hely-Hutchinson on laying down the Governorship of the Cape in 1909: "In 1893 the railway from the Cape ports extended to Pretoria on one side and to Vryburg on the

[1] The following are the distances of the competitive routes to Johannesburg from the coast ports:—

From	Capetown (via Bloemfontein) .	1,011 miles.
,,	Capetown (via Fourteen Streams) .	956 ,,
,,	Port Elizabeth	712 ,,
,,	East London	665 ,,
,,	Durban	482 ,,
,,	Lourenço Marques . . .	394 ,,

[2] Report by the General Manager, Lagos Railway, on the British South African Railways, 1908 (*South Africa, Pamphlets*, vol. ii, No. 65, in D. & C.O. Library), p. 11.

[3] Ibid., pp. 11–12.

other. The railway from Durban extended to Charlestown and to Harrismith. As to Beira, there was a miserable little two-foot railway from Fontesvilla, a short way up the Pungwe. In 1893 there seemed to be no prospects of being able to secure an extension and the Cape Colony was getting all the trade. . . . Within a year and a half the railway was extended to Lourenço Marques; within two years Natal was connected with the Rand; within four years the railway reached Bulawayo; within five years it reached Pietersburg; and within ten years it reached the Victoria Falls. Before that the journey even from Bulawayo to the Victoria Falls was a dangerous one, and I recollect a young officer, who was quartered at Maritzburg, losing his life from thirst and dysentery in the attempt to return from the Victoria Falls to civilization. Within thirteen years the railway had been extended to Broken Hill and now it is extended to the Congo Border. In those sixteen years 5,500 miles of railway have been laid in South Africa. . . ."

The introduction of railways brought about a real agricultural revolution in South Africa. During the ox-wagon period few farmers found it worth while to produce more cereals and other agricultural produce than was necessary for domestic consumption on the farm. The cost of transport made production for export or distant markets impossible and there was little demand in the vicinity, for each neighbour also provided for his own wants. Such cultivation as was necessary for the purpose of the farm was left to the "bywoner". The owner of the farm confined his attention to stock-raising. The construction of railways made possible the great export trade in maize; and whereas the fruit that used to travel by bullock wagon often arrived at its destination in a state of pulp, that brought by railway arrived at the port in a sound condition, so that it could be shipped abroad.

Nevertheless, when the end of the nineteenth century burst of railway construction was over, problems of the first magnitude promptly emerged. In the first place it was clear that the prosperity of the Cape depended upon the Transvaal. In 1898 the statement was made in the Cape Legislative Council that the only railway in the Colony that paid without the Transvaal trade was the Wynberg line.[1] Such a situation was pregnant with future trouble,

[1] *Cape Legislative Council Debates, 1896,* col. 213.

for at that time neither Boer nor Briton was in an accommodating mood. Then the governing purpose of the trunk lines which had been constructed was to connect the ports with the industrial centres and the plan adopted was to lay down the rails by the shortest route, even though that route ran through mile after mile of desert. The mining population must be served and agriculture could wait. In Cape Colony the line ran over the vast barren Karroo but did not touch the most fertile districts in the Colony, and in the course of his speech when opening the Cape of Good Hope Parliament in 1895 the Administrator took occasion to say that the time had arrived " when the claims of the south-western districts of the Colony, which have not up to the present enjoyed the benefit of railway communication with the ports and the inland trade centres, should be favourably considered ".[1] Rhodes was the Prime Minister, and one of the matters which occupied a place in his well-filled programme was the construction of new lines to give the inland farmers railway access to their markets.

Until the end of the nineteenth century, even Kimberley felt acutely its lack of railway communication with other parts of South Africa. To go by train from Kimberley to Bloemfontein, the centre of the district which supplied the former with a good many of the necessaries of life, involved a journey by way of De Aar, the distance being 396 miles, whereas in a direct line the distance between the two places was about 100 miles. The position in 1894 resulting from the heavy cost of transport was thus illustrated in the Cape House of Assembly when the question of constructing a direct line of railway from Kimberley to Bloemfontein was under discussion : " The finest grain districts in South Africa were within 160 miles of Kimberley. . . . Yet when, a year ago, the locusts ate up all the veld, it was almost all Australian flour and corn which was used at Kimberley. That flour was grown and milled 7,000 miles away, and yet it cost less to the people of Kimberley than flour grown 160 miles away. In the Caledon River Valley was one of the finest flour mills in South Africa, and yet the proprietor could not land his flour at Kimberley at prices to compete with the Australian article." [2]

Four years later Lord Milner pointed to the longitudinal

[1] *Debates of Cape Legislative Council, 1895*, col. 2.
[2] *Cape House of Assembly Debates, 1894*, p. 255.

character of the South African railway system as one of the chief obstacles in the way of political union : " We talk of closer South African union. But perhaps we do not consider how greatly it is of necessity impeded by purely physical difficulties, by the immense distances which separate the principal centres, and which, until bridged by a more rational system of communications, prevents that easy and constant intercourse, that interweaving of interests, and, more important still, that free interchange of ideas which are so important in the growth of national life and national sentiment." The Orange River Colony and Natal were neighbours, but " it takes as long to get from the capital of the one to the capital of the other as from London to Rome ". To get from Bloemfontein to Harrismith, a distance of 200 miles, took forty-five hours by rail. To get from Johannesburg or Pretoria to Kimberley or to Mafeking or Bulawayo " you are sent round by Naauwpoort and De Aar ".[1] When Lord Milner laid down the High Commissionership in 1905, he was able to say that during his administration 275 miles of new railways had been completed in the Transvaal and Orange River Colony ; 311 miles were in course of construction ; and 488 miles arranged for.[2]

Up to the time of the Union, the different Governments of South Africa operated their respective railways with little or no regard to considerations relating to South Africa as a whole. Without amalgamation and a pooling of interests the different systems could not be operated with the maximum benefit to themselves or the country. The first steps to this end came as a result of the South African War.

At the date of the outbreak of war, it will be remembered, the Transvaal and the Orange Free State had separate railway systems. The Transvaal lines, excepting the Pretoria–Pietersburg Railway, were constructed and worked by the Netherlands Railway Company, a private company, but in which the Government of the South African Republic had a considerable interest. There were also two uncompleted lines which were private ventures, the Selati Railway and the Machadodorp–Ermelo Railway. The lines in the Orange Free State, it has been seen, were constructed by the Government of Cape Colony and were worked by that

[1] Further Correspondence relating to Affairs in the Transvaal and Orange River Colony, 1905 (Cd. 2482) (*Accounts and Papers*, 1905, lv, p. 45).

[2] Ibid., p. 180.

Government under an agreement between the two Governments until 1896, when the Republic took over the lines and itself managed them until the war.

When, during the war, the British military authorities got control, they administered the railways of the two Republics jointly. After the Peace they continued to be administered as a single system under the name of the Central South African Railways by a Commissioner of Railways who was subject to the control of the High Commissioner.[1] The terms of the official announcement[2] were that henceforth the railway systems of the sister Colonies, the Transvaal and the Orange Free State, would be one concern. The Imperial Government, which by conquest had become the owner of them both, had decided to hand them back to the two Colonies as one, to be the common property of both. The receipts would be pooled and the management of the lines would be in common.

In 1903 a Railway Committee of the Inter-Colonial Council was set up to advise the High Commissioner on the administration of the Central South African Railways and under him to exercise a general control over such administration. The executive control of the railways was in the hands of a general manager.

By giving their control and administration to such a body, Lord Milner kept the Central South African Railways as far removed from political influence as possible. " Such influences may affect both matters of domestic and matters of foreign policy. In the former case they may have such consequences as the construction of unremunerative lines, the granting of unremunerative rates, or local purchase of supplies without sufficient justification; or even the employment of unnecessary hands, the payment of unnecessarily high salaries or wages, or the appointment of unsuitable officers. Other Colonies in South Africa and elsewhere have experienced some or all of these evils. . . . From such consequences the Central South African Railways have fortunately been free." [3]

Questions concerning the inter-colonial policy of the railways were of even greater importance. The Central South African Railways shared a disability in common

[1] See Order in Council of 15th September, 1902.

[2] Papers relating to the Finances of the Transvaal and Orange River Colony, 1903 (Cd. 1552).

[3] *Report of Commission on the Central South African Railways, 1907-8*, Pretoria (T.G. 5—1908), p. 4.

with all other railways in South Africa, in that from the days of their construction they had been "the pivot of South African inter-colonial politics",[1] a state of things which only amalgamation could cure. The financial equilibrium of the respective Colonies depended largely on their railway revenues and the unfortunate result was that the railways were subordinated to the exigencies of the inter-colonial struggle for existence and were neither run as a commercial concern nor allowed to play their legitimate part in promoting the development of the country, while the problem of through railway rates from the ports was in the circumstances particularly difficult.

This partial amalgamation of the South African railways was no cure for one particularly troublesome problem. As between the different ports of South Africa there has always been considerable jealousy and rivalry. This has been especially manifest in the competition of Port Elizabeth, East London, Durban, and the Portuguese port of Lourenço Marques on Delagoa Bay for the Transvaal traffic. The principal factor in determining the route which that traffic should take was the fact that the Central South African Railways owned the inland sections of all the routes between the Rand and the ports. Of the whole distance of the different competing lines from the ports to Johannesburg, the proportion owned by the Central South African Railways was as follows :—

Of the 394 miles from Lourenço Marques . . . . or 85·3 per cent of the whole.	336 miles
Of the 665 miles from East London . . . . or 57 per cent of the whole.	379 ,,
Of the 712 miles from Port Elizabeth . . . . or 53·8 per cent of the whole.	383 miles
Of the 482 miles from Durban . . . . . or 36·9 per cent of the whole.	174 ,,
Of the 1,011 miles from Capetown via Orange River Colony or 36·88 of the whole.	383 ,,
Of the 956 miles from Capetown via Klerksdorp and Fourteen Streams . . . . . or 27·3 per cent of the whole.[2]	261 ,,

Clearly it was to the advantage of the Central South African Railways to attract as much traffic as possible to the Delagoa Bay route and in this the company were successful.

[1] Ibid.

[2] Report by the General Manager of the Lagos Railway on the British South African Railways, 1908, p. 9 (*South Africa, Pamphlets*, vol. ii, No. 65, in D. & C.O. Library).

The total tonnage of through goods traffic to the Rand from the various ports during 1907 was as follows [1] :—

From	Capetown	7,259	tons, i.e.	1·74%	of total port traffic.		
,,	East London	20,831	,,	,,	4·95%	,,	,, ,,
,,	Port Elizabeth	27,023	,,	,,	6·44%	,,	,, ,,
,,	Durban	139,554	,,	,,	33·23%	,,	,, ,,
,,	Lourenço Marques	225,257	,,	,,	53·64%	,,	,, ,,

"Other considerations besides rail freights will weigh in determining the most advantageous route for different goods. Amongst them are the sea freight dues and transhipment facilities at the ports and the return cargo obtainable. Also some goods can pay for quick delivery and others, by reason of their weight or bulk, are the more economically sent the longest portion of the journey by sea and railway respectively. For the general rule is that steamers charge by bulk and railways by weight. The operation of these factors is, however, much curtailed by the controlling influence of the Central South African Railways, with the result that the foreign port of Lourenço Marques reaps great advantage to the detriment of the Colonial Ports." [2]

To check the flow of traffic to the foreign port a dam was erected by the Mozambique Agreement, based on the *modus vivendi* arranged by Lord Milner after the war, which was entered into by the Transvaal Government shortly before the Union. Thereby an arrangement was made by which the proportion of the traffic to Delagoa Bay was fixed at 55 per cent, leaving 45 per cent to the Cape ports and Durban.[3] The arrangement was enforced by a manipulation of railway rates, that is to say, any rise above the 55 per cent barrier or any fall below it was countered by the alteration of rates, the general effect being to divert traffic, other than heavy and rough goods, to the ports other than Lourenço Marques. Being constructed with the object of stopping traffic in excess of the proportion of 55 per cent, the railway rate for Delagoa Bay was maintained at an artificially high figure. On the other hand, while the rates from Delagoa Bay remained practically stationary after the war, and up to 1914, merchants were not sure from day to day what the rates were going to be from Durban, East London, or Port Elizabeth. Nor did the restriction encourage the Portuguese authorities to improve their port.

[1] Ibid., pp. 3–4. [2] Ibid., pp. 9–10.
[3] The arrangement was renewed in the new Convention of 1928.

Such was the problem which could only be solved by unification of all the South African railways.

Meanwhile railway economics in the rest of South Africa had developed on lines which were far from satisfactory. "With regard to the traffic within the Coast Colonies, the present position is honeycombed with the result of political interference. To favour certain districts, branch lines which can never pay have been built, and for the same reason rates are in force which are entirely unremunerative. The result is, in the endeavour to make both ends meet, the general level of all rates is raised, and legitimate and developmental traffic suffers. Last year the Cape lines had to face a deficit of a quarter of a million and in addition defaulted a like sum to the fixed contribution to the Depreciation Fund. The Natal Railways just about paid their way, but this was owing to good fortune . . . for, but for the enormously increased coal traffic the result would have been very different. There is no doubt that the present unsatisfactory position is chiefly the result of interference, both positive and indirect, with the working of the Railways for political reasons." [1]

The High Commissioner pointed the moral in the following terms :—

"A Government often uses the railways as a means of developing a particular district or industry. . . . Thus a State in following this policy often builds branch lines which offer no reasonable prospect of becoming paying propositions. For the same reason it often gives specially low rates on some lines in order to develop the district it serves—rates which under no circumstances could pay. Though this policy is undoubtedly attractive, all experience shows that, where it is pursued without regard to the ordinary principles of business management, it leads to disastrous results. It means that the loss on the specially treated lines has to be made good by keeping up the rates on the whole of the rest of the system. . . . The arguments adduced in favour of this policy are that the real return which a State ought to look for is not railway profit, but the encouragement of industrial and agricultural development and the increase of population of the district concerned. But if it is desirable to do this to a greater extent than

[1] "Report by the General Manager, Lagos Railway, on the British South African Railways, 1908" (*South Africa, Pamphlets*, vol. ii, No. 65), p. 10.

railway rates which are justifiable on business principles would do, it ought to be done openly, that is by a definite grant-in-aid from State funds to assist in the working of the line. . . . Such rates offend against the economic law that the products and not the means of industry should be taxed. . . . Special rates are highly desirable, but only when they are based on the strictest principles of business economy." [1]

At the time when the four Colonies became the Union of South Africa, the important railways were the Central South African, the Cape Government, the Natal Government, and the Rhodesian. For the Cape and the Natal Railways the respective Ministers dealing with railway matters were responsible. The Central South African Railways were controlled by a Committee of the Inter-Colonial Council of the Transvaal and the Orange River Colony.

By the provisions of the South Africa Act, 1909, and the Regulations made thereunder, all ports, harbours, and railways belonging to the several Colonies at the establishment of the Union vested, from the date thereof, in the Governor-General in Council and their control and management was directed to be exercised through a board of three commissioners appointed by the same authority, with the Minister for Railways and Harbours as chairman, and headquarters in Johannesburg. The actual management of the whole of the railways was to be in the hands of a general manager under the control of the board and he was to be the official channel of communication between the board and the public or staff. In him the entire control of the railways became centred.[2]

At the end of the year 1913, when the new state of things had got into working order, there were 8,784 route miles of railway in the Union,[3] most of it single line, often with but one train a day or three trains a week in each direction. Of this length, 8,232 miles were Government-owned under the provisions of the South Africa Act. This great State-owned system did not come into existence, as in Canada, as

[1] Papers relating to a Federation of the South African Colonies (the "Selborne Memorandum") (Cd. 3564), pp. 91–2.

[2] See Act No. 17 of 1916.

[3] The mileage was distributed among the four provinces as follows: Cape of Good Hope, 4,081 miles; Natal, 1,167 miles; Transvaal, 2,369 miles; and Orange Free State, 1,167 miles. Of the total, 8,180 miles consisted of Standard Gauge line (3 ft. 6 in.), and 604 miles of Narrow Gauge (2 ft. and 2 ft. 6 in.).

the result of force of circumstances compelling an unwilling Government to take over the fruits of private enterprise. The railways of South Africa had for the most part been constructed by the respective States and had provided striking instances of the particularism which had too often characterized provincial policy. The South Africa Act made further internecine railway rate wars impossible.

The Colonies had regarded their railways as revenue-producing organizations. An entirely different conception of the purpose of the railway system was laid down for the guidance of the Union Government in the South Africa Act. The railways, ports, and harbours of the Union were to be " administered on business principles, due regard being had to agricultural and industrial development within the Union and promotion, by means of cheap transport, of the settlement of an agricultural and industrial population in the inland portions of all provinces of the Union. So far as may be, the total earnings shall be not more than are sufficient to meet the necessary outlays for working, maintenance, betterment, depreciation, and the payment of interest due on capital ".[1] How the railway policy of the Union had worked out in practice to the end of 1913 was indicated by the general manager in his evidence before the Dominions Royal Commission.[2] " The earnings have not advanced in the same ratio as that of the expenditure. There are several notable reasons that account for this. First, a sacrifice in revenue by the reduction of rates has been made since Union, which at the time of the reduction was calculated to be equivalent to a sacrifice of £1,336,000 per annum. Secondly, through the development of maize, coal, and other traffic, which is carried at exceedingly low rates, the effect has been to disturb very materially the relationship of the earnings to the expenditure. A third factor is that of the increments, concessions, and privileges which have been granted to the staff since Union, figures for which are not available, but which may be stated to amount to approximately £900,000 per annum. Yet another factor is that in 1909 contributions in respect of depreciation were not made by the late Cape and Natal administrations."

Nor was the question of railway rates handled in a manner that was satisfactory to the merchants and industrial

[1] 9 Edw. 7, c. 9, s. 127.
[2] *D.R.C. Minutes of Evidence* (Cd. 7706), Q. 2261.

population, especially those of the "competitive area" as the Witwatersrand region between Pretoria, Klerksdorp, Vereeniging, and Springs was called by reason of the keen competition among the coastal railway administrations for the large traffic to that centre resulting from the discovery of the goldfields of the Rand. The complaint was that "notwithstanding that under the Act of Union the railways are no longer to be run on a revenue-producing basis, in actual fact the rates are so arranged that the consignees in the inland centres have to pay excessive rates in order to make up the losses on the working of the harbours and on the non-paying railway lines to the coast Provinces. . . . In 1911, after Union, the South African Railways earned a net profit of £2,460,118, after paying interest on capital; of this profit, £1,804,317 was earned on the Transvaal section of the railways, and it should be noted that the sections of the Cape, Free State, and Natal, which earned the greatest portion of the profit in those Provinces, were sections of the trunk lines to the competitive areas".[1] Agricultural produce was carried at almost nominal rates, in uncertain quantities, on branch lines with very little traffic. This state of things was pointed to as one of the main reasons accounting for the almost total absence of local industries, other than mining, in the interior. Thus high railway charges to the interior, although the difference in wage rates could not altogether be left out of account, were regarded as largely accounting for the fact that the steel construction industry was found in the coast regions.

There are certain characteristics of the country which are bound to affect the running costs of the railways unfavourably. The population is small in relation to area.[2] There are long distances between the chief industrial centres and the coast, and between the consuming areas and the areas which produce raw materials. To reach any of the principal objectives much undeveloped territory has to be traversed, much of which may be arid or semi-arid regions. Then the early stages of the journey from

[1] *D.R.C. Minutes of Evidence*, 1914 (Cd. 7706). Evidence on behalf of Johannesburg Chamber of Commerce, Q. 3189.

[2] According to the *Report of the Railway and Harbour Affairs Commission, 1934* (U.G. No. 36—1934), there were 13,781 miles of railway in a region (including S.W. Africa and Bechuanaland) of 1,069,310 sq. miles inhabited by some 9,000,000 people of whom about 2,000,000 were European, including 40 per cent who were not self-supporting. The native population travels but little, so that the railways in reality depend on about 60 per cent of the European population.

the ports to the interior are characterized by steep grades. From Capetown, Port Elizabeth, and East London grades of 1 in 40 are frequent. On the first 70 miles of the Natal Railway, there are a good many grades of 1 in 30. Bridges of any magnitude and tunnels were avoided by the early railway builders. But once the plateau is reached all the railways meet with good alignments.

On the other hand, the South African Railways, with the exception of those of the Cape Province, enjoy the advantage of cheap coal. In 1908 the average price paid by the Central South African Railways was under 6*s.* a ton of 2,000 lb. The Natal Railways paid 8*s.*, but for a better coal. The average price of the fuel for the Cape railways was much higher, the cost of transport from the producing Provinces to the Cape Province having to be taken into account, being, in 1908, 16*s.* 2*d.* a ton.[1] In 1930, the average price of coal at the pit's mouth was 5*s.* in the Transvaal, 5*s.* 10*d.* in Natal, and 13*s.* 9*d.* in the Cape.

Shipping

It has already been pointed out that to the Dutch East India Company the Cape of Good Hope was of value, primarily as a port of call and a place of refreshment for their ships trading with the East.[2] At the beginning of the nineteenth century Danes, Swedes, and Hamburghers carried on an extensive contraband trade, and also conveyed supplies to Mauritius and Batavia. The Americans also were beginning to trade with the East Indies, China, and Batavia. To these also the Cape was essential as a place of call for victualling.

The opening of the Suez Canal in 1869 was an event which was bound to be of serious concern to the South Africa ports which hitherto had been the great half-way stations on the trade routes between Europe, America, and the East. From time to time, however, circumstances have arisen to prevent the entire supersession of the Cape route by the Suez Canal. At first, the unsuitability of the ships of the existing lines for the passage through the Canal kept the Cape route in being. Then, when vessels had been built especially suitable for the often narrow

[1] Report by the General Manager, Lagos Railway, on the British South African Railways, 1908 (*South Africa, Pamphlets*, vol. ii, No. 65).

[2] See Chapter 1.

and shallow passage through the Canal, it was found that in many cases " the saving of 1,000 miles between London and Melbourne was more than outweighed by the burden of Canal dues ".[1] For this reason, " it was common knowledge even in 1931 that molasses tankers from Java and the Philippines and oil tankers from the Persian Gulf were reaching Europe via the Cape." [2] When, in 1914, the Panama Canal was opened to traffic, there came into existence a competitor with the Cape route much less handicapped than was the Suez Canal with the burden of dues. According to the Liverpool Steamship Owners' Association,[3] " the Suez Canal dues compare very unfavourably with those of the Panama Canal. The effect of this difference in tolls has been to divert a considerable amount of tonnage to the Panama Canal." Moreover, the distance from Liverpool to New Zealand via the Panama Canal is 1,000 miles less than by Suez, and to Sydney the distance is only 150 miles greater.

Among the disadvantages which discouraged shipping from using the Cape route were the primitive coaling arrangements, the want of deep water at Cape ports, and the high cost of coal for bunkering purposes.

As a result of the wave of optimism in South Africa following the Boer War, large sums were spent in providing the ports with wharfs, cranes, and other equipment to deal with the expected access of traffic. Ten years later much of this equipment was still idle. Durban, however, by dredging, had enabled steamers of all sizes to get alongside the wharf in the harbour, and in 1908 was developing a considerable coal traffic, and the Castle Line were becoming large consumers. The *Kildonan Castle* was the first steamer which did not coal at Madeira ; " she had enough Natal coal on board for the voyage to England." [4]

In the old days, steamers calling at South African ports had to obtain coal there which had been shipped from England. When plenty of Natal coal became available, so that its cost in South Africa was reduced by about 40

[1] Lieut.-Colonel Sir Arnold T. Wilson, *The Suez Canal*, p. 94.

[2] Ibid., p. 154. The D.R.C. reporting in 1914, stated that about 75 per cent of the total outward traffic from the United Kingdom to Australia and New Zealand, and 32 per cent of the homeward traffic went by way of the Cape (*Third Interim Report* (Cd. 7505), p. 45).

[3] *Report for 1930*, p. 14.

[4] Report of General Manager, Lagos Railway, on the British South African Railways, 1908 (*South Africa, Pamphlets*, vol. ii, No. 65, in D & C.O. Library).

per cent,[1] an effective inducement was offered to ships to use the Cape route to the East rather than the Suez Canal. . When South Africa began to develop an important export and import trade of its own, so that its ports became trade termini and no longer mere ports of call, a new set of problems emerged.

It was pointed out by the Dominions Royal Commission that in the pre-War period the Union of South Africa, in common with Australia and New Zealand, probably paid at least as much for ocean freights as in customs duties, and that if the return freight charges to the United Kingdom were added, the total charges for sea transport of merchandise to and from those Dominions were a far heavier charge on commerce than were customs duties.[2] Since the War, freights had increased much more than had tariffs.

South African merchants and the Cape Government have carried on a long and not particularly successful struggle to maintain competition among shipowners in the South Africa trade in order to keep down freight rates.

When, in 1876, the Union Steamship Company's contract for carrying the mails between England and the Cape expired, the only steamers in the South Africa trade were those of that company, supplemented by a couple of steamers belonging to Mr. Donald Currie of the Castle Company. Negotiations were commenced between the Cape Government and the Union and Castle companies for alternate weekly mail services, the sailings to be equally divided between the two companies, but Mr. Donald Currie refused on behalf of the Castle Company to accept a condition in the proposed contract which provided that " whereas the said services . . . have been divided between the Company and the Union Steamship Company . . . with the object of securing competition between the said Companies and such purpose and object will be frustrated if the Company amalgamates with the Union Steamship Company ", there was to be no amalgamation with any other company and no agreement with any other company to charge the same prices on freights as so to prevent competition between the companies, save with the consent of the Governor of the Cape. In the contract finally arranged,

[1] In 1890 all coal was imported, and cost 35*s.* to 40*s.* a ton. In 1914, South African coal was procurable at from 22*s.* to 26*s.* (*D.R.C. Minutes of Evidence* (Cd. 7706), Qs. 1521–22).

[2] Final Report (Cd. 8462), p. 127.

it was provided that there should be no amalgamation between the Union and Castle companies save with the approval of the Cape Government. A contract with the Union Company stipulating for the exclusive conveyance of emigrants was cancelled and the conveyance of emigrants was divided between the two companies equally. Later, mail contracts were settled in accordance with the principle of equality between the Union and Castle companies.

On the termination of the contract which expired in 1900, there was a particularly interesting trial of strength between the public and the shipping companies. The Cape Government put the new contract up to tender, it having been decided that it should go to one company only and that the system by which the mail service was divided between the two Companies should be ended. The upshot is best described in Mr. Donald Currie's own words [1]: "The object of course was to compel competition between the Union Company and the Castle Company. The Cape Government also desired and expected to receive offers from British steamship owners and capitalists. No satisfactory offers, however, were forthcoming; the Union and Castle Companies declined to compete against each other; and in the absence of proposals for the mail service, the Cape Government finally agreed to the terms offered jointly by the Union and Castle Companies and divided the mail contract, as formerly, between them."

Shortly after the 1900 to 1910 contract was signed an agreement was made between the Union and Castle companies whereby the Union Company was taken over by the Castle Company and the Union-Castle Mail Steamship Company was established under the management of the Donald Currie firm, and by this new company the mails were carried.

Although the two companies had enjoyed a monopoly of mail carrying subsequently to 1876, yet other companies engaged in the South Africa trade. The Clan Line was established in 1881 for the trade between Glasgow, Liverpool, and South Africa. The line contributed to the development of the coal export trade, inasmuch as having taken out cargoes to South Africa, their ships then loaded coal to Eastern ports making the return voyage via the Suez Canal. The Rennie and King Lines engaged in the direct trade

[1] See statement prepared by Mr. Donald Currie for the Royal Commission on Shipping Rings, dated February, 1908, from which many of the foregoing facts relative to the mail contracts are taken.

with Natal. The South African Line was started in 1881 under the leadership of Houlder Bros. and Co. Then, under encouragement from the Cape Government, who desired specially to obtain reduced terms for the conveyance of their emigrants who had been carried up to that time by the mail companies, a new line, the International Line, came into existence in opposition to the companies which had hitherto divided the Cape traffic between them. The conveyance of emigrants was put up to tender; the Union and Castle companies jointly tendered at "somewhere about £12 per head", but the International Line tendered at about £8 per head and got the emigration contracts. But difficulties in the fulfilment of the contract brought about its cancellation and new contracts for the emigration service were made with the Union and Castle companies.

The entry of the Bucknall Line into the trade in 1892 coincided with the formation, at the suggestion of Sir Donald Currie, of the South African Merchants Committee, for the purpose of conferring with the shipowners on questions of freight rates, goods classification, possible improvements, and other questions of mutual interest.

The foundations of the South African Shipping Conference were well and truly laid by the founders of the Union-Castle Line, and when the Dominions Royal Commission was sitting in 1914 they found that no vessels outside the Conference carried cargo to South Africa, neither from England, nor from America, nor from Germany.[1] The Houston Line remained outside the conference a number of years, but in the end was absorbed on the understanding that its existing contracts for freights at lower rates than those of the Conference lines should be observed until their due expiry. Sir Donald Currie told the Royal Commission on Shipping Rings in 1908 how "the State railways of Germany allow to the German East African Mail exclusively reduced railway carriage rates from inland towns upon German manufactured goods, provided they are shipped at Hamburg by the steamers of the German East African Line", with consequent injury to British steamers engaged in the trade between the continent and South Africa. The Dominions Royal Commission found that in 1914 the German boats were also in the combine.[2]

In the long controversy between the merchants and

[1] *D.R.C. Minutes of Evidence* (Cd. 7706), Qs. 1253, 1482—84.
[2] *D.R.C. Minutes of Evidence* (Cd. 7706), Qs. 1485-8.

the ship owners which reached its crisis in the first decade of the present century, South Africa was prominent. The shipping companies had formed themselves into shipping rings or conferences for the purpose of regulating or restricting competition in the carrying trades on definite trade routes. To meet the competition of shipowners outside the conference, the companies had recourse to the system of deferred rebates whereby shippers were credited with a percentage of their aggregate freight payments provided they had not within a certain period shipped goods by vessels other than those dispatched by the conference, which credited sum was, however, actually paid over only at the end of a further period during which they had continued to ship only by conference vessels.[1] In the case of the South African trade the deferred rebate was 5 per cent. The purpose of the system was to bind the shipper to the conference lines by making the receipt of the money representing a freight rebate contingent upon loyalty to the conference so far as shipments within the conference area were concerned, the area of the South African conference being the trade between the United Kingdom and the Continent on the one hand, and the ports of Cape Colony, Natal, and Delagoa Bay on the other. It was asserted by the shipowners that the system of conferences and deferred rebates ensured fixed and regular sailings, first class vessels, stable freights, and other advantages. The merchants' view was that the system placed the shipowners in the position of monopolists, thus enabling them to charge excessive freights to the injury of British commerce. The tramp steamer had been driven out of South African ports and there was no free market in freights. For instance, a South African farmer required a large quantity of iron standards for fencing purposes on his farm in the Karroo, and he wished to get them from a British manufacturer. He offered the order to commission agents at Port Elizabeth and intimated that, as he was in no hurry for the goods, they could be brought out by any convenient tramp steamer. The reply of the agents was, " If that is your condition we cannot take the order because we shall lose our rebates." [2]

The system was introduced into South African trade in 1886, and the measure of its success was the prominence of

[1] *Report of Royal Commission on Shipping Rings, 1909* (Cd. 4668), p. 9.
[2] *D.R.C. Minutes of Evidence* (Cd. 7706), Q. 1344.

those interested in South African trade in the general opposition to the system.

The special prominence of South Africa in the fight against the conference system was due primarily to the circumstance that South African trade was of such a character that the deferred rebates system could easily be imposed on shipments from South Africa homeward as well as on the outward trade from Great Britain. Generally it was not nearly so easy to apply the rebate system to homeward trade as to shipments abroad. A large proportion of the homeward cargoes from different parts of the world consist of grain, timber, and other foodstuffs and raw materials which are shipped in large bulk. For these the expensive services of the liner are not essential and tramp steamers successfully compete for such cargoes. The homeward trade of South Africa is, however, not of this character. Rather, as compared with the outward trade, it is small in bulk, consisting as it does of diamonds, gold, wool, ostrich feathers, mohair, fruit, and other cargo which occupy comparatively little cargo space and for which the tramp steamer is not appropriate and is, therefore, not a dangerous competitor with the liner. Accordingly circumstances enabled the conference to impose the rebate system on the homeward trade from South Africa a few months after its introduction in the outward trade.

Again, the shipowner fixes his rates on goods outwards, not merely with reference to the outward voyage, but with reference to the amount of cargo available on the round voyage. Lack of freight in the homeward trade may, therefore, result in higher freight rates for goods outwards. This factor is especially evident in South African trade, when the lack of cargo homewards was pointed to by shipowners as the reason for comparatively high outward rates. That circumstance, and not the unscrupulous use of monopolistic powers, was, they also alleged, the explanation of the disadvantage under which South African trade laboured, as compared with that of India or Australia, where homeward cargoes were plentiful. But "the small bulk of homeward cargoes as compared with outward induces certain lines to clear for ports in India and the Far East either in ballast or with coal instead of returning direct to Europe",[1] and to them the foregoing argument could only apply to a modified degree.

[1] *D.R.C. Third Interim Report* (Cd. 7505), p. 43.

South Africa got rid of the deferred rebate system in 1911, when it became necessary to consider the terms of the new Cape Mail contract then due.

The Statute [1] regulating the terms of the new contract prohibited any ocean mail contract with any company which gave, offered, or promised to any person any rebate, refund, discount, or reward on consideration that such person should ship goods by vessels of particular lines to the exclusion of others. The contract made with the Union-Castle Mail S.S. Company in September, 1912, providing for the payment of an annual subsidy of £171,000 for the conveyance of the mails between Southampton and Table Bay included a number of important novel stipulations which gave South Africa advantages not provided for in the contract for the conveyance of the Indian and Australian mails. Thus it was stipulated that cold storage accommodation should be provided on the mail steamers, and cheap rates were prescribed for the fruit, butter, and meat carried therein. Moreover, " in order to assist in the agricultural development of South Africa," the contractors agreed to convey between Great Britain and South Africa, free of freight, pedigree stock intended for breeding purposes. It was authoritatively declared in the following year that " the granting of free freight for pedigree stock by the Union-Castle Steamship Company, in accordance with the mail contract, is having a great deal to do with the present extensive import of animals ". [2] Similarly, " In order to assist the development of the South Africa coal export trade," the contractors undertook to purchase for export, in addition to the requirements for their own steamers, not less than 50,000 tons of coal per annum at any port or ports in the Union, provided it was supplied at " not less than 1*s.* 6*d.* per ton below the average prices of 1912 ". Emigrants from the United Kingdom handed to them by the Government were to be conveyed at a reduction of 20 per cent on ordinary fares.

The passage, as hitherto, was to be accomplished in 16 days 15 hours. The fact that there had been no effective acceleration of the voyage of the mail steamers to South Africa during the previous ten years gave rise to a good deal

[1] Post Office Administration and Shipping Combinations Discouragement Act, 1911 (Act. No. 10 of 1911).

[2] *Agricultural Journal of the Union of South Africa*, vol. vi, 1913.

of criticism, with which the Dominions Royal Commission expressed their sympathy.[1]

Instances of greater speed already accomplished were pointed out. Thus, even before 1898, the *Scot* had made the passage in one hour less than 14 days, and the *Dunottar Castle* in 14 days 23 hours.[2] "Before the Union Steamship Company and the Castle Steamship Company amalgamated, there was much more competition as regards speed than there is to-day, especially on the homeward voyage."[3] Nevertheless, there had been great improvements during living memory, for about 1875 it took a month to reach Natal, and the Union Company's Mail contract then running allowed a 37 days' voyage between England and Capetown.

The deferred rebate system had been abolished, but then a new dispute between shipowners and merchants arose. "Whilst this particular form of the grievance has been removed, it is alleged that the Union-Castle Company and other lines shipping to South Africa endeavour to maintain the monopoly of freight carrying, which the Act of 1911 was intended to prevent, by giving preferential treatment to shippers who sign an undertaking not to forward goods by outside lines."[4] For instance, goods sent by a shipper who had not signed the undertaking would be put on one side and only forwarded when all the goods of merchants signing the undertaking had been accommodated.[5]

The economic device of the shipping subsidy was put to new use by the South African Government in 1933 when it agreed to contribute to two Italian companies, the *Libera Triestina* and the *Italia* Navigation Companies, an annual subsidy of £150,000 for shipping services between South Africa and Marseilles and Genoa. The payment was to be a pure subsidy in that, unlike the subsidy paid to the Union-Castle Company, it was linked to no such definite service as the regular conveyance of mails. The ostensible purpose of the agreement was the expansion of South African trade in Mediterranean countries by the provision of regular shipping services, the export of fruit, wool, and meat from South Africa to those countries having hitherto been hampered by the want of direct shipping facilities. Under

[1] *D.R.C. Third Interim Report, 1914* (Cd. 7505), p. 44.
[2] Ibid., *Minutes of Evidence, 1914* (Cd. 7706), Q. 1237.
[3] Ibid.
[4] *D.R.C. Third Interim Report* (Cd. 7505), p. 44.
[5] *D.R.C. Minutes of Evidence, 1914* (Cd. 7706), Q. 1254.

this contract, which is to be for five years from March, 1934, two additional vessels entered the trade in that year and were operating a monthly service. Already the Italian companies were members of the shipping conference, so that freight cutting is not likely to become a factor in the new competition for South African trade.

CHAPTER 13

TRADE RELATIONS

1806–1855 : The Old Colonial System as applied at the Cape.
1855–1886 : Period of Cape dominance.
1886–1910 : Transvaal dominance.
Post-Union Protection.

DURING the half-century following the capture of the Cape in 1806 its fiscal policy was controlled from England by Orders-in-Council according to the principles of the Old Colonial System.[1] Tariffs were framed in England for enforcement in the Cape so as to benefit English trade and shipping.[2] In return a large preference was given on Cape wines entering England. On the whole it was a low tariff period, since England wished to encourage its trade and manufactures, and any deficits in the Cape accounts due to bad harvests, slumps in prices, or Kaffir wars could be made up by Imperial subsidies. Traces of incipient protectionism affecting agriculture and primary industries can, however, be detected. This period of dominance by the Imperial Government came to an end in the fifties with the collapse of the Old Colonial System, and thereafter the Cape and South Africa generally were left to direct their own fiscal policy. The Cape had a less stormy tariff history than either Canada, the Australian colonies, or New Zealand, since matters in dispute with the Imperial Government were settled elsewhere before they got to the Cape.

The generation extending from the fifties to the eighties witnessed the dominance of South Africa by the Cape in matters of trade and tariffs. South Africa then contained four political units, the two colonies of the Cape and Natal, and the two republics, in contrast with the quasi-unity that formerly prevailed under the Imperial Government. The Cape had the bulk of the wealth and population. Again,

[1] See *Economic Development of the Overseas Empire*, vol. ii, pp. 53–9.
[2] The Cape was not altogether passive, and pressure could be brought to bear from the Cape to secure alterations. Cf. G. M. Theal, *History of South Africa since 1795*, vol. ii, p. 205.

though it was further from the inland States than Natal, it possessed three out of the four important seaports in South Africa, natural communications linked the Cape and the inland States, and after 1870 the Cape was ahead of Natal in the matter of railway communication with the interior. Accordingly, most of the trade with the inland States flowed through the Cape, and the Cape was able, because of its strategic position, both to tax their imports and to resist retaliatory measures. This state of things was all the more a grievance, since the period was one of rising tariffs in the Cape—from 7½ per cent in 1855 to 10 per cent in 1866–7 and to 15 per cent in 1884. Chiefly these increases were due to bad times and the need for more revenue, but gradually and especially in 1884 the claims of home industries to protection came to be recognized.

The spell of Cape dominance was brought to a rather abrupt end by the discovery and development of the gold-fields of the Witwatersrand. Thereafter, from the middle eighties until the formation of the Union of South Africa in 1910, the Transvaal became increasingly dominant in the trade of South Africa. The coastal colonies, instead of the inland States, became the suppliants, and the roles of Dives and Lazarus were reversed. The Transvaal trade became the lodestar, and both the Cape and Natal cut their tariffs and railway rates in order to secure as large a share of it as possible. All the time the Transvaal held the trump card of Delagoa Bay, and this fact ultimately compelled the high tariff Cape and low tariff Natal to draw together in the Customs Convention of 1898, since they felt that a united front against the Transvaal was better than a triangular fight. The post-war annexation of the inland States paved the way to the all-in Customs Unions of 1903, 1906, and 1908. Nevertheless, the Transvaal still dominated the situation, and when it received responsible government in 1907 it showed its power. In 1909 it renewed the *modus vivendi* of 1901 in the form of a Convention with the Government of the Portuguese Province of Mozambique, under which provision was made for the reciprocal interchange of " the products of the soil or of the industry " of the respective territories free of all import, export, or transit duties. If was a step much disliked by the other three colonies, but they had no choice but to make the best of it. Further, realizing the unsatisfactory nature of the Customs Union, it brought it to an end and secured the complete

political unification of the four colonies in 1910, mostly on its own terms. The period was marked at first by reductions of tariffs from 15 to 12 per cent, then to 9 and to 7½ per cent, but latterly as a result of war costs and growing protectionism the tariff was raised once more to 10 per cent and then to 15 per cent. In 1903 Imperial Preferences were restored after an interval of a half-century.

Since the Union there has been the usual struggle between the low tariff commercial and mining interests and the high tariff industrial and agricultural interests, as well as an unusual kind of struggle over differential railway rates between coastal and inland manufacturers. Although the tariff was raised to 20 per cent in 1915, it was really a war measure to obtain increased revenue, and on the whole the low tariff interests were victorious. In 1924 the National and Labour Parties were successful, and since then there has been the development of a "National Policy" as in Canada after 1878.[1] A permanent tariff board, called the Board of Trade, was set up to examine the claims of necessitous industries and to recommend protective tariffs.

The Dutch East India Company had exercised a strict monopoly until it lost the Cape in 1795, forbidding the colonists to dabble in external trade and hampering even internal commercial intercourse.[2] The British and Batavian governments in the next eleven years somewhat relaxed the trade regulations. Then came the second and final British occupation in 1806. With enhanced freedom of trade, with increased demands for foodstuffs by the large English garrison and with currency inflation in 1810 and 1812 commerce at the Cape increased rapidly.[3] A systematic customs service was established, and the prevailing Old Colonial System was applied to the Cape, with allowances for the peculiar situation of the colony on the road to India and Australia, but otherwise out of the world.[4] The Old Colonial System was applied to the Cape in three aspects. English trade and shipping were favoured by lighter duties

[1] See *Economic Development of the Overseas Empire*, vol. ii, pp. 378–380.

[2] Report of the Commissioners of Inquiry, II, Upon the Finances of the Cape of Good Hope, in *Parliamentary Papers*, 1827, xxi, p. 255.

[3] Ibid., pp. 255–6.

[4] Between 1806 and 1824 only 134 vessels on the average per annum called at the Cape, mostly East Indiamen (Annexure to Report of Collector of Customs for 1899 (G. 26—1900), p. 8, in Appendix I to *Votes and Proceedings of the Cape Parliament*, vol. 4, 1900 (C.O. 51/336)).

and dues at the Cape. Trade between the Cape on the one hand and India and foreign countries and possessions on the other was regulated and sometimes prohibited. The Cape wine trade was favoured by lighter duties in England.

English goods and English ships were favoured at the expense of foreign goods and foreign ships in the Cape trade. This was the great bulwark of the Old Colonial System and persisted until the overthrow of that system in the forties and fifties. At first the situation was complicated by the fact that England was engaged in the death-grapple with Napoleon, and duties and regulations were altered in accordance with military and diplomatic need. In 1806 English goods entering in English ships paid 3 per cent; English goods entering in foreign ships and foreign goods entering in English ships paid 7 per cent; while foreign goods in foreign ships paid 10 per cent. In the following year the discrimination was widened, since English goods in English ships were allowed to enter free; on English goods in foreign ships and foreign goods in English ships the duty was reduced to 5 per cent; while on foreign goods in foreign ships the rate was raised to 15 per cent. In 1809 the discrimination was further altered, English goods in foreign ships and foreign goods in English ships having to pay 10 per cent, while the other duties remained as before. Finally, in 1811, an Order-in-Council forbade, as a war measure, foreign ships to trade to the Cape at all. In those days the bulk of the Cape trade consisted of English goods in English ships on which no duty was charged, and the result was that there was but a small revenue from Customs. In 1813, to increase the revenue a duty of 3 per cent was levied on English goods, and in that year the yield doubled and in 1814 it trebled. Between 1813 and 1842 the duty on English goods remained almost stationary: it was 3 per cent till 1821, 3¼ per cent till 1832, and 3 per cent again till 1842. In 1842 the duty on English goods was increased to 5 per cent, where it remained until 1855, when it was equalized with the duty on foreign goods at 7½ per cent. Prior to 1855 the duty on foreign goods had ranged between 10 per cent and 15 per cent, so that a very substantial preference had been the portion of English goods for a half-century. The excellence of English manufactures and the preference did their work. The Commission of Inquiry in 1827 recommended a reduction of foreign

duties " without prejudice to British manufactures, the taste for which is now generally established ".[1]

The East India trade was in 1806 the monopoly of the East India Company. Nevertheless in that year it was thrown open to Cape traders using English ships by Governor Baird's proclamation. In 1809, however, the importation of goods from the East was confined to East India Company ships. This rigid system was partly modified in 1811 when trade was permitted between the Cape on the one hand and Ceylon and New South Wales on the other in three vessels of 300 tons each annually. In 1814, after the renewal of the East India Company's Charter in 1813 and the abolition of its absolute monopoly of trade, the Cape amongst other places was permitted to trade with places under the sway of the East India Company in vessels exceeding 350 tons.[2] This was virtually free trade. So far as foreign countries were concerned, war-time restrictions were relaxed with the coming of peace in 1815. By an Order-in-Council of 1820 the products of countries in amity with Britain (excepting articles of cotton, wool, iron, and steel) could be imported into the Cape in English vessels, or vessels of the country of origin. By another Order-in-Council of 1826 this privilege was confined to countries that gave reciprocal privileges to Britain.[3] It was only on the repeal of the Navigation Laws in 1849 that the final restrictions on Cape and Colonial trade generally were removed, and foreign ships allowed to participate in inter-colonial trade. At the same time the Navigation Laws had been in harmony with the natural flow of trade, and their repeal was accomplished with a minimum of disturbance.

So far customs duties have been considered as part of the Imperial machinery, in so far as they were used to favour English goods and shipping and to penalize foreign goods and foreign shipping. Now customs duties must be considered as part of the machinery of the Cape government, in so far as they were used to raise revenue for the colony and to protect or encourage local agriculture or industry.

[1] Report of the Commissioners of Inquiry, II, Upon the Finances of the Cape of Good Hope, in *Parliamentary Papers*, 1827, xxi, p. 258. The varying rates of duties are conveniently summarized in S. Evans, " Preference and Protection in British South Africa," in *Burden of Protection* (International Free Trade League), pp. 83–4.

[2] Report of the Commissioners of Inquiry upon the Trade of the Cape of Good Hope, in *Parliamentary Papers*, 1829, v, pp. 251–2.

[3] Ibid., p. 252.

Thus customs duties had to serve two masters, Imperial requirements and Cape needs, and, of the two, Imperial requirements had the first place throughout the period. Thus the duty on English goods, the chief imports, was kept low, so as not to discourage colonial consumption and English trade, but that policy at the same time kept revenue low. So complete was the Imperial predominance that in 1834 control of the Cape customs was transferred from Capetown to London and " with a view to placing the establishment on a proper and efficient footing, experienced officers, who had served for some years in the English customs, were selected and sent out to fill the principal offices at the various ports in the Colony ". This control was only relinquished in 1853, the year following the grant of representative government to the Cape.[1]

The Customs yield remained more or less stationary between 1815–1820 and 1831–1840, but in the forties it almost trebled and in the fifties it more than doubled again. Customs per cent of imports fell from 7·8 in 1815–1820 to 3·7 in 1831–1840, but rose once more to 7·4 in 1841–1850 and to 9·4 in 1851–1860. Customs per cent of total revenue altered between 1815–1820 and 1831–1840, but rose from 21·3 in the thirties to 43·2 in the forties and to 54·4 in the fifties.[2] These figures reveal the growing importance of customs in the Cape revenue, absolutely as the result of the growth of trade and of the increase of rates on the chief imports (the English imports), and relatively on account of the shrinkage of other sources. Finally in 1840 " rated " or specific duties were introduced for the first time on such articles as gunpowder, pepper, rice, sugar, spirits, tea, tobacco, wood, and wine.[3] Hitherto all duties had been *ad valorem*, which yield less in a time of falling prices such as the thirties and forties of the last century. " Rated " duties became popular later amongst producers desiring protection, since they prevented foreign rivals cutting the customs rates by cutting their prices.

Some elements of the restrictive rule of the Dutch East India Company survived into the British era after 1806.

[1] Annexure to Report of Collector of Customs for 1899 (G. 26—1900), p. 9, in Appendix I to *Votes and Proceedings of the Cape Parliament*, vol. 4, 1900 (C.O. 51/336).

[2] A. Plant, " Customs Tariff as a Means to Revenue and Protection," in *Journal of Economic Society of South Africa*, vol. i, No. 1, p. 34.

[3] Annexure to Report of the Collector of Customs for 1899 (G. 26—1900), p. 9, in Appendix I to *Votes and Proceedings of the Cape Parliament*, vol. 4, 1900 (C.O. 51/336).

The root idea of their system of trade control was to maintain " fair prices " as between producers and consumers. Wheat could only be imported or exported under licence of the Governor " upon the information received at different times of the deficiency or abundance of the annual produce of the Colony ", and this system was not done away with until 1828.[1] Still it was scarcely protection in the ordinary sense of the term, in which the protection of producers is the leading idea. Here the consumers were theoretically as much in view as the producers.

As a matter of fact protection of local trades was a plant of slow growth in South Africa. Society was so largely agricultural and self-sufficing that few trades did or could develop locally. Nevertheless, even in this period of Imperial tutelage, signs are not wanting that certain producers hankered after protection of some sort. By the Order-in-Council of 10th August, 1840, imposing " rated " duties, foreign flour had to pay a duty of 3*s.* per barrel of 196 lb., foreign wines paid the duties of 2*s.* per gallon in bottle and of 1*s.* 6*d.* per gallon in wood. These duties would serve as moderate protection to the farming, milling, and wine interests, quite apart from the natural protection afforded by high freight rates on account of the Cape's remoteness, which the Commissioners of Inquiry estimated as being equal in the case of wheat to £9 per load, or 45*s.* per quarter.[2] The wine interests were further looked after in 1841 by the inclusion in the free list of commodities used by them such as glass bottles, cask staves, hoops, and cooper's rivets. Again, in 1848 the duty on foreign spirits was increased from 1*s.* to 2*s.* per gallon, and the further curious provision was made that for every 10 gallons of Cape wine exported one gallon of foreign spirits might come in duty free. Presumably the aim of the latter provision was to free a raw material from duty, since French spirits were used to give body to Cape wines and to enable them to stand the journey overseas.[3] In 1855 this provision was abolished, but the duties on foreign wines and spirits were increased.[4] There is no real ground for the belief that before 1846 the colonists were

[1] Report of the Commissioners of Inquiry upon the Trade of the Cape of Good Hope, in *Parliamentary Papers*, 1829, v, pp. 253, 269.

[2] Ibid., p. 270.

[3] Ibid., p. 266.

[4] Annexure to the Report of the Collector of Customs for 1899 (G. 26—1900), p. 9, in Appendix I to *Votes and Proceedings of the Cape Parliament*, vol. 4, 1900 (C.O. 51/336).

drilled under and became accustomed to the policy of producing raw materials for the colonizing nation, England. Industries developed slowly in South Africa, not because of any policy of retardation on the part of the Imperial Government, but because natural conditions were against them.

As a result of the free trade and anti-imperialist movement of the forties and fifties, and following Canada's assertion, in 1859, of its right to protect its own industries, South Africa was left virtually free to fix its own tariffs and determine its own trade policy. Thus in 1866–7 the Cape increased its tariff, and though the Governor, Sir Philip Wodehouse, fumed, the Imperial Government did not interfere. Not only so, but the same anti-imperialist reaction led to what has been called the " dismemberment of South Africa ". Hitherto the Imperial Government had claimed authority over all settlers in South Africa. Now, in the years 1852–6, under pressure of " peace, retrenchment, and reform ", it virtually cut South Africa into four political units and disowned authority over two of them. In 1852, by the Sand River Convention, the independence of the Boers beyond the Vaal was recognized, and in 1858 their several communities united to form the Transvaal or the South African Republic. In 1854, by the Bloemfontein Convention, the Boers between the Orange and the Vaal rivers were granted their independence, and the Orange River Sovereignty became the Orange Free State. Finally Natal, which had been annexed by the Imperial Government in 1843 and linked to the Cape in 1845 by receiving a Lieutenant-Governor who was subordinate to the Governor at the Cape, was made a distinct colony in 1856 by receiving a Governor of its own. Meanwhile in 1853 the Cape had been granted representative government, with a large measure of control over its affairs.

Throughout the generation following this so-called " dismemberment of South Africa " the Cape was the dominating figure in the sub-continent. Even as late as 1890–1 its white population was one and a half times greater than the combined white populations of the three other sections of South Africa. Moreover, it was the chief gateway of the whole country, and though Durban was threatening this supremacy and at Delagoa Bay a cloud on the horizon was looming up, the Cape dominated the trade and the trade policy of South Africa because it commanded the

sea approaches to the Orange Free State and to a lesser degree to the Transvaal. Finally the Cape was the oldest settled part of the country, and it was both the wealthiest and the most economically developed unit of the four. Its dominance is easily understood.

In the Bloemfontein Convention of 1854 the Imperial Government had promised to recommend to the Cape that a share of the customs collected by the Cape on goods in transit for the Orange Free State should be handed over to the inland State.[1] Presumably the recommendation was made: certainly it was never acted on. Time and again the Orange Free State made pilgrimages to the Cape, and the Cape recognized the claim in principle, but nothing was done. The Orange Free State did not lack for a precedent. When the provisional government was set up in Natal after its annexation in 1843, it at first collected customs duties upon goods coming from the Cape. In August, 1845, Natal was annexed to the Cape, and customs duties ceased to be levied on articles coming from the Cape. This meant such a serious diminution of the customs yield that Natal applied to the Cape for a share of the customs collected there and this was conceded. This system continued until September, 1846, when Natal was partially separated from the Cape and again collected customs on goods coming therefrom.[2] Granted that the Orange Free State was not a colony like Natal, yet this had not prevented the Bloemfontein Convention recommendation. The financial situation of the inland State was serious. It was a primitive country, where direct taxation was difficult and yielded little, and yet indirect taxation was practically impossible. Customs are easily collected at one or two seaports, but to have levied customs along hundreds of miles of land frontier would have cost more than the yield. The one solution was an arrangement along the lines of the Bloemfontein Convention recommendation.

In 1870 the diamond diggings were opened up right on the borders of the Cape and the Orange Free State, and at once the ownership of the territory was in dispute. If the

[1] Cited by President Brand to the Earl of Carnarvon, 18th July, 1876, in Further Correspondence relating to the Affairs of South Africa (C.—1631, p. 47, in *Parliamentary Papers*, 1876, lii).

[2] Correspondence relative to the Establishment of the Settlement of Natal, in *Parliamentary Papers*, 1847–8, xlii, pp. 273, 323, 326. Further Correspondence relative to the Settlement of Natal, in *Parliamentary Papers*, 1851, xxxvii, p. 310.

Orange Free State had been able to substantiate its claim to the diggings, its financial worries would have been largely solved, since it could easily have levied such taxes on a compact and wealthy community as would have enabled it to pay its way. As it was, it had to get what consolation it could out of the sum of £90,000 paid by Great Britain in 1876 in consideration of the relinquishment by the Orange Free State of all claims to that strip of border territory. The inland State then returned to its old claim, and President Brand asked Lord Carnarvon to use his influence with the Cape for the fulfilment of the Bloemfontein Convention recommendation. Lord Carnarvon in reply seized the occasion to point the moral of confederation, alleging that " there is no guarantee . . . that the Republics might not after receiving the customs duties legislate on fiscal matters, and on other matters of common importance, in a manner possibly inconsistent with the general interest ", and exhorting the President " to make some advance in the direction of qualifying the Orange Free State to receive those fiscal advantages, which, as I have shown, can only be enjoyed by the members of a Confederation ".[1] The Orange Free State refused to consider this plea, and the deadlock continued. The Cape had before the middle of the eighties nothing to gain by considering the inland State and therefore continued in its refusal to hand over a fraction of the customs to its neighbour.

The Transvaal was remote from the Cape and was esteemed of but little importance before the gold discoveries of the eighties. By the Sand River Convention of 1852 the Imperial Government had promised to encourage free trade between the Transvaal and the British Colonies.[2] This was certainly conceded, but it was not free trade that the Transvaal wanted, it was revenue, a share of the customs. This the Cape and also Natal refused to concede. Later, indeed, the coastal colonies instituted a system of rebates which reduced the customs to transit dues in order to meet the rivalry of Delagoa Bay, but while this tended to lower prices to the Transvaal consumers it did not help Transvaal finances. However, the Transvaal was not encircled in the same way as the Orange Free State : it had the backdoor of Delagoa Bay and it set itself to develop

[1] Further Correspondence on the Affairs of South Africa (C.—1631), pp. 46, 78, in *Parliamentary Papers*, 1876, lii.

[2] Further Correspondence relative to the state of the Orange River Territory, p. 36, in *Parliamentary Papers*, 1852–3, lxvi.

this route and exit. Treaties were negotiated in 1869 for six years, and in 1875 for twenty years with Portugal on behalf of its colony, free trade was arranged between the two countries with certain exceptions, efforts were made to construct a railway between the Bay and the inland country, and goods entering by Delagoa Bay for the Transvaal were to pay a transit due of 3 per cent.[1] As to the Transvaal corridor to the sea, funds were lacking and the railway made snail-like progress. Unlike the Orange Free State, the Transvaal did have a customs system of sorts, the duties being levied mostly at the "drifts" as the goods entered the country. In 1871 a duty of 1½ per cent was exacted on furniture, musical instruments, and jewellery. In 1876 the duty was increased for revenue purposes. In 1881, on its achievement of independence again after annexation, the general rate was fixed at 5 per cent, with specific duties on a number of articles—luxuries and mining machinery being taxed most heavily.[2] The yield before the development of the goldfields at Witwatersrand was small, and amounted in 1876 to a paltry £6,000 per annum.[3] So pressed was the Transvaal financially that it twice begged the Cape for a Customs Union; the chance was lost and with the gold discoveries the Transvaal attained financial solvency.[4]

Meanwhile Natal was building up its industries and its trade with the interior from very small beginnings in the forties.[5] When Sir John Robinson landed at Durban as a small boy about 1850, the collector of Customs acted also as magistrate.[6] In the "overberg" trade Natal had this advantage over the Cape, that it was nearer to the Orange Free State and very much nearer to the Transvaal. Again, Natal was a younger and less developed colony than the Cape and did not possess the infant industries that were later to cause embarrassment to the Cape's transit trade

[1] Text of 1869 Treaty in *British and Foreign State Papers, 1872–3*, vol. lxiii, pp. 600–7; and that of 1875 Treaty in *Hertslet's Treaties*, vol. xv, pp. 301–9.

[2] "Locale Wetten der Zuid-Afrikaanse Republik, 1849–1885," pp. 634, 660, 1023, 1225, 1377, cited by J. A. Bruwer, *Protection in South Africa*, pp. 76–7.

[3] S. Evans, "Preference and Protection in British South Africa," in *Burden of Protection*, p. 85.

[4] E. A. Walker, *History of South Africa*, p. 413.

[5] In 1849, Natal customs amounted to £5,681, its total revenue to £12,832, and its expenditure to £14,941. (Further Correspondence relative to the Settlement of Natal, in *Parliamentary Papers*, 1851, xxxvii, p. 310.)

[6] Sir J. Robinson, *A Lifetime in South Africa*, p. 17.

by demanding high tariffs and diverting traffic to Natal. On the proclamation of the diamond diggings in 1870 on the Cape–Orange Free State borders, both Cape and Natal traders competed for the market. This marks the beginning of the rivalry between the two coastal colonies which lasted a generation and only came to an end when Natal joined the Cape–Orange Free State Customs Union in 1898, and with the all-in Union of 1903. After some preliminary success Natal was driven out of the market of the diamond diggings, that territory having as a result of the Keate Award been declared part of Cape Colony and a railway having been built linking Capetown and Kimberley.[1] Thereafter Natal built railways and attempted to fight the Cape for the inland trade and traffic with the twin weapons of differential railway rates and low customs duties. This struggle came to a head in the eighties and nineties when the Transvaal became the hub of South Africa and its trade and traffic glittering prizes to be contended for by the coastal colonies.

The era of Cape predominance marks a further development in the rather embryonic protection of the earlier period. Formerly protection had been mainly enjoyed by the farmers. Now it was extended to the manufacturers. The general rate had been fixed at 7½ per cent by the Imperial Government in 1855. In the sixties the Cape passed through a very black time. " Droughts all over the country, blights in the corn crops, *oidium* in the vineyards, and sheep diseases of all sorts . . . the country's main staple, wool, depreciated in value, and as a logical outcome of the Cobden policy colonial wines were virtually excluded from the British market." [2] Naturally the yield of the customs fell off, and accordingly in 1866–7, to increase its revenue, the Cape government raised the general rate to 10 per cent, and adjustments were made in the " rated " duties. While the farmers were in some degree protected by a duty of 8*d.* per 100 lb. on wheat, they were further helped by agricultural machinery being placed on the free list. But the chief effects were on industry. Milling was further protected by the duty on foreign flour being raised from 1*s.* 6*d.* per 100 lb. to 2*s.* 6*d.* per 100 lb.[3] At the same time the trades of

[1] Ibid., p. 236.
[2] J. H. Hofmeyr, *Life of J. H. Hofmeyr*, p. 99.
[3] Annexure to the Report of the Collector of Customs for 1899 (G. 26—1900), p. 11, in Appendix I to the *Votes and Proceedings of the Cape Parliament*, vol. 4, 1900 (C.O. 51/336).

wagon and coach building, furniture making, boot and shoe manufacture, harness making, soap boiling, fruit conserving, jam making, brewing, distilling, wine and vinegar making, all seem to have received an impetus from this virtually protective tariff, apart from the natural protection they enjoyed on account of their remoteness from the seats of manufacture in Europe or America. During the seventies most of those industries shared in the boom in trade connected with the development of the diamond diggings. In the early eighties came the slump in trade, and those infant industries clamoured for protection against foreign competition. In response the government appointed a Select Committee on Colonial Agriculture and Industries in 1883 to investigate the depressed state of agriculture and industry and make recommendations. Prominent members of the Committee were J. H. Hofmeyr, of the Afrikander Bond, a moderate protectionist, and J. X. Merriman, a free trader. The Committee in its Report took its cue from Hofmeyr. It asserted that consumers frequently preferred imported articles " although both dearer and of worse quality than the colonial article, simply on account of a long established prejudice ".[1] It grumbled, and the grumble has been repeated in almost every tariff committee report since, that it could not find " any trace of an attempt to so regulate our import duties, by placing the lightest possible taxes on certain raw materials required by the colonial manufacturers, as to promote the development of our industries ". It failed to realize that protection in an undeveloped country applies first to raw materials and that such protection becomes an obstacle when primary and secondary industries develop : the wheat farmer is protected and later the miller and the biscuit manufacturer are hampered. Finally it recommended a duty of 20 per cent on wagons, furniture, doors, windows, and other woodwork, 15 per cent on boots, shoes, harness, and leather, increased " rated " duties on beers, wines, spirits and corn imported, a drawback on sugar used in jam and confectionery making, and bounties to encourage the manufacture of glassware and the growth of sugar, coffee,

[1] Report of the Select Committee on Colonial Agriculture and Industries, 1883 (A. 3—1883), p. iv, in Appendix II to *Votes and Proceedings of the Cape Parliament*, 1883 (C.O. 51/241). J. X. Merriman in a Minority Memorandum noted dryly that the prejudice against colonial boots was not unconnected with " their smell and their creakiness ". Ibid., p. ix.

and cotton.[1] J. X. Merriman opposed the policy of protection and industrial development, arguing that "our true policy should be to stimulate agricultural and pastoral production, both for the supply of the population and for exchange with the manufactured products of other countries" and stating that, if protection must be the policy, freight charges and existing duties were already adequate.[2] Undoubtedly opinion in the colony was fairly evenly divided, with the median running through moderate protection. Rhodes himself spoke strongly against "bastard industries" based on imported raw materials, but favoured protection for agricultural and primary industries. The Government responded with the tariff of 1884 in which the general rate was raised from 10 per cent to 15 per cent, while the "rated" duties on wines, spirits, corn, and flour were increased, and new "rated" duties were placed on boots and shoes, and on matches, amounting in the case of the latter to a protective duty of almost 250 per cent.[3] The tariff was claimed to be revenual, but it was also protective, as the report and evidence of the 1883 Committee make clear. In fact 1884 marks the birth-year of South African protection and corresponds to 1859 in Canadian fiscal history and to 1867 in that of Victoria.

The discovery and development of the goldfields of the Transvaal intensified the rivalry between Natal and the Cape for the market of the interior in the eighties. Natal was then pursuing its low tariff policy to attract trade, while the Cape was building up high tariffs to secure revenue and protect its industries. In 1884, the year of the enactment of its high tariff, the Cape attempted to neutralize Natal's low tariff advantage by granting a rebate on goods going to the inland States equal to the difference between the Cape and Natal tariffs. In addition the Cape determined to build a railway right to the Transvaal goldfields and thus neutralize

[1] Ibid., pp. iv–vi. One witness favoured protection "upon every article that we can produce ourselves", but drew the line at soap for fear of discouraging cleanliness. (Hon. T. T. Heatlie, Qs. 268, 270, ibid.)

[2] The wine duty was four times the wine excise, and in the case of glass freight plus tariff meant a protection of 100 per cent. *Minority Memorandum*, pp. ix, x.

[3] Annexure to the Report of the Collector of Customs for 1899 (G. 26—1900), p. 12, in Appendix I to the *Votes and Proceedings of the Cape Parliament*, vol. 4, 1900 (C.O. 51/336). Cf. evidence of G. Sichell, in "Report of the Select Committee on Colonial Industries, 1891" (C. 1—1891), Qs. 814–15 in Appendix II to *Votes and Proceedings of the Cape Parliament, 1891* (C.O. 51/278).

Natal's second advantage of greater nearness to the market. The Orange Free State lay between, and for the first time the inland State had something with which to bargain in its dealings with the Cape. In return for permission to build a railway through its territory to the Transvaal boundary, the Orange Free State stipulated that it should receive a share of the customs levied by the Cape. The position was accepted by the Cape in conference and was embodied in the first Customs Union of South Africa, which came into force in 1889. Under this Customs Union the two consenting parties, the Cape and the Orange Free State, accepted the principle of free trade between the different colonies and states of South Africa, and the Cape promised to hand over 75 per cent of the duties collected on goods going to the Free State, retaining 25 per cent as costs of collection and of harbour maintenance, these proportions being altered to 85 per cent and 15 per cent in 1896.[1] Natal representatives attended and signed the provisional agreement, but their action was disowned by the Natal people, and the Natal legislature did not even deign to discuss it. The Cape wanted a high tariff and offered 16 per cent. Natal wanted a low tariff and offered 9 per cent. The Free State wanted as much revenue as it could get and threw its weight on the Cape scale, demanding at least 10 per cent. Finally the rate was compromised at 12 per cent. Another thing that exasperated public opinion in Natal was that the Cape refused to concede free trade to its sugar and spirits and insisted on charging duties on both those commodities.[2] The result was that Natal pursued its separate and rival career for another decade. The Transvaal, now growing self-sufficient, had refused to attend the conference and occupied itself afterwards in attempting, though unsuccessfully, to disrupt the Customs Union by giving free entry to Free State products and attracting its sister republic within its orbit. After 1889 the rivalry between the Cape and Natal continued. The Customs Union established customs houses along the Natal border, and Natal lost practically all its trade to the

[1] Annexure to the Report of the Collector of Customs for 1899 (G. 26—1900), pp. 13, 15, in Appendix I to the *Votes and Proceedings of the Cape Parliament*, vol. 4, 1900 (C.O. 51/336).

[2] *Correspondence respecting the Conference of Delegates on the Question of Customs Union and Railway Extension* (C.—5390), pp. 3–4, 13, 20, 36–8, in *Parliamentary Papers*, 1888, lxxiv. Sir J. Robinson, *A Life Time in South Africa*, pp. 243–5.

Free State. Also the Cape completed its railway through the Free State to the goldfields before Natal established its line thither, and, with the prior completion of the Delagoa Bay railway also, Natal imports were halved in the course of three years.[1] Under pressure of competition from Delagoa Bay, which charged only 3 per cent on goods for the Transvaal, the coastal colonies were compelled to reduce the transit dues on goods bound for the Transvaal from 5 per cent to 3 per cent. Both railway rates and customs duties were reduced to the full extent possible, but at last, in 1898, Natal had to give up the unequal contest and join the Customs Union, making common cause with the Cape as against the Transvaal. Several developments combined to render agreement easier than before. The tariff of the Customs Union had been lowered from 12 per cent to 9 per cent, then to $7\frac{1}{2}$ per cent. Apart from that, the Country Party, which had been returned to power in Natal, favoured protection of local industry and a higher tariff. Natal sugar and tea were entitled to free entry within the Union and the duty on foreign tea was increased. Incidentally, between 1889 and 1898 the area of the Customs Union was widened by the inclusion of British Bechuanaland and Basutoland in 1891, Bechuanaland Protectorate in 1893 and Pondoland in 1894, while in 1899 the Cape and Southern Rhodesia entered into a customs agreement, whereby the Cape agreed to hand over 85 per cent of the duties collected on goods bound for Southern Rhodesia.[2] Only the Transvaal stood sullenly aloof. In the autumn of 1899 the war broke out which was to change everything.

The Transvaal fiscal and economic policy during the eighties and the nineties was comparatively simple. It aimed at securing as much of the goldfields market as possible for its farmers and to that end imposed, in 1894, very stiff duties on flour, beef, mutton, and other foodstuffs coming into the country. In addition it determined to build up within its own boundaries industries of national importance and, in particular, industries incidental to gold mining. " President Kruger was to a large extent guided in his policy by the national independence argument. He repeatedly stated in the Volksraad that his aim was

[1] Sir J. Robinson, *A Life Time in South Africa*, pp. 246–251.

[2] Annexure to the Report of the Collector of Customs for 1899 (G 26—1900), pp. 14–16, in Appendix I to the *Votes and Proceedings of the Cape Parliament*, vol. 4, 1900 (C.O. 51/336).

to encourage the growth of local industries and thereby render the Transvaal independent of foreign countries." [1] To this end the government imposed heavy duties on imported manufactures, such as 3*s*. per 100 lb. on cement and £2 per 100 lb. on jams.[2] The chief method, however, of encouraging manufactures was the grant of monopoly concessions to substantial burghers on the lines of the monopolies granted by Queen Elizabeth and James I to Court favourites. In addition to concessions connected with railways, tramways, banking, and municipal enterprises, concessions were granted for the manufacture of dynamite, liquor, iron, leather, sugar, wool, bricks, earthenware and porcelain, cement, oil, soap, matches, rope, paper, and candles. The periods were for twelve, fifteen, twenty, and thirty years. Some of the concessions lapsed because the conditions were not fulfilled. Such were wool, earthenware and porcelain, soap, matches, rope, and candles, while the iron concession had not been made use of when the war broke out. Of the others, the most important were the dynamite, brick, and cement concessions, all of which bore heavily on the gold mining industry, and became the objects of the most intense resentment. Apparently the burghers regarded potential manufacturers as a second goldfield where they could stake out claims to be sold later for exploitation by others. The procedure was usually " for the President and executive authorities to grant the right of working it to some weighty burgher. . . . The possessor of the right then sold it, usually very soon, for a sum bearing some proportion to its prospective value to a foreigner of Hollander, German, British, or other nationality, who in his turn dealt with it, or formed a company to put it into effect ". The system was accepted as quite natural: " This practice of, as it were, tapping concessions at their source for the benefit and refreshment of well-connected burghers did not excite any surprise nor, indeed, much indignation, until practical inconvenience began to be felt owing to the burthens imposed by some of the concessionaires upon industry." [3] Not only so, but it was asserted that concessions led to " sham industries ", whereby the public

[1] S. Evans, " Preference and Protection in British South Africa," in *Burden of Protection*, p. 89.

[2] *Report of Sir David Barbour on the Finances of the Transvaal and the Orange River Colony, 1901* (Cd. 628), p. 4.

[3] *Report of the Transvaal Concessions Commission, 1901* (Cd. 623), pp. 10, 69–94, 99–105.

was exploited without the industries really being set up in the country at all. Also, it was alleged that concessions led to wholesale bribery and corruption. Thus the younger Baron Oppenheim, desirous of the Selati Railway concession, paid away in 1890 large sums by way of " commission " to leading members of the Executive Council and Legislative Assembly, presented American carriages and watches to the Volksraad, expended £300 on a portrait in oils of President Kruger, and gave a grand banquet at the Transvaal Hotel. These " formation expenses " amounted in all to nearly £15,000.[1] These concessions, on the whole, probably speeded up industrial development to some extent, but they certainly embittered relations with the farmers, merchants, and manufacturers of the Cape and Natal, who wanted easy ingress to the Transvaal market, and at the same time antagonized the mining interests within the Transvaal, who wanted their supplies as cheaply as possible, and thus paved the way to war.

After the war and the annexation of the two Republics, Lord Milner turned to the task of establishing a Customs Union for the whole of South Africa. Up to a point his task was easy, since Natal and the Cape, both desirous of Union, had their own representatives at the Bloemfontein Conference of 1903, while the Transvaal and the Orange River Colony, which might have proved recalcitrant, were representated by their Governor, Lord Milner. Southern Rhodesia, already a partner in a customs agreement with the Cape, was also represented. The Customs Union of 1903 was the result.[2] The general tariff was fixed at 10 per cent, instead of the 7½ per cent of the Customs Union of 1898. The increase in the tariff was due partly to the cost of the war and the need for more revenue, but, partly also, it was due to the strengthening of the movement in favour of protection. The Cape since 1884 had been more or less committed to a protectionist policy, and a Select Committee on Colonial Industries had reported in 1891 that " it is full time for us to bestir ourselves in earnest to increase the number of our industries, and to make those we possess as flourishing as possible ", and recommended increased protection for boots and shoes, matches, and biscuit manufactures, rebates or free entry for agricultural implements

[1] Ibid., pp. 38–9.

[2] Draft Customs Union Convention agreed to at a Conference at Bloemfontein, March, 1903 (Cd. 1599). *Minutes and Proceedings of the Conference* (Cd. 1640).

and for raw materials connected with soap and candle manufactures and the iron and the steel industry; and the lowest possible railway rates for Cape manufactures.[1] Natal, which, in relation to the Cape, had played the role of low tariff New South Wales to high tariff Victoria in another Dominion, had lost its "Sir Henry Parkes" by the death of the Hon. Harry Escombe in 1899, and by 1903 had definitely swung over to protection. The free traders of the former Free State were voiceless, and in their place was Lord Milner, to whose resolute mind protection was absolutely essential for the rapid industrial development of South Africa.[2] In addition, the Customs Union of 1903 provided for a system of Imperial Preference which was now revived after a lapse of a half-century, first in Canada in 1897 and now in South Africa. The amount of preference was one-quarter, which meant that in the case of the general rate of 10 per cent English goods were charged 7½ per cent duty. This revival was not popular. The Cape delegates went up to the Bloemfontein Conference pledged to oppose it, but it was a case of all or nothing and the Cape had to accept Imperial Preference as an integral part of the Customs Union. On their return the Convention was just ratified and no more, the casting vote of the Speaker in the House of Assembly and the casting vote of the President in the Legislative Council securing its passage.[3] The Imperial Preference was immediately extended without negotiation or reciprocity to Britain, and, after negotiation, to Canada in 1904, and to Australia and New Zealand in 1906. No further inter-imperial agreements were made, apart from the confirmation of the customs agreement with Southern Rhodesia.

In another important matter Lord Milner did not achieve as much as he had expected, or as much as the coastal colonies had hoped. The Transvaal-Mozambique agreement, dating originally from 1869 and 1875, had become a matter of life or death for the goldfields and for the Transvaal State, since it dealt not only with the trade and traffic between the two countries but also with the recruitment,

[1] Report of the Select Committee on Colonial Industries, 1891 (C. 1—1891), pp. v, vii–xiii, and Q. 1135, in Appendix II to *Votes and Proceedings of Parliament, 1891* (C.O. 51/278).

[2] S. Evans, "Preference and Protection in British South Africa," in *Burden of Protection*, p. 99.

[3] United States Tariff Commission, *Report on Colonial Tariff Policies*, 1922, p. 752.

within Portuguese territory, of the essential native labour for the gold mines. The Portuguese were in a strong position in that they held a monopoly of an essential commodity and had been able virtually to dictate terms in the past to the Transvaal Government. Lord Milner found he had to bow to the inevitable and in 1901 he negotiated a temporary agreement (slightly modified in 1904), the oft-mentioned *modus vivendi*, which continued the open-door policy between the two countries and secured the bulk of the Transvaal traffic for the Delagoa Bay route.[1] The fact that Delagoa Bay was the natural harbour for the Transvaal in no whit lessened the resentment of the coastal colonies at the new agreement.

The Customs Union was renewed after the Conference of Pietermaritzburg in 1906.[2] The general rate was raised from 10 per cent to 15 per cent, and this increase was claimed as a definite victory for protection. In 1905 the South African Manufacturers' Association had been formed for the express purpose of agitating for higher tariffs, and after the Conference the Manufacturers' Association of Natal triumphantly hailed the increased tariff as "an instalment of our due".[3] Nevertheless, the Customs Union of 1906 was not popular, and Lord Selborne spoke of it as "a compromise . . . almost universally disliked".[4] The commercial and mining interests regarded the tariff as being too high and as hampering trade. The manufacturing interests regarded the tariff as too low and as not adequately assisting industry. Another matter for contention was the Imperial Preference which was now fixed at a flat rate of 3 per cent. This meant that on the general rate of 15 per cent the preference was equivalent to one-fifth, but that on lower rates the preference was proportionately greater.

Still another important point of contention was the question of the preferential railway rates, which, first emerging at the 1903 Conference, had a prominent place in the 1906

[1] Printed in *Correspondence relating to Affairs in the Transvaal and Orange River Colony, 1904* (Cd. 2104), pp. 189–190. See also p. 168.

[2] Customs Union Convention provisionally agreed to at a Conference held at Pietermaritzburg, March, 1906 (Cd. 2977).

[3] S. Evans, "Preference and Protection in British South Africa," in *Burden of Protection*, p. 99.

[4] Papers relating to a Federation of the South African Colonies, 1906 (Cd. 3564), p. 7.

Conference, when a special body was appointed to deal with the question.[1] Broadly speaking, preferential railway rates fell into two categories. There were preferential rates on home (usually coastal) manufactures and products as against overseas manufactures. This led sometimes to curious results. In 1908 it was reported : " Natal sugar is carried at a very much lower rate than sugar imported from oversea, the result being that the farther inland the sugar travels the higher the protection afforded against the oversea article. In consequence of this and of the fact that the production of sugar in Natal is far below the consumption of the Union, the bulk of the sugar produced is sent inland to the Transvaal, Orange River, and Cape Colonies, while Natal very largely imports sugar from oversea for its own consumption." [2] Secondly, there were preferential rates on finished articles as against raw materials. This, on the face of it, seems reasonable and economic, but it meant in a land where many industries are based on imported raw materials, which lose bulk in manufacture, that coastal manufacturers were favoured at the expense of inland manufacturers. Thus it was about these preferential rates that the inland colonies complained loud and long, appealing for reduced rates on imported raw materials so that inland manufacturers would cease to be so seriously handicapped. The Transvaal dynamite industry complained of competition from the Cape in this way.[3] In addition it was felt that while the coastal colonies could no longer tax imports going to the inland colonies for their own benefit through the Customs tariff, they could still tax them for their own benefit by means of heavy railway rates, by reason of the separate ownership and administration of the railway systems. The only solution was a uniform administration, through political union, not only of the Customs, but also of the railways.

The Customs Conference of 1908 at Pretoria and Capetown served to reveal once more the discord that existed between the colonies making up South Africa. Agreement for the

[1] A Cape Select Committee in 1898 had urged the abolition of differential rates. (" South Africa : Railway Rates and Road Competition," in *Round Table*, 1929–1930, p. 186.)

[2] Report of the Customs and Industries Commission (T.G. 6—1908), p. 5, in Annexures to *Votes and Proceedings of the Transvaal Legislative Assembly, 1908*, vol. ii.

[3] Ibid., pp. 18, 39. The Transvaal farmers also complained of the competition of agricultural and dairy produce from the coast. Ibid., p. 5.

time being was reached only on the understanding that a convention would soon be summoned to discuss and, if possible, achieve their political union, and that in the meantime the problems of customs, tariffs, and preferential railway rates should be left over. The continuation of Imperial Preference was opposed by the Cape and the Orange River Colony, but the Transvaal under Botha threw its weight in the scale in favour, and once more Preference was saved.[1] At the same time the Customs Union remained "a compromise . . . almost universally disliked", and the burning questions of customs and railway rates, threatening to set South Africa ablaze and vividly described by Lord Selborne in his Conferedation Dispatch, still remained to be settled. Finally in 1909 the agreement between the Transvaal and Mozambique enshrined in the *modus vivendi* fell due for renewal. Botha on behalf of the Transvaal thereupon negotiated a new agreement,[2] but determined to secure its ratification by the whole of South Africa. At first this seemed impossible, for, when the terms of the agreement were known, there was violent opposition from the Cape and Natal. The Cape was angered by the small allotment of Transvaal traffic it received, for railway rates were to be so adjusted as to give Delagoa Bay 50 per cent of the inland traffic, Natal 30 per cent and the Cape ports only 20 per cent. Natal was specially aroused by the free entry of Mozambique sugar into the Transvaal, and its fears seemed confirmed when in 1910 the importation of Mozambique sugar exceeded that of 1909 by over 300 per cent.[3] It was under such unpromising auspices that the Union Convention met in 1909.

Nevertheless, the Transvaal achieved its objects. It secured union and it secured ratification of the Mozambique agreement. However resentful the other (and particularly the coastal) colonies might be, they could not afford to shut themselves out of the Transvaal market, and once more it was proved that he who pays the piper can also call the tune. The Transvaal insisted that the Mozambique agreement was essential to the existence of its gold mining

[1] United States Tariff Commission, *Report on Colonial Tariff Policies*, p. 748.

[2] Printed in Convention between the Governor of the Transvaal and the Portuguese Province of Mozambique, 1909 (Cd. 4587).

[3] Report of the Commission on Conditions of Trade and Industries (U.G. No. 10—1912), p. 24, in Annexures to the *Votes and Proceedings of the House of Assembly, 1912*, vol. iii.

industry, and the other colonies were compelled to acquiesce.[1] The questions of the customs and railway rates did not bulk very large in the discussions at the Union Convention. General Smuts, speaking on behalf of the Transvaal, emphasized the importance of a united economic policy and of the development of the interior, but he stressed still more the need of a united native policy for South Africa.[2] As a matter of fact, it seems generally to have been felt that it was only after political unification had been achieved that the questions of tariffs and of railway rates could be tackled. Thus in 1910 a united South Africa came into being.

As a result of the Union the railways in South Africa were unified and in 1911 handed over to the control of a Board of three Railway Commissioners. The aim of the administration was to keep the railways out of politics and to put a stop to inter-colonial grievances by fixing rates on a business basis. Thus the virtual "taxation" of the inland provinces by the coastal provinces charging heavy rates on goods travelling inland was to cease. Differential railway rates were a more difficult matter. Differential rates at the expense of overseas products for the benefit of South African products were universally condemned in the different tariff inquiries before the Union, and in their place straightforward customs protection was recommended, as an addition to the existing tariff. Coastal witnesses objected to their complexity and concealed character which prevented them from attracting foreign capital and fresh manufactures.[3] Inland witnesses disliked them in so far as they enabled coastal producers to compete in their inland market, but advocated them in so far as they enabled inland products to compete in the coastal market.[4] Others condemned them because railway rates, unlike the customs tariff, were not under the direct control of Parliament and there was always the possibility

[1] The agreement was renewed in 1928 to run for 10 years on substantially similar terms as before, except that the supply of labour was to be cut down.

[2] Sir E. H. Walton, *The Inner History of the National Convention of South Africa*, pp. 261, 262, and Report appended by G. R. Hofmeyr, p. 333. Gemeral Smuts "reminded the Convention that it was not the negro question in America that led to civil war, but that it was the division of the whites". Ibid., p. 333.

[3] Report of the Customs Tariff Inquiry Commission with Appendices, 1908 (*Natal Departmental Reports, 1908–9*, No. 7), p. 18.

[4] Report of the Customs and Industries Commission (T.G. 6—1908), pp. 4, 5, 7, 28, in Annexures to *Votes and Proceedings of the Transvaal Legislative Assembly, 1908*, vol. ii.

that the policy of Parliament in regard to tariff duties might be thwarted by an extra-Parliamentary authority, by means of countervailing changes in railway rates.[1] Differential railway rates still exist and in some ways their scope has been widened. Railway rates are used not merely to give home products the home market as far as possible, but in the case of maize and wheat cheap rates are given to encourage export.[2] Differential rates on finished articles as against raw materials still continue, as they are economic and reasonable, but as and when real unity is evolved in South Africa, less complaint should be heard on this score.[3]

The chief problem after Union was the fiscal policy of the new Government. Before the Union, the four colonies had had a big protectionist drive. Each colony had held an inquiry into its agriculture, industries, trade, and tariffs, and had come to the conclusion that what it needed was more and higher tariffs and that then all would be well. The Cape Tariff Commission recommended duties on carpentry and joinery work increased to 15–25 per cent, on candles from 20 to 30 per cent, on various iron and steel commodities (but not machinery) to 25 per cent, on furniture from 15 to 20 per cent, on boots and shoes from 15 to 20 per cent, on men's clothing to 25 per cent, partly on the ground of unfair competition from badly-paid foreign labour and partly on the infant industries' plea.[4] The Natal Tariff Commission stated : " In no case that we have come across, has any witness asked for increased duty to be put on an article that is already adequately protected. *The truth is that producers, years ago, have known the amount of duty that would enable them to manufacture locally in competition with the imported articles, and years ago have asked for that duty to be put on.*" [5] It attributed past faults in the tariff

[1] Minority Report by W. A. Martin, in the Report of the Commission on Conditions of Trades and Industries (U.G. No. 10—1912), p. 138, in Annexures to the *Votes and Proceedings of the Union House of Assembly, 1912*, vol. iii.

[2] S. H. Frankel, *Railway Policy of South Africa*, pp. 172, 182–4, 208–9.

[3] " South Africa : Railway Rates and Road Competition," in *Round Table, 1929–1930*, pp. 183–197.

[4] Report of the Customs Tariff Commission of the Cape of Good Hope (G. 11—1908), pp. 6–12, 17, in Appendix I, vol. ii, to the *Votes and Proceedings of Parliament, 1908*.

[5] Report of the Customs Tariff Inquiry Commission with Appendices, 1908, *Natal Departmental Reports, 1908–9*, No. 7, p. 11. Italics are the Commission's. Producers, as a matter of fact, showed an amazing lack of unanimity in the protective rates demanded.

system to South African slackness, "begotten of local conditions, in a country owing its commercial beginnings to 'Rushes' to Diamond and Gold Fields, and to the subsequent Haste to Grow Rich which such beginnings prompted." [1] It complained that the tea and sugar industries were hard hit by foreign dumping following recent reductions in the tariff; that the manufacturers of biscuits and cakes had been "harshly treated" by the imposition of duties on wheat and flour, formerly suspended; that the "overberg" trade in Natal confectionery had been practically annihilated by an Orange River Colony governmental bounty on confectionery; and that the jam trade had suffered from the loss of its preferential railway rate to the Transvaal, following the Railway Conference of 1906 [2]: and, of course, the remedy in most cases was higher tariffs. The Transvaal Tariff Commission reported that the manufactures beer, cement, earthenware, explosives, and candles had become entrenched behind tariff walls and were making satisfactory progress; that joinery, soap, jam, and pickles suffered from coastal competition due to differential railway rates; and toyed with the idea of establishing a State-subsidized iron and steel industry.[3] The Cape and Natal Commissions alike agreed in condemning foreign dumping, the Natal Commission calling it "market piracy" and demanding action along the lines of the Canadian clause. The millers complained of the dumping of Australian flour; the sugar growers and refiners complained of the dumping of Java sugar refined in Australia; and the tea growers complained of the dumping of Indian and Ceylon teas, "elsewhere unsaleable." The Transvaal, protected by its inland position from foreign dumping, was more concerned with the "dumping" indulged in by the coastal colonies.[4]

The preparation of the public mind for further protection by means of the different colonial Commissions was followed up after the Union by the appointment of a Union Commission on the conditions of trade and industries in 1910. After taking voluminous evidence it presented its report in 1912.

[1] Ibid., p. 25.
[2] Ibid., pp. 30–3, 46–7, 49, 51.
[3] Report of the Customs and Industries Commission (T.G. 6—1908), pp. 2, 5, 14–19, in Annexures to *Votes and Proceedings of the Transvaal Legislative Assembly, 1908*, vol. ii.
[4] *Cape Report*, pp. 17, 45; *Natal Report*, pp. 19, 21, 34; *Transvaal Report*, pp. 5, 28.

It is curious how each of the committees, commissions, or conferences on tariffs in 1883, in 1891, in 1903, in 1906, in 1908, in 1912, and in 1924 asserted: "Hitherto we really have not had protection: let us now proceed to have it," and yet each successive committee, commission, or conference negatived the claim of its predecessor to have established it. The Report of 1912 commenced, as usual, by stating that while the tariff of 1906 had aimed at being protective, it had turned out to be mainly revenual, and then proceeded to recommend "adequate protection" in the case of industries where a fair proportion of the raw materials could be obtained in the country, where a fair percentage of white labour was employed, and where there was a reasonable chance of the industry becoming established. On consideration the Commission doubted the wisdom at that time of attempting to build up the engineering trade by protective means for fear of hampering agricultural and industrial development. In the case of the iron and steel industry it blew hot and cold on the possibility of smelting local ore, but commended the Australian and Canadian bounty systems in this connection. Naturally it fulminated against foreign dumping of Australian-refined sugar and Australian-milled flour and recommended the Australian anti-dumping procedure to keep out those Australian commodities. In addition to higher tariffs, the Commission stressed the importance of continuity in tariff policy, the need for capital in South Africa and the duty of the people to practise a sort of economic Couéism: "Finally the people of the country must create the spirit of endeavour, of expansion, and a belief in the great destiny of this country. Unless this spirit of patriotism prevails nothing will avail." [1]

In 1913 a Bill was drafted adopting the increased tariff recommended by the Report, but this time the consumers, to wit the mining interests of the Transvaal, marshalled their forces and defeated the Bill.[2] Accordingly the 1906 tariff of 15 per cent remained, and the only important and

[1] Report of the Commission on Conditions of Trade and Industries (U.G. No. 10—1912), pp. 12–13, 23, 60, 66–7, 96, in Annexures to the *Votes and Proceedings of the Union House of Assembly, 1912*, vol. iii. See also Summary of Evidence before the Commerce and Industries Commission (U.G. 9—1913), in Annexures to the *Votes and Proceedings of the Union House of Assembly*, 1914, vol. i.

[2] United States Tariff Commission, *Report on Colonial Tariff Policies*, p. 750.

immediate effect of the Commission was the enactment in 1914 of an anti-dumping measure on the model of the Canadian dumping clause.[1] In 1915, as a result of war expenses, the general tariff rate was raised from 15 to 20 per cent, and this meant an almost general rise, since only 193 articles were exempted from the general tariff. The Imperial Preference remained at 3 per cent *ad valorem*, which meant a shrinkage on the rebate. This increase in tariff rate was revenual, not protective, but as the war dragged on and the blockade of South Africa had led to the establishment and development of industries there, the government in 1918 came out definitely in support of a policy of protection for home industries.[2] The blockade arising from high freights and the paucity of foreign supplies continued after the war was over, and this impetus to industrial development in South Africa lasted until 1920. A Report of 1921 was of opinion that more had been done "to establish industries since the Armistice than before".[3] Nevertheless, the progress of industry was not great; the Government performance lagged behind promise, and in some instances actually contradicted promise. In 1920 the duty on blankets, quilts, and clothing made of blanketing or baize was reduced from 25 to 20 per cent and the duty on cloth and cotton and woollen piece goods from 20 to 15 per cent. Something, however, was done to meet the glutting of the market in South Africa following the collapse of the post-war boom. The importation of wheat and flour was in 1920 prohibited except under licence, and the importation of certain types of boots and shoes made in South Africa was in the same year prohibited altogether. The boot and shoe industry in South Africa had benefited from the blockade and had increased its output from under one million pairs in 1914 to over three million pairs at the beginning of 1920, which amounted to about 43 per cent of the total supply.[4] Until 1924, when the National and Labour Parties were returned to power on the basis of the Compact, the government continued its policy

[1] A. Plant, "Anti-dumping Regulations of the South African Tariff," in the *Journal of the Economic Society of South Africa*, vol. iv, part 1, pp. 21–2, 51–3.

[2] United States Tariff Commission, *Report on Colonial Tariff Policies*, p. 750.

[3] *Report on South Africa*, by W. G. Wickham, Department of Overseas Trade, 1921, p. 16.

[4] Ibid., pp. 10, 20. Also Report, 1922, p. 30.

of moderate protection, attempting to hold the balance between the key industry of gold mining which wanted low tariffs and cheap supplies and the developing manufactures which demanded protection.

On the advent of the National and Labour Parties to power in 1924, a policy of full-blooded protection was entered upon. In 1921 the Government had appointed a Board of Trade and Industries, which in 1923 was put on a statutory foundation. In 1924 another Act was passed reorganizing the board and defining its functions at some length: "To inquire into and advise the Government on all matters concerning the economic development of the natural resources of the Union and its industries and trade, and in particular on (*a*) the payment of bounties or other forms of State aid for industries; (*b*) fiscal policy in so far as it bears on commerce and industry; (*c*) the recasting and revision of the Customs tariffs; (*d*) the removal of anomalies from time to time in the Customs and Excise tariffs . . . (*l*) such other matters as the Minister may refer to it for report." The first board had consisted of part-time members, men of considerable practical experience. The new board consisted of four full-time members, "with one exception, young and enthusiastic economists equipped with University degrees but no business experience." [1] The Board set to work on "the recasting and revision of the Customs tariffs", and in 1925 its recommendations were passed into law as the Customs Tariff and Excise Duties Amendment Act.[2]

By the 1925 tariff, protection was given to existing industries by increased duties amounting to 30, 35, and even 40 per cent; free entry was permitted in the case of essential machinery, plant, tools, and supplies; and ante-natal treatment was provided whereby industries yet unborn could be encouraged by suspense duties to be brought into operation by proclamation when the industries had emerged. In the years that followed 1925, the Board of Trade continued its inquiries into industries requiring protection, and on its recommendations duties were increased and the scope

[1] Hon. J. W. Jagger, M.L.A., "The Board of Trades and Industries," in the *Journal of the Economic Society of South Africa*, vol. i, No. 2, pp. 35–6. For criticism of the Board's administration and policy, see ibid., pp. 36–8, and A. Plant, "Anti-Dumping Regulations of the South African Tariff," in the *Journal of the Economic Society of South Africa*, vol. iv, part 1, pp. 38–9.

[2] Act No. 36 of 1925.

of protection considerably widened.[1] At the same time the government attempted to keep the cost of living down within South Africa by offsetting against higher protective duties lower revenue duties on such articles as tea, cotton piece goods, threads, yarns, and cottons, certain underclothing, carpets, glassware, china and earthenware, and stockings. As a result the ratio of customs to total imports, not an infallible index of the burden of protection, increased only slightly from 12·79 per cent in 1913 and 12·80 per cent in 1924 to 13·12 per cent in 1925 and 13·60 per cent in 1926, and fell again to 12·79 per cent in 1929.[2] Moreover, the amount of Preference given to England was reduced to a *quid pro quo* basis. This policy of protection to manufactures in South Africa had the support of " the great majority of the people " who desired to provide employment for the growing number of whites that could not be absorbed into either agriculture or mining and at the same time aimed at widening the market for the consumption of home-grown produce.[3] In 1928 a commercial treaty was negotiated with Germany, the first foreign treaty negotiated by South Africa.

Things went well until the slump of 1929. With intensified competition from abroad, higher duties and further anti-dumping regulations had to be brought into force to protect home industries. With the falling off in the revenue the revenual duties which had been reduced had to be increased once more, and the burden of protection became heavier. The ratio of customs to total imports rose from 12·79 per cent in 1929 to 13·68 in 1930, and the trend continued definitely upward. However, on a review of the situation as a whole since 1925, it must be admitted that industrial progress has been made—at a cost. In 1917–18 the number of industrial establishments in the country was 5,918, the number of employees of all races was 134,211 and the total output value was about £60,000,000. In 1923–4 on the eve of the higher tariff policy the number of establishments was 7,112, employees numbered 182,877 and the value of

[1] Not all the reports of the Board of Trade are printed. Among the most important of those that have been printed are: Report No. 62 on Customs Tariff Amendments (1826); Report No. 66 on Sugar Industry (1926); Report No. 67 on Methods and Costs of Wheat-growing and Milling (1926); Report No. 94 on Engineering (1929).

[2] *Report on South Africa*, by N. Elmslie, Department of Overseas Trade, 1931, pp. 40–1.

[3] *Report on South Africa*, by N. Elmslie, Department of Overseas Trade, 1928, pp. 34–5.

the output was about £80,000,000. In 1928–9 the establishments numbered 7,461, employees totalled 217,660, of whom 89,236 were whites, and the total output was valued at about £113,000,000.[1]

The country has built up a considerable number of subsidiary industries under the shelter of the gold mining industry and also of industries producing goods for consumption—foodstuffs, boots and shoes, etc. South Africa, however, feels that unless it can have an iron and steel industry of its own, with blast furnaces and forges, it will always be in a position of dangerous dependence on countries more economically advanced than itself. In 1928 the Iron and Steel Industry Act was passed " to promote the development within the Union of the iron and allied industries and for that purpose to constitute the South African Iron and Steel Industrial Corporation ", one class of share being wholly taken up and paid for by the Government. The management and control were to be in the hands of a board of seven members of whom four were to be appointed by the Government. The idea was to bring together the coal of Natal and the iron ore of the Transvaal, and to establish a large iron and steel works at Pretoria, as the most central spot.[2] The difficulty confronting the iron and steel industry is the difficulty that confronts almost every industry in South Africa. The population of South Africa is so small and so widely scattered, that there is scarcely the demand to keep a large-scale industry going; and, again, distribution costs are so high that economies of centralized production are dissipated in the expense of distribution over a wide area.

[1] *Reports on South Africa*, by N. Elmslie, Department of Overseas Trade, 1928, p. 35; 1929, p. 31; and 1931, p. 37.

[2] The works were begun during 1931, the aim being an annual output of 150,000 tons of rolled steel (*Official Year Book of Union of South Africa, 1932–3*, No. 15, p. 560).

CHAPTER 14

THE POSITION OF THE NATIVE IN THE ECONOMIC LIFE OF THE DOMINION

Relations of white and native races.

No coalescence : a dominating white minority and a native labour rank and file.

Slavery an institution under Dutch regime.

Gradual emancipation under British rule.
The " Charter of the Hottentots ", 1828.

The native in the labour market.

The native labourer and his remuneration.
Rhodes' native labour policy.
The Labour Tax.
The natives' challenge to the white monopoly in the skilled labour market.

The Pass Laws.

The initiation of the native into local self-government.

The native and the land.

Communal system gradually gives way to individual land tenure.
The Segregation Policy of the Glen Grey Act, 1894, and the Natives Land Act, 1913.
The latest views as expressed by the Native Economic Commission, 1930–2.

IN Canada and Australia the aboriginal inhabitants have proved incapable not only of coalescing with the white settlers, but even of existing side by side with them. For the most part they have disappeared : segregation has been the lot of the few that have survived. In South Africa the complete expropriation of the native inhabitant was impossible. The place of any that might disappear would speedily be taken by new tribes pressing down from the north : to try to exterminate the native tribes was like trying to bail the sea. In South Africa too there has been no coalescence between the two races, but in contrast with conditions in the other Dominions the natives of South Africa not only live side by side with the whites but are an essential element in the economy of the country. Essentially the relationship between the white man and the black has continued as it began, that is to say a dominant white minority served by a black labour rank and file,

The change that has taken place since the time of the early settlers has been merely a change in the status of the labourer.

During the Dutch regime slavery was an institution in South Africa. The Dutch East India Company imported slaves from Mozambique and Madagascar whom they employed in loading and unloading vessels and cultivating the company's land.[1] As an institution it continued for some little time after British rule had displaced that of the Dutch, but by the Act of 1807 for the Abolition of the Slave Trade the actual traffic in slaves was stopped and Africans imported into any British Colony thereafter as slaves were forfeited to the King. Suddenly and entirely to uproot slavery would have been well-nigh impossible for, as Lord Charles Somerset, who took up the Governorship of the Cape in 1814, had occasion to point out to his chief, Earl Bathurst, then Secretary for War and Colonies, " slaves are the only property of any value in this Colony ; land is of none in comparison." Accordingly, while constrained for the time being to accept slavery as an institution that still survived, the British Governor made serious efforts to better the conditions and treatment of the existing slaves. One of the improvements in the condition of the slaves for which the Governor took credit was that " the domestic correction of the males is confined to 25 stripes " ; and there was also " a restriction as to the implement with which such limited domestic correction is to be inflicted ". The separation of man and wife or mother and children by sale was forbidden. Moreover, manumission was possible, " nothing is more common here than for a slave to purchase his own freedom." [2] Nor was the Church inactive in the same good cause, for about the same time a Church appropriated for slaves and slave children was consecrated at Stellenbosch.[3] The home Government missed no opportunity of getting rid of slavery in the Colonies. Thus, in 1820, it was directed that in grants of land in the newly settled districts of Cape Colony it should be made a condition that cultivation thereof should be by free labourers only.

Meanwhile a class of free negro apprentices was growing up. Many of them had acquired that status as a result of

[1] *Records of the Cape Colony*, ed. by G. McCall Theal, vol. vi, p. 178.

[2] See letters from Lord Charles Somerset to Earl Bathurst, dated 31st January and 1st February, 1824, in *Records of the Cape Colony* (*supra*), vol. 17, pp. 37–44.

[3] *Records of the Cape Colony* (*supra*), p. 50.

having been the subjects of the now illicit slave traffic. Slaves found to have been clandestinely landed in the Colony were forfeited, and the Government dealt with them by having them bound apprentices by indenture for a term which might be fourteen years. Special steps became necessary to maintain their free status and to prevent them from being merged in the class of slaves and so becoming the property of individuals. The method adopted was to require every proprietor of a slave or slaves to register them : and whenever the property in any slave was transferred, whether by sale or otherwise, the purchaser or other transferee was required to obtain from the proper Government official a certificate of the transaction, which document constituted his title to the slave he had acquired.[1]

The acute labour shortage in the Colony was responsible for a traffic in native children which was thus described in a letter of the Landdrost of Graaff Reinet, written in 1817,[2] " The cruel barbarous custom so prevalent among the Bosjesmen of murdering or exposing such of their children as they cannot provide for, or parting with them on any terms whatever, has induced several farmers to procure some of those children, by giving their unnatural parents some trifles in exchange, for the purpose of keeping them as servants hereafter, or some from a more humane principle, only to save their lives." This was regarded as harmless enough so long as the child was given up so soon as the parents demanded it and no remuneration was demanded. But a practice was growing up by which children so acquired were passed from hand to hand for payment secretly taken, and " itinerant merchants begin to be supplied with them through some channel or other ". And a number of possible evil practices were indicated " to which men used to and leading the unpolished life of some of our most remote colonists may be seduced by such easy profit ".

The manner in which the problem was dealt with furnishes yet another instance of the humanity of the British administration. The Governor's Proclamation [3] prohibited under heavy penalties any unauthorized traffic in children. In the few cases where an inhabitant with the knowledge and consent of the Field-Cornet and Landdrost was allowed

[1] See Proclamation by Lord Charles Somerset of April, 1816, in *Records of the Cape Colony* (*supra*), vol. xi, p. 102.
[2] See *Records of the Cape Colony* (*supra*), vol. xi, p. 325.
[3] Ibid., p. 365.

to receive a native child, provision was made for the child's formal apprenticeship. Moreover, a school was established by the Governor for all Government slave children, the intention being to apprentice them at 12 years of age, and at the expiration of their apprenticeship to emancipate them as an example to others. The Governor, however, regretted that he " could not get slave masters to join me in sending these children to our school ".[1]

Public opinion in England, especially as voiced by the London Missionary Society under the inspiration of their representative at the Cape, Dr. Philip, chafed under the restrictions still placed upon a theoretically free people, and by the Fiftieth Ordinance which was promulgated in 1828—the Magna Carta of the Hottentots as it was called —the right to exercise all the privileges of burghership was conferred on Hottentots and other " free persons of colour ". They could in future acquire land and other property. They were exempted from any compulsory service to which the subjects of the Crown were not liable, and punishments were to follow only on due process of law. Wages were no longer to be paid in liquor or tobacco and a servant was given facilities for taking proceedings for ill-usage at the hands of his master.

The wholesale removal of restraints from a people given to indolence and averse to settled and orderly habits, unaccompanied as it was by any measure for their employment or support, not unnaturally resulted in many of them taking to a life of vagrancy and so becoming a burden rather than an asset to the country.

The Fiftieth Ordinance survived until 1842, when it was superseded by the Masters and Servants Ordinance of that year, the effect of which was still further to equalize the position before the law of the white and coloured inhabitants of the Colony—the latter being almost entirely former slaves and Hottentots.[2]

The Native in the Labour Market

The non-white labour force in South Africa includes Bantus living otherwise than in tribal conditions, as farm

[1] Ibid., p. 432.

[2] It is the view of Professor W. M. Macmillan that in 1842 " the Cape Colony ceased to know any legal distinction between ' white ' and ' coloured ' " (*The Cape Colour Question*, p. 257).

servants, for example, or dwelling in town or mine locations; the Cape coloured people; the Indians in Natal; and minor elements such as immigrants from Mauritius and St. Helena.[1] The main body, however, comes from the Bantu tribes living under their own tribal conditions in British and Portuguese territory.

"Under the Bantu tribal system no individual owns any part of the land occupied by the tribe. Portions of land are allotted by the chiefs and headmen from time to time. . . . Each individual has a claim to an allotment of sufficient size to support his family and himself according to recognized standards. The labour required to work the land is not very great and custom has assigned it largely to the women. The men were, therefore, free to follow their special pursuits of war and the chase. To-day they are still free but are able now to work or idle as they choose, instead of fighting or hunting, and there is little work for them to do in the kraal except during the ploughing season, and then only where ploughs are used. But a significant change has taken place, in that dormant wants have been awakened in the native and his family by contact with Europeans. To provide for their satisfaction money is requisite. Consequently the native is induced to engage himself to the white man. . . . Moreover the chance of selling his labour to the white man is of great value to him, as it makes him independent to a large extent of any failure of his crops. Formerly when they failed he starved. To-day he arranges with the local store-keeper to feed his family and hires himself out to pay off the debt." [2]

Neither the farmer nor the mining company is likely to favour any change from black to white labour, even if it were possible. Black labour is more amenable and docile than white immigrant labour and very much cheaper. At a time when the New Zealand farmer was paying his harvesters ten shillings a day with three meals, the black agricultural labourer in South Africa was getting from ten shillings to thirty shillings a month and his very simple food, with often in addition, it should be added, a patch of

[1] The term "Native" is variously defined in the legislation of the different Colonies in South Africa. After reviewing them all, the South African Native Affairs Commission of 1903–5 decided to use the word "Native" as meaning "an aboriginal inhabitant of Africa, south of the Equator, and including half-castes and their descendants by Natives" (Cd. 2399), 1905, p. 10.

[2] *Report of Economic Commission, 1914* (U.G. No. 12—1914), p. 35.

land of his own.[1] But the universal upward trend in wage rates has not left South Africa unaffected: "In the olden days native labour was cheap and plentiful, the remuneration being the privilege of squatting upon the farms and possibly a certain amount of mealie meal for food and other small perquisites. But since the introduction of mining, the growth of towns, and the general opening up of the Colony, a great change has come over the native. His rate of pay has increased enormously, and he now received from £2 to £3 or even more, per month, in the towns or in the mines, in addition to food and sleeping accommodation."[2]

Under the "labour tenancy" system, the main feature of which is the giving of services for a certain period in the year to the farmer by the native and his family in return for the right to reside on the farm, to cultivate a portion of land and to graze his stock, the assessment of the real wages of native workers on the land is not at all easy. "Payment of natives working on the farms in South Africa is still largely by means of perquisites, i.e. by allowing them to run cattle, sheep, goats, and pigs on the farm, by providing them with a certain area of land for the growing of maize or other crops and sometimes even supplying the seed and implements and oxen to cultivate it, and by giving them food, and at times payment being made by means of livestock or a number of bags of maize. In some districts, notably in Natal, the native gives a period—usually three or six months—of free service in return for being allowed to live on the farm. During this period the native gets food, with or without the addition of a small wage, in return for his labour, and after the termination of the contract period there is a further period of optional or compulsory service at comparatively low wages, usually from 10s. to 25s. per month."[3]

Payment of native labour in kind may be economical where the farmer has insufficient stock to equip the whole of his land. It is also considered to anchor the servant more securely to his master than a purely cash nexus. But "from the point of view of the farmer, labour tenancy is definitely an uneconomic method of procuring a labour supply. . . . The only reason why it is maintained on many

[1] *D.R.C. Minutes of Evidence, 1914* (Cd. 7706), Q. 818.

[2] Further correspondence relating to Affairs in the Transvaal and Orange River Colony, 1905 (Cd. 2482) (*Accounts and Papers*, 1905, lv), p. 331.

[3] *Journal of the Union Department of Agriculture*, 1924, vol. viii, p. 299.

farms is that there is at present no satisfactory alternative. It involves waste, inasmuch as it is generally necessary to keep more labour on the farm than the work warrants ".[1]

There are, of course, considerations on the other side of the account which tend to balance the relative cheapness of native labour. " A notable point as regards the natives' work for the white man is its common discontinuity. The tribal native living in the Union usually devotes to wage-earning periods of from four to nine months, though Portuguese natives take service for longer periods and have in consequence, as it is said, a higher industrial value on the mines. . . . The greatest hindrance to the efficiency of natives is the short period for which they work continuously." [2] At the same time, the coal mines managed to retain their native labour on something approaching a permanent basis, and the reason apparently was that on the coal mines, whether in Natal or in the Transvaal, locations were provided to which natives could bring their families, a system which was found only to a small extent on the gold mines and not at all on the diamond mines.[3]

Rhodes had a very clearly defined conception of the part to be played by whites and natives respectively in the economy of South Africa and of the conditions of life that should be imposed upon the latter. He was no believer in the possibility of a white South Africa. He felt that he understood the native with a thoroughness that few white men could claim. At the diamond mines he had had 10,000 natives in his charge ; at the beginning of his political life he was sent to Basutoland in connection with the native question there ; and he had had to deal with similar questions in Bechuanaland and the Transkei. As a result of this experience he concluded that " properly directed and properly looked after, the natives would be a great source of assistance and wealth. At any rate, if the white population maintained its position as the supreme race, he thought the day would come when they would all be thankful that they had had the natives—in their proper position ".[4] What their proper position should be was, in his view, not open to

[1] *Report of Native Economic Commission, 1930–2* (U.G. 22—1932), para. 368.
[2] *Report of Economic Commission* (U.G. No. 12—1914), Pretoria, 1914, p. 35.
[3] Ibid., p. 36.
[4] *Debates of House of Assembly*, 1894, p. 362.

doubt. "It must be brought home to them that in the future nine-tenths of them would have to spend their lives in manual labour," [1] and the white man would do the superintending and the brain work. At the same time he realized the obligations of the white man to the black and found that those obligations had been but ill-observed. "They had had the natives originally in a state of pure barbarism and they had simply placed them in locations. They had not given any consideration to the development of these people," with the result that "they had shown a tendency to copy the whites and to imitate them in many of their vices, without perhaps arriving at some of their few and small virtues".[2]

Moreover, under their communal system of land tenure the native locations had become overcrowded and the time had arrived when the land could no longer support the population upon it. Since the land and internecine warfare had ceased to provide sufficient occupation a large class of idle natives was growing up which promised to become an increasing evil. "There were a large number of young men in these locations who were like the younger sons at home or rather the young men about town. They went to 'beer-drinks' and to their fathers or brothers for food and so they remained in these large areas and never did a stroke of work." It was with these "Kaffir mashers", as he called them, that Rhodes proposed to deal. "It was the duty of the Government to remove these poor children out of their state of sloth and laziness and give them some gentle stimulants to go forth and find out something of the dignity of labour." The gentle stimulant which he embodied in the Glen Grey Act, 1894, was special taxation for the landless and workless.

By that Act Rhodes, then Prime Minister, substituted for communal land tenure a system of individual tenure. The available land in the native territories was to be divided up into locations and the locations into allotments of four morgen each. These allotments were to be granted to as many native claimants as the land would carry. Any native not in possession of land under the new system of individual tenure or in freehold "who in the judgment of the Resident Magistrate is fit for and capable of labour" was to pay a tax of ten shillings a year unless he could

[1] Ibid., p. 366.
[2] *Cape Legislative Council Debates*, 1894, col. 293.

prove that he had been in service or employment three months out of the twelve beyond the borders of his district.[1] The proceeds of this Labour Tax were to be applied to the establishment and maintenance of schools for the education of the native in agriculture and industry.

This provision of Rhodes's Glen Grey Act was the only one which met with serious opposition. It was denounced as the "Slavery Tax". The Prime Minister could see nothing resembling slavery in a system under which no native would be compelled to work if he paid the ten shillings tax. At the same time the stimulus to labour would be there. "They were all sufficiently acquainted with the characteristics of black races to know that so long as it was merely a question of sharing mealies no great difficulty would arise, but once it was a question of paying out "oof" as it was sometimes called, however small the amount, the brother would say, "No, I cannot afford to do that. You are welcome to share my pot, but I cannot find you the ten shillings, and the best thing you can do is to go out and work." [2]

It turned out, however, that the provisions for the imposition of a Labour Tax were to be the one failure of the Act.

In 1903 a Select Committee was appointed by the Cape Legislature to inquire into the administration and working of the Glen Grey Act, and they reported the same year.[3] They found that "speaking generally . . . the operations of the Act have been, as they were intended to be, most beneficial to the natives concerned". It was, however, "somewhat discouraging to find that from almost every direction, there is a marked reluctance among the natives to come under the operation of the Glen Grey Act—a reluctance which arises partly from ignorance, but partly also from a strong objection to certain of its provisions." In particular they recommended the repeal of the Labour Tax provisions. "The weight of evidence goes to show that these provisions, while they have fallen into complete desuetude, are regarded by the natives with disfavour, and nothing has done more to make the Act itself distasteful

[1] Act No. 25 of 1894.
[2] *Cape Legislative Council Debates, 1894*, cols. 294–5.
[3] Report of Select Committee on the Glen Grey Act, Capetown, 1903 (Appendix II to *Votes and Proceedings, 1903*, vol. i.)

or to create a serious opposition to its extension." [1] Moreover, there was no means of checking the amount of labour a native did.

The Labour Tax provisions of the Glen Grey Act were, in accordance with this recommendation, repealed in 1905.[2]

But while the white man persists in his prejudice that he cannot share unskilled labour with the native, the native has for many years been manifesting an increasing disposition to enter upon the field of skilled labour, hitherto the preserve of the white man. "It has been clearly proved to us that the restriction of the native to the sphere of unskilled work cannot be permanent. His intense desire for education is everywhere the subject of comment." [3] A Minister of the Dutch Reformed Church, asked by the Transvaal Indigency Commission whether the desire for education was keener amongst the natives or the poor whites, replied: "Amongst the natives, from my experience." [4] The increasing desire of the native to procure some of the minor luxuries of life and his increasing disposition to qualify himself by education for the higher paid class of work in order to satisfy those desires has for many years constituted a challenge to the white man's supremacy in the skilled labour market. Already in the early years of the present century the Transvaal Indigency Commission were "satisfied that carpentry, painting, plastering, and similar skilled work was being done to an increasing extent by coloured labour," although at that time competition was not so severe in the Transvaal as in Cape Colony and Natal. But the white man will not surrender his privileged position in the skilled labour market without a struggle. His attitude still is that expressed by the Minister of Mines in the debate of the "Colour Bar Bill" of 1926; "In South Africa we have to deal to-day with a great national question, namely the preservation and perpetuation of the white race. We do not want to be unjust towards the native and we are willing to allow him latitude for development . . . self-preservation however is after all the first

[1] Ibid., Evidence of Mr. W. T. Brownlee, Resident Magistrate, Q. 1230. This witness also tendered evidence "to correct the idea that many people have, that the natives are not going out to labour as they should".

[2] Glen Grey Amendment Act, 1905 (No. 14 of 1905).

[3] *Report of Transvaal Indigency Commission, 1906–8* (T.G. 13—1908), Pretoria, 1908, p. 27.

[4] *Minutes of Evidence* (T.G. 11—1908), Q. 7784.

law of nature." [1] The lesson of previous experience was rather ingenuously indicated in the same debate. " Where we allow the unskilled native and Asiatic to compete in the unskilled vocations with white man, white men go under." [2]

The task imposed upon the white races of South Africa is to fit into the economic organization of the country a race utterly removed from themselves in descent, habits, and civilization. Australia, New Zealand, Canada, and the United States with the partial exception of the Southern States has had no such problem to face. It is a problem which clearly would not be solved so long as the only authority the native recognized was tribal and patriarchal. When the native races became part of the economic structure which the white races were building, working for wages which the white man paid him, he acquired rights and undertook obligations which would only be made effective by submission to the white man's laws. There is plenty of evidence that the native is not disposed to be resentful of legislation which imposes upon him duties and obligations, if only he is tactfully dealt with and is allowed to see without reference to any question of punishment that it is to his advantage to obey. The Scab Disease Commission of 1892–4, which was appointed to inquire into the working of the laws dealing with the suppression of scab disease in sheep, records striking evidence of this native characteristic. While the Commission had to record their conviction that scab was prevalent to an alarming extent " especially in the north-western and western districts ", on the other hand, they were satisfied upon the evidence submitted to them and as a result of their personal inspection that wools from the Kaffrarian districts were more free from scab than any others coming from the Colony and that this was due to the working of the Scab Act.[3] Before the Inspector took in hand the natives' flocks running in locations in his area, " their flocks were always scabby, whereas it is now quite exceptional to find scabby stock belonging to natives in his area and this we attribute entirely to his seeing the dipping thoroughly and efficiently carried out." [4]

Representatives of the natives appeared before the

[1] *House of Assembly Debates, 1925*, vol. 3, cols. 267, 274.
[2] Ibid., col. 1894.
[3] See Report of Scab Disease Commission, 1892–4 (G. 1—1894), p. 9 (Appendix I to *Votes and Proceedings of Cape Parliament*, vol. 5, Session 1894).
[4] Ibid., p. 25.

Commission at King William's Town. All would have been sorry to see an end of the Scab Laws. Molongeni described how "immediately we see scab we report it". Nazo said frankly, "We have good sheep when we dip. We did not like the Act at first, especially when we were fined, but after dipping and carrying out the Inspector's instructions we find the Government is protecting us." [1]

Legislation which imposes restrictions on personal liberty is less easy of comprehension by the untutored mind than protective measures, and the Pass Laws have been the subject of acute controversy.

In an organized community the establishment of the identity of the individual by registration at birth and its preservation during life are essential. Among the white races, tax records, voting lists, social and business associates, the habit of having a fixed address, and conscription laws are some of the means of identity which are difficult to escape. The need for establishing and preserving individual identity is just as essential in the case of natives living in touch with an organized white community, but the means of so doing are much more difficult. As Lord Milner once had reason to point out: "If aboriginal natives are to come and go in large numbers in search of labour and are to reside for considerable periods in the midst of a white community, there must be some passport system, else the place will be a pandemonium. Alike for the protection of the natives and for the protection of the whites, it is absolutely essential to have some reasonable arrangement by which the incoming native can be identified and his movements traced." [2] But "apart from the Pass Laws, the only more or less general system of registration of native males is through tax records and these do not lend themselves to the ready and efficient tracing of natives even in their own districts. The uneducated native has few means of keeping in touch with his home except by irregular and indefinite messages sent through compatriots, and seldom has letters or personal documents in his possession. Many witnesses have informed us that relatives have frequently only the most nebulous ideas as to the whereabouts of absentees".[3]

[1] Ibid., *Minutes of Evidence*, Qs. 948, 1038.
[2] Quoted in *Report of Inter-Departmental Committee on the Native Pass Laws, 1920* (U.G. 41—1922), Capetown, 1922, p. 3.
[3] Ibid., p. 8.

In quite early South African history the Pass Laws were the means by which control over the movements of individual natives was exercised by white governments and their officials. These same laws were the occasion of a notable dispatch of Lord Milner's in which he took occasion to utter "a warning against the danger of interference in South African native affairs by well-meaning people in Great Britain".[1] who pressed for the emancipation of the native from what they alleged to be oppressive enactments.

"Pass Laws in the various Provinces of the Union have in the past been considered necessary to secure control over the native population and to provide a safeguard against crimes such as stock theft. In the earlier days their aim was principally directed against an influx of natives from the neighbouring barbarian tribes and for the protection of the cattle and property of border farmers. As the country became more settled they were utilized for enforcing contractual obligations between natives and Europeans and for detecting deserters. Later, when the natives began to seek employment in the large European urban and mining centres—more particularly the Witwatersrand—these laws, amplified and extended, have been used to maintain order, to detect deserters, to identify on behalf of their relatives natives who have become lost and to trace the heirs of those who have died leaving assets which should properly be distributed at their homes." [2]

The Inter-Departmental Committee on the Native Pass Laws, 1920, found that each of the Provinces in the Union had its own Pass Laws and that there had been no attempt to bring about uniformity in the laws or in their administration. The most drastic were those of the Transvaal and Orange Free State. All natives travelling in the Transvaal required passes and in urban areas a monthly pass had to be taken out. In the Orange Free State male natives could not enter the Province without a pass and within the Province every coloured person moving about had to have a pass or could be arrested as a vagrant by any inhabitant. There were Pass Laws in Natal but they had been found largely ineffective and had fallen into disuse.

"The earliest reference to pass provisions in the Cape appears to be in the Proclamation of the Earl of Macartney dated 27th June, 1797, which aimed at excluding all natives from colonial territory and directed farmers and others

[1] Ibid., p. 3. [2] Ibid., p. 2.

employing natives to discharge them. A policy of out-and-out segregation was probably contemplated and no native was to be allowed within the established limits of the Colony without a pass. This policy was subsequently abandoned, and Ordinance No. 49 of 1827 made provision for the admission of native foreigners for employment in the Colony under passport." [1] In this Province the Pass Law system was found to have fallen into disuse save in Bechuanaland and the Transkeian Territories, where permits for entrance and exit were required [2]; instead the vagrancy laws of the Province were relied upon,[3] which enable " idle and disorderly persons " trespassing on private property to be apprehended by the owner and summarily dealt with.

Save for such early provisions as those indicated it would not be true to say that the white man has imposed restrictions on the free movement of natives simply because they are natives. The desire to make exceptions from the general law in favour of natives who have shown themselves possessed of a more than ordinary degree of intelligence, education, or loyalty to the white race has been expressed in something more tangible than a pious aspiration. The Fingos, refugees from the remorseless Zulu chief Tshaka, were accepted as British subjects as far back as 1835. Shrewd and capable members of the Bantu-speaking tribes, they from time to time, and before dispersal throughout the Cape Province, rendered useful service as a buffer tribe on the frontier. Since then they have shown considerable aptitude for the absorption of European culture. They were given a Certificate of Citizenship [4] written on parchment and carried in a metal receptacle. The document was much prized by the Fingo. " It was a protection to him wherever he went." [5]

Addressing representatives of the native organization called the South African Native National Congress in 1918, the acting Prime Minister, after pointing out that " The Pass Laws do not exist for the purpose of slavery, as has been said, but for the purpose of assisting and protecting the uncivilized native ", went on to say : " I hope, however,

[1] Ibid., p. 2.
[2] See ibid., Annexure B for summaries of the Pass Laws of the different Provinces.
[3] Act No. 23 of 1879, as amended by Act No. 27 of 1889.
[4] Under Act 17 of 1864 (Cape).
[5] Evidence of J. T. Jabavu before Inter-Departmental Committee on Native Pass Laws (*supra*), quoted in *Report*, p. 9.

that as the natives get more educated and better civilized it may be possible to remove the Pass Laws. This cannot be done to-day, but we can say to-day to a native who is civilized and educated, 'We will exempt you from the Pass Law,' and the number of exemptions will increase as time goes on." [1]

The Inter-Departmental Committee on the Native Pass Laws which reported in 1920 [2] recommended the sweeping away of the existing laws and the substitution of a system which would enable a native to enjoy free and unrestricted movement throughout the Union, subject only to registration and the carrying of the registration certificate, duly signed by him or impressed with his thumb mark, when he went outside the Ward in which he resided, with exemptions in favour of natives of good character who have arrived at such a degree of civilization and education as makes it no longer necessary that they should be subject to special measures of protection and control beyond those extended to other members of the community.

The complaints on the subject of the Pass Laws by natives in the Transvaal, Orange Free State, and Natal were considered afresh by the Native Economic Commission appointed in 1930, but the Commission could do no more than recommend that the Report of the Inter-Departmental Committee of 1920 "be brought up to date and acted upon".[3]

One of Rhodes's settled notions was that the more intelligent members of the native community should be given some share, not in politics—"it was really ridiculous to suppose that these poor children could be taken out of this absolute barbarism and could come to a practical conclusion on such questions" [4] but in "some of their little local questions". Accordingly, when as Prime Minister he passed the Glen Grey Act,[5] he provided that for the purpose of the provisions of the Act, which set up a system of individual tenure of land, and subject to the strict conditions otherwise laid down therein, each location should be under the control of a Location Board of three resident holders of

[1] Quoted in *Report of Inter-Departmental Committee on the Native Pass Laws* (*supra*), p. 6.
[2] *Supra.*
[3] *Report of Native Economic Commission, 1930–2* (U.G. 22—1932), p. 106.
[4] *Debates of House of Assembly, 1894*, p. 363.
[5] Act No. 25 of 1894, and see pp. 321 *et seq.*

land appointed by the Governor. Furthermore, a District Council was set up for the administration of local affairs within the district, consisting of twelve members, six of whom were to be appointed by the Governor and six nominated by the Location Boards. The Resident Magistrate was to preside at their meetings. Power was given to the District Council to levy rates the proceeds of which were to be devoted to local development and good government.

The Act was originally applied to the Glen Grey locations, but power was taken to extend it to native territories elsewhere. Under these powers, the provisions of the Act were gradually extended to the Transkeian Territories, the first of the provisions so applied being those relating to local government.

In 1903 the Glen Grey Act was the subject of an Inquiry by a Select Committee of the Cape Legislature [1] under the chairmanship of John X. Merriman. Their finding was that, generally speaking, the Act had justified its existence. In particular : " Individual tenure and local self-government have done much and will in the future do more, to lead the aboriginal native in the path of improvement . . . particularly is this the case in the Transkei, where it is gratifying to know that a keen and intelligent interest is being shown by the natives in the management of their own local concerns." The natives also appreciated the advantages of the councils in that " their roads are made, drifts are kept in order, bridges are built, and schools are provided ".[2] In some respects they seem to have reproduced rather too faithfully the procedure of at any rate some local authorities that were indubitably white. In the words of the English local surveyor : " Every headman would like a good road leading to his location ; he wants all the drifts in his neighbourhood kept right ; he generally wants me to employ his uncle or his son or someone connected with him." [3]

The Native and the Land

By providing the labour force for the mines and as a farm worker the native has made a definite contribution to the

[1] Report of Select Committee on the Glen Grey Act (Appendix II to *Votes and Proceedings of Cape of Good Hope Parliament, 1903*, vol. 1).

[2] Ibid., Evidence of W. H. Biggs, Surveyor to the General Council, Q. 1267.

[3] Ibid., Q. 1248.

economic development of South Africa and is entitled to a permanent place in the story of that development. In his capacity as the occupier or owner of land he plays no such meritorious part; instead he appears as a social problem rather than as an economic asset.

Originally communal occupation was the only possible form of native land tenure. The administration of the land by the chief and his councillors was part of the tribal system and was suited to the needs and the customs of the aboriginal races. Then, while the native population as a body instinctively clung to the communal system, education and contact with white civilization awoke in many the desire for independence and individualism. The Native Affairs Commission of 1903–5, while recognizing the attachment of the native to the tribal system of land tenure, yet expressed the opinion that the growing tendency in favour of individual tenure was worthy of encouragement,[1] although the chiefs were by no means anxious to exchange the tribal system for one which they saw must in time weaken their control over their people.

Labour difficulties in South Africa have in varying degrees at different times been due mainly to the circumstance that the life of the average native has always been that of a pastoralist or agriculturist in a small way. The normal life of a small cultivator and herdsman is not a condition calculated to develop that capacity for continuous daily labour which European industrial conditions require, nor has any incentive thereto been supplied by their normal wants, which are for the most part limited, while their manner of living is inexpensive.

Cape Colony was the first of the South African Governments to experiment in the individual tenure of land by natives. The arguments in its favour were that individualism was conducive to greater industry and enterprise and that it promoted progressive and healthy growth. If, moreover, the holder of land by individual tenure could be brought to understand that if he continued to indulge in his besetting sin of stock-thieving or otherwise strayed from the path of good citizenship there was much he might lose, a greater sense of responsibility might arise in him.

The relatively liberal attitude of Cape Colony towards the

[1] Report of the South African Native Affairs Commission, 1903–5 (Cd. 2399), 1905 (*Accounts and Papers, 1905*, vol. lv), p. 95.

native question generally is reflected in its native land policy. "The policy followed by the Government of Cape Colony in respect of native land tenure has been to begin by adopting the communal system of occupation observed by tribes in their independent state, and by gradually adapting it to the changing conditions of life attendant upon the march of civilization, while at the same time establishing a just and sound administration of their personal as well as tribal affairs, to prepare the way for recognition by the people of the advantages of an individual system tending towards assimilation of European methods." [1]

Before the inauguration of individual land tenure among the natives of Natal in 1918, all the lands in the native reserves in that Province were held under communal and tribal tenure. To safeguard the native reserves against alienation to Europeans, the Natal Native Trust had been constituted in 1864. In that body, which was in effect the Governor and Executive Council so acting, were vested over 2¼ million acres of location land and 144,000 acres of mission reserve lands, to be administered by the Trust for the benefit of the natives living thereon. No rent was payable by natives living on location land, but they were liable for the annual Hut Tax of 14*s*., but mission reserve natives paid, as well as the Hut Tax, an annual rental of £1, of which one-half was remitted to the missionary bodies for educational purposes. By an Act of 1912, all this land was transferred from the Natal Native Trust and vested in the Minister of Native Affairs.

The early practice was, after the necessary initial survey, to grant individual titles to allotments with rights of commonage attached. The first of such experiments was made in 1852. But the question of transfer or sale on death was regarded by the natives as of no importance, and a special Act of Parliament had to be passed fifty years later to unravel the consequent legal muddle. After a survey of four native locations which was made in 1860, "although the titles were prepared, not one was taken up, so that the locations are still held communally." [2] Three years later the Government, after careful inquiry, decided to locate in a certain area some Fingos who had been used as a buffer between the European farmers and the

[1] *Report of South African Native Affairs Commission (supra)*, p. 87.
[2] Quoted in *Report on Native Location Surveys*, by M. Vos, 1922 (U.G. 42—1922), Capetown, 1923, p. 1.

Bushmen. In their case three Select Committees and two Acts of Parliament were subsequently involved in the attempt to rectify the grants of freehold title.

The native grantee of a freehold evolved a procedure of his own, the application of which is typified in the case of a survey for locations commenced by the Kaffrarian Government in 1869. In these locations a grant was made to individual natives of village and garden lots on payment of a quit rent and on condition of non-alienation of the land without the consent of the Government. In 1877, similar locations were established in a second area on similar conditions. In the result: "Although the grants of the two areas was accepted, the natives, except on rare, very rare, occasions, did not occupy the village lots; in fact for health reasons it was as well they did not. The garden lots were some distance from the village and the natives promptly squatted on the commonage in the immediate vicinity of the garden. As the commonage was large the distant parts of it could not be reached for grazing purposes, with the result that another spot was occupied as a cattle post and gradually became the residence of one of the relations; consequently a grantee or his successors occupied three sections of land of which he was the legal owner of only one, and in addition held title to a village lot which he had abandoned." [1]

No better system than those which were followed by such chaotic conditions was evolved until 1894, when the Glen Grey Act [2] was passed, the principles of which "constitute the best methods yet devised of applying the European system of individual tenure to the requirements of the native people".[3]

A native territory has given its name to the statute which is the most important landmark in the development of native land policy in South Africa. Glen Grey, one of the areas in the east of the Cape Province where the natives are segregated, is to the south of the Storm Bergen and west of the Transkeian Territories. It was established as a native location by Sir George Cathcart in 1852. In 1921 it had a native population of 41,836. This comparatively small territory was chosen by Rhodes as the experimental area wherein the bold native policy that is associated with

[1] Ibid., p. 3.
[2] Act No. 25 of 1894, and see p. 321 et seq. (*ante*).
[3] *Official Year Book of South Africa, 1929–1930*, p. 953.

his name was first to be seen in operation. The Omnibus Act in which he embodied provisions relating to land, labour, liquor, local government, and the franchise has become famous in the Glen Grey Act, 1894, of which something has already been said.

When, as Prime Minister, Rhodes had the opportunity of embodying his views in legislation, his methods were direct and peremptory. One knows to what lengths a Statute dealing with the law of real property can run in the English Statute Book. In the Glen Grey Act a new system of real property law was set up in a mere handful of terse sections. He also had his own characteristic method of dealing with the Legislature, that is to say rather as a Dictator than a mere Prime Minister, and the measure passed into law practically in the form in which it was originally submitted.

The position with which he had to deal was that the native locations had become overcrowded. War and pestilence, thanks to the white man's Government, had ceased to function as a check on the growth of the native population. The period had come when the native population could no longer be supported solely by their land: "Every black man could not have three acres and a cow in the future."

The problem thus presented was to be solved by the application of a few broad and simple principles. There was to be complete segregation. "His idea was that the natives should be in native reserves, and not mixed up with whites. He claimed that in the interests of the white man." Even locations on private farms were not to be tolerated. "For the most part they were in remote valleys where no one could get at them, and which were often mere reserves for stolen stock." [1] The communal occupation of land by natives was to disappear. The land was to be divided up and allotted on the basis of individual tenure, and the surplus native population left over when all the available land had been disposed of was to go to swell the labour corps, of which South Africa was so much in need.

The framework of the new system of land tenure was simple. The land in the native territory, with the exception of that already alienated, for instance to missions, was to be cut up into areas termed "locations", each such area consisting of "some 2,700 morgen of pastoral ground

[1] *House of Assembly Debates, 1894*, pp. 366-7.

and about 300 of agricultural ground ".[1] The available land, after reserving a certain portion for commonage for the use of registered holders in the location and dwelling sites, was to be divided into allotments of four morgen each to be granted to approved claimants, mainly natives already in authorized occupation in the location. For each such allotment a " perpetual quit rent "[2] of 15*s.* was to be paid. It was assumed that the great majority of occupiers would be content with a straw hut for their dwelling place. If, however, any desired to build " a substantial house " and other buildings, he could have another small lot for the purpose. The title deed for each individual holding was to be in the simple form prescribed by the Act and registered.

The hopeless confusion which had arisen in earlier times when the native was able to alienate his land was a state of things to be avoided at all costs. It was also eminently undesirable that a native should sell out to a white man. The notion of white people settling down in locations with the blacks always filled Rhodes with horror. He scouted the notion that the example of the white man would tend to uplift the character of the natives among whom he lived. His view was rather that of the member of the Legislative Council who said : " It was in Glen Grey as it was in Pondoland, where a few whites of very low class were living with Pondo wives and had degenerated to the level of the natives."[3] For these reasons it was made a strict condition in the title deed that the land was not to be alienated or transferred without the consent of the Governor. Rhodes did not actually include in the Bill a prohibition against alienation of native land to white men, for the reason, as he explained characteristically enough, that such a provision would be denounced by the " negrophilists at Home ", as class legislation. He relied on the authorities refusing their sanction to any such alienation as would enable white men " to come and live with their children in the midst of the savages just emerging from barbarism ". Nor could the land be divided or sub-let, and the holding would be forfeited if the holder neglected

[1] Ibid., p. 363.

[2] " Quit rent " is a term belonging to the early history of the English Law of Real Property, where it means a fixed rent paid by the freeholder or copyholder of a manor whereby he goes quit and free of all other services.

[3] *Cape Legislative Council Debates, 1894*, col. 305.

its proper cultivation or was convicted of theft. The land must be in the possession of workers; neither speculators nor loafers were wanted.

Nor was the Government's tight grip of the land released on the death of the holder. He could not devise his land by will: its descent was determined by the Statute itself.[1] Nor was it to be divided up among the holder's children. The holding was to descend intact according to the rule of primogeniture.

The new system of land tenure was applied in the first instance in the Glen Grey district, but provision was made by which it could be extended to other districts "in which the inhabitants are mainly aboriginal natives". The Act was applied to successive districts in the Transkei by Governor's Proclamation in 1898 and subsequent years.

In accordance with the Act, the Glen Grey area was surveyed and divided up into about 8,000 lots, to all of which titles were issued, and substantial monoliths were erected to mark the corners of the plots. The native occupier, however, retained his indifference to boundaries and the formalities of transfer. The boundary beacons disappeared, and when, in the year 1922, there was occasion to inquire into the land situation in the native territories, it was found in the Glen Grey area that "40 per cent of all allotments were in possession of the wrong people".[2] Official intervention straightened out matters satisfactorily enough, but it was clear that in the absence of constant supervision, boundary beacons would continue to disappear and registration of title on transfer would fall into arrear. Subject to the provision of such supervision there seemed to be no reason why, in the native territories, the system of individual tenure should not work satisfactorily enough.

There is an element of irregularity in "squatting" which appeals to the native temperament. Life to him is more interesting if, instead of occupying land where he is protected by legal forms, he settles down on Crown lands not formally set apart for native occupation or on private property otherwise than as a labour tenant or the servant

[1] The provisions in the Glen Grey Act relating to the administration and distribution of the estates of natives were repealed and re-enacted with amendments by the Native Administration Act, 1927 (No. 38, of 1927), which brought into harmony native administration in the various provinces.

[2] *Report on Native Location Surveys*, by M. Vos, 1922 (U.G. 42—1922), Capetown, 1923, p. 5.

of the legal owner or occupier. The Native Affairs Commission of 1903–5, found that in some of the Colonies, notably the Transvaal and Natal, "a large number of Natives are squatting on Crown or private lands." Summarily to eject them would cause serious distress and discontent. Regulation was the alternative, removal only being effected under conditions which enabled the native to find work and to live elsewhere. The same Commission recognized that "the unrestrained squatting of natives on private farms, whether as tenants or otherwise, was an evil and against the best interests of the country".[1] For instance, it was found that under the conditions imposed upon him his movements might be restricted and his labour not freely available elsewhere. Nevertheless, the Commission found it desirable to recommend recognition of "squatting" and suggested various rules for its regulation.[2]

The Commission also came to the conclusion that restrictions on the purchase of land by natives were necessary. "It is the fact that, say, 25 years ago, there were comparatively few native landowners by purchase in Cape Colony and Natal where to-day they exist in considerable numbers. The capacity to purchase, by collective process if necessary, is to-day in excess of what it formerly was. Furthermore, there is a manifest effort on the part of natives to-day being made to possess land which is not counteracted by any reluctance on the part of European holders to dispose of it so long as the sellers are not themselves bound to live in proximity."[3] The condition expressed in the last few words of the foregoing statement by the Native Affairs Commission, describing the state of affairs in the early part of the century, indicates only one of various difficulties met with in the attempt to adjust native rights in the land with those of the white man. Thus native earnings tend to increase while his necessary expenses remain small. He is in this way enabled to buy land at

[1] *Report of the South African Native Affairs Commission, 1903–5* (*supra*), p. 24.

[2] See ibid., p. 100. The occupation of land without normal or legal title is only one of the conditions which constitute a squatter. "The term 'squatter' has been used in the Transvaal and Orange Free State to describe what is now more generally known as a labour tenant, but in Natal 'squatter' implied a Native who was allowed to settle or squat on a piece of land either on payment of a cash rent or a share of the crops produced by him on the land which he occupied" (*Report of Native Economic Commission, 1930–2* (*supra*), para. 354).

[3] Ibid., p. 101.

prices in excess of its market value, as his habits and standard of living enable him to exist on land acquired in conditions whereunder no European could make a living. Moreover, the multiplication of native landowners scattered among a white population would make it impossible to preserve those social and political distinctions which the bulk of white South Africa regards as essential.

Hitherto the conditions which regulated the purchase of land by natives had varied considerably. In the Cape and Natal land, except that reserved for natives only, could be held in freehold or on lease without distinction of race. In the Orange River Colony, land could not be either purchased or leased by natives. In the Transvaal, under the terms of the Convention between the British Government and the late Republic, natives could acquire land subject to its transfer on trust to a Government officer. In Basutoland land was inalienable as also was the land reserved to natives in the Bechuanaland Protectorate. The recommendations of the Native Affairs Commission of 1903–5 were based on the principle of "limiting the purchase and leasing of land by natives to areas within which the privilege may be exercised by them without bringing them into conflict with European landowners and of the extension of the privilege by the creation of such areas in all Colonies and Possessions, where this can be conveniently done".[1] Purchase of land by natives should be limited to certain areas to be defined by legislative enactment; and purchase of land which might lead to tribal, communal, or collective possession, or occupation by natives should not be permitted at all.

During the immediately succeeding period the negotiations preliminary to the Union absorbed all the energies of South African statesmen and the native question was of necessity allowed to remain in its unsatisfactory state. By 1913, however, the overflow of natives into the areas of white settlement had reached a stage when it was at last realized that measures of protection of the white areas against native encroachment could be postponed no longer. Accordingly when the Union of South Africa had been achieved, the Union Government turned to face the problem of whites and natives. General Botha, then Prime Minister, looked to a scheme whereby whites and natives would be kept in separate blocks of territory as the true solution

[1] Ibid., p. 26.

" The time was coming when the native question would have to be considered most seriously in the direction of keeping whites and natives apart and preventing their intermingling. They would have to fix attention closely on the question of segregation, while treating everyone with absolute justice." [1] The outcome was the Natives Land Act of 1913,[2] which gave effect to the policy of segregation, in other words the territorial separation of land rights as between the European and native races. Appended to the Act was a schedule of native areas in which no person other than a native could acquire land or any interest in land without the special permission of the Governor-General, while outside these areas no native could purchase, hire, or acquire any land or interest in land from a European without the approval of the Governor-General.[3] The Act aimed at maintaining the *status quo* as regards the ownership and occupation of land in the Union between natives and whites " until Parliament should make other provision " in the direction of further legislation to be based on the report of the Natives Land Commission, for the appointment of which provision was made in the Act. This body, the Beaumont Commission, reported in 1916. What followed throws a very clear light on the white man's seemingly hopeless pursuit of a satisfactory Native Policy. In 1917 the Union Government introduced the Native Affairs Administration Bill, which was designed to deal with the problem on the basis of the recommendations of the Beaumont Commission. The Act of 1913 had definitely embodied the principle of territorial segregation on the basis of ownership, but not of residence. The Bill of 1917 set out to introduce a scheme of native government based entirely on the principle of separate native areas which the Government sought to extend beyond the limits of the schedule given in the Act of 1913. The Bill, after a second reading, was referred to the Select Committee on Native Affairs, which recommended the appointment of " Local Committees " to revise the schedules of the Beaumont Commission. Local Committees were appointed for the Cape, the Orange Free State, Natal, Eastern Transvaal, and Western Transvaal. Their reports were published

[1] Debates, 9th May, 1912. [2] Act No. 27 of 1913.

[3] By the decision of the Appellate Division of the Supreme Court in the case of Thompson and Stilwell *v.* Kama, it was held that the Cape Province was exempt from the restrictive provisions of the Act.

in 1918, and met with as great a storm of opposition as had the recommendations of the Beaumont Commission and the provisions of the Act itself. The Government then decided that " the time was not ripe to deal finally with the position arising out of the legislation of 1913 until the recommendations of the Beaumont Commission and the various Local Committees had been co-ordinated and the machinery devised for enabling native opinion to be focussed on the proposals ".[1] The controversial provisions having been dropped, the Union Government embodied the remaining provisions in a Bill, which became law as the Native Affairs Act of 1920.[2] These provisions were chiefly political in nature, having as their objects the appointment of a permanent Native Affairs Commission, the establishment of native local councils, and the summoning of representative native conferences to ascertain native opinion on any projected native legislation.

The Native Land question still remained to be solved; the Natives Land Act, 1913, continued on record as the last word of the Legislature on the subject, the rigour of the statute, however, being in the meantime to some extent mitigated by the use of the Governor-General's dispensing power, provision for which was fortunately made.

The dominating importance of the land factor in the whole native question is brought out with striking clearness in the Report of the Native Economic Commission appointed by the Governor-General in 1930. For although the terms of reference direct the attention of the Commissioners primarily to the economic and social conditions of natives in urban areas, the whole tenor of their Report [3] was but to confirm the view expressed by another Commission which had reported a quarter of a century previously [4] that " the common origin of many serious Native problems " is the land question, in that " it dominates and pervades every other question : it is the bedrock of the Native's present economic position and largely affects his social system ".

In the Natives Land Act, 1913, the Native Economic Commission, 1930–2, found elements of good and bad.

[1] *Report of Native Affairs Commission for 1923* (U.G. 47—1923), Annexure C : " Statement of the Natives Land Act, 1913, and Subsequent Administrative Policy," by G. A. Godley, pp. 64–5.

[2] Act No. 23 of 1920.

[3] *Report of Native Economic Commission, 1930–2* (U.G. 22, 1932).

[4] *Report of the South African Native Affairs Commission, 1903–5* (Cd. 2399), 1905.

The principle of segregation in land-ownership and occupation as between natives and other races the Commission condemned as uneconomic. The Act bases the right to hold land not on any economic qualification, but on race. "It does not matter whether a person of the other race can produce several times as much from the land. On account of his race he is precluded from trying." [1] On the other hand, the desire to secure land held by natives to their own race they found to be commendable, and the discouragement of the system of share-farming with natives resorted to by Europeans lacking the energy, ability, or desire to work their own land—Kaffir-farming—was a protective measure in favour of Europeans against a system that is doing "an immense amount of harm on company farms and Crown Lands where it is still permitted".[2]

Meanwhile there was found to exist in the native reserves "a state of affairs in which, with few exceptions, the carrying capacity of the soil for both human beings and animals is definitely on the downgrade"; while "with the exception of a few favoured parts, a native area can be distinguished at sight by its bareness". It was not that the native had been given inferior land. "The Commission saw for themselves that the reserves include some of the richest land to be found in the Union. A comparison of a map of South Africa, distinguishing the native areas, with a rainfall chart, shows that the Natives as a whole have no reason to complain on the score of the moisture conditions of their lands, judged by the general rainfall distribution of South Africa." [3]

These generally unsatisfactory conditions, the Commission points out again and again, are the result of the native habit of overstocking, which "is so general in the Reserves as to have become an evil of the first magnitude", and the consequence was the increasingly rapid drift of the native to the towns with the accompanying grave problems of housing, administration, and morality.[4] On the agricultural side education is equally wanted. "Despite European influence, the use by natives of the alternatives of manuring and rotation remains exceptional." [5] In the old days, as land became less fertile through overcropping, it was abandoned and another plot occupied. Under the new

[1] *Report of Native Economic Commission, 1930–2* (*supra*), para. 178.
[2] Ibid., para. 182.
[3] Ibid., paras. 69, 71, 342.
[4] Ibid., paras. 71, 84, 338.
[5] Ibid., para. 54.

conditions this simple solution of a grave problem is precluded. More land for native occupation and more education as to its economic use were, in the opinion of the Commission, the essential factors in solving the native land problem.

But the native problem remains—how those natives who do not receive that economic training and discipline which comes from working for white employers whether on the land or in the mines are to be made into economic assets; and how the white settlers are to be enabled to stand up against the ever-growing pressure of a native population which declines to melt away before them as it has elsewhere; and the circumstance that the white population of South Africa has made full use of the native as the basis of all agricultural and industrial enterprise, even to the extent of inducing him to leave his tribal lands and to gain his livelihood in the unskilled labour market, saddles the governing class with a special responsibility which cannot be ignored when the problem of reconciling the claims of white and black South Africans is under consideration.

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