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SATURATED CIVILIZATION



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SATURATED CIVILIZATION

By SIGMUND MENDELSON

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INTRODUCTION

Although modern civilization manifests itself largely through material achievements, it also possesses powerful humanizing agencies, profoundly affecting the social and economic status of large masses of people in every part of the world. Its tendency is to level not only wealth, rank, rights and opportunities, but also material indulgences and comforts of life. Wherever the human being aspires to social and economic betterment, he comes under the spirit of this civilization and assumes his place in the march of social and economic progress. To this the masses are the chief contributors, as well as its chief beneficiaries, and from their mental and physical exertion modern social and economic progress derives its force and wide diffusion.

Whereas past cultural civilizations, including medieval Western civilization, formed an intellectual aristocracy, nurtured by the élite of society and supported by their sovereigns for the glorification of their dynasties, modern civilization forms an intellectual democracy, the chief factors of which are the common people, and the influence of which penetrates to the lowest social strata. Cultural civilization is based exclusively upon extraordinary achievements of indi-

vidual creative geniuses, whereas modern civilization is based largely upon cooperative efforts and collective achievements of the large masses of people. The one is a humanizing agency in the sense of stimulating the spiritual and intellectual forces in man, and increasing the importance of the spiritual, philosophical, and esthetic aspects of life. The other, although stressing the importance of material life and of material achievements, is a humanizing agency in the sense that it strives to promote social justice, spreading knowledge and education, increasing comforts and conveniences, and raising the general standards of living. The one deals with the mysteries and higher purposes of life, the other with concrete problems and the practical phases of life. Both, purely cultural or largely a material civilization, are human creations, and hence form only passing epochs in the march of the human race. Neither can endure permanently, but their rise and decline may be prolonged or abridged, accelerated or retarded, by external or internal causes. The decline of Roman civilization is attributed historically to both external and internal causes, but irrespective of other influences, it had reached the point of saturation, and decline was inevitable according to the laws of nature. Medieval civilization, as distinguished from the Dark Ages, had preserved its main characteristics until the end of the eighteenth century, but it passed its meridian a century before and was brought to an abrupt

end by the French Revolution, which paved the way to the present era, distinguished by different mental peculiarities, different achievements, and different aspirations.

No single cause but a number of contributory causes have aided in the rise, development, and spread of modern industrial civilization, and in the absence of any one of these causes, the present age would have assumed a different aspect and would have followed a different tendency. It requires no great stretch of imagination to realize that if the intense spirit of warfare which actuated the nations of Europe for two centuries and engendered a series of chronic wars, had not given way after the fall of Napoleon Bonaparte to a strong spirit of peace, industrial civilization in the nineteenth century would have been greatly retarded, if not altogether checked. Likewise, had not peace and political stability made available for productive purposes the enormous supply of human energy which formerly was employed in warfare, industrial progress would not have been the outstanding feature of the present era.

Symptoms of the decline of medieval civilization and of the birth of a new era were quite pronounced in the greater part of Europe in the last half of the eighteenth century, not only in the growing revolt against the rule of absolutism upon which medieval society was based, not only in the widespread prostration of trade,

commerce, and industry, and in the growing discontent and misery of the large masses, but also in the powerful mental ferment and in the agitation of the intellectual leaders against the existing social order.

The causes and conditions which hasten the end of every important era in human history serve also as the source of new aspirations and hopes, which lead to renewed effort for human progress. Powerful forward movements arise from existing decay and dissolution. The decay of Paganism hastened the spread of Christianity. On the débris of the ancient Greek and Roman civilization arose the intellectual and cultural era of the Renaissance. Not every age, however, and not every land is conducive to great mental effort and can develop forces of progress. In some ages the people cannot be aroused from their lethargy, and they cannot be stimulated to great effort, or be attracted to higher ideals, or to an improved human existence. Other ages again are particularly susceptible to civilizing forces and the people lift themselves to a higher human plane. Many of the lands which in the past were particularly fertile in civilizing forces and made the most enduring contributions to human progress have become sterile and their people have relapsed to a level corresponding with their deteriorated mental powers, indifferent to their low conditions and insensible of their past glories. On the other hand, the people who offered the greatest resistance to Western

civilization in its early stages, as, for instance, those of northern Europe, and particularly the countries which in modern times constitute Scandinavia, are now in the vanguard of modern social progress.

Progress is neither a boundless nor an uninterrupted movement, and the laws of rhythm serve as the balance wheel by which all creations in the universe, including those resulting from human agencies, are maintained in orderly relationship. It can readily be conceived that without the operation of this fundamental law of nature all earthly formations and manifestations, whether relating to organic or inorganic matter, would reach unlimited dimensions and a state of normalty and balance could not exist. The growth and development of the human body, to use an illustration, would continue until terminated by death, mountains would rise to unlimited height, and intellectual development would form a continuous process, infinite like space and time.

The course of human progress, whatever form it takes, is marked by alternating stages of rise and decline, acceleration and retardation, ferment and exhaustion. At the climax of activity and development, counteracting and reactionary forces assert themselves, impelling either temporary rest and subsidence, or diverting the pent-up energies into new channels or outlets, like the volcano, which at the height of activity creates new craters for the release of its confined energies, or the forces which had made for progress

relapse once more into a dormant state. A material age leads to a spiritual age, and mental stagnation to intellectual ferment, and the reverse is also true. Through the reversive and reactionary forces of the rhythmic laws all creations on earth are characterized by perpetual change and movement, by progression and retrogression, by rise and decline. Without the operation of this force, either eternal stagnation or eternal chaos would be the state of this planet, as it may be of many others in the universe.

A civilization, however advanced, and whatever its tendency, produces in itself reactionary agents, which arrest further advance and compel recession to a lower level until the exhausted human forces are recuperated and can be incited to renewed activity. The more advanced and prolific a civilization, and the more intense human efforts be, the more powerful and active are the reactionary forces which they develop. It does not follow, however, that the recession reaches the former low level, for the increased knowledge and experience are not entirely obliterated, and a certain stage of the advance is retained and maintained, and serves as a stepping-stone to the next advance in the march of the human race. Hence a certain degree of progress, whether material or cultural, is permanently established by every wave of civilization. The present civilization, although it manifests itself in different form and concerns largely the social and material welfare of the

human family, is destined to follow the path of past civilizations, and neither human nor mechanical forces can prevent its eventual decline.

World-wide economic development and individual betterment have given enormous impulse to trade, commerce, and industry, which are exceedingly sensitive to reactionary forces. The material wants which they have enormously stimulated, the overloaded comforts, facilities, and luxuries which are widely indulged in, are in themselves destructive of virility and of those forces and qualities without which distinguished achievements in any field of human activity cannot be realized. Material indulgences are not conducive to intense efforts, whether individual or collective, and they do not promote progress whether material, intellectual, or spiritual.

Material instruments of progress, however far-reaching their efforts in the early stages of their application, become dulled by use. After they are incorporated in the economic mechanism and economic conditions are adjusted to their operation, they lose their power and influence as factors of change and progress. After steam power became a widely used source of energy and its operation was reduced to a scientific standard, it was no longer a deciding factor in the cost of production, and had no further effect on the economic status of labor, nor did it lend further increased impulse to industrial progress. The operation of rail-

roads and of other improved means of mechanical locomotion have each in their turn produced not only vast economic changes, but have also profoundly affected the routine life of the individual. But after the human family is once adjusted to the changed conditions, the effect of the latter becomes more and more blurred, and is no greater than when gas light supplanted candle light, or when in turn gas light gave way to the electric bulb. New mechanical agencies, however effective they may be in their operation, can neither prolong industrial civilization, nor can they prevent its decline.

Probably more important to posterity than the remarkable material progress are the profound changes and reforms which modern European civilization has effected in every branch of the social organization. It has created a powerful wave of social progress which neither geographical boundary lines nor the traditions of ages can check. Its force has been particularly manifest in the changed political, social, and economic condition of the masses, which from time immemorial occupied a position of inferiority with greatly restricted social rights and with a heavy burden of duties and obligations. Since at all times the weak had to submit to the arbitrary power of the strong, it has been a fundamental tenet of every religion and the fundamental law of every enlightened government to temper might with right, and ameliorate the condition of the

oppressed and helpless. Nevertheless, slavery was a strongly entrenched institution, and was tolerated until the last half of the nineteenth century in one of the most advanced countries in which the humane principle that all men are created equal is deeply implanted in its political institutions.

Although not nominally in bondage, labor was depressed to the lowest level of existence in all civilized countries in the earlier stages of the present industrial age. Alongside of the material aims and achievements, modern civilization has, however, developed a powerful humanitarian spirit, the force of which is manifested not only in world-wide political and religious toleration, in the practice of broad philanthropy, in international comity, in democratic forms of government, but above all in the intense public sentiment and pressure for a higher social order in which the masses exercise great power and class privileges and distinctions are eliminated. This powerful moral force is reflected in every phase of the social organization and in the individual life. It has given irresistible impulse to the elevation of labor and to the most advanced social reforms. It has created a vast chain of agencies for the protection and welfare of those who formerly were the victims of human discrimination and moral torpor.

The intense spirit of social progress is removing human inequalities, and is not only aiding the weak

and incompetent in their struggle for existence, but is protecting them in the exercise of the rights and opportunities which they now share with the more fortunate. No phase of human life is neglected with a view of improving the existing social order, whether it relates to man, woman, or child, or whether it concerns their physical, material, intellectual, or moral welfare, their working and living conditions, or their political and social rights.

The emotional as well as the intellectual forces of the present age are attracted strongly to the solution of social problems which have baffled social reformers of all times. Every human and social shortcoming falls within the range of this intense and widespread agitation which is effecting profound social changes in the affairs of the human family. The intense impulse which characterized every high wave of civilization is also straining the entire mechanism of modern civilization as well as individual life. The greater human progress becomes, and particularly in a civilization distinguished by extraordinary concrete achievements, the more human effort does it require to sustain it and operate the complex social machinery. However powerful the human forces, they are not equal to the increasing tension of continuous progress, and eventually they become exhausted and the particular civilization they have created forms a closed chapter. While the achievements endure, the succeeding gen-

erations are actuated by different ideals and mental peculiarities which lend to the human race a new aspect and character.

Intense activity in life and nature leads to exhaustion and subsidence, and intensity is the outstanding characteristic of the present civilization and of modern life. Economically, socially, and politically, evidence of overdevelopment and overstimulation is quite pronounced. The world is saturated with social and political reforms and theories, and overloaded with comforts and material indulgences, without, however, bringing human contentment. The pressure of earthly existence has been increased and is reflected in the widespread unrest and in the mental and nervous strain which is characteristic of the age. The struggle for existence is not relaxed with a higher standard of living, with increased wants and desires, with increased individual responsibilities and duties, and with the exacting demands of modern life.

The symptoms of saturation and reaction, which will be treated in detail in this study, cannot be interpreted merely as the temporary effect of overstimulation, to be followed after a short pause by renewed economic expansion and inflation, and by still more advanced social and political reforms and innovations. These are symptoms forshadowing, as they have in all past intense human manifestations, subsidence and decline of the mental peculiarities and tendencies, which

in the present age are powerfully expressed in material and social progress. It is not to be implied that the forces of progress will cease to function, or that the chase for wealth is to be abandoned, or the wheels of the economic machinery will cease to provide employment for labor and satisfy the wants of the human family. The intense impulse and activity which have characterized modern civilization and modern life have, however, produced a surfeit of material progress, a surfeit of material indulgences, a surfeit of mechanical facilities, a surfeit of wealth and credit, a surfeit of social and political reform, a surfeit of educational and cultural opportunities, a surfeit of mental and material stimuli, in short a surfeit of all those powerful elements which constitute modern progress. Surfeit means excess and overload in life and in nature, and invariably ends in subsidence and decline. All past waves of civilization were marked by intensity in the particular manifestations which distinguished them. Their fate must be repeated in the history of the present as well as of all future civilizations.

Advance and recession mark the course of human progress, and only those incapable of great mental effort, as, for instance, many of the savage tribes, are exempt from the laws of rhythm; they neither advance nor recede but remain stationary in their low state of existence. Retrogression implies also inherent forces

of progression, and though civilizations and nations become extinct, the human forces eventually find new outlets and move forward to the formation of a new civilization.

SATURATED CIVILIZATION

CHAPTER I

FORCES IN PAST AND PRESENT CIVILIZATIONS

With the fall of Napoleon Bonaparte, the militaristic spirit which had shaped the destinies of the European nations for centuries lost much of its force, and there followed an era of political tranquillity and of vast economic activity. This era marks the rise and development of a new European civilization, differing from the old civilization both in ideals and achievements, and in a profoundly changed status of the human family. Unlike periods of high cultural achievement in the past, modern civilization is the product, not of powerful spiritual forces, but chiefly of cold reasoning powers. It intensively engages the mental powers of the human race in promoting the practical purposes of life and improving the various phases of the social organism. It is actuated powerfully by material stimuli as well as by a humanitarian spirit. Its outstanding achievements are in the field of concrete problems relating to the social and material betterment of the human race.

Industrial progress and intense commercial development lend special distinction to the nineteenth century. Prior to that time industrial and economic pursuits were regarded in most European countries as degrading, and those engaged in them occupied inferior social and political rank.¹ Military and ecclesiastical careers offered the chief opportunities for political and social advancement and enjoyed special class privileges. Economic development was restricted for many centuries, not only by chronic warfare, political instability, and social prejudices, but by oppressive taxes and drastic regulations, affecting labor as well as industrial and economic operations.² Where trade and commerce did flourish and receive the care of the state, it was due to special geographical or maritime conditions which offered favorable opportunities for international trade; as, for instance, in Venice in the Middle Ages, or in the Dutch Republic and in England at a later period. National pride was not expressed in terms of trade and commerce or of material

¹ William Graham Sumner, *Earth, Hunger, Liberty and Responsibility*, p. 191.

² In monarchical France there was established the doctrine that "the right to labor is a royal right which the prince may sell and subjects should buy." Along with this went the enforcing of countless industrial regulations by armies of officials, pushed to such extremes in France that before the Revolution the producing and distributing organizations were almost strangled.—Herbert Spencer, *Principles of Sociology*, Vol. III, "Acquisition and Production," p. 366.

wealth, but in terms of cultural and military achievement. France, for instance, occupied for centuries the leading position among the nations of Europe, yet her trade and commerce were at a low level, and never lower than during the reign of Louis XIV, when France gloried in her military prowess and in her intellectual and cultural primacy. Art, science, and literature formed the powerful fermentive force of European civilization from the dawn of the Renaissance until the outbreak of the French Revolution. Not until the nineteenth century did trade, commerce, and industry assume vast proportions in all civilized countries and give European civilization a new trend and aspect.

Every civilization is characterized by pronounced mental peculiarities with distinct tendencies and creative powers. The mental powers reach a high state of activity and efficiency in certain spheres of human endeavor, and are deficient in others. In modern civilization the mental powers are expressed in the field of concrete problems rather than in the domain of abstract reasoning. Although the complex social organism and the vast operation of trade, commerce, and industry make severe demands upon the reasoning and imaginative powers, modern civilization is not an intellectual movement in the sense applied to past waves of civilization. The mind is trained intensively within narrow confines of concrete and practical problems, and the

intellectual achievements arise largely from material motives, or serve material purposes. Modern civilization has achieved marvelous results in the practical application of the forces of nature, in the utilization of the resources of the earth, and in the development of the productive activities. It is expressed and defined in terms of economics and mathematics, in mileage of railroads, in tonnage of shipping, in volume of trade, in magnitude of production, in means of communication and transportation, and in a general way in achievements which denote and promote material welfare and a higher standard of material life. It is deficient, however, in the intense spiritual forces and lofty intellectual ideals which have distinguished past civilizations and have raised the human race to a higher cultural level.

The mental peculiarities which give rise to an advanced civilization have no enduring force and are not transmittable to posterity. Ultimately they reach a point of decline and exhaustion, as does the civilization which they have created. Achievements, on the other hand, form permanent contributions to the store of knowledge, and ages after the civilization has terminated they still exert a powerful influence on posterity and on the progress of the human race. The civilization of Egypt and Assyria lent force and form to the pagan civilization of Greece, and the achieve-

ments of the latter, after a lapse of two thousand years served as a stimulus and guide to Europe rousing itself from the mental stupor into which it had relapsed after the break-up of the Roman Empire, and inspired the remarkable cultural achievements of the Renaissance. Extinct civilizations leave in the track of their ruins not merely memories of past glories and failures, but they generate an eternal force, which fertilizes future civilizations and aids new achievements.

Although modern civilization has chiefly a social and an economic groundwork, it is thus powerfully influenced by the legacies of past civilizations. In art and literature, in law and the sciences, in the operation of social and political institutions, and in fact in every agency serving human interests, the extinct Greek and Roman civilizations still function as indispensable schools for knowledge and enlightenment, and as guides to human progress. The great advance in applied sciences in modern times, and particularly in those departments which serve as aids and tributaries to economic development and material progress, cannot be attributed to the operation of higher intellectual powers in the present age. In most instances the achievements are the direct result of accumulated knowledge and discoveries to which past generations have made valuable contributions and have paved the way to future development. The development of electricity has been

remarkable, but without the transmitted scientific discoveries and observations of the preceding generations, the knowledge and practical application of this force could not have reached its present advanced stage. Physical astronomy in the days of Aristotle or of Ptolemy was not as highly developed as it is to-day, not because the intellectual powers of the ancient Greeks were not equal to those of later generations, but because the earlier generations lacked the advantages of cumulative inherited achievements in this field of human activity. The invention of the telescope has raised physical astronomy from a speculative to a positive science, and has been instrumental in imparting a clearer knowledge of the laws of the universe. A single mechanical invention, as, for instance, the microscope, has been the means of vastly increasing human knowledge and aiding future achievements in many spheres of human activity. Each succeeding stage of human progress has an increased advantage, not in greater intellectual powers, but in inherited and cumulative achievements, which enrich knowledge and are productive of new achievements. The earliest and simplest mechanical inventions in the existence of the human race, as, for instance, the spade, chisel, and lever, served already as important stepping-stones to progress by increasing the efficiency and enlarging the scope of labor. They present the earliest attempt at improving the productive power of human labor by

means of tools and mechanical devices, and considering the utter lack of mechanical knowledge and experience, their invention probably entailed as much mental effort as does the invention of a complex modern machine with the aid of transmitted accumulated mechanical knowledge and experience.

The advance of the human race through countless ages and stages to a higher state of development formed an intermittent process, and was marked by relapses and long periods of rest. On the chart of human progress variations and reverses are quite pronounced and occur in rhythmic order. Advances alternate with recessions, and intense activity with extreme exhaustion. This process forms the history of nations as well as of civilizations, and is vividly illustrated in the disintegration of the Roman civilization. In the wake of the receding high wave of Roman culture followed a long period of intellectual coma and mental impotency. Europe relapsed into a state of semi-barbarism from which it did not emerge until eight centuries later, when the Dark Ages slowly gave way before a quickening of the intellectual energy which culminated in the Renaissance. During this long period all the civilizing forces, whether expressed in art, literature, and science, or in the refinements of life, were in a dormant state, or greatly neglected, except in that part of Europe which came in close touch

with Saracen culture. The impotence of the reasoning powers stirred the imaginative powers all the more, and blind credulity and unbounded superstition became the most powerful actuating forces and reconciled the people to a disorganized social order and to the lowest depth of human existence. Not only were the priceless cultural and educational heirlooms of past civilizations cast aside or put under the ban of the Church as dangerous legacies of pagan civilizations, but material achievements serving the health, comfort, and convenience of the people, as, for instance, the aqueducts and public baths, the highways and bridges, all of which were formerly the pride of the people in the provinces under Roman rule, were abandoned and completely neglected. Their débris has survived and is a living evidence of the remarkable creative and intellectual powers of the ancient Romans, and the equally remarkable intellectual decay which followed it, obliterating not only the cultural and material achievements of past civilizations, but paralyzing for eight centuries the human agencies which make for progress and enlightenment.

A beam of light occasionally penetrated the darkness of the long night, but it lacked sustaining force, and Europe relapsed into its previous state of darkness. Human progress could not be resumed in the social miasma and intellectual decay which characterized the greater part of Europe during the Dark Ages. The

monasteries served as the only link with past civilizations, and they formed the reservoirs and conservers of transmitted knowledge and culture, which after many centuries aroused Europe to renewed intellectual activity and lent powerful impulse to the Renaissance.

The reign of Charlemagne in the latter part of the eighth century stands out in bold relief in the history of that period and in contrast with the age which preceded it and with the age which followed it. But even the genius of a Charlemagne failed to arouse his people from their mental stupor and restore human progress which had remained dormant for over three centuries.³ The forces of progress which he tried to arouse from their long lethargy were not ripe for action, and immediately after his death his social and political creations became extinct, and Europe under the reign of his successors sank to a lower level than at any other period during the Dark Ages. Human endeavor in every department of intellectual, social, and economic activity remained paralyzed, and barring church architecture, religious discourses, and a rather crude art, the long period between the fifth and eleventh centuries has transmitted no evidence of powerful civilizing forces, and their absence is reflected not only in the

³ His (Charlemagne's) real merit is doubtless enhanced by the barbarism of the nation and the times from which he emerged.—Edward Gibbon, *The History of the Decline and Fall of the Roman Empire*, Vol. V., Chapter XLIX.

paucity of intellectual and material achievements, but in the disorganized social order in which existing laws proved of little avail, life and property were exposed to the power of the lawless, and disease and pestilence held undisputed sway. It is true that during the reign of Charlemagne schools were organized which paved the way in the course of centuries to the present-day universities, but in their earlier stages these schools served merely as adjuncts for the propagandà of the dogmas of the different religious orders. They were not seats of higher learning or of culture, and although Latin was cultivated, its teaching was greatly restricted in scope for fear of pagan contamination. Science, literature, and art did flourish when darkness was most intense in the ninth and tenth centuries, but only in that part of Europe which was in possession of, or came under the influence of, the Saracens.

The intellectual forces of western Europe were, however, not extinguished during their centuries of dormancy, and under cover of darkness the seed of intellectual progress gained vigorous root and blossomed all the more profusely when it was exposed to the sunshine and warmth of the coming Renaissance.

CHAPTER II

EUROPEAN CIVILIZATION IN THE MIDDLE AGES

In the earlier stages of the Renaissance, the intellectual powers were particularly attracted to art, literature, science, and philosophy, and their higher development formed the pride and ambition of the rulers and of the nobility. Secular knowledge and learning were extensively pursued, accompanied by widespread mental ferment, without, however, arousing suspicion of heresy and producing violent conflicts with the church authorities, such as characterized the later period. Intellectual activities had an esthetic as well as a rational and humanizing tendency, lending importance and purpose to earthly existence, regardless of the question of future salvation, which was the most powerful actuating force in Christianized Europe during the Dark Ages.

Material progress did not, however, keep pace with the rapid intellectual development, and the crude human existence into which the greater part of Europe relapsed after the break-up of the Roman Empire remained unchanged until the eighteenth century.

Deep-rooted indifference to the most essential comforts and refinements of life was a heritage of the common people, and ambition for improved physical existence was difficult to arouse. The splendor of the palaces served the vanity of the feudal lords and aristocracy, but it did not relieve the squalor and wretchedness of their surroundings. Violent pestilences and widespread diseases, arising from squalid living conditions and lack of sanitary provisions, depopulated the most flourishing towns and countries of Europe. Even as late as the latter part of the seventeenth century, England, notwithstanding its marked intellectual progress, was, in respect to living conditions, sanitary provision, facilities for intercommunication, safety of traveling, and all essential comforts, on a lower plane than any semi-civilized country of the present age. Going back sixteen hundred years, it is evident from the remains of ancient Rome and from the excavated provincial city of Pompeii, that in the refinements of life and in all those things which enter into a high social organization and promote the health, comfort, and physical welfare of a people, Roman civilization was far in advance of European civilization of the seventeenth, if not of the eighteenth century. The well-paved streets, the magnificent highways, some of which still endure, the stupendous aqueducts, the scientific system of drainage, lend support to this conclusion in the face of widespread physical neglect which sub-

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sequently characterized the leading countries of Europe, until almost the very rise of modern industrial civilization in the nineteenth century.

Of London, supposed to have been the most populous capital in Europe at the end of the seventeenth century, Lord Macaulay in his history of England¹ presents this picture: "The pavement was detestable. . . . The drainage was so bad that in rainy weather the gutters soon became torrents. . . . When evening closed in the difficulty and danger of walking about London became serious indeed. The garret windows were opened and pails emptied, with little regard to those passing below. Falls, bruises and broken bones were constant occurrences. For, 'til the last year of the reign of Charles the Second, most of the streets were left in profound darkness. Thieves and robbers plied their trade with impunity."

This was the condition of London at a period when the intellectual development of England was immortalized by great achievements and European civilization was making rapid progress. More, however, than London, the rural districts of England present at the end of the seventeenth century the antithesis of a civilized state of society, as may be inferred from the following description of rural England in the *History of Intellectual Development of Europe* by John Wil-

¹ Lord Macaulay, *History of England*, "The State of England in 1685," Chap. III.

liam Draper.² "The peasant's cabin was made of reeds or sticks plastered over with mud. His fire was chimneyless—often it was made of peat. In objects and manner of existence, he was but a step above the industrious beaver who was building his dam in the adjacent stream. There were highwaymen on the roads and pirates on the rivers, vermin in abundance in the clothing and beds. The common food was peas, vetches, fern roots and even the bark of trees. Man was altogether at the mercy of seasons. The population sparse as it was, was perpetually thinned by pestilences and want. Nor was the state of the townsman better than that of the rustic; his bed was a bag of straw, with a hard round log for his pillow. . . . Rural life had but little improved since the time of Cæsar; in its physical respect it was altogether neglected."

This state of social degradation and widespread physical neglect prevailed at the close of the seventeenth century not only in England, but in all leading countries on the Continent. In all those countries it was accompanied by extraordinary intellectual activities, centered on literature, sciences, and fine arts, which shed particular luster on that period. For instance, in the reign of Louis XIV the intellectual advance of France was most marked, yet poverty was

² *Condition of England at the close of the Seventeenth Century*, Vol. II, Chap. VII.

intense, and trade and commerce were prostrated.³ In the sixteenth century the highways in France were so overrun with brier and thorn that it was difficult to discover the tracks.⁴ The enforcement of countless industrial regulations by armies of officials was pushed to such extremes in France that before the Revolution the producing and distributing organizations were almost strangled.⁵ In contrast with widespread wants and distress, the extravagance of the nobility and of the sovereigns of France knew no bounds, and although the industries devoted to articles of luxury were artificially stimulated thereby, the economic condition of France remained at a low level. In the face of the most burdensome taxes which threatened national bankruptcy, vast sums were expended by the rulers to satisfy their passion for huge palaces. The latter still elicit the admiration of the tourist from every part of the globe, little realizing the great suffering they entailed in their time. They are examples of a high form of architecture, as they are also examples of the most reckless extravagance and of the extreme folly of the autocratic rulers of that period. They are evidence of a cultural age in which the artistic and the beautiful strongly appealed to the emo-

³ Henry Thomas Buckle, *History of Civilization of England*, Vol. II, Chap. IV, p. 211.

⁴ Herbert Spencer, *Principles of Sociology*, "Acquisition and Production," Vol. III, p. 366.

⁵ Herbert Spencer, *Principles of Sociology*, "Regulation of Labor," Vol. III, No. 771, p. 418.

tional powers, and social progress was considered inimical to the interest of the state and a menace to the ruling class.

European civilization prior to the end of the eighteenth century was not a humanizing agency in the sense of promoting social justice or raising the masses from the animal existence to which they had become accustomed since the Dark Ages. The chronic wars of three centuries were not conducive to sympathy for fellow men or one's higher ethics of life, and indifference to the suffering of others was a pronounced characteristic of European civilization at the height of intellectual progress.

Nevertheless it was due to the disintegrating influence of the intellectual forces of that age that the political and social institutions of Europe were violently disturbed at the end of the eighteenth century, and the militaristic, ecclesiastical state of society, which was firmly intrenched since the end of the Roman Empire, was finally supplanted by a new social order based upon democratic principles, and actuated by ideals and purposes which concerned the material and social welfare of the masses. The new spirit of democracy vested the common people not only with political power and rights which formerly were the exclusive privileges of the aristocracy, but it aroused in the laboring class a deep consciousness of its own power and lent a new phase to the problem of capital and labor.

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Medieval civilization, rooted in the soil of the Dark Ages and ripened in the atmosphere of feudalism and religious mysticism, had to give way to a new European civilization in which the mental and physical efforts of the human family are spurred to the utmost in the competitive race for material welfare and social progress. The imaginative powers are expended not on phantasies and abstract speculation, but on concrete questions of practical concern to mankind.

CHAPTER III

MODERN EUROPEAN CIVILIZATION

Every high wave of civilization increases the store of human knowledge and enlightenment and forms a permanent agency for the advancement of the human race. Whether its intellectual peculiarities are manifest in cultural or material achievements, both are humanizing forces, lifting the human race to a higher level. Both are of permanent benefit to the human race, the one enlarging the scope of knowledge, the other providing improved material means in the struggle for existence. If civilization is measured by this standard, and no other can aptly be applied, the present era may be justly characterized as a high wave of civilization, although the material phase is an outstanding feature, and the intellectual achievements which accompany it serve largely as instrumentalies of material progress.

The intellectual ferment which broke the spell of the Dark Ages and lent a special cultural aspect to European civilization through the Middle Ages and until the end of the eighteenth century, was at that

point diverted into the broader channels of material progress and deeply impressed the new age with material as well as scientific achievements, serving chiefly a material purpose. Modern European civilization is distinguished not only by unparalleled industrial progress and economic development, but also by remarkable scientific discoveries and mechanical inventions which have greatly stimulated material progress and have effected far-reaching changes in the social organization, in the interrelationship of the human family, and in the life of the individual. Steam and electricity are removing barriers of time and distance, of oceans and mountains, and by means of rapid communication and transportation the peoples of the earth come into close contact and relationship. Long-established traditions and customs are weakening under the influence of international intercourse, and new tastes, wants, and habits are universally cultivated in response to the changed conditions of life and to the pressure of modern progress. Comforts and conveniences have increased enormously, and are introduced into the remotest lands. National and racial characteristics and contrasts are becoming less marked, and the civilized world in particular presents a homogenous aspect. Not only in material, intellectual, and cultural life, but psychologically and in the vital social and political problems, is the homogeneity quite pronounced. For instance, social unrest and socialism with its various

theories and aims are now outstanding symptoms and manifestations in all lands, produced not merely by local economic and social conditions but by a state of mind characteristic of the present age and particularly of the working and non-possessing class. The mental process of the laborer operates along parallel lines in all civilized countries, and it is this peculiarity that lends force to the powerful group spirit and world solidarity of labor, uniting in common sympathy and in harmonious cooperation all labor, irrespective of race, creed, and national differences.

The phenomenal industrial and economic development of the nineteenth century, with which modern civilization is closely linked, did not spring from mechanical or scientific agencies, as is the notion. The influence of one upon the other is reciprocal, one stimulating the other to greater activity and achievement. Mechanical inventions result from existing needs, or, as an old proverb correctly expressed it, "Necessity is the mother of invention." Increased wants and industrial activity and competition spurred inventive minds to produce and improve mechanical devices for the purpose of economizing human energy, improving the methods of operation, facilitating the distribution and exchange of commodities, and above all for increasing and reducing cost of production.

Modern industrial progress was aided enormously by mechanical inventions, but its primary impulse was derived, not from mechanical, but from human forces, released and agitated by the social upheaval which accompanied the French Revolution at the end of the eighteenth century. Up to that period the masses of the European countries were still living in a state of semi-serfdom or servitude; in most of the countries without any political rights, and in all of them with greatly restricted social rights. Even in England, where they had some degree of freedom, an artisan (outside of London) could not carry on any other occupation than that to which he had been apprenticed, and not until 1824 was he allowed to emigrate.¹ Industrial and commercial enterprise was hampered and discouraged by political and social instability, by drastic laws, and by oppressive taxes. Chronic warfare and military service provided the chief opportunity for gratification of personal ambition and adventure, and for exercise of skill and ingenuity. Once, however, the masses were granted freedom and equality, and despotic rule was replaced by law and order, the pent-up human energies sought an outlet in peaceful activities offering material advantages, without requiring previous specialized training. Political and, to a large extent, also, social distinctions were leveled in most of the European countries, and individual effort was

¹ Herbert Spencer, *Principles of Sociology*, Vol. III, Chap. 814.

greatly stimulated by the increased opportunities for economic betterment and social advancement. Trade, commerce, and industry, with their wide ramifications, offered an unlimited field not only for the employment of the skilled and unskilled, but also for the educated, and particularly those with scientific and technical training. The opportunities for intellectual employment were vastly increased, and as a result the reasoning and imaginative powers were directed to material achievements and to things offering material returns. An industrial and a commercial democracy came into being which wrested political and social power from the aristocracy of birth. It has bridged over the wide social gap which had existed from time immemorial between the different classes of society; it has created a powerful middle class which in all civilized countries forms a strong force for political stability and for social equality and justice.

Another important factor, without which material progress would have been impossible, was the comparatively long era of peace and security which followed the chronic wars of the preceding two centuries, and the more recent Napoleonic wars. The savings of centuries which formerly sought safety in concealment now came to the surface as active capital, and, being applied to economic ventures, produced new operating capital. Individual and national ambition no longer sought expression in military achievements, but in the

peaceful pursuit of wealth by means of economic development. Nations vied with one another in developing their natural resources, promoting industrial enterprises, and extending trade and commerce to the remotest corners of the earth.

Modern European civilization constitutes a powerful and widespread human movement for material and social betterment. Universal in influence and worldly and material in effect, it derives its force not from the select few of the human race, inspired and irresistibly moved by high ideals and intense emotional powers, but from the large masses of humanity aspiring for an improved material existence and for a higher social order. No race, country, or people, no matter how remote, can long remain untouched by the spirit of modern European civilization. The Orient and Occident are alike affected by it, and however highly developed the native culture, and however deep-rooted traditions, customs, and habits, they cannot long resist its modifying and disintegrating influence. Powerful social institutions preserved from dim ages and cherished with reverence are giving way under pressure of modern European civilization, or are remolded to conform with its conditions and spirit. Japan, at one time the most conservative of the Oriental countries, is now the most responsive to European civilization, notwithstanding the fact that until the middle of the last century it shielded itself from European contact and contamina-

tion by refusing to maintain trade relations either with Europe or the United States. The culture of India, which is powerfully stimulated by spiritual forces, has through countless ages retained its characteristic peculiarities. But this stronghold of Oriental civilization also shows strong evidence of disintegration, due solely to the pressure of European civilization. Gandhi, the most powerful spiritual leader of India, has been exhorting his people, with the fire and ardor of the old prophets, to restrain their material indulgences and to refrain from commercial intercourse with European nations, with a view of preserving the culture and institutions of his native country. Modern civilization exerts, however, greater power than the exhortations of spiritual leaders, and no group of people can withdraw from international relationship without inviting material retrogression, if not want and privation.

It is, however, on the native soil that modern European civilization has produced the most profound social transformation, affecting every phase of the social fabric and every sphere of human endeavor. Modern European civilization is particularly fertile in social ideals and theories for the advancement of the human race and for the intellectual and moral improvement of the individual. Widespread discontent with existing conditions encourages new social formulas and precepts as a remedy for social ills and defects, and as a means of promoting human progress and happi-

ness. Laws and customs, which in the past have maintained order and stability and have controlled the affairs of the human family for ages, are discredited as antiquated, and social measures bearing the stamp "progressive" are substituted to remove human shortcomings and to establish a more perfect state of society. This spirit of progress and unrest is metamorphizing not only the political status of the state and the social and economic affairs of the people, but also the individual life of man, woman, and child. The power of the state is no longer exercised by divine right, and the will of the people is the supreme law to which monarchs have to bow. The mental attitude of woman and public sentiment regarding the status of woman have undergone revolutionary changes, and her interests and duties are no longer centered in the home, but embrace every human activity which man formerly monopolized. She has thrown off to a large extent the social restraint of ages, and woman is now universally exercising independence of mind and conduct in opposition to all inherited customs and traditions.

Like the modern woman, the modern child is the product of existing social unrest and the urge for change and progress. In the home and in the school the child is being trained in an atmosphere of greater freedom, self-reliance, and individual initiative, and its energies and imaginative powers are given free play and diverted into channels offering the least resist-

ance. Scientific child training is virtually a modern science, and from infancy until maturity the child is reared according to widely observed principles and theories, with a view of strengthening character and stimulating its moral, mental, and physical development. The permanent benefits of this new system of child training, and whether it will improve the individual and the race, only the future can determine. What appears, however, evident as an immediate result is greatly relaxed discipline and weakened authority over the child in the home and school.

A process of violent social flux and change is the marked characteristic of the time, and the intense pressure for human progress is giving rise to new aims and aspirations and to new measures and expedients which are leaving an indelible impress upon modern civilization and upon the mental attitude of the individual. Among the changes it has permanently effected in the social fabric, the transformation in the social and intellectual status of the lower masses of humanity will stand out as the preëminent achievement. The spirit of unrest and the pressure for change are also responsible for the universal spread of the doctrines and theories of Socialism which appeal not only to the lower element, but also to the intellectual leaders, and youth is particularly susceptible to them. They have given rise to a widespread human movement which, under the banner of democracy and under the name of

Bolshevism, is preaching, in violation even of some of the fundamental principles of radical Socialism, a new social gospel which derives its force from class hatred and from the world's social convulsions. Established as a powerful political and social institution on the soil of Russia, its doctrines are expounded not only in the slums of every part of the world, but also in the palaces where formerly the most autocratic monarchs wielded the scepter. It forms a tyrannical rule of the proletariat and reduces to impotence and poverty the large middle class which forms the social balance wheel in the civilized world. It enforces a common social and economic level, not by lifting and aiding the unfavorably situated to a higher level, but by depressing to a lower level those who are favored by nature and would otherwise rise by their own effort and merit. Conforming with the spirit of the proletariat, it discourages individual initiative, ambition, and enterprise and removes the incentive for social and economic progress. Bolshevism in its original form cannot endure, much less become a universal political institution, because it is not creative but destructive; it is not an uplifting but a depressing force. It is purely a materialistic creation and a political mechanism which opposes itself to the spiritual and social ideals which form a protective screen in all countries from dangers within and without. National spirit constitutes a binding force in which the divergent and opposing elements are

fused, and Bolshevism cannot supplant it with a creed in which class hatred is strongly impressed and communistic doctrines form its chief force. Nevertheless Bolshevism has been convulsing the world and has awakened among the lower masses visions of an inverted social order in which brawn is to rule over brain, and the comforts of life are allotted to all alike, regardless of individual exertion and effort, or of biological differences.

Internationalism is a product of modern civilization, not merely as an instrument of the universal propaganda of Bolshevism, or as a term which distinguishes the divergent group of radical Socialism as the first, second, and third *International*, but in the sense of strong ties of mutual interests and close association which bind the different nations and peoples of the earth into one human family. Commercial intercourse and modern methods of communication have broadened and strengthened the kinship of the human family and have firmly established a code of international ethics and obligations. Intense as the national spirit may be within political boundary lines, and strong as a nation may be in power and resources, the welfare of each country is closely linked to the welfare of the rest of the world, and mutual assistance is a generally observed international policy. However remote the source of a serious disturbance, whether political, social, or economic, the effect is felt more or less in all countries,

and becomes a universal menace to existing governments and institutions.

A strong spirit of internationalism, universal group sympathy, and cooperation also actuates labor in its common relationship. The labor forces of the world form a cohesive element attracted to each other not only by a common cause, but by a common grievance against capital. Whatever tends to promote or endanger the interest of labor in any one country, whether it relates to the wage, hours of labor, or any measure affecting its local welfare, is a matter of deep concern to labor of every country and often becomes a cause of world-wide agitation.

No other factor, however, creates a closer or more universal kinship in the human family or exerts greater power over mankind than trade, commerce, and industry, which lend to the present age a particularly material aspect. Trade and commerce form the point of contact not only between producer and consumer, but between the peoples of the earth, however distant geographically and however different ethnologically. From the earliest stages of human development they have served as the most powerful agency for the propagation of civilization and as an incentive to human progress. Civilization always followed along the track of trade and commerce, and wherever trade and commerce reached a high state of development, the development of civilization was equally pronounced. The

countries and towns which gained commercial distinction during the Middle Ages were also centers of great cultural activity and of an advanced social order. The Italian Renaissance took deepest root in Florence, Venice, and Genoa, which were noted for their widespread commercial and financial activity. Trade and commerce were important features of England and the Dutch Republic in the seventeenth and eighteenth centuries, but equally marked during that period were their culture and their advanced state of civilization. Although purely a mercenary institution, operating for material gain and promoting its own interest, commerce from the earliest stages of its development has served as the fertilizing and propagating agent of every civilizing movement. It has been instrumental in the discovery of new continents and ocean lanes, and it has opened the wildest regions of the earth to human habitation and civilization. It is the pioneer and pathfinder of migrations and colonizations, and mitigates the struggle for existence in regulating the supply and demand of the essentials of life, and relieving want and deficiencies where they exist with the surplus products elsewhere available. It is the cause of conflicts, as well as the incentive to harmony, and hence it is a prime factor in war and peace. More than ever, commerce in modern times exerts a powerful influence over the destinies of nations and over the individual members of the human family, owing to the marvelous means of

communication and to the vast ramifications of modern economic development. It has effected changes and interchanges of customs and habits, of ideals and aspirations. It is disseminating a resistless spirit of change and modernity, and creating a universal kinship of thought, action, and cooperation, as well as of unrest and discontent. The power of trade and commerce is felt in sparsely settled and uncivilized regions as it is in civilized countries, undermining old customs and introducing new wants. More autocratic than any other human authority, and receiving quicker response, it decrees styles and fashions, changes customs, creates and stimulates wants, and transforms luxuries into common necessities. Even the savage in the wilds cannot escape its influence, and he is discarding his loin cloth for modern clothes and is accustoming himself to wants and fads which formerly were indulged in only by people of more advanced civilization. Due to the operation of trade and commerce, the standard of living is advancing in every country, and the entire world is pulsating with economic activity to satisfy increasing wants and the craving for material comforts and indulgences.

Whereas differences of race, religion, nationality, and language separate the human family into distinct and often antagonistic groups, breeding strong prejudices, intense hatred, and eternal strife, trade and commerce, on the contrary, tend to reconcile differences,

induce commingling and blending between different and widely separated peoples, strengthen the spirit of international comity, and awaken sympathy for all mankind. Not that human strife does not spring chiefly from economic causes, but impulses are restrained and consideration is displayed when self-interest is at stake and is likely to suffer from a disturbed economic relationship. Commercial and industrial operations are based upon the reciprocal action of producing and consuming, of buying and selling, and distinct as the two interests are, they form, nevertheless, an inseparable element in the operation of the economic machinery. Each party is actuated purely by self-interest, yet their close interdependence demands mutual confidence and good will and regard for commercial ethics and laws, not the least of which is the strict observance of mutual obligations. An individual or a country may for a time thrive at the expense of another, but prosperity and security cannot be permanently maintained unless based upon mutual benefits, confidence, and good will. Trade, commerce, and industry bind nations and individuals by ties of common economic interests, and the more equitable the division of the benefits is to those concerned, the more secure is it against disturbance and the more friendly is the relationship, although it is actuated purely by self-interest.

Deficient as modern civilization may be in the spirit-

ual forces that are expressed in high cultural achievements and in emotional religious manifestations, it forms, nevertheless, an advanced social stage in the march of the human race. Whatever evils and shortcomings may be attributed to modern industrial civilization, it must be recognized that, aside from remarkable material progress, it has raised the human family to a higher level socially, and in many respects morally as well; it has enlarged the sphere of human activities and increased the opportunities for education and for useful pursuits; it has developed individual initiative, encouraged ambition, and insured greater individual freedom. Moreover, it has enhanced enormously the value and dignity of human labor, and has created vast outlets for the pent-up human energies, which formerly were dissipated in destructive warfare, and now are being applied to productive occupations, benefiting not only the individual, but society in general. Abolition of slavery in the United States, equal political and social rights and public education in civilized countries, and the many reforms for the uplift of the lowly and for the emelioration of labor testify to a powerful public conscience and to a high sense of civic duty. Constitutional government has strengthened civic pride and individual responsibility in all matters relating to the welfare of the state. A humanitarian spirit is manifest among all civilized people and emphasizes the kinship of the human race. Respect for authority, whether

human or supernatural, has weakened under the new social order, but public conscience and individual responsibility have been raised to a higher level. Human rights are highly regarded in modern law, and no civilized country can ignore the spirit of the age and exercise a rule of discrimination and injustice against the masses.

Modern European civilization will not serve future generations as a source of spiritual inspiration nor as an example of great cultural progress by virtue of its achievements in the domain of abstract thought; but its concrete achievements will forever form a most valuable legacy, paving the way to human progress probably more remarkable than that which distinguishes the present age. Conceding that outwardly modern civilization has a material aspect and influence, it is nevertheless manifest that within this highly developed material shell the soul also is powerfully active, and is promoting a higher stage of social and human progress than the human race has attained in past history.

CHAPTER IV

LABOR IN THE NINETEENTH CENTURY

Poverty, hardship, and degradation were labor's heritage, transmitted from generation to generation and from the dim ages when forced and hired labor was first instituted in the human family. At all times labor has been closely associated with poverty and no law or precept could change this condition. The iniquities practiced on labor stand out in every stage of human progress, and all high waves of civilization are marked by extreme labor degradation. Under humane labor conditions the wonderful monuments of Egypt, Greece, or Rome would not have been reared, nor would the remarkable industrial development of the nineteenth century have distinguished modern civilization.

The vital factors of industrial progress are capital and labor, and distinct as they are in their functions, and in relationship frequently discordant and unbalanced, they form, nevertheless, a close and inseparable union in the operation of the economic machinery. Capital creates opportunities and provides means and facilities for the employment of labor, while labor contributes individual exertion to the production of tang-

ible wealth. As a result of the joint operation, labor receives as its share a wage which is largely determined by supply and demand, whereas the compensation of capital is in the form of net earnings, in which the wage earner has no interest or share. The relatively lower earning value of physical labor, expressed in terms of wage, is not established by arbitrary rule of capital or by tradition, but by immutable biological laws, which lend to human intellect greater power than to physical exertion. Under every social order, from the remotest ages to modern times, labor has been subordinated to the intellectual powers, not because it is willed by man, but because it is in harmony with the laws of nature. A social order based upon the reversal of this law cannot permanently endure, as has been repeatedly demonstrated in history. No human law can level permanently human inequalities, or create a single standard of compensation, or a single standard of physical and mental effort. The strong will always have the advantage over the weak, and human institutions cannot successfully combat this law. They can only restrain the strong and protect the weak. Coöperation, however, lends defensive as well as offensive powers to the weaker, evidence of which may be observed even in the life of the animal. Coöperation constitutes a vital force in the human struggle for existence, for by its operation small and weak units combine and form powerful units. Labor could not have attained its pres-

ent commanding position if in its dealings with capital it had not fused into unions and acted collectively in all matters relating to the welfare of the individual members, as well as of labor in general. In the social organization of the human family the stronger is greatly dependent upon the coöperation of the weaker, delegating to it work which is as essential for its own existence as it is for the existence of the weaker. Only through coöperation and by combined efforts of the strong and weak does the human race progress, and can the individual promote his interest.

On the other hand, a social organization depressed economically and socially to a uniform level, in which wealth, rank, and individual opportunities and incentives are eliminated, cannot long endure. Biological laws are more powerful than the theories of visionaries, and uniformity of compensation and reward, regardless of the value of service rendered, cannot long be maintained in practical operation. The fallacy of this principle, which forms the cardinal tenet of advanced Communism, is glaringly illustrated in the present regime of Bolshevism. After having prostrated the entire land and inflicted starvation and misery on the people of Russia in the attempt to depress the social level and establish a rule by the proletariat, and for the proletariat, Bolshevism has from all accounts abandoned the leveling process, and is compelled by the irresistible pressure of economic laws to recognize and encourage individual

merit and discriminate between the competent and the incompetent, the industrious and the lazy.

The French Revolution offers a parallel of a social order in which the proletariat is invested with political power, and society is reduced to the level corresponding with the lowest social stratum. Under the inspiring slogan, "Liberté, Fraternité, et Egalité," all institutions, laws, and customs conflicting with the principles and theories of the French Revolution were suppressed, the Church was deprived of its functions and privileges, and the nobility of its power and possessions. The cockade was the outward evidence of social equality, and formed the badge of citizenship and the emblem of a common brotherhood, freed from social distinctions and from individual restraint. Like Bolshevism in Russia in its early stages, the example of a new social organization in which the oppressed and lowly were invested with power over those who were formerly their superiors, aroused the masses to a state of delirious joy, and it was only after complete social chaos called for the rule of a firm dictator that Liberté, Fraternité, et Egalité lost its inspiring force and ceased to be the shibboleth of the sobered French people. Every human attempt to establish social and economic equality has demonstrated that on the foundation of the biological variations of the human species complete social and economic equality cannot be maintained. Political institutions, however democratic their funda-

mental principles, are powerless to overcome this law, although they can modify it greatly in its practical application.

Modern industrial development was enormously aided by an abundance of cheap and mobile labor, which was responsive to every demand made upon it and submissive to most arbitrary treatment. Keen competition and the need of insuring the widest distribution of his product largely influenced the policy of the manufacturer toward labor, which offered less resistance to the lowering of its value than the raw materials entering into the product. Low cost of production was often a matter of self-preservation to the manufacturer, and depressing the wage and forcing a higher labor productivity served as the easiest method of solving his problem. Self-preservation also actuated the laborer, but to him this was of more serious import, for unemployment, even for a short space of time, inevitably brought suffering into his home. He had no savings nor credit to fall back upon, nor any other resource by which he could temporarily bridge over his spell of idleness. When he was so fortunate as to secure permanent employment, he was compelled to work to the limit of human endurance, often at the cost of his health and not infrequently at the risk of his life. Labor was treated, not as a human element entitled to care and consideration, but as a mechanical agency of production in which human sentiment played

no part. The most vital factor of industrial civilization, he had no share in its benefits, and the increased comforts, which are the most characteristic feature of present civilization, did not enter into the existence of the average wage earner, particularly the unskilled, until the declining cost of living in the latter part of the nineteenth century lent greater purchasing value to the wage. Little did labor realize the tremendous importance of its latent powers, which at a later period were to effect vast changes, not only in its own economic status, but in the social organization of the entire human race.

Of the two fundamental factors of modern industrialism, labor was the chief contributor in physical exertion, and capital was the sole beneficiary in material gain. Labor had to bear the entire weight of the physical burdens, and its compensation was determined by the market value of human energy and by the pressure of the wants of the individual laborer. Physical labor was his only resource, and no matter how great the measure of his exertion, it offered him only the means of existing in a condition of permanent poverty, or at best in a condition bordering on poverty. He was as helpless to change the condition and course of his life in the nineteenth century, as he was under compulsory labor in remote ages. Capital, however, was not solely responsible for the deep degradation of labor under modern industrialism. The low human plane

which labor occupied was due more to ignorance and weakness within its own ranks than to the abuse of power exercised over it by capital. Emerging from a social order under which, for ages, labor was treated as an inferior, if not a contemptible social element, it was devoid of the moral and intellectual force to produce leaders inspired to redress its wrongs, and labor sank lower and lower, without a heroic attempt to resist the decline or assert its human rights. It was only when the pinch of hunger awakened the laborer from his lethargy and his herd instinct manifested itself in violent mob action, that the lamb turned into a lion and became a menace in its fury. Destructive rather than constructive, moved by impulses rather than reasoning powers, trained to obey rather than to command, labor was powerless to ameliorate its condition until its cause aroused intense public sentiment and modern social reformers came to its rescue.

Trained and degraded in the state of extreme poverty, the laborer submitted with humility to his inhuman working and living conditions, accepting them as if they were the natural and fixed conditions of life. Just as the marvelous monuments of antiquity were the products of forced labor, whether in the age of the Pharaohs or of the Cæsars, so industrialism of the nineteenth century is the product of labor which under pressure of want and under the power of capital was forced to extreme exertion, subjected to rigid disci-

pline, and supplied an abundance of human energy at a low cost. Labor under humane treatment and free to exercise its own will would have lent to antiquity a different aspect and to modern European civilization a different trend.

Whereas the forced labor in more remote times was the result of military conquests, the unfavorable labor conditions of the nineteenth century were the result of economic laws, and chiefly of labor congestion. Three distinct causes contributed to disturb the supply, distribution, and employment of labor during that period.

1st. The disbanding of large forces of men at the close of the Napoleonic wars;

2d. The transition from village industry to factory labor;

3d. The displacement and readjustment of labor owing to mechanical inventions.

Chronic warfare of the seventeenth and eighteenth centuries diverted a large part of the male population of Europe from productive occupations to military adventures, and this condition became even more marked during the Napoleonic era. Not until the end of his reign was an era of peace assured, and large forces of men were released from military service and thrown upon their own resources without any means of a livelihood other than the application of muscle. The industrial centers formed the goal and the hope of the labor

recruit, and in the competitive race for employment he depressed the wage to a point, where, even under favorable conditions, he could maintain only a bare physical existence. His daily hours of labor were not controlled by legal enactments nor by human sentiment, and they varied, according to the nature of the employment, from twelve to fourteen hours. The inexorable laws of supply and demand placed him completely under the power and at the mercy of capital, and doomed him for decades to a life of extreme poverty and hardship.

Another important cause contributing to labor congestion and degradation was the migration of labor from rural districts to large industrial centers, induced by mechanical inventions, improved means of transportation, and greater freedom of labor movement. From the rural districts and small towns, where working and living conditions were more conducive to an orderly and regulated existence, the laborer was transplanted to the miasma of the congested industrial centers, where he was reduced to almost an animal existence, receiving no more care or attention, and in fact less, than the machine he was hired to operate. The machine forms invested and productive capital, and its depreciation and replacement entails a loss according to the care it receives, whether in operation or not. The employment of labor, however, does not in itself represent capital investment, and the depreciation of the individual laborer does not affect capital or operating profits when

an abundant labor supply can replace promptly the depreciated human energy. Labor had a small market value and its employment and treatment involved no moral responsibilities, nor was it protected by legal enactments or by force of public sentiment.

Precarious as was the laborer's condition at all times, it became deplorable when his earnings were reduced by illness, accident, or advancing years, for which his wage did not permit him to make provision, nor was his employer required to do so by law or public sentiment. His place of diversion and source of cheer was the liquor saloon, and there in the companionship of his fellow workers he would for a time forget his unhappy lot, and be welcomed as a guest as long as his wage lasted to pay for his indulgences. Even his children of tender years were forced by economic conditions, if not by greed of capital, to contribute the little energy they could muster to the support of the family, toiling, like their elders, to the limit of their slender physical powers.

The misery and brutalization of labor in England in the early part of the nineteenth century is vividly portrayed by President Walker.¹

"The beginning of the present century found children under five and even three years of age, in England, working in factories and brick-yards; women working underground in mines, harnessed with mules

¹ Francis A. Walker, *Political Economy*, 1888, pp. 380-81.

to carts, drawing heavy loads; found the hours of labor whatever the avarice of the individual mill-owners might exact, were it thirteen, fourteen or fifteen. . . . Children had not a moment free, save to snatch a hasty meal or sleep as best they could. From earliest youth they worked to a point of extreme exhaustion, without open-air exercise, or any enjoyment whatever, but grew up, if they survived it all, weak, bloodless, miserable, and in many cases deformed cripples, and victims of almost every disease."

More humane, in comparison, was the lot of the laborer and his family under conditions of slavery, for they constituted wealth and were productive of wealth, and the conservation of their health and the prolongation of their life was a matter of material, if not humane, concern to the slave owner.

It was not only the complete degradation of labor which characterized industrialism in its earlier stages of development, but the utter lack of public conscience, in so far as it concerned the welfare of labor. The deep-rooted moral torpor of that period needs no more illuminating example than the fact that a law was enacted in England in 1831 restricting factory labor of children between nine and sixteen years of age to eleven hours a day. Eleven hours of daily toil for a child of nine years was considered a reform measure in the interest of the child and was approved by public

sentiment in one of the most advanced countries, the cradle of modern democracy and humanitarianism.

The very reforms, as, for instance, the removal of the restrictions on labor migration and permitting the laborer to change his abode and his trade at will, did not improve his position, and placed him still more at the mercy of capital. The industrial centers could not absorb the influx of labor from the smaller towns, and the residue presented a serious social and economic problem characteristic of congested labor centers. Even the most urgent and humane reform measures, as those relating to child and female factory labor, reacted at first unfavorably on the home and on the economic condition of the laborer, for it diminished the joint family earnings, inadequate as they were before to provide for a decent existence. Labor, however, attributed most of its ills to the increasing use of mechanical power. The displacement of human energies, which accompanied the installation of mechanical devices in most of the industries, stirred labor to the utmost, and filled it with despair at a new competition that was far beyond the physical powers of the human being to meet. Neither capital nor labor realized in the early stages of mechanical development that the displacement of human energy was merely a temporary effect, and that it would eventually elevate labor to a position unparalleled in history, and invest it with powers more effective and more despotic than any of

which it had itself been the victim. What was at one time generally accepted as the cause of labor's degradation has proved to be the cause of its redemption.

Dignity of labor and social equality were deeply implanted in the English colonies of North America, and this spirit is strongly reflected in the framing and in the development of the political institutions of the United States. Only in the Southern colonies, where climatic conditions lowered the human energies and continuous physical exertion became irksome, was the dignity of labor not generally recognized, and slave labor was resorted to by the white settler to make good the deficiency of native human energy. The settler in the Northern states, on the other hand, was capable of great exertion, and to work, even after having attained economic independence and success, became not only a habit but a fixed principle in his life. Voluntary idleness was generally looked upon with disfavor and lowered the individual in the esteem of his fellow men, and this is still a generally recognized characteristic of the people of the greater part of the United States. To be trained in the school of labor often served as a special recommendation and qualification for higher office, and from the ranks of labor rose many of the so-called "captains of industry" and some of the most distinguished citizens. It will be observed that labor in the United States was trained under con-

ditions differing from those in European countries, where caste, tradition, and prejudice stamped the performance of physical labor as a low human function, and those engaged in it occupied the lowest social strata, were deprived of political rights and restricted in legal rights.

Nevertheless, a decided economic and social decline of labor became manifest in the United States in the latter half of the nineteenth century, and in most of the industries it reached a level as low as that of the industrial centers of Europe. The submergence of labor was a universal symptom in the nineteenth century, but was most pronounced where industrialism made the greatest strides. In countries, however, where the movement of labor from agricultural districts to industrial towns made the least headway, and the agricultural laborer adhered to the soil and did not disturb the balanced distribution of labor, as for instance, in France, the condition of the workingman was on a higher plane than in the industrial centers of other countries, including the United States.

Commerce and industry formed a natural growth in the United States, due to the abundance of raw materials and the vast supply of fuel for mechanical power. Moreover the favorable opportunities for material gain, and the social prestige which the possession of wealth insured, made the gainful occupa-

tions most attractive and greatly stimulated economic ventures. As in the economically more highly developed European countries the movement of labor from the farm and village to industrial centers appeared also in the United States during the latter half of the nineteenth century. The movement was particularly pronounced in the Eastern states, where industrial progress made the greatest strides, attracting rural labor to the industrial centers in large numbers. Unfavorably as it reacted upon the laborer, and particularly upon the unskilled, another and more pronounced cause greatly added to his degradation.

In the last two decades of the nineteenth century the stream of immigration increased enormously in volume and depreciated greatly in quality. Whereas emigration to the United States formerly had its source in lands advanced in European civilization, the centers of emigration subsequently shifted to lands foreign to modern civilization and to Anglo-Saxon culture in particular. The greater part of the immigration came from countries in which even the rudiments of an education formed a special privilege, ignorance was a common heritage, and the masses still bore the yoke of medieval feudalism, or were trained to bow to the discipline of the padrone. With the change of source followed also a change of outlet, and the main stream of immigration no longer followed the course to the productive agricultural districts, but was dammed up

in the seaports, filling the industrial labor reservoirs to the brim.

Although the impulse to migration arose largely from economic pressure, and in many instances from the pressure of political and religious persecution, the movement was not altogether a spontaneous process. On the contrary, it was artificially stimulated by organized agencies in the interest of the competing steamship lines, which derived a large profit from the transportation of the immigrant, and in the interest of large industries which scoured every human market for cheaper labor than the home supply offered. Accustomed to the crudest form of human existence, and trained to maximum exertion and minimum wants, the employment of the new immigrant was particularly desirable and profitable in the industries in which he displaced higher priced labor without lowering operating efficiency. His extreme thrift, which resisted the most essential needs and comforts, and his remarkable industry and endurance, which knew no limit of daily hours of labor, was actuated in most instances by a fixed purpose of saving from his meager wage a fund that would eventually enable him to return to his native country and lead a life of comparative ease the rest of his days. The immigrant from southern Italy is actuated solely by this aim, or ideal, as it may be termed, and although he is not distinguished by great physical exertion in his own country, he excels

in it when he is transplanted to foreign soil, and his energies are spurred to the utmost by the possibilities they offer him of returning eventually to his native land, with his savings to enjoy a better existence than heretofore.

It must not be overlooked, however, that whereas the great influx of immigration was the chief cause of labor congestion, it was also the means of creating new opportunities for the employment of labor. The marked industrial progress which distinguished the United States in the last part of the nineteenth and in the first decade of the twentieth century was enormously aided by unrestricted immigration consisting largely of raw labor, which congested the seaports and depressed the economical and social status of the earlier immigrant and native laborer. Without the abundant and cheap supply of labor, the construction of the vast net of railroads, the phenomenal development of the steel industry, as well as of all industries depending upon the physical exertion of labor in large groups, would have been greatly retarded. Industrial progress creates new and increased opportunities for the employment of labor, and with increased impetus it will exhaust the supply of labor, as was the case at a later period.

The deep submersion of labor was creating forces for its elevation which ultimately were to transform excess into depletion of labor, and helplessness and

humility into might and dominance of labor. The moral forces not alone of the United States but of the civilized world were at last aroused by an economic condition that doomed the life of the laborer to permanent poverty and to inhuman exertion, beginning when a mere child and continuing through his life until his energies were exhausted and he became a drain on his family or a charge on public charity. The misery of the laborer in his home and at his work formed a glaring feature wherever industrial progress was greatly stimulated in the nineteenth century, and the United States, in respect to both, occupied a prominent rank among the civilized nations. A vivid but correct picture of the economic status of the average laborer of that period is conveyed in a report submitted in 1885:

“Ninety per cent of the actual producers of wealth have no home that they can call their own beyond the end of the week; have no bit of soil, or so much as a room, that belongs to them; have nothing of value of any kind, except as much old furniture as will go in a cart; have the precarious chance of weekly wages, which barely suffice to keep them in health; are housed for the most part in places that no man thinks fit for his horse; are separated by so narrow a margin from destitution, that a month of bad trade, sickness, or unexpected loss, brings them face to face with hunger and pauperism This is the normal state of the aver-

age workman in town or country.”² The approach of a new era in which labor was to be raised to a higher human level and to unprecedented power over the human family became manifest already in the United States, in the last quarter of the nineteenth century, in the enactment of numerous labor-reform measures and in the increasing power and independence of labor in its relation to capital. The movement while it gained great momentum in all countries during the World War was not caused by the greatly and universally impaired productive powers in consequence of the war. Labor’s elevation was effected by deeper and more enduring forces which had been operating for the redemption of labor long before the outbreak of war in 1914.

² Industrial Remuneration Committee, Report, 1885, p. 429, in paper on Remedies for Social Distress, by Frederic Harrison.

CHAPTER V

LABOR REFORMS

Since the middle of the nineteenth century the tragic situation of labor has formed the foremost cause of intense social ferment, the force of which is still convulsing the entire world and is revolutionizing the social order in many lands. Every moral, social, and political agency has been expounding the economic maladjustment of labor as the cause of most of the social evils of the day. Economics and sociology, particularly as they are concerned with capital and labor, are the most popular studies of the present day, appealing not only to the idealist who strives for social justice, and to the layman who is directly concerned in the employment of labor, but also to youth as a necessary equipment for a career in the modern world.

The powerfully awakened public sentiment in behalf of labor has been productive of innumerable reform measures in the past three decades, which in all civilized countries have completely changed the status of labor. Besides the enactment of laws, the increasing power of labor is receiving greater consideration and respect from capital with a view to promoting more

friendly relations. The vast powers which organized labor now exercises are fully equal to the task of promoting the interest of labor regardless of public sentiment. Child and female labor, however, still engage public attention and additional reform measures are being agitated, particularly in the United States.

Legislative reform measures relating to child and female labor had their beginning in the United States in the second half of the nineteenth century, and the first law, enacted in the state of Massachusetts in 1866, prohibited in the manufacturing establishments the employment of children under ten years of age, and restricted the employment of those between ten and fourteen years of age to eight hours a day. In the light of the previous child-labor conditions, when children under ten years of age were generally engaged in textile and other gainful occupations, and children five years of age were working for a wage in the mines of England, this reform, slight as it may seem, marks a decided advance and a new era in social progress. In the light, however, of the present status of child labor in all civilized countries, the reform measures of the earlier period bring out in stronger contrast the child-labor iniquities practiced in that age, and the higher humane spirit and the more developed public conscience regarding the welfare of labor of the present day.

It is obvious that modern industrial progress at that period was of greater concern to the state than the

physical, moral, and mental development of the minor children of the laborer, although they form the largest element of future citizenship, and the welfare of the state depends upon their proper training and development. Child labor had at all times a relative market value according to the physical exertion it could endure in competition with adult labor. It formed the cheapest human energy which the labor market could supply, and was on that account in demand. At no time in the past was its employment discouraged by public sentiment, much less condemned as a vicious policy reacting not only upon the welfare of the state but also upon future industrial progress by checking the mental, physical, and moral development of the child laborer.

The child of the laborer paid heavy tribute to industrial progress in the nineteenth century, due to the low economic and moral condition of its home and to the indifference and moral torpor of the people. At a tender age when children of the better situated class are still engaged in playing with their toys and are carefully guarded in their homes, the child of the laborer was already initiated in the ranks of wage earners and its energies were put to severe strain. Child-labor reform made slow progress in the nineteenth century, and opposition to it came not only from capital, but even more from the individual laborer himself, whose economic condition was at first seriously

affected by the restrictions placed upon child labor.

It was not until the first decade of the present century that the pressure of public sentiment gave great momentum to the enactment of advanced child-labor laws in every part of the United States, including the Southern states, where child labor was at one time most abused. Official statistical data relating to child labor¹ offer concrete evidence of the marked decrease in the employment of children under eighteen years of age in gainful pursuits in the United States. Below fourteen years of age, child labor is practically eliminated, for out of 10,640,000 children between ten and thirteen years, 49,105 children were employed in non-agricultural pursuits in 1920, against 609,030 in 1910. Between ten and fifteen years of age the total number of children employed in 1920 in all gainful pursuits, including agricultural, was 929,367, showing a decrease as compared with 1910 of 46.7 per cent.² It is noteworthy that in the Southern states, where child labor was supposed to be an entrenched institution, the decrease in the employment of children between ten and sixteen years of age is no less marked than in the other states of the Union. For instance, in Georgia the rate was 45, North Carolina 45.8, and in South

¹ Children in gainful operations, Bureau of Census, published in 1924.

² In this number are included children under sixteen years of age who are, strictly speaking, neither industrial nor agricultural workers, as, for instance, messenger or errand boys, and those engaged in light indoor chores.

Carolina 57 per cent., notwithstanding the enormous textile development in those three states. Child-labor reform was not confined to children under fourteen years of age, and subsequently it included those between fourteen and sixteen years whose employment is placed under many restrictions and demands the sanction of the school authorities. In some of the states, children sixteen to eighteen years of age come under special working provisions and are subject to educational and occupational requirements. Their daily hours of labor are restricted and their employment in factories at night is prohibited.

The statistical data relating to child labor offer a concrete illustration of the enormous contraction of human energies for productive purposes which have resulted from the reform laws and from the humanization of labor in general. The virtual abolition of child labor between ten and fourteen years of age is alone equivalent to a contraction of over 11 per cent. in the total supply of all industrial labor, without taking into account the additional loss due to the restrictions placed upon the employment of those between fourteen and eighteen years of age. Child labor between ten and fourteen years of age has in most industries and shops been replaced by adult labor. Even the employment of children between fourteen and eighteen years of age is in many industries unprofitable owing to the restrictions and conditions

which some of the states impose upon their daily hours of labor and the nature of their occupation.

Labor reform laws also regulate the employment of women in most of the states and restrict their daily hours of labor and their employment at night. Child and female labor reforms have promoted social progress and have greatly aided the humanization of labor, but the economic effect has been a decided depletion of labor, as the statistical data clearly demonstrate.

CHAPTER VI

DEPLETION OF LABOR

Shortened hours of daily labor, as much as the question of wage, has in recent times formed the chief issue between capital and organized labor. The calendar day in the life of the laborer was divided approximately in two equal parts, twelve hours of physical exertion and twelve hours of rest. At no time prior to the middle of the Nineteenth century was daily labor controlled by any law except laws of nature, which before the introduction of gas light restricted factory operation to daylight hours. Neither the Old nor the New Testament nor the Koran limit the daily hours of labor; they enjoin one day of rest in a week's labor, and one day of rest and six days of labor are emphasized in the Ten Commandments. The hours of daily labor from time immemorial have been controlled and determined by the sun, by the needs of the people, by transmitted custom, and by geographical and climatic conditions. Fewer hours of daily labor and less physical exertion are required in tropical zones and in fertile regions than in the temperate and in barren regions.

Even people of the same country are strongly influenced in this respect by climatic conditions. For instance, in the United States the individual, including the laborer, living nearer the tropical zone or in southern California is less disposed to work full time and he enjoys more days of leisure than the individual in northern climes, who has to exert himself more to maintain his existence.

The regular daily working time in the different industrial countries was eleven to fourteen hours, and this time schedule applied to man, woman, and working child, and was determined by the limit of human endurance, varying according to the strain imposed by the industry or the age and sex of the worker. For instance, the limit of physical endurance of the female laborer was supposed not to exceed twelve hours of daily labor, and the first reform measure enacted in England in 1844 in behalf of the female adult laborer sets this number of hours as the limit permitted under this law. As regards child labor, the same principle of human endurance seems to have prevailed in its employment until the latter part of the nineteenth century, and even after the spirit of child labor reform had become manifest, the age of fourteen years was considered the limit at which the working child required protective measures, in so far as it concerned daily hours of labor.

It must also be borne in mind that the introduction of mechanical power did not generally lessen the strain of labor. The strain of running a sewing machine is no less than is the application of the needle by hand. The strain on the weaver in the operation of the power loom is greater than the operation of the hand loom, owing to the complex construction of the power loom and the close attention and alertness it requires of the operator. Physical energy is economized by mechanical power and devices, but mental and nervous strain is greatly increased thereby. The physical environment under which power machinery is operated in the factory contributes greatly to the monotony and tedium of labor and is one of the causes of labor unrest.

Along with increasingly successful efforts to ameliorate the condition of labor, and in part due to such success, went gradual depletion of the supply of labor, skilled and unskilled, agricultural and industrial, which has become increasingly manifest in the United States since 1907. The United States Bureau of Labor Statistics (in Bulletin 245, published in 1919, Table VI, p. 24) compares the union wage and the full-time hours per week for a period of ten years from 1907 to 1917. The three war years 1915, '16, '17, which are included in the original table, are purposely omitted here in order to base the deductions upon normal prewar conditions.

TABLE I.

	Rates of wages per hour	Full-time hours per week	Retail prices of food
1907	100	100	100
1908	101	100	103
1909	102	99	108
1910	105	99	113
1911	107	98	112
1912	109	98	119
1913	111	97	122
1914	114	97	125

The outstanding factors of the above table are rising wage, diminishing hours of daily labor, and advancing price of food, which proceeded simultaneously and uninterruptedly from 1907 until the outbreak of the World War in 1914. The economic chart of that period does not record any violent industrial or financial disturbance or fluctuation to explain the persistent movement affecting the condition of labor. The advancing wage may have been due to the increased cost of living, or vice versa, but the same cause cannot be associated with diminishing hours of labor, which was also an outstanding feature. Supply and demand strongly influences the economic and social condition of labor, and statistical data seem to establish conclusively a decided contraction in the supply of labor from 1907 to 1914. The U. S. Census of Manufacturers, 1919, Table I, p. 16, shows that whereas the average number of wage earners in the manufacturing industries increased 21 per cent from 1904 to 1909, the in-

crease was reduced to 6.4 per cent in the five-year period from 1909 to 1914, although the population increased from 90,691,000 inhabitants in 1909 to 99,342,000 inhabitants in 1915.¹

A shortage of agricultural labor became quite acute already several years before 1914 and was generally attributed to the rapid growth of the industrial towns, which attracted in large numbers the rural laborer, and particularly the younger generation. More pronounced were the symptoms of depletion in domestic labor which seriously affected the housing of families and their mode and standard of living. The natural drift of labor is toward employment offering a maximum wage, short hours of labor, and opportunities for recreation. Hence, labor shortage will first manifest itself in occupations which offer the least of those attractions, such as farm and domestic labor. It does not appear that a surplus of labor existed even in the industrial towns during the five-year period preceding the war. On the contrary, a shortage began to be manifest in seasons of economic activity, and which was not materially relieved by increased or improved mechanical means of production.

Ignoring the abnormal labor conditions prevailing

¹ Further recession in the supply of labor occurred from 1915 to 1920, but statistical data based upon the abnormal labor conditions which resulted from the World War or from the subsequent demobilization of the large military forces do not warrant scientific deductions.

during the war, it does not appear that the restoration of peace and the demobilization of the vast military forces have congested the world's labor market, except in England, where industrial prostration in the past four years has been quite marked, and impaired labor efficiency and productivity is greatly retarding industrial activity. The depletion of labor continues wherever the elevation of labor progresses, and is only locally or temporarily arrested by spells of economic reactions which have become a marked feature in all industrial countries since the end of the war. Quick reactions follow short periods of intense industrial activity, and sustaining power to lend stability to economic operations is lacking even in the United States, with its enormous wealth, vast resources, and the great consuming power of the masses.

The vast energies which have been withdrawn from every field of labor in consequence of child-labor laws, of restricted female labor, of shorter working days, of increased number of holidays, of relaxed discipline and control over labor, and, by no means the least important, in consequence of the laborer's economic and social rise, have contributed to diminish the supply and impair the efficiency and productivity of labor. Moreover, it is the policy of organized labor in all industrial countries to restrict production with a view of controlling the supply and demand of labor, as well as its product, and thereby strengthen the power of labor.

This condition, which was evident already in a smaller degree prior to the war, has become more pronounced since the restoration of peace, and is strongly influencing the economic institutions of the world and retarding economic progress.

The labor question presents also a psychological aspect which has a direct bearing on the supply and productivity of labor. The performance of labor for a livelihood is not a matter of choice, but is impelled by necessity, and the greater the pressure of need the harder the task imposed upon labor. The exertion of energy in all animal life, including that of the human being, is in response to want and necessity, and when life can be maintained with little expenditure of energy, as in particularly favored climates, ease and indolence, and not physical activity, are characteristic of the people. The love of rest and ease is an animal instinct, characteristic not only of the cattle in pasture and of the beast in the jungle, but is also strongly inherent in the human being. When economic pressure is removed and everyday wants can be satisfied with diminished efforts, the driving power of labor is relaxed, unless it is supported by some strong incentive, such as thrift and ambition, or stimulated by new desires and wants. But not all people, either wage earners or others, possess the thrift or ambition to provide for more than their immediate wants, and the incentive for work is likely to be weakened if a week's living is insured by

the labor of five days or less. With greater earning power and with greater independence of labor, the wage earner is under less compulsion of working full time than heretofore, and any trivial occasion or attraction often serves as an excuse for shirking work.

To prevent shrinkage of production from curtailed labor demands the employment of a greater number of workers, improved or increased mechanical facilities, and, above all, greater labor efficiency. Labor efficiency is the dominant factor in the operation of mechanical energy as it is in the application of human energy, and in the degree that it is deteriorated the advantages of labor-saving devices are lessened.

A shorter workday even after it had been reduced to nine and ten hours from the inhuman working schedule of the nineteenth century, was strongly advocated by some of the leading social reformers, both on the ground of increasing labor efficiency and in the interest of the moral and physical welfare of the laborer. It was claimed that the greater efficiency gained by shorter time would fully offset the time lost, and that eight hours' labor will produce as much as nine hours. This theory, however, is not substantiated in practical experience except under certain exceptional circumstances and in certain trades. Close investigation in various industries has conclusively demonstrated that labor will not in most of the important industries produce as much in eight as in nine hours of daily

work, except in industries where unremitting exertion is a strain on the worker.²

Whether seven, eight, or nine hours of daily labor form the happy medium which neither brutalizes labor by excessive toil, nor enervates and demoralizes it by excessive leisure, cannot be established by scientific investigation. A short workday does not promote labor efficiency any more than an unreasonably long workday. Under-work as much as over-work weakens human energy. The human machine, like the mechanical

² National Industrial Conference Board, Research Report No. 12 (Hours of Work as Related to Output and Health of Workers, Wool Manufacturers), Boston, 1918, p. 20, contains the following conclusions regarding the effect of the 54-hour week on the woolen industry:

"In the case of the 54-hour group a much broader basis of experience is available. This group includes 68 establishments and over 57,000 employees. Six establishments reported that output was increased; 7 others that it was maintained; 55 that it was decreased. The 13 establishments maintaining or increasing production, however, included less than 7 per cent. of the total number of workers in this group. The results indicate that the 54-hour week has unquestionably placed a burden on the industry from a production standpoint. The fact that so many establishments report a decrease in output, makes it reasonably clear that the 54-hour week does not give maximum output."

The effect of the shorter days on the metal manufacturing industries is shown in the following report issued by the National Industrial Conference Board and published in the press on June 30, 1919: "It was possible for a considerable proportion of establishments to maintain production on a schedule of fifty hours a week, but that such schedule could not be universally adopted by these industries without some loss of production." Of the forty-eight-hour week the report said. "If both management and workers could actively cooperate, such a week might prove practicable in a larger number of establishments than is now the case. But unless such cooperation is secured there can be little question that the general adoption of a forty-eight-hour week in the metal trades would involve a serious economic loss to the nation."

machine, produces the best results, whether physical or mental, when operating at normal capacity. Individual labor efficiency varies greatly and is determined by the nature of the occupation and by working and living conditions. Subjective no less than objective causes greatly influence it, as temperament, nerve power, etc. Those lazily inclined will prove inefficient under all conditions, whereas the industrious will demonstrate his greatest efficiency when occupied to the limit of his capacity.

From an economic and social point of view, the workday should neither be so long as to affect the physical and moral welfare of the laborer, nor so short as to be a detriment to public welfare or to the moral welfare of the laborer himself. Leisure indulged in by those who have not been trained to occupy their time profitably does not serve as a moral agency. On the contrary in most instances it proves more harmful to the individual than excessive labor, and this applies to the mental as well as to the manual worker. The aggressive policy of organized labor for further curtailment of the daily and weekly hours of work is, however, not prompted by moral or economic principles but springs from motives of power and economic domination.

Restricted productivity, more than the wage, forms the most vital issue of the day, in which not only capital and labor are deeply concerned, but the continuity

of industrial civilization is seriously involved. Mistrust and fear of increased productivity, whether by his own individual exertion or by means of improved mechanical devices, sway the laborer of the twentieth century as they did his predecessor in the earlier stages of modern industrial progress. He is still deeply imbued with the theory that increased industrial productivity is inimical to his interest, and that by restricting labor the demand for labor is increased in the same ratio. If, for instance, productivity is reduced fifty per cent, it will require under normal conditions twice as many workers or twice as much time of work to make good the deficiency.

Wherever the power of the trade unions can be exerted, a shorter workday is persistently agitated even in trades where forty hours already constitute a full week's work, and the week-end holiday includes Saturday and Sunday, as for instance in the cloak and suit trade in New York City.³ The policy of restricted productivity is, however, not confined to human exertion, but it also concerns the operation of labor-saving devices, which are the chief instruments of increased

³ Further curtailment of labor is not a remote possibility, and a five-day working week is not only the ultimate aim of industrial labor, but it would also offer certain operating advantages to the employer. This tendency is already quite manifest during the summer months in many factories and shops. Saturday half holiday from the standpoint of factory operation is not an economical time arrangement, and the small production and the serious technical difficulties which it involves do not in many instances justify industrial operation on that day.

productivity. From the early stages of industrial development, the introduction of mechanical devices has aroused the strong suspicion, and in many instances the violent opposition, of labor, although by stimulating the employment of labor they have been largely instrumental in raising labor from the low level on which it had existed from time immemorial. Labor is still actuated by this suspicion, as the following example will illustrate. The installation of the automatic loom in cotton and worsted mills enables one weaver to operate two and three times as many looms with less exertion than operating the old-type loom. Production is increased and cost is reduced, but wherever the attempt is made to install the automatic loom it meets first with strong opposition, although it insures the weaver increased earnings without entailing increased exertion.

Minimum exertion and low productivity forms a widely practiced labor tenet in all civilized countries, based upon the belief that through it the demand for labor is stimulated and the power of labor is strengthened. Enormously increased wants of the masses, however, strain the impaired productive powers all the more and create distorted economic conditions, of which inflated costs of living and of labor are outstanding factors and compel economy in the cost of living and in the use of hired labor.

Organized labor has demonstrated indisputably that

it can influence powerfully the economic as well as the political condition of the entire world; that it can at will strengthen or weaken, if not paralyze completely, the productive powers of a country. By restraining individual effort and discouraging efficiency and high productivity, it inflates the wage artificially, creates a scarcity of labor, and stimulates a demand for labor, not in conformity with the natural process of economic laws, but in defiance of it. It levels the standard of efficiency to the basis of the least competent, and wherever the power and influence of the trade unions extend, individual ambition is discouraged and the policy of restricted productivity is observed in spirit and in practice. Nevertheless, labor's permanent economic welfare is largely a question of continued industrial progress, and if the policies of labor tend to check or retard industrial activity, as they no doubt do, they must ultimately react upon labor. The institution of labor is controlled by economic forces, and its fundamental principles cannot be arbitrarily changed so long as they are based upon the wage for which the laborer has to render personal service in order to earn the means for subsistence.

Unrestricted productive powers of labor paved the way to modern industrialism, to labor's economic betterment, and to a higher standard of living. The lower costs of all commodities resulting from increased production enormously stimulated wants, diffused com-

forts and conveniences to every part of the world, and greatly increased the demand for labor. The process is now being reversed, and restricted and weakened powers of production are universally contracting wants and curtailing the market for the products of labor. Favored by mass production, even recognized luxuries become popular necessities and are spread to every part of the earth. Mass production and the low cost resulting from it have, to use an illustration, democratized the use of the Ford automobile and have created a demand for it even in semi-civilized countries, and incidentally opened a new and profitable field for the employment of labor. Restricted labor, either by curtailed daily working hours or by diminished individual effort, will for a time artificially stimulate the demand for labor and create employment for a greater number than would otherwise be required. Ultimately, however, increasing cost of living which results from this policy will curtail the demand for the products of labor and react unfavorably upon society in general, including the laborer.

The present economic condition of Europe offers an example of under-consumption on a large scale due to the marked discrepancy between the enormously inflated cost of living and the greatly depreciated purchasing power of the people of the various countries. In consequence, extreme self-denial is practiced in the essential wants, which ordinarily give life to trade and

commerce. Industrial progress is greatly retarded, but notwithstanding widespread unemployment and want, the power of labor is unbroken, and it resists successfully every attempt to increase productivity and to reduce the inflated wage, and thus to help in restoring an economic equilibrium. On the other hand, temporary industrial recovery, however slight, quickly exhausts the supply of labor, as was the case in France in 1923, according to official reports, which seems to prove that under the existing labor conditions the restoration of normal economic activity is still remote, if at all possible. That the changed labor conditions should also universally affect the standard of living as well as customs, habits, and wants of the people is a legitimate conclusion supported by certain facts. Abundance of labor and low cost of production were the chief causes of the wide diffusion of comforts and conveniences, and have raised the standard of living in every part of the world. But with the impairment of labor and inflation of prices, contraction in wants is imposed upon the greater part of the human family, and readjustment to a lower level of the standard of living is the inevitable consequence. A lowered standard of living would first manifest itself in the character of dwelling which forms the chief item of expense in the budget of the average individual in civilized lands, and forms a fairly accurate gauge of his economic condition, whatever his station in life may

be. In so far as the present housing conditions are concerned they are distinguished by a widely felt inadequacy not only in the United States, but in the whole civilized world, and not only in the large cities but in the smaller towns. Effective relief is greatly retarded, if not made impossible, by the restricted productivity of labor and enormously inflated cost of construction.

Retrenched and congested living quarters is the only solution of the housing problem created by the existing labor conditions, and strange as it may seem, the tendency to congestion is most evident among the middle class in the United States, and particularly in the larger cities. The one-family house, which at one time was the characteristic American type of dwelling, is now becoming obsolete and is being replaced by the multi-family house. The so-called kitchenette apartment, contracted in space and in number of rooms, forms now, in the large cities in the United States, the popular domicile of families that were accustomed to spacious homes and to the privacy and comforts they offered. Another type of dwelling for the middle class with small families has, as a chief attraction, a fairly large living room which is quickly transformed into sleeping quarters, the beds being concealed when not in use in specially constructed closets. A partitioned space in the living room serves as the dining room in this type of apartment. This contracted mode of liv-

ing appeals to a large number of families of the middle class, not solely because of the economy in expense and labor it offers, but because of the acute scarcity of domestic help which makes housekeeping in the more spacious homes a serious burden. Even the homes of the rich cannot escape the effect of the labor problem and they desert their mansions for the more convenient hotel life.

The transformation of the home reacts upon the family life and eventually it must affect the entire social organization. Pride of home is sacrificed, and in a measure also the spirit of family life, both of which form powerful spiritual forces and are essential in the training of the child and in the development of its character. Space is a vital moral and social factor, and the lack of it in the home is a matter of serious consequence not only to the happiness of family life and to the physical and moral development of the child, but to common welfare. Housing congestion among the middle class and among the well-to-do is no less a social evil than among the poor, and that it exists in a marked degree and lowers the standard of living and of the home is generally recognized. Nor can it be reasonably questioned that this new social problem is the result of the existing labor conditions which discourage construction and maintenance of proper homes.

Contracted dwelling is, however, not the only evi-

dence of the changes that are being effected in the daily life of the people in civilized countries. Old-established customs and social requirements are being simplified and modified with a view of economizing in labor. Fashion itself reflects this spirit and is modifying its decrees to lessen the requirements for hired labor. For instance, the use of table linen is being dispensed with on many occasions, and in its place table coverings and doilies made of oilcloth and paper, and napkins made of paper are considered up to date and in proper social form. The standing buffet instead of elaborate course dinners requiring the service of a staff of waiters, is the vogue at social functions among the well-to-do. Home cooking threatens to become a lost art in the near future, and more and more canned provisions of every variety and foods prepared in the rotisseries and delicatessen stores constitute the daily menu in the kitchenette apartment, as well as in the more elaborate home. Countless eating places catering to every taste and to every pocket lessen the care of housekeeping, and considering the many incidental expenses which enter into the cost of preparing and serving meals in the home, it is not at all surprising that restaurant life appeals to people even of most moderate means. Aside from money economy, labor economy is effected in all the instances mentioned here, and the lessened need for domestic

labor also lessens the annoyances to which the home is exposed under the existing labor conditions.

The same causes which are deeply affecting modern housing and living conditions and modifying wants and customs are also influencing the style and form of most of the essential commodities. Economizing in the application of labor is as essential in industrial operations as it is in the household, otherwise the use of the products would be greatly restricted owing to the inflated cost. In the practical operation of this policy, quantity rather than quality is the aim, durability is neglected, artistic taste is repressed, and simplicity is the dominating feature, unless commonplace ornamentation is resorted to. A few examples will illustrate this present tendency. The leading hotels in New York, as for instance the Waldorf-Astoria, Plaza, and Astor, which were constructed during the period of abundant and cheap labor, are distinguished by elaborate decorations, fittings, and furnishings, whereas those recently constructed, as the Commodore, Ambassador, and Pennsylvania, show the influence of the high cost of labor in the architectural construction and in the simplicity of decorations and fixtures. The artistic and highly ornate style of the different French period could flourish only when labor was under economic compulsion to demonstrate the highest efficiency and render the best service for a minimum compen-

sation. With relaxed economic pressure, however, efficiency has been impaired, cost of labor has been inflated, and, as a consequence, quality, style, and artistic taste reflect a decided tendency to economize in labor wherever it forms an important factor of the cost of the product.

The tendency to simplification and the absence of elaborate and decorative details is characteristic of many of the commodities in popular use, as furniture, electric fixtures, etc. In furniture, for instance, the Mission and Colonial styles predominate and typify by their simplicity and the absence of ornamentation the early period of the United States when the efforts of the settler had to be concentrated upon the essentials necessary for his physical existence. Even in women's apparel, which is least influenced by economic conditions, simpler form and lack of little details which involve extra labor are the prevailing features. The same causes have no doubt made the soft shirt and collar popular among all classes, although formerly they were worn exclusively by the workingmen and identified his calling.

Of the many changes which the high cost of labor is producing in the everyday life and in the habits of the people, neglected upkeep and renovation of their homes and their belongings deserve mention. Repairs and replacements are deferred from time to time, and

when urgently required, superficial work is resorted to with a view of avoiding the exorbitant cost. When the wage of a journeyman averages over ten dollars for a short day's work, and 50 per cent is added for extra time, upkeep of the home dependent upon hired labor becomes a serious problem, and cleanliness, order, thrift, and not to mention pride of living, must suffer in consequence.

CHAPTER VII

LABOR'S RISE

United as labor is by mutual sentiment and by common grievance, it is divided by decided differences in the means and methods of promoting its cause, in the interpretation of the relationship of capital and labor, and in its viewpoint regarding the effect of the operation of private capital upon labor and upon society in general. Difference in mental attitude divides labor into two groups, conservative and radical: the one cooperating with capital in the interest of labor and as a means of self-preservation; the other combating it as an iniquitous institution which enriches the few and pauperizes the masses. The moderate labor group, as distinguished from the radical or socialistic type, links its welfare with the operation and preservation of capital, and is actuated solely by the aim of securing for itself an adequate wage, improved working and living conditions, and curtailed daily hours of labor. It resorts to organized strikes as a means of improving its condition and lessening its economic dependence upon capital, but the feuds, however hostile, do not aim at, nor lead to, permanent disruption of its re-

lationship with capital. Mutual interests inevitably bridge the chasm, for permanent strife is of serious consequence to both of the parties concerned. Conservative labor recognizes that private capital is the basis of material progress and the instrumentality for the employment of labor, and that capital cannot be disturbed, much less displaced, without reacting upon material welfare, and more particularly upon labor.

Radical labor, on the other hand, is strongly imbued with the theories and doctrines of the various types of modern Socialism in its broader and particularly its destructive aspects, and is fanatically devoted to this creed, whether expressed in terms of Internationalism, Communism, Anarchism, or any form of Socialism advocating the suppression of capitalist monopolies. Above all, the socialistic theory of a more equal division of wealth appeals forcibly to the mind of the average wage earner, and conveys to him vivid pictures of a new Utopia.

Whereas preservation and expansion of capital as a means of promoting the interest of labor is the policy of conservative labor, radical labor, on the contrary, seeks universal salvation in the elimination of capital, except when controlled by the state for the benefit of labor, irrespective of individual merit or qualification. It does not seek local advantages or individual benefits, but aspires to a universal supremacy of labor dominating the world politically and economically, or

at least a universal social order molded in the spirit of radical Socialism.

Despair and social unrest form most powerful proselyting and propagating agents for the dogmas of Socialism, as they do for any creed that arouses hopes for greater happiness on earth or in the hereafter. Unlike the cause of labor in general which demands prosperity and political and social stability for the promotion of its interests, the principles of radical Socialism gain in force and in adherents only in times of adversity and widespread discontent.

The conditions created by the World War have been particularly favorable to the wide propagation of socialistic doctrines and to their disintegrating effect upon all existing institutions. A rule of the proletariat is no longer an idle dream, and is in practical operation in Russia, where it is successfully maintaining its authority, but with little regard for the fundamental principles of Communism, not to say of democratic principles. Even in conservative England, where class distinction and old tradition are deeply rooted, socialistic labor forms a most powerful political and economic factor, and its leader, closely affiliated with the International movement, has enjoyed a place at the head of the government as Prime Minister of Great Britain. The political rise of labor to its present commanding position was not, as in Russia, the result of a violent social revolution, but of a peaceful social evo-

lution. By will of the people and with the coöperation of a political party, which by tradition and conviction is out of sympathy with socialistic theories, Great Britain entrusted for a time its national affairs to the party in sympathy with the most advanced socialistic principles. Whether or not this recognition and demonstration of the great political power of labor was merely a passing manifestation and an evidence of the democratic and tolerant spirit of England, it is a universal symptom of a tremendous social transformation, which is reversing the social scale of the human family and is giving to the hitherto submerged class the commanding political and economic position in present industrial civilization.

Even the intense national spirit of France and the surviving aristocratic traditions, which the political and social institutions of that country still reflect, cannot resist the power of labor as most recent history conclusively proves. Notwithstanding the valuable service rendered to France by Poincaré, the late Prime Minister, and notwithstanding his passionate appeals to national pride and to the future safety of France, the radical socialist, Herriot, was called into power by popular choice and reversed the most vital political issues of his predecessor. More than that, the very head of the government, President Millerand, an intense nationalist, was forced to resign and was succeeded by President Doumergue who is in thorough

sympathy with the policies and principles of advanced Socialism.

Through organized labor, class spirit, solidarity, and aggressiveness of labor have been fused into a most powerful political, social, and economic force, and the decrees of labor, although serving purely class interest, carry greater weight in the civilized world than those of any other class in the social organization.

Only a short span of time in the twentieth century separates the period of impotence and subjection of labor from that of power and dominance; political and social disability of labor from political and social equality. The transition presents an extraordinary phenomenon, without parallel in human history, in so far as it relates to the high elevation of the largest element in the human family, and which seemed forever doomed to the deepest degradation. The revolutionary social transformation, much as it was accelerated by the World War, was not the direct result of it, as would seem at first thought, but the effect of modern civilization, which is powerfully actuated by a spirit of democracy and social justice. Constitutional government has supplanted autocratic rule, and popular suffrage has invested labor with power and prestige, and has made it not only the most powerful and the most courted, but also the most disturbing political element in the legislative bodies of the civilized world.

Labor has secured for itself all the rights which it is within the power of constitutional government to grant to its subjects. It is no longer the aristocracy of birth and wealth which enjoys special class privileges and protection, but labor, without assuming in return special duties or obligations with which the aristocracy was formerly burdened. In most civilized countries, laws have been enacted insuring the laborer and his family, chiefly at the expense of the state and the employer, against every contingency in life, whether old age, sickness, accident, unemployment, or death. His working and living conditions receive the care of the state and municipalities, and the working woman and child are protected from abuse by restrictions placed upon their employment.

Labor reform is the alluring policy of every government and of every party, but not in all cases is it justified by an existing evil or by social injustice, but is prompted by political expediency or by individual political interests, and, above all, by pressure of organized labor. Measures are often enacted under the cloak of labor reform which, though they are of benefit to labor, are detrimental to the common welfare.

Paradoxical as it may seem, capital also is instituting many important labor reforms, and not purely from altruistic motives but as a matter of sound business policy. With a view to gaining the good will of labor and creating higher efficiency and greater contentment

of labor, it is providing means for the moral, physical, and intellectual improvement of the laborer, irrespective of the agencies created by the state to promote labor's welfare. Many of the larger industrial concerns maintain at great expense educational facilities, technical schools, circulating libraries, etc. The recreational opportunities cover the entire field of outdoor and indoor sports, as well as amusements. The welfare work extends into the homes of the worker, where sanitation is guarded under expert supervision, and in case of sickness of any member of the family free medical and nursing care is rendered. In short, the worker and his family are provided with facilities and opportunities for improving their existence which are often lacking in the life of those outside of the ranks of labor, including those engaged in the professions.

Whereas representative government and general suffrage placed the laborer on political equality with his fellow men regardless of social distinctions, two other factors greatly aided his economic and social betterment; namely, compulsory education and trade unionism. Rudimentary as this education was, it removed the stigma of ignorance and awakened labor from the mental stupor which characterized it from time immemorial. Education and enlightenment were considered dangerous instruments in most of the European countries until the end of the eighteenth century, and to

withhold them from the masses was the policy of the church and of every despotic government. In darkness and ignorance labor formed a stagnant mass, difficult to stir and callous to the treatment it received. But with educational advantages and greater enlightenment labor became a dynamic force; like the oily rag, which is harmless in the closed closet, but exposed to air and light forms a strong combustive force. Democratized education is a noteworthy feature of modern civilization, leveling economic and social opportunities and increasing the dignity and power of labor. It forms the melting pot in which the poor and the rich are cast in the same intellectual mold, without leaving marks of distinction except those produced by individual merit and characteristics. The ranks of the rich would become depleted in modern times were they not constantly replenished by those who by individual effort and merit rise from the ranks of labor to become captains of industry, and often intellectual leaders of society.

Organized labor is also a product of modern industrial civilization and it has been largely instrumental in promoting the economic betterment of labor. Prior to the middle of the nineteenth century labor combinations in Europe were either prohibited or greatly restrained by law. In the earlier industrial development of the United States they formed only a negligible factor. Since then their growth in number and

influence, although fluctuating according to the prevailing economic conditions, has been quite marked, and they form in the industrial world the chief contact and the recognized negotiating medium not only between capital and labor, but also between labor and the state.

Unlike capital, which operates through the intellectual powers, labor's functions are chiefly physical, and the individual laborer is intellectually untrained and handicapped to cope with capital concerning their mutual interests. He has to resort to collective and organized action by combining with his fellow workers in guarding their joint interests in their employment. Trade unions are the product of this group spirit, and they form the medium through which labor expresses its grievances and enforces its policies. They are the authorized and organized agency through which labor adjusts its disputes and regulates its intercourse with capital. Inbred group spirit, reflected in firm cohesion and in a strong spirit of cooperation and subordination, lends special force to collective action of labor and makes organized labor unions the most potent factor in the operation of the economic machinery.

Still greater power over labor, and in fact over the entire country, is exercised by the combined labor groups, which, organized as a central and national body, control not only the welfare of labor at large, but to a great extent also the welfare of the entire country.

Whereas labor amalgamations in the European countries serve political as well as economic purposes, their chief aim in the United States is the economic and social betterment of labor. Their decrees form an inviolable code in regulating the relation of capital and labor, and in many instances they are enacted as the laws of the land. The power of organized labor and the intense group spirit of its members are particularly manifest in the conflicts with capital. Under stress or threat of a strike the sympathy of labor throughout the country is aroused even though the interest involved concerns but a local trade and a local issue. The response is often expressed in financial support or in some strategic demonstration to strengthen the power of the strikers. In many instances a sympathetic strike is declared without any particular personal animus, but merely as an expression of sympathy with the strikers with a grievance. In some extreme cases involving a vital policy affecting all labor the financial resources of organized labor are mobilized and put to a severe test in order to support a strike. An assessment may be levied for this purpose on the wage of every member of the trade unions; how extensive this aid may be, is illustrated by the prolonged coal strike of 1922 which became a question of endurance requiring financial sacrifice on the part of organized labor to force a satisfactory settlement. How vast financial resources are at the command of organized labor may

be inferred from the fact that the United Mine Workers collect in dues from its members \$250,000 a month. One trade union in Indianapolis had on deposit in October, 1923, \$1,100,000. The surplus of the Amalgamated Association of Street Railway Workers is over \$6,000,000, and the entire expenses of the organization are met by interest on deposits and investments, and its surplus is growing rapidly. (*Atlantic Monthly*, July, 1924.)

The means employed in promoting labor's interest and the purpose itself may in some instances strongly clash with the interest and welfare of the state. Labor combinations, under whatever title they may function and in whichever country they exist, exercise in the industrial world greater power and command more effective means of demonstrating this power than any other organized or unorganized social group in modern society. In controlling its own members and the machinery which they operate, combined labor can resort to arbitrary measures that vitally affect society. It can, as it did in some instances in the past, prostrate industries, create privation and destitution, and threaten national welfare and existence. It can interrupt communication and transportation, arrest production, and create scarcity in commodities most essential to the existence of the individual, including the laborer himself. It may, moreover, create class strife, produce intense social convulsions, and revolutionize the exist-

ing social order, as recent examples vividly illustrate.

Particularly under conditions of national stress and danger does organized labor exert menacing power, and by threat of strikes and violence force upon the nation and people policies and measures which under normal conditions would be resisted with all the resources at the command of the state. The Adamson law, which was enacted in August, 1916, under threat by organized labor of suspending the operation of all the railroads in the United States unless the eight-hour schedule was adopted by the entire railroad system, furnishes an apt illustration of the great power and pressure which labor can exert upon the government, when resistance on the part of the government would have been of serious consequence not only to this country, but to the entire world. Labor made the peremptory demand at a most critical period when the European War compelled the United States to mobilize all her resources in anticipation of entering the war, and the railroads in particular were subjected to an enormous strain.

Universal suffrage, compulsory education, and trade unionism have transformed labor from a mere physical force to the most powerful human element. The first has secured for labor equal rights; the second, enlightenment; the third has powerfully aided its struggle with capital. The three factors have effected a decided transformation in the institution of labor, in

the mental attitude of the individual laborer, and in the operation of capital and labor. They have been instrumental in removing his inherited lowliness, torpor, and resignation, and have imbued him with a spirit of fighting for his rights and with a strong consciousness and appreciation of the value of his service.

The wage earner is now actuated, not by pressure of want and destitution, but by a spirit of independence and by the ambition to have his employment offer him very possible opportunity of sharing in the joys of life and in the profits of capital. The value of his service he translates, not in terms of wage alone, but in curtailed exertion, greater freedom, and relaxed discipline. His demands and aspirations cover a wide range, from a decent human existence to political and economic domination, according to the mental and temperamental attitude of the individual laborer and according to the principles and policies of the labor group with which he affiliates.

Unrest is, however, the present universal symptom of labor in all lands and under every political and economic condition. It is as evident in the United States which is favored by economic prosperity and where the laborer has equal rights and equal opportunities, as it is in countries suffering from industrial depression, or where the laborer is deprived of political and social rights. Nor do the fluctuating economic conditions

effect any change in the attitude of labor toward capital, and it demonstrates its powers under adverse as well as under favorable conditions. In England, for instance, labor unemployment and industrial depression have been quite pronounced since the end of the World War, and particularly in the past three years, yet labor imposes its will upon the whole land and successfully resists every effort that is being made to have it relinquish some of the exceptional advantages it secured under the intense pressure and menace of the World War.

In Switzerland a nine-hour labor day was strongly advocated with a view of regaining her foreign trade, which had suffered greatly since 1918, but it met with the resistance of labor and the proposed increased working day was overwhelmingly defeated in 1923 by popular vote. Nor has the power of labor suffered in the United States since the end of the war, as was at one time the prevailing notion, and while some concessions may be forced from it in times of business contraction, they are rescinded in most instances when business activity is resumed and the demand for labor exceeds the supply.

Only in social rank does the manual laborer still occupy an inferior position, although he has attained political equality, has improved himself economically and intellectually, and is exercising great powers in the

social organization. His inferior social rank gives him, however, an economic advantage over the average brain worker, who, by reason of his calling, environment, and training, is obliged to observe at least the outward appearance of gentility, and has to maintain a different standard of living than is incumbent upon the laborer or mechanic. The brain worker is accustomed to certain refinements of life, and his cultural and intellectual needs have to be satisfied as much as his material wants. Moreover, his earnings may become seriously impaired by lowering his social environment or ignoring its conventions and requirements, all of which add to his financial burdens and make his economic condition at times more complex than that of the laborer.

The average laborer is trained in a coarser and simpler life, and his environment makes few conventional and still fewer cultural or intellectual demands upon him. He is not likely to impair his earnings or be ignored by his friends, though he lives in a congested tenement or carries a dinner pail to his place of work. His wage follows more closely the trend of the cost of living than does the salary of the brain worker. His improved economic condition, even in the face of the higher cost of living, permits him to improve his living conditions, whereas the average brain worker is compelled to lower his standard of living in the face of

the lessened purchasing value of his earning powers.¹

The savings of the laborer now form a large source of productive capital, and considering that the resources of the savings banks in the United States are derived largely from accumulated savings of labor, the conclusion seems justified that the enormous increase in amount of deposits and in number of depositors reflects a decidedly improved economic condition of the laborer. Banking institutions, managed exclusively by labor and in the interest of labor, have recently been established in large industrial centers, and their remarkable success thus far offers additional proof not only of group solidarity and loyalty, but of the largely increased money resources of labor. The Brotherhood of Locomotive Engineers is now said to exercise control of over \$100,000,000 through the nine banks in which the Brotherhood is interested (*Atlantic Monthly*, July, 1924). A new labor bank was recently opened in New York, and on the first day it received over \$5,000,000 in deposits.

More significant in this enterprise is, however, the spirit of its promoters, who propose to wrest from monopolist capital the control over labor's savings and direct it into channels from which labor is to receive

¹ According to the U. S. Bureau of Labor Statistics, the average wage of union labor was higher in December, 1924, than in any year since the outbreak of the World War, and 141 per cent higher than 1907. The cost of living during that period increased 72.5 per cent, and the margin of 68.5 per cent is reflected either in a higher standard of living or in increased saving of the laborer.

the exclusive benefit from the operation of its capital. Thus the present tendency of labor is not only capitalistic but also monopolistic in an extreme sense, for unlike corporate capital the benefits of its operations are not open to the general public, but are largely confined within its own class. Capitalist labor forms one of the most striking and significant features of a period so rich and profound in social and economic changes that it is almost beyond the power of the human mind to grasp them, much less to foresee and conjecture their final effect upon the social organization.

Labor's elevation is not a movement in which rise and fall alternate in rhythmic order within fixed limits; nor is it a passing manifestation arising largely from the World War, and which eventually is to be followed by a downward movement to the former low labor level. The rise of labor since the last quarter of the nineteenth century forms a slow evolutionary process of gradual stages of progress, and is now as firmly imbedded in the modern social order, as was labor's degradation in the old social order. It derives its force from widespread public enlightenment, from a higher sense of social justice, and above all from the awakened force within labor itself. Not that political and economic reactions, not that supply and demand will not cause decided temporary fluctuations in the power of labor and in the operation of capital and labor, but no more than the feudal system can be restored or the

spirit of the Dark Ages be revived, can labor be forced back into a condition of impotence and ignorance or be reduced to the inhuman existence of the past ages.

The achievements of modern civilization will not be appraised in future generations by the remarkable industrial and economic development, but by the permanent impress they have left upon the social order, of which the uplift of labor forms the distinguishing feature. Forests of smokestacks, networks of steel rails, harnessing of steam and electricity, and all material creations serving comforts and conveniences, are no more evidence of a higher social order, than is the displacement of candle light by the electric bulb, or the substitution of mechanical power for human energy. Comforts and conveniences are increased, and time and energy are saved by mechanical devices, but unless the final result constitutes a permanent contribution to human progress and happiness and the soul expands along with increasing material advantages, the human family is not raised to a higher level because of the material achievement. The same rule applies to the individual, and the advantages of increased comforts, conveniences, and facilities do not raise him to a higher human level or contribute to human progress, unless they are instrumental in increasing his usefulness, however modest his service may be, whether mental or physical. For instance, time economy is effected by improved methods of convenience, or by the use of an

automobile, but it is the use and the ultimate result of the time gained that determines whether the improved facilities are an agency for human progress.

The uplift of labor will stand out as the most important event in the history of modern European civilization, the force of which is manifest in the tremendous changes it has effected in the political and economic institutions of the world. It is universally accompanied not only by greatly increased compensation, improved working and living conditions, removal of political and social disabilities, but by social reforms in the interest of the working woman and child. A social change of this magnitude, affecting the largest and most important element of the human family and touching the vital force of modern industrial civilization, must also have a powerful influence upon the future tendency of this civilization and upon the affairs of the human family.

CHAPTER VIII

SOCIAL AND ECONOMIC EFFECT OF HUMANIZING LABOR

Labor has at all times been a complex problem, due to the fact that it is both a human element and an instrument of production. This is a fundamental and an immutable condition from which labor cannot be dissociated by human decrees or by mechanical devices, and it will endure as long as hired labor is essential to the existence of the human race as well as for the maintenance of the individual laborer himself. To keep the two factors in proper balance and relationship, without degrading the human element and without impairing the productivity of labor, has been the aim of social leaders and the precept of religious institutions in all ages. As a human element it demands consideration, humane treatment, and just dealing, but as the instrument of production it has to bear exertion, endure hardship, and submit to control and discipline. To reconcile the two conflicting factors forms the outstanding social problem of to-day, as it has at all times from the earliest stages of human progress.

The greater part of the human race has to perform

manual labor for its own maintenance and for the existence of the other members of the human family. The simpler the life and the more uniform the economic and social level of a community, the more does the individual perform his own work and the less dependent is he upon hired labor. It is only in an advanced industrial civilization in which comforts and conveniences are greatly stimulated, and in countries where the ruling or so-called upper class lives in luxury and ease, that the greater number of people perform manual labor for the maintenance and convenience of others. Hired labor, whether individual or in groups, may serve productive as well as nonproductive purposes. In thickly populated countries of retarded industrial development and with social peculiarities and distinctions of their own, as for instance, India and China, a large part of labor is employed in domestic service, and in service relieving individual physical exertion, as porters, messengers, etc. In the cultural and luxurious age of France in the seventeenth and eighteenth centuries, when industries languished and opportunities for productive labor were greatly restricted, the greater part of labor was compelled by economic necessity to engage in military or domestic service. The more desperate and adventurous type resorted to brigandage upon the highways, making life and property insecure.

In all previous waves of civilization, material and

even cultural progress was aided by dehumanized and brutalized labor, either in a state of bondage or extreme destitution, compelled to inhuman exertion and reduced to inhuman living conditions. Captive or slave labor provided the human energies in the construction of the vast monuments of antiquity. For instance, in the construction of the Colosseum in Rome ten thousand captive Jews from Jerusalem were employed. The status of labor in the early stages of modern industrial civilization was not on a much higher plane from a human and an economic standpoint than if a condition of slavery had existed. Laws of nature, rather than human laws or sentiment, placed the limit upon exertion, which cannot be driven beyond the point of physical endurance. Intense exertion of nominally free labor was as essential to modern industrial development as compulsory labor was to ancient achievements. Under pressure of extreme poverty, labor in the nineteenth century had to submit to inhuman existence and the children of the laborer were initiated as wage earners in their early childhood days in order to contribute to the support of the home, and they were trained in the hardships which their elders had to endure throughout life.

Humanized labor is a very recent achievement, and the first tangible evidence of popular interest in the welfare of labor dates from the time of the early labor reform legislation in England in the middle of the last

century. It is, however, only since the outbreak of the World War in 1914 that the advance of labor to unparalleled power made most rapid progress, not as a passing incident or an after effect of the war, but as a definitely progressive stage of human history. The World War greatly accelerated the rise of labor, but the tremendous forces behind this human movement spring from far different causes and were the result of the social ferment which was particularly active several decades before the outbreak of the World War, and which imbued the laborer with a new sense of his might and of his rights.

Evident as is the elevation of labor, so are impaired productivity and high cost of production which accompany it. In every civilized country, whether enjoying intermittent spells of activity, as, for instance, the United States, or suffering from industrial prostration and widespread labor unemployment, as England, deteriorated labor efficiency and high cost of production are outstanding features, and are considered the chief causes of existing economic ills. Labor is concerned only in promoting its own welfare, and it will not sacrifice any of the advantages it has gained with a view of aiding increased economic activity. The conditions which it imposes upon its service, and which at one time were considered merely passing incidents or the aftermath of the World War, are now firmly established in all civilized lands in the operation of labor,

whether industrial, agricultural, or domestic. High wages, contracted work, and relaxed discipline remain outstanding factors and testify to the solidarity and tremendous power of labor. The welfare of labor has taken deep root in the social order of the civilized world, and is receiving primary consideration even when it involves and affects the economic condition of a country. It is compelling the readjustment of the economic machinery, as well as of the material affairs of the human family, to the powers of labor and to newly involved social principles.

Past and present examples lend support to the theory that only debased and impotent labor can be used as an effective instrument of intensive material progress, and that exertion and submissiveness, which are essential qualities of labor efficiency, cannot be enforced on enlightened and humanized labor. The indisputable historical fact stands out that the material achievements of past civilizations until the dawn of the twentieth century, including the remarkable industrial progress of the nineteenth century, were the products of debased labor, whether actually in bond or nominally free, and it would seem a reasonable conclusion that humanized labor, greatly as it enhances social progress, is not conducive to continued material progress.

Contrary to the prevailing theory, degraded labor was not the product of industrial civilization, but reversely, industrial civilization was the product of

degraded labor. Only in a state of complete helplessness could labor have been driven to such inhuman exertion and be resigned to the animal existence which characterized it during the greater part of the nineteenth century. On the other hand, labor has in recent times conclusively demonstrated that with each stage of further elevation its efficiency becomes more impaired and its supply more depleted.

Under whatever social and economic conditions the laborer existed in the past, his demands were satisfied with the mere essentials for his physical existence. This formed the full measure of his daily wants, if not the extent of his earthly aspirations, and for this he and his family had to render extreme toil and endure inhuman hardships. As his elevation proceeded, however, his material wants rose in proportion, and he is now a close competitor with the average brain worker and with the small trader for the comforts and conveniences of life. He now forms a part of that class of society, which, though not distinguished by wealth, nevertheless is able to participate in the better things of life. The petty refinements of life are no longer foreign to him, and cultural tastes and desires are often evident in his home. The graphophone, the radio, the player piano, and any other device that contributes to the cheer and to the attraction of the home finds a ready market among laborers. Even the ownership of an automobile is not beyond the reach of the

average wage earner, and it is not an uncommon practice in the smaller manufacturing towns to use this means of conveyance to and from his work. If his wage does not permit the cash purchase of these luxuries, he frequently resorts to the installment plan to satisfy the desires and ambitions of himself and his family.

The economic improvement and the moral elevation of the laborer are evident in his higher standard of living, better home environment, and in the educational and cultural opportunities he offers to his children. In the high schools and in the higher educational institutions in the United States the children of the workingman are largely represented, creating for themselves careers far removed from the occupation of their fathers. Economic betterment has proven a most important factor in the humanization of labor, and in consequence of it the laborer has been enabled to elevate himself morally and intellectually, as well as physically. Labor itself is now the greatest consumer of its own products, and it is almost as important as a consuming factor in the operation of the modern economic machinery as it is a producing factor. In a degraded and servile state, maximum exertion and minimum consumption are imposed upon the laborer, but lifted to a higher social and economic level, the condition is reversed and is marked by decreased exertion and increased consumption. Whereas luxurious

indulgences by a small number have a negligible effect upon economic development, leveling and diffusing of comforts and conveniences among the large masses had a most potent influence on economic development.

Paradoxical as it may seem, labor is steadily encroaching on the domain of capital as explained on page 97. *Capitalist labor* is not a dream of visionaries or a socialistic creation, but is a natural economic development following in the wake of the humanization of labor. With an adequate wage and with ordinary thrift the budget of the average laborer shows a surplus, and insignificant as the amount may seem in the first attempts of saving, nevertheless it forms the nucleus of wealth and is a constantly increasing source of new productive capital. *Capitalist labor* is based upon the aggregate small savings of a large number, in distinction to the generally understood term of capital derived principally from the large earnings of a small number. The small savings of the individual laborer promise to be to the United States as important as a source of liquid capital, as the savings of the peasantry were to France before the war and still is to-day.

Labor as the chief factor of production is also rapidly gaining in importance as a financial factor and is thus uniting within itself the functions of capital and labor. Whether or not the eternal problem of capital and labor is to be solved by such merger would be idle to

predict, but the fact must be recognized that the individual small savings of labor form now an important tributary to the flow of capital and to the growth of wealth, as is evidenced in the remarkable development of labor banks in recent times and the enormous increase of savings-bank deposits of which the savings of labor are a large factor¹ and in the increasing number of wage earners who are shareholders in the company in which they are employed.

With a view to increasing the interest and the stability of the wage earner in his employment, the large industries in the United States are offering him every inducement to invest his savings in the stock of the company in which he is employed, and that this policy is meeting with success the increasing number of stockholders from the ranks of labor give ample testimony. Nearly one-half of the 100,000 share owners of Armour & Co. are in the employ of the company. The report of the U. S. Steel Company published in December, 1923, shows that 50,020 of their employees were stockholders in the company with an aggregate of 841,233 shares of common and preferred stock.

Concentration of great wealth in the hands of a few, although greatly stimulating cultural progress, as it

¹ On January 1, 1918, there were 10,631,586 savings-account depositors. On January 2, 1925, depositors numbered 38,867,994. Twenty-nine labor banks with resources close to \$90,000,000 are in operation throughout the country.—*Proceedings of the Academy of Political Science* in April, 1925.

did, for instance, in the Italy of the Medici, nevertheless stands out in history as an instrument of oppression and as a menace to liberty. Leveling and diffusion of wealth has been the ideal of a perfect state of society, which social reformers have preached and wise leaders have advocated ever since wealth and poverty have divided the human family into two opposing classes. This ideal is nearer realization in the twentieth century than ever before in the history of the human race. Without attracting particular notice, the wide diffusion of small wealth among those who in the past knew only poverty is proceeding in a marked degree, and with every evidence that it is not a mere passing manifestation, but is the result of the social and economic forces which have gained great momentum through the humanization of labor.

Economic improvement has effected a decided transformation in the psychology of the laborer, which is reflected not only in his relationship with his employer, but also in his family life. One particular phase of the changed mental attitude of the laborer deserves notice, inasmuch as it concerns the future welfare of his children and has a direct bearing upon the future supply of labor. Labor in the past has formed a permanent tradition transmitted from father to son and from generation to generation. Hence the constituency of labor varied very little from time to time, and was perpetuated by line of succession within its own family

group. The ranks of labor were only thinned by war and pestilence, and under normal conditions they remained intact, the son succeeding to the occupation of his father as his heir right. Other opportunities for existence, barring military adventures, were not open to the laborer nor to his children, and their economic and social status were permanently fixed. "Once a laborer always a laborer" was the immutable law.

Different are the conditions which have been created through the humanization of labor. The supply of labor is chiefly determined by the economic and social status of labor. Low economic condition and excessive supply of labor operate in common, and wherever the former prevails the latter is also a pronounced feature. On the other hand, the more favorable the economic and social status of labor, the more the supply of labor is being drained. Whether the child of the farmer or of the laborer in an industrial center, his tendency under the existing economic conditions is to drift away from the environment and from the calling of his father. In the case of the farm hand it is generally attributed to the attraction of the large town, but different must be the motive that actuates the child of the industrial laborer in the large towns to change his environment and choose his own calling. The laborer is now moved by a higher ambition regarding the future prospects of his child, and he no longer aspires to have it perpetuate his calling and his hardships.

The child is offered educational opportunities, frequently involving great sacrifice and self-denial by the rest of the family, to prepare itself for what the parents consider a more honorable and promising career. Instead of being trained in the hard school of actual labor, the child is sent to the public school for an education. Unlike his father, whose career as a wage earner began in the tender years of childhood, the apprenticeship of the son does not commence until he has almost emerged from boyhood years, and in most of the states of the Union he is compelled to attend school until he is sixteen years of age, except with special sanction of the school authorities. But even at that age the child of the laborer is not necessarily withdrawn from school to qualify as an apprentice. With the improved economic condition of the laborer, his ambition to give his child a broader education is becoming a marked feature, as is evidenced by the increasing number of children from the home of the laborer who crowd the high schools and even the colleges throughout the United States. It seems reasonably evident that their schooling will not prepare nor qualify them for the ranks of labor, and that their future occupation will be far remote from the calling of the father. This is not a mere fad or passing tendency, but is a strong national characteristic which is diverting into the channels of mental labor the natural tributary of physical labor. It is another symptom and

effect of the humanization of labor, and like all measures that lifted labor from its degradation, popular education, while it marks a decided stage of social progress, is draining the natural source of the future supply of physical labor.

In its universality, and in its political, social, and economic effect, the humanization of labor forms an event without parallel in history. It has released social forces which remained dormant or repressed from the earliest stages of the human race, and which have now free play and are exerting a tremendous power over the entire world. It is transforming the social order in every land, and is introducing political and economic principles which are leveling wealth and rank, and investing the masses with power which formerly was exercised only by the higher class in society. The new labor era is particularly distinguished in the political domain, and the civilized part of the entire world is now either under the absolute rule of labor, or largely under its influence.

Probably less remarkable, or rather less dazzling in this new era, are labor's achievements in relation to capital and in material betterment. Economic institutions and traditions have greater stability and are more resistant to revolutionary changes than political institutions. Nevertheless, in this field also, labor's will and wishes largely determine the operation of the economic machinery, and the economic and working conditions

of the laborer have improved vastly. Labor unrest is still a universal fact, for humanized labor chafes under the restraint and discipline of its employment, and it is no longer reconciled to being treated as the servant of capital and submitting to rigid rules and orders. Often it assumes the rôle of master, imposing its own conditions and regulations upon its employment, whether in groups or individuals, or whether engaged in industrial, agricultural, or domestic service.

Far reaching and all important to the human race as are the changes that are being produced in the human organization as a result of the humanization of labor, they are also decidedly marked in the mental attitude and in the spirit which actuates the individual laborer. The causes of strife with capital no longer spring from oppression, suffering, and abuse, but from self-consciousness of the might of labor, and from pressure for a higher standard of existence. While the wage still is a chief cause of contention between capital and labor, the more radical element clings to the doctrine that labor alone should share in the profits resulting from the production of wealth. Whatever be the outcome of these contending forces, the permanent service of modern civilization to the human race will not be judged by economic or material results, but by the social revolution it has effected in raising the submerged masses to a higher human plane and

developing a higher sense of social justice in the human family.

The humanization of the masses is establishing a higher standard of human existence in every part of the world and is giving to modern civilization a different aspect and tendency than characterized the material and industrial age until very recently. Social progress is the powerful ferment which is agitating the human family and is creating a vast transformation, not only in the institution of labor and in every fiber of the social fabric, but also in the status of man, woman, and child.

CHAPTER IX
FORCES OF REACTION
ECONOMIC SATURATION

Material and social progress not only promotes the welfare of the existing generation, but also takes into account the effect upon succeeding generations. It is the evidence of civilization, of a higher moral and intellectual development, and of an advanced social order. Progress, social and material, is influenced and stimulated as much by future as by immediate benefits which it offers to society. Extensive public and private undertakings, while influenced by existing needs, foresee and anticipate, in most instances, future requirements. For instance, for the purpose of insuring an ample water supply for New York City, distant rivers were tapped, enormous storage reservoirs were constructed with a view not only to present needs, but also to the future prospective needs of a largely increased population. The financial burden is assumed largely by the present generation, although a less extensive and costly system would have been adequate to meet this particular requirement for years to come. The development of the railroad system in the United

States would have made much slower progress had it aimed solely to meet existing requirements. Prospective needs were anticipated so far in advance and at such enormous cost that in many instances the original capital investment has suffered serious depreciation and the net income is seriously impaired by the fixed charges on the debts contracted to provide facilities for future traffic. In the past fifteen years, railroad construction in the United States has virtually come to a standstill, as the following table based upon the figures published in the Statistical Abstract of the United States, 1924 (p. 357), conclusively proves:

TABLE II

Year	Miles of Road
1900	193,346
1905	218,101
1910	240,293
1915	253,789
1920	252,845
1923	250,222

To what extent railroad development, even in the most populous territories, has exceeded existing and future transportation requirements, the state of New York offers an illuminating example. Although this state has more than doubled in population in the past forty years, railroad mileage has remained almost stationary after the construction of the West Shore

Railroad about forty years ago, and the existing facilities are adequate to take care of the increasing traffic for many years to come. Only very recently a railroad in the state of Maine has applied for permission to discontinue operation on one thousand miles of its tracks, owing to insufficient traffic and the heavy drain on its resources. The territory which the one thousand miles of tracks served has anticipated a largely increased population and has been operated at a loss even before motor trucks entered into competition. The New York, Westchester & Boston Railroad, which forms a part of the New York, New Haven & Hartford System, was constructed about fifteen years ago to provide for the future growth of suburban traffic, but it has proven a great drain and a liability to the main line from the very beginning of its operation, and is likely to remain so for many years to come, even with a normal increase of traffic. The Chicago, Milwaukee & St. Paul Railroad, at one time classed among the most successful railroads in the United States, is now in the hands of receivers, due to the policy of expansion it adopted in later years with a view of anticipating future traffic requirements.

For the time being this vital instrument of industrial progress and of modern civilization has reached the limit of expansion and development not only in the United States but in all countries noted for their

rapid industrial progress. The main arteries of the railway system in the United States, whether spanning the North and South, or the East and West, have in most instances anticipated the needs of a larger population and of greater economic development than is likely to be realized in the present generation. Competition of motor-vehicle transportation has affected the financial operation of some of the railroads, but the main cause can be traced to overexpansion and overdevelopment in anticipation of future needs, and to the enormous debts and fixed charges which this policy has entailed. The Delaware, Lackawanna & Western Railroad, to use an illustration, is exposed to the same competition, and to the same extent as the other railroads, but because its debts and interest charges are negligible and it is operating within a territory adequate in population and industries to support its operation, motor competition has had no effect on its earnings, nor has it impaired the value of its stock. On the other hand, if this railroad had largely anticipated future transportation possibilities, let us assume, by doubling its present trackage and burdened itself with enormous debts, the unfavorable financial condition which would probably have resulted would have been attributed to motor-car competition. Moreover, the latter, while it diverts traffic from the railroads, forms a large tributary and a source of increased

revenue to them in transporting the raw materials and the finished products in connection with the manufacture of automobiles, and in the distribution of fuel for their operation. How important to the railroads this last item alone is may be inferred from the report of the Bureau of Mines that in the month of November, 1924, the average daily consumption of gasoline in the United States amounted to 23,000,000 gallons.

Not only in transportation, but in all economic ventures, speculation on future prosperity is a strong incentive. Prospective needs and demands stimulate economic expansion and development which existing conditions would not justify. It is generally recognized that the mechanical means of production have increased far in excess of existing requirements, and that curtailed productivity in most of the industries in the United States is due, not to inadequate and inefficient mechanical agencies, but to inadequate and inefficient human agencies. When an industry operating full time reports eighty per cent operating efficiency, as is now considered a fair average in most of the textile mills under normal conditions, it conveys a picture of one hundred per cent mechanical equipment and eighty per cent labor efficiency. The discrepancy between the two, or between efficient and inefficient labor, represents unproductive capital which in the final analy-

sis constitutes a tax upon the consumer, or a drain upon the industry.

In civic undertakings the tendency to anticipate needs far beyond the requirements of the present generation is quite marked, and large and small towns are being overburdened with debts and taxes, which sooner or later must reach a saturation point and may become a serious problem in municipal affairs. Municipalities vie with one another in embellishing their cities and providing them with every modern facility and attraction, regardless of the debts to which they are already committed. Vast public improvements are financed, as are private enterprises, on inflated credits based upon prospective benefits and profits. Prospective rather than current requirements are the incentive to financial ventures and a stimulus to public and private enterprise. The intense driving power thus lent to economic activity is, however, at the expense of future activity which it has largely discounted. For instance, railroads, highways, telegraph and telephone lines, local transit facilities, and other public utilities, and even the operation of mechanical devices, discount future requirements so far in advance as to lessen the need and the opportunities for further future anticipation and cause temporary, if not permanent, saturation. Provisions for prospective future needs

congest credits and divert capital into channels which do not offer immediate advantages, and not infrequently remain permanently unproductive. Whereas the present generation is concerned in the payment of the interest on the contracted debts, the future generation will have to take care of the payment of the principal, and thus assume a financial burden which it did not choose but for which it is made responsible.

Above all else, industrial progress has been enormously stimulated by the universal spread of comforts, conveniences, and material indulgences, due chiefly to declining cost of production which has continued with little interruption from the time of the general introduction of mechanical power, until 1910. The downward trend of prices leveled wants and enlarged the range of essentials, many of which were formerly classed as luxuries. It stimulated material indulgences among all classes, but more particularly among the masses, which from time immemorial had been restricted to the bare necessities for a crude physical existence. The greatly reduced cost of all products of labor raised the standard of living in every part of the world, and enabled even the poor to share in some of the modern comforts and conveniences of life. Since 1910, however, the downward trend has been completely checked, as shown in Table 1, P. 63, and the reverse movement has been gaining in power and is

advancing the cost of living and contracting the world's wants, as the declining cost had previously favored increasing wants. Severe retrenchment is now practiced by the greater part of the human family, and the means and agencies that are being employed to restore economic normalty and stimulate wants have thus far proven of little avail.

In many of the basic industries, as, for instance, coal, iron, steel, lumber, and textiles, which were the chief contributors to modern industrial progress, intermittent activity and relaxed progress are evident in all countries, and symptoms of which were already manifest several years before the outbreak of the World War in 1914. Not only in Europe, but in the United States, economic stability is lacking and supply and demand undergo quick changes and prevent sustained and normal operation of the economic machinery. The official statistics relating to the iron, steel, lumber, and cotton industries covering a period of twenty-five years, from 1900 to 1925, and which are presented here in condensed form in Tables III, IV, V, and VI, point to the fact that the peak was reached in 1910, when the highest rate of progress in those basic industries is reported. Since then the rate of progress has diminished, except during the industrial inflation which accompanied the war period and which for obvious reasons must be left out of consideration for the purpose of this analysis.

TABLE III
Production of Steel Ingots and Castings

	Total Production	Rate of Increase per cent.	
1901-1905	76,839,657		
1906-1910	112,042,565	+46	
1911-1915	141,892,349	+27.6	
1916-1920	209,100,885	+47	No. 1
1921-1925	183,762,358	-12	No. 2 Compared with 1916-1920
		+29	Compared with 1910-1915

No. 1. Includes the war period.

No. 2. December, 1925, estimated by the *Iron Age*.

TABLE IV
Pig Iron Production

	Total Production	Rate of Increase per cent.	
1901-1905	91,198,326	+60	
1905-1910	120,123,608	+31.8	
1911-1915	137,591,093	+14.5	
1916-1920	185,052,008	+34.7	No. 1
1921-1925	153,611,905	-17	No. 2 Compared with 1916-1920
		+12	Compared with 1911-1915

TABLE V
Cotton Spindles

Yearly Average	Spindle Activity full or part	Rate of Increase per cent.	
1900	19,472		
1901-1905	25,250	+35	
1906-1910	27,083	+ 7.4	
1911-1915	31,227	+15	
1916-1920	34,340	+10	
1920-1925	32,115	- 6.4	Compared with 1915-1920
		+ $\frac{1}{4}$	Compared with 1911-1915

TABLE VI

Lumber Production¹

Average Yearly Production	Millions of Board Feet	Decrease per cent.
1904-1908 incl.	35134	
1909-1913 incl.	39815	13
1914-1918 incl.	36377	9.5
1919-1923 incl.	32809	10

In England, which before the war occupied the front rank in the coal, iron and textile industries, prostration is pronounced and has resulted in widespread unemployment of labor. The increasing use of oil as a substitute for coal, and the intensive development of hydraulic power in recent years may have affected the coal industry permanently, but the prolonged depression in the other industries is due primarily to curtailed demand and to the contracted wants of a great part of the human race.

The statistical data presented here for a period of twenty-five years, do not demonstrate an actual state of saturation in the chief basic industries, but a trend toward a constantly diminishing rate of progress, which, if continued, must eventually reach the point of saturation, as is already evident in the construction of railroads and in many of the utilities which have anticipated wants far in advance. The persistently declining rate of industrial progress during a period of fifteen to twenty years cannot be logically explained

¹ Considerable variation in the completeness of the lumber returns is pointed out in the Statistical Abstract, p. 666.

by, what is termed, economic cycles, and brief as a period of twenty-five years may appear to reach scientific conclusions, the statistical figures, nevertheless, offer reasonable evidence of a trend toward economic saturation. This trend, in so far as it relates to the United States, is all the more significant in the light of the greatly increased earning power of the masses, and, above all, in the light of the increased population, which rose from 92,267,000 inhabitants in 1910, to 112,078,000 in 1924,² or over twenty-one per cent in the course of fifteen years, and which should have effected an equally increased rate of production in all the industries depending upon domestic consumption.

Industries producing non-essentials and luxuries, as automobiles, radios, etc., are making gigantic strides, seemingly at the expense of the more essential things, and are creating illusions of general prosperity. Greatly as they should stimulate the basic industries, the latter, nevertheless, are lagging and their rate of progress is neither equal to their development prior to 1910, nor commensurate with the increased population and the increased purchasing power of the masses. Enormously increased wealth and credit seek channels of speculative ventures which do not promote sound or permanent economic development, and at best create merely spasmodic and intermittent economic activity along the lines of luxuries and superficial wants. Not

² Estimate, Statistical Abstract of the United States, 1924.

mass production of luxuries, but of the things which enter into the daily life of the average individual and promote a higher standard of living, lend stability to industrial progress. Widespread material indulgences denote not the peak but the decline of a civilization, as past history has repeatedly demonstrated.

Credit is the most important factor in modern industrial civilization and forms the chief source from which the economic machinery derives its driving power. It has been the means to the phenomenal development of trade, commerce, and industry, as well as the incentive to the vast chain of enterprises which are based upon future needs and benefits. Credit is, however, not boundless and unending in its operation and is subject to contraction and exhaustion, and it may prove inadequate and costly and restrict wants and economic activity.

That the present enormously inflated credit of the world is not altogether the result of the war, and that the credit institutions of the world were already severely strained several years before the outbreak of the war, is not a mere theory, but is conclusively demonstrated in the rising rate of interest and in the decline of all government as well as railroad and industrial securities yielding a fixed rate of interest, which proceeded uninterruptedly and universally from 1909 to 1913.

The Bureau of Foreign and Domestic Commerce furnishes the following quotations of government securities of the four leading countries, including the United States, for the five years preceding the war in 1914.

TABLE VII

	2½ per cent English Consols	3 per cent French Rentes	3½ per cent. German Loans	4 per cent U. S. Bonds
1909	83.43	97.77	94.14	119.11
1910	81.09	97.98	93.17	115.18
1911	79.31	95.61	93.32	114.84
1912	76.16	92.46	89.80	112.67
1913	73.62	87.08	85.82	112.48

The average price of the leading railroad bonds in the United States, according to the records of the New York Stock Exchange, was as follows from 1909 to 1913:

TABLE VII

1909	100.5
1910	98.2
1911	97.6
1912	95.3
1913	90.7

The same downward movement is reflected in municipal securities in the United States, as, for instance, New York City four per cent bonds, due in 1957, which declined from 103 on December 31, 1908, to 95¾ on December 31, 1913.

The rising rate of interest during the same period is conclusively established by the average bank rate of

the Bank of England, according to the records of the Bureau of Foreign and Domestic Commerce.

TABLE VIII

1909	3/ 2/6
1910	3/14/4
1911	3/ 9/4
1912	3/15/5
1913	4/15/5

It should be added here that the five years preceding 1914 were not marked by abnormal economic conditions in Europe nor in the United States, and hence the universal depreciation of all securities having a fixed rate of income, and the simultaneous rise of the rate of interest during that period, can be reasonably explained only by an inadequate supply of liquid capital to sustain the vast industrial expansion and the increasing requirements of governments and municipalities which distinguished the first decade of the present century. It seems evident that the tremendous impetus of material progress was straining the financial institutions, and that symptoms of reaction were beginning to be manifest in every channel of economic activity before the outbreak of the World War in 1914.

The late World War has left in its track devastated territories, exhausted financial resources and weakened productive powers; but it could not have repressed the inherent recuperative powers which are particularly exerted towards economic recovery under such condi-

tions. The Napoleonic wars had also left in their track prostrated trade and industries, and financial exhaustion, yet so great were the recuperative powers of devastated Europe, that when peace became assured after the battle of Waterloo economic development received extraordinary impulse. In more recent times the United States after the ravages of the Civil War furnishes an illuminating example of the forces of recuperation, for immediately after peace was restored economic development made remarkable strides, notwithstanding the serious financial difficulties with which the United States were confronted. Different, however, are the economic conditions following the World War, and seven years after peace economic prostration of Europe still persists, and economic disorder prevails in the rest of the world, notwithstanding the powerful efforts that are being made to restore economic normalty. Greatly as the present economic disorder has been intensified by the war, the primary cause is not the war, but the natural result of economic overdevelopment and overstimulation.

Reactionary forces set a limit to economic operations as they do to all human activities and agencies. Countries with vast resources and strongly imbued with a spirit of optimism and enterprise, as for example, the United States, are equally as powerless to combat the economic forces as are less favored countries.

CHAPTER X

LIMITATIONS OF MECHANICAL INVENTIONS AND EXHAUSTION OF NATURAL RESOURCES

Scientific discoveries and mechanical inventions, which particularly characterize modern industrial civilization, have effected incalculable economies of human energies, yet the demand for labor has not diminished, nor has the available supply of labor increased. On the contrary, the demand is more urgent than ever, and under normal economic conditions the supply in civilized countries is inadequate to meet the demands made upon it, whether in the industries, agriculture, or in the home. The depleted supply of labor, its improved economic and social condition, the arbitrary power it exercises over capital and over society, not to mention the greatly inflated cost of production, are conclusive proof that mechanical power is not superseding human labor, nor is it relieving the shortage nor depreciating the market value of labor. Wherever mechanical power has made the greatest progress, as, for instance, in the United States and England, the power and economic betterment of labor are quite pronounced. The existing labor conditions in the in-

dustrial countries seem to justify the conclusion that either the depletion and deterioration of labor is proceeding more rapidly than the ingenuity of man can make good through labor-saving devices, or, that labor-saving devices themselves are creating an increasing demand for labor and are exhausting the available supply of labor.

In competition with mechanical power, muscular energy has lost in importance in modern industrial operations. The intellectual powers, which are the essential elements in the performance of labor, have not only enormously enhanced the value and dignity of human labor and increased the opportunities for the employment of labor, but they have also made possible the utilization of mechanical inventions.

The greater the labor economy from the operation of mechanical devices, the greater the impulse to industrial activity and expansion, and the greater and the more varied also the opportunities for the employment of labor. By means of mechanical devices quantity production has enormously increased, and the cost of products has been greatly reduced, thus stimulating and spreading wants, comforts, and even luxuries, which otherwise would remain beyond the reach of the masses. Increased and diffused wants have made the human family all the more dependent upon hired labor, not so much to supply physical energy, as the mental qualities and skill which are the vital forces in human

labor, and without which the construction and the practical operation of machinery would be impossible.

That labor-saving devices should prove a direct cause, not of labor congestion, as was at one time generally assumed, but of labor depletion, would at first seem a paradoxical statement. Nevertheless, the facts point to this conclusion in the light of the industrial expansion and increased consumption which have resulted from the operation of labor-saving devices, and which have greatly stimulated the demand for labor. More than any other agency or economic cause, mechanical power in the earlier stages of its practical operation has created a tremendous upheaval of labor. It has destroyed as well as created opportunities for the employment of labor, and it has in turn depressed and elevated labor. It has caused the geographical displacement of the laborer through the abandonment of village industries and the growth of factory industries in large towns. It has caused his vocational displacement from the industries for which he had been trained from early boyhood, and turned him into industries which are operated by mechanical power and for which he had no training. Greatly as mechanical devices at one time disturbed the economic stability of the laborer, they are creating for him new and greater opportunities through the expansion of the old industries and the vast chain of new industries to which mechanical power has given birth and which have

completely absorbed the labor displaced by labor-saving devices. They lend greater value and dignity to labor by relieving it as a source of brute energy and transforming it into a force in which the exercise of the mental powers determines its economic value.

The production of mechanical and labor-saving devices makes heavy drafts on the supply of labor and form important industries, which in turn stimulate other industries. The relative displacement and absorption of labor in consequence of mechanical inventions cannot, however, be scientifically established by statistical data and has to be based upon conjecture. An increasing demand for labor has followed in the wake of every important mechanical invention, and particularly in the wake of steam power, which greatly stimulated industrial progress, although in the earlier stages of its development it was considered a menace to the welfare of labor. The practical application of steam as a source of energy forms the most important epoch in economic history, and has given rise to many new industries and to new channels for the employment of labor. For instance, the mining of coal on a large scale is virtually a new industry, owing its development to the invention of the steam engine, and employing, according to the U. S. Census of 1920, 733,936 operatives. It has created auxiliary industries and has provided additional opportunities for the employment of labor through the demand for appliances,

tools, and machinery. Moreover, the mining of coal requires for the distribution of the product extensive transportation facilities on land and water, which gave tremendous impetus to the development of the vast network of railroads, to steam navigation, as well as to the development of the iron and steel industry in the United States. The operation of all these industries made enormous demands upon the supply of labor, which labor-saving devices cannot materially relieve.

The steam engine was a monumental labor-saving invention, relieving physical exertion to a greater extent than any other mechanical agency. Whether furnishing mechanical power for the operation of factories or for the operation of railroads and steamships, the displacement of labor by steam power will in a final analysis prove to have been negligible in comparison with the vast opportunities it has created for the employment of labor in the countless new industries and auxiliary industries to which steam has given the impulse, not to mention the increase in wants which the application of mechanical power has enormously stimulated.

In all productive operations labor-saving devices tend to stimulate the demand for the product, and as a result the demand for labor is increased in the very industry in which the labor-saving devices threatened to displace labor. The rotary printing press has

revolutionized the process of printing in so far as labor economy is concerned, yet the demand for labor in this particular industry is greater than before, owing to the increased demand for the product. The power loom has displaced the hand weavers in large numbers, yet the greatly increased demand for the product requires a much greater number of weavers than when the hand loom was operated. The industries to which mechanical devices give rise will in most instances give employment to a greater number of laborers than has been displaced by mechanical devices. For instance, in the production of automobile bodies, a great many more cabinet makers are required than those it displaced in the carriage industry.

Unlike human labor, which is indispensable to the human race, owing to the intellectual forces it commands, animal power is being universally replaced wherever it enters into competition with mechanical power. From time immemorial and in every clime the horse has rendered invaluable service to man as a source of energy and as a means of communication and transportation. With the remarkable modern development of mechanical energy, and particularly of motor power in the past two decades, horse power is, however, losing its economic value, and horse-drawn vehicles will soon be a curiosity in most countries. The horse is being replaced in the industries, on the farms, and in the homes by the motor vehicle, which has given

rise to a vast new industry and to a number of new auxiliary industries, employing in the United States, in 1923, 404,000 wage earners in the production of motor vehicles and motor bodies and parts. Statistical data alone cannot fully convey the far-reaching effect upon labor in the United States of the popular use of this mechanical device, for it has given rise to many important auxiliary industries, as, for instance, the manufacture of tires and automobile accessories, and to numberless different agencies which are required for marketing, storing, and maintaining automobiles. The effect, in so far as it relates to labor, extends still further and is reflected in the enormous demands the manufacture of automobiles makes upon the iron, steel, lumber, and mining industries for the supply of raw materials and fuel, upon the oil industry for the supply of gas and lubricants, and not least of all upon the transportation facilities on land and water. The economic effect of this new industry is universal, and it has, for instance, enormously stimulated the production of rubber in Brazil. This illustration may be legitimately applied, though on a smaller scale, to all important mechanical and labor-saving devices. They displace labor locally in some instances, but in the end they deplete rather than congest the supply of labor by the greatly increased and diversified opportunities they create for the employment of labor. Labor-saving machinery by increasing production re-

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duces the cost of the product and creates a larger demand and a wider market. An article comes into common use and ceases to be a luxury when it meets the requirements of large production, low cost, and speedy delivery.

Curtailement of the workday in the industrial countries has recently given rise to the theory that the ingenuity of man will perfect labor-saving devices which will eventually reduce the week's labor in most of the industries to thirty hours and less. This theory fails to take into account the fact that the wants of the human family increase in the ratio of increased labor productivity, and that a wide gap between production and consumption cannot long be maintained in the operation of the economic machinery. Consumption and trade expansion, not to mention geometrical increase of the world's population, are severely taxing the productive powers of labor, and they will continue to do so, so long as the present industrial civilization endures and requires maximum performance of labor, regardless of increased efficiency which may result from new mechanical inventions.

The movement for the curtailment of daily labor which has gained remarkable and universal headway since the outbreak of the World War in 1914, and which now forms the outstanding economic problem in the entire world, was not altogether the result of improved mechanical devices, and still less the result

of increased productivity of labor as seems to be the prevailing theory, but is largely due to the increasing power of organized labor over capital. Labor, as outlined before, is actuated by the policy of diminishing its productive powers in order to increase the demand for its services, and no means having this end in view has proved more effective than curtailing the daily hours of labor. Organized labor is pursuing this policy consistently at every favorable economic turn, and wherever its influence can be exerted it is curtailing the supply of labor, and restricting the productive powers of mechanical devices. It is controlling the productive powers of mechanical energy, as it is of human energy, and their joint operation is adjusted to the needs and interests of labor.

Human labor is a most important factor in the industrial operation of mechanical power, determining in large degree the productive and economic results of the latter. Mechanical devices, more than human labor, lose in effectiveness and economic advantages in the ratio of their curtailed operation. In the case of human labor curtailed time may be compensated by intensive work, and maximum efficiency is attained in a reasonably short, rather than in an abnormally long workday. But not so the machine which operates at fixed speed and power and restricted use impairs its productive as well as economic advantages.

Mechanical power lends itself more readily to in-

dustrial expansion and to the increasing wants of the world than human energy, which as a human force is actuated by reasoning powers, influenced by self-interest, and restricted by endurance and humane laws. Unlike labor, mechanical power is not exposed to seasonal fluctuations and periodic depletion; and unlike labor it is not for hire, it has no grievances, nor does it shirk work or change employment. It forms fixed capital and its depreciation and obsolescence figure in the cost of production.

Labor-saving devices cause local displacement of labor, but for reasons already outlined, they have no marked effect upon the general supply of labor. They would cause serious economic disturbance if the displacement were widespread and industrial development and the wants of the world were to remain stationary. But increasing wants, industrial expansion, not to mention curtailed time of labor, counteract the effect of mechanical power. Labor has conclusively demonstrated in recent years that it can successfully cope with labor-saving devices and with all agencies and expedients that may check its progress or menace its welfare. It may seem a paradoxical statement that labor is gaining in power and is becoming more indispensable to the material welfare of the human race the more mechanical devices contribute to production and replace human energy.

Industrial expansion of the twentieth century has

been promoted not so much by revolutionary scientific discoveries and mechanical inventions, as was the case in the nineteenth century, but by additions to the number of mechanical units in the various industries, for everything being equal, two machines will produce twice as much as a single machine. The productive power of the industrial plants has been greatly raised by increasing, for instance, the number of sewing machines, looms, printing presses, blast furnaces, etc. It was more by increased than by improved machinery that production in recent years could in a measure keep up the close race with increased consumption and the increased population of the world. Whereas improved machinery tends to displace labor, additional machine units make immediate and increased demands upon the supply of labor. Increased production by means of additional mechanical units entails, however, higher cost of production than by increased labor efficiency, owing to larger capital investment and higher cost of maintenance and depreciation.

The most vital deficiency of mechanical power and which the ingenuity of man cannot remove, is its dependence upon human labor for its operation. However improved mechanical devices may be, their effectiveness is largely determined by labor efficiency, and in the degree that the latter is impaired, cost of production is increased and wants are contracted, just as they expanded under diminished cost of production.

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Remarkable as are the scientific and mechanical achievements of the modern industrial age, and particularly achievements that serve comforts and conveniences and aid industrial progress, they have nevertheless not lessened the importance of labor as the chief producing factor, nor have they diminished the demand for labor. They have effected economies in human energy, they have harnessed the forces of nature, they have overcome space and time, and they have increased enormously the resources of the human family, but they have not discovered a substitute for human labor and human brain. Not unlike the medieval faith in the supernatural power of the alchemist, modern science forms a popular fetish, boundless in discoveries and achievements, and inexhaustible in remedies for all earthly ills and deficiencies. It is to science that man turns to correct the effects of his own faults and shortcomings, to remove the impediments created by nature and by men, and to produce abundance where want and scarcity prevail. Regardless of laws of nature and of economic forces, science is to insure uninterrupted material progress and create a new El Dorado in which, by mechanical devices, increasing wants of the human family can go on unchecked and human exertion be greatly reduced.

Like all intense intellectual manifestations, human ingenuity is, however, not infinite and boundless; it cannot be transmitted from generation to generation,

and it cannot be permanently stimulated and applied to the solution of material problems and to the exploitation of material gains without exhausting its forces. Not every age develops the mental qualities to stimulate material progress or is conducive to scientific discoveries and inventions of practical benefit to the human race. Every age is characterized by certain mental peculiarities and tendencies which differ from the preceding age. The human mind lacks endurance, and after prolonged tension its powers become relaxed or are diverted into new channels of mental activity. It has the creative powers to produce an era of great intellectual activity and human progress, but it has not the sustaining power of preserving it from decline and extinction.

The age of steam, electricity, and oil has been particularly favorable to the invention of mechanical devices. Until the end of the eighteenth century the mechanical tools and instruments of production did not differ materially from those used in ancient times, if in all respects they were equal to them. It may be questioned whether the obelisks, pyramids, and temples of ancient Egypt, or the wonderful architectural monuments of ancient Greece and Rome, could have been produced—aside from their artistic features—with the primitive mechanical implements which were in use in Europe at the end of the eighteenth century. The practical application of steam and electricity, and in

more recent times the use of oil for mechanical purposes, has offered unlimited opportunities for the invention of mechanical devices and for their commercial exploitation. Every important mechanical invention stimulates further inventive efforts and starts a chain of auxiliary and competitive inventions. The radio, as an illustration, has opened a new field, with endless ramifications, for the employment of the inventive mind.

Under pressure of industrial competition the inventive genius of the entire world has been exploited and has been particularly prolific in the past hundred years in devising improved instruments and methods of production. The mental faculties, whether engaged in the solution of concrete or abstract problems, are, however, subject to overloading and reach the limit of their capacity beyond which they operate with weakened force, and further progress is barred. This tendency has been manifested in every era of intense intellectual activity and applies to scientific and mechanical eras as well as to cultural eras. Moreover, with higher development of mechanical energy and increased efficiency of mechanical devices, the need and possibilities of further improvement are greatly lessened, as are also the practical advantages which the latter may offer. That scientific and mechanical achievements will be less marked and numerous in the twenty-first than they were in the twentieth century,

and that revolutionary inventions for industrial purposes will become, and are already rarer, is not a mere matter of conjecture, but is a reasonable deduction from existing facts. Whether electric power supersede steam power or some other and more powerful energy is discovered to supersede electricity, it will not change materially the speed of the mechanical device to which the new energy is applied, nor will it increase the productive powers materially in industrial operations if the speed of the mechanical device is limited for economical or technical reasons. In the mechanical operation of all industries a certain standard is reached which meets the necessary requirements in the results obtained, beyond which the advantages of further improved mechanical devices cease to be an important factor from the standpoint of economy, efficiency, etc. For instance, electric power is replacing steam power on many of the railroads in the United States and all over the world; more powerful locomotives are being built, yet neither the maximum nor the average speed of the passenger trains of the leading railroads in the United States has been increased in the past thirty years. Regardless of the higher motive power which is developed by means of electric energy, it is not found practicable to increase the train speed beyond eighty miles an hour. Marked improvements have been made in the propelling force of steamships, yet the keen competitive race for increased speed which characterized

steam navigation until the first decade of the present century has virtually ceased, and reduced rather than increased speed is now an outstanding feature of the newly constructed ocean steamships. In the earlier stages of the automobile industry, high-powered cars were the vogue, but this has subsided and the aim now is to produce a motor car with reasonable power efficiency and maximum economy of operation. Machinery is generally timed and restricted to a fixed speed and to a certain number of revolutions per minute, for economic as well as mechanical reasons, and often also as a matter of safety and precaution. Hence change in motive power, revolutionary as it may be in many other respects, will not add materially to the speed in the operation of mechanical devices, nor greatly increase their productive power.

Mechanical devices themselves reach a limit of efficiency beyond which human ingenuity cannot effect further important improvements. The indispensable sewing machine of to-day does not differ materially in efficiency from the one produced thirty years ago, nor does it differ in its mechanical principles from the original sewing machine produced seventy years ago. The mechanical principles and methods of carding, spinning, and weaving are virtually the same as when mechanical power was first applied to them more than a century ago. The so-called automatic loom with shuttle and bobbin-changing devices has greatly re-

duced the cost of weaving, not so much because it can be operated at greater speed, but because it enables a single weaver to operate a larger number of looms than the old type power loom permits. Mechanical improvements and new labor-saving devices are being produced constantly, but in importance they had, in many of the industries, reached a climax in the latter part of the nineteenth century, and they do not effect economic development in the degree of the early mechanical inventions. The incentive and opportunities for inventive minds lessen, the more perfected mechanical appliances are beyond those in use in the earlier stages of modern industrial development. The mechanical inventions in recent years have not relieved labor shortage, nor have they checked the declining productivity of labor, and it may be questioned seriously whether they are keeping pace with the increasing wants of the human family. The fact that human ingenuity has been unable by mechanical instruments of production to lessen the world's dependence upon labor would seem to prove not only the limitations of mechanical devices as a substitute for human labor, but of human ingenuity in safeguarding continued material progress. If human ingenuity cannot provide the mechanical means of satisfying the increasing wants of the world, the Malthusian theory that decreasing means of sustenance and increasing density of population will in the course of time endanger the

existence of the human race may, after all, not be a delusion.

Improved mechanical facilities and cheap industrial labor made possible a higher standard of living and greatly stimulated the spread of material wants for things that were formerly considered luxuries. In many quarters it is seriously questioned whether industrial progress can suffer a permanent interruption, or whether wants will be contracted, in view of the increasing world's population and the improved mechanical means of utilizing the resources of the earth and the forces of nature. Where social progress and enlightenment have not advanced, as for instance China, India, and southern Italy, density of population retards, rather than stimulates, economic development. It tends to spread and intensify poverty and reduce the masses to primitive wants and to a low standard of existence. On the other hand, industrial progress in the nineteenth century has greatly influenced a marked increase in population in the industrial countries. Greater opportunities for the employment of the masses and the unrestricted employment of children, whose wage contributed to the support of the family, encouraged the raising of large families among the working class. The child constituted a material asset and formed a source of hope for economic betterment in the mind of the average laborer. The greater the number of children the stronger was his belief that

they would eventually improve his condition and lighten his toils. In recent years, however, the population in the more advanced and prosperous countries has either remained stationary, as in France, or the increase in population is greatly diminishing, as in England and in the greater part of western Europe. A higher standard of living and the desire for comforts and for material pleasures exert a strong tendency to checking increasing population in the civilized world, owing to the greater financial burdens and the sacrifice of material pleasures which the raising of a large family often involves.

The resources of the earth, unlike the forces of nature, are not inexhaustible, and the more material wants are increased and diffused, the more the natural resources are depleted, and the greater also are the obstacles to securing them. In some of the most important of the earth's resources the process of depletion proceeds at a greater rate than the process of replacement, and the rate of depletion increases with increased population and wants. Even in remote lands which have been made accessible to the civilized world the forests are being depleted to serve industrial purposes or to gain additional land for agricultural or pastoral needs. The earth's supplies of coal, oil, and minerals are diminishing and long before they are completely exhausted they will cease to have economic value, owing to mechanical and economic difficulties of

obtaining satisfactory results from a source that is approaching exhaustion. Timber and coal in the less accessible parts of the world have no economic value, owing to the difficulty and high cost of transportation. The earth's resources are only of practical benefit to man if their economic value is greater than the cost of the energies required to obtain them. Coal and even the most precious metals lose their economic value with the deepening of shafts and increasing technical difficulties of bringing them to the surface. Assuming, however, that new resources to replace the exhausted ones will be made available by the ingenuity of man, and that science will discover sources of energy of even greater practical benefit than those that are now applied, those can no more insure uninterrupted material progress than can steam and electricity or the resources of the earth which are now available. The factor of present and future material progress is the human element, which is neither boundless nor positive, and is subject to the laws of nature and to reaction.

CHAPTER XI

LABOR DETERIORATION

The elevation of labor has created a tremendous social force which is controlling the destiny of the human race and is as constructive as it can be destructive, leveling social distinctions and economic opportunities, and attaching to the badge of labor greater power and influence than to the titles and inherited distinctions of the aristocracy. The vast power of labor is particularly manifest in civilized countries, where governments bow to its will and the welfare of labor forms the outstanding policy. In control of the productive powers, and in most of the leading countries also of the political powers, manual labor constitutes a new form of monopoly, in most instances imposing its own terms for the service it is hired to render, and enforcing a maximum price for a minimum of exertion. On the other hand, with the advance to a higher human and economic level, and with increasing educational and cultural opportunities, labor has become the most potent factor of modern social progress, the champion of political freedom, of equal rights and equal opportunities irrespective of race or creed. It fuses the diverse elements of the so-called lower class

of society into a single and cohesive element, which, stamped as "labor", provides means of subsistence irrespective of individual qualification, whether competent or incompetent, industrious or lazy, weak or strong.

Immeasurably as humanity has gained by raising labor to a high social level, *labor*, as a source of physical energy and as an aid to industrial progress, is depreciated. It has, to be sure, lost the qualities of servitude which characterized it in the past and which were exploited to the fullest extent in the nineteenth century until labor was aroused from its stupor and began to realize the power it can exercise over capital and over its own destiny. In proportion to the rise of labor to a higher social and economic level, not only is its productive efficiency affected, but the sources of supply of labor are drained. Physical labor, as a means for existence, is not a matter of free choice or ambition. It is impelled by pressure of economic circumstances, but it has the advantage of offering the laborer immediate means for a bare living in any part of the world without requiring previous training. With economic improvement of labor, quantity as well as quality of the latter depreciates. Those with little ambition and the lazily inclined lessen their exertion; the industrious and thrifty after saving a small capital seek opportunities in other vocations than that of manual labor, either to satisfy their higher ambition or to enjoy in advancing years greater freedom and

ease. In many of the industries, as, for instance, in the various branches of the needle trade, the owners of smaller plants have often received their' training and experience in the ranks of labor.

All available statistical evidence points to the fact that the supply of labor is diminishing and is not keeping pace with increasing wants. Depletion and deterioration of labor is the outstanding problem, and while the supply of labor is seemingly abundant during the frequent trade reactions or during seasonal inactivity, it is quickly exhausted under normal economic conditions, whether in industries, farms, or domestic service. The tributaries of labor are diminishing and particularly in the United States, not only because of restricted immigration, but also, among other reasons, because the laborer can now afford to give his children better educational opportunities than were offered to him, and they choose vocations in which they can utilize their educational advantages and satisfy their social ambition. At all times the children of the laborer replenished the supply of labor, but under improved economic and social conditions this most important source of labor is now gradually being drained. Moreover, the thrifty laborer with his greatly increased earning power is creating in the ranks of labor a constantly increasing group of small capitalists who are becoming less dependent upon their individual exertion as a means for existence.

With all the fabulous wealth and the enormous resources of the United States, trade stability and normal economic activity have not been restored, and prosperity and reaction follow at frequent intervals, and abundance of labor is almost overnight transformed into paucity of labor. Concessions forced upon labor under reactionary trade conditions are rescinded under improved trade conditions, and a game of economic seesaw between capital and labor has become a marked feature in recent times without having affected a permanent recession in the wage or diminished the power of labor. The labor conditions which prevailed during the World War and which were then considered merely abnormal manifestations incident to the war, are universally recognized and accepted since the restoration of peace as normal and permanent features in the operation of hired labor. They are the outgrowth of the new era of social progress which is remolding modern civilization and existing institutions, impressing upon them principles and features contrary to those which distinguished industrial civilization in the nineteenth century.

The power of labor is firmly established in all industrial countries, not excepting England or Germany, where lack of employment is quite marked and should have effected a decided change in the independent attitude of labor. The spasms of industrial and trade activities which are quickly followed by depression are

in themselves symptoms of economic disorder and evidence of the weakened operation of the economic machinery. In contrast with these frequent violent fluctuations, the chart of industrial progress and trade activity in the United States prior to 1914 was marked by long cycles, popularly known as seven-year cycles of prosperity and reaction. At no time was the supply of labor inadequate to meet the demands made upon the industries, and unrestricted immigration made good every local shortage of labor and stimulated vast industrial development. Since the end of the war, however, every movement that promises to restore economic normality and stability in any of the industrial countries comes to a halt before it has gained much headway.

Economic equilibrium is still far remote, and the enormous devastation caused by the war, the huge national and municipal debts, and the oppressive taxes which divert capital from productive operations have seriously, if not permanently, impaired normal operation of the world's economic mechanism. The task is made all the more difficult and complex by the attitude of labor which is taking advantage of every favorable opportunity of inflating the wage, restricting production, and adding to the complexities and difficulties of financial, industrial, and economic operations. The exorbitant cost of labor restricts economic enterprise and compels moderation in the wants of the people in

every country, and curtails home consumption as well as international trade. Economically the world at large is suffering at the present time, not from expanded but from contracted wants; not from over-production, but under-production; not from cheap and abundant labor but from inadequate and inflated cost of labor. The laws of supply and demand, in so far as labor is concerned, make no impression upon the existing conditions. Surplus of merchandise is quickly followed by scarcity, thus preventing decline in the inflated cost of living which follows closely in the wake of the high cost of labor.

In many of the industries mass production at the expense of quality and individuality conceals the inflated cost of production and the actual relative value of the product. Cheapness, and not intrinsic merit, is the prevailing policy, and to this end modern technical skill and ingenuity is strongly attracted in order to counteract the economic effect of the existing labor conditions. Economy in the application of labor and the consequent lowering of quality are evident in most of the commodities in general use, and also in the home and in everyday life. The public at large is taxed for the higher cost of production either in the use of deteriorated commodities or in an increased cost of living, and both have a detrimental effect on the standard of living. The standard of living is raised not so much by added number of wants, as by im-

proved quality and by the increased refinements of the wants which enter into the home and into individual indulgences. When the inflated wage and deteriorated labor compel congested and neglected housing, depreciate quality of the essential commodities, restrict the service of hired labor in the home and in the agencies that serve comforts, conveniences, cleanliness, and health, they are symptoms of a lowered standard of living. It is true the wage earner is less affected than the large number of people whose earnings cannot keep pace with the inflated cost of living. Whereas the wage follows closely increasing cost of living, and may even greatly outstrip it, as it has in the United States in recent years, those dependent upon their limited earnings, as are a large portion of the mental workers, and of the middle class, have to retrench their wants and adjust themselves as best they can to the unfavorable economic conditions. Both, capital and labor, can compensate themselves for the high cost of production, the one raising the price and the other the wage, but not so the general public, which in the final analysis bears the brunt of the inflated cost of living and is powerless to increase earnings as rapidly, if at all, as the movement of inflation proceeds.

Labor in the civilized world has reached the apex of political power, and with its largely increased earnings and savings it promises to become an important financial factor and encroach upon the domain of capital.

The progress it has made in this direction in a very brief space of time is demonstrated in the United States in the marked development and success of the specially organized banks in the interest of labor and acting as trustees for the savings of labor. This movement apparently is only in its infancy and promises in the near future to extend its field of activities, for labor is distinguished by its solidarity and group spirit and will help to promote any cause or undertaking that carries the label of "labor." An apt illustration are the labor coöperative stores which are particularly successful and popular in the advanced European countries, as in England and France.

The entire lower mass of humanity is being raised to a higher social and economic level, to power and dignity, forming the most marvelous social transformation in the history of the human race. It is lending to the entire world a new aspect, impregnating it with a powerful spirit of democracy and creating a higher sense of social justice. As the chief factor of material progress, labor, however, is deteriorating in the ratio of its social and economic advance. It is weakening in the forces which have given remarkable impulse to modern industrial civilization, and which have been instrumental in providing increased comforts and conveniences and improving the material existence of the entire human family. It is compelling the world's

economic machinery to reduce its momentum and adjust it to the needs and interest of labor.

The institution of labor will continue to function as long as hired labor offers the chief and quickest means of subsistence to the greater part of the human race. But it has lost the old-time subservience, efficiency, and discipline which have characterized it in the past and which have lent particular aid to every stage of human progress, and particularly to modern civilization. It will no longer serve as a mere tool for the production of private wealth, nor as the submissive agent for providing comforts and conveniences without demanding maximum compensation and receiving every advantage from the service it renders. Labor will have to be recognized and treated as the most powerful human element, which is giving to the present industrial civilization a new aspect, and to the social organization a new character.

CHAPTER XII

SATURATION OF MATERIAL INDULGENCES

The acquisition of wealth forms a most powerful incentive to human efforts and to daring adventures, and at all times has played the most vital part in the human drama, either as an instrument of progress, culture, and enlightenment, or of oppression, tyranny, and social debasement. The possession of wealth forms a short cut to power, influence, and social prestige, and serves not only as the medium for the gratification of material pleasures and comforts and for the refinements of life, but also for the realization of the higher purposes and ideals of life. It is the result, as a rule, of thrift, enterprise, and virility, as it is also the cause of ultimate decline and debility.

The race for wealth is a marked feature of modern civilization which is distinguished as a material age, and the acquisition of wealth as the means of sharing in the material joys of life is the desired goal of a large part of the human race. The greatly increased range of comforts and conveniences and their greatly reduced cost strongly appeal to the multitude and have universally stimulated and leveled new wants. Not

many of the added wants are real necessities, but they become so by force of environment, habit, example, and custom. Increased material indulgences do not establish a higher standard of life, nor are they evidence of a higher culture. They do not lessen the struggle for existence; on the contrary, they tend to make life more complex and increase discontent, envy, and unrest among those who either are unable to satisfy their newly awakened material wants or have to strain their resources to gratify them. Where formerly the material requirements of the masses and of the middle class remained stationary, they now increase by leaps and bounds through pressure of fashions and conventions, and to keep pace with them imposes a heavy burden upon people with limited means, and even upon those possessing wealth. The world at large, irrespective of class, is being overstimulated and overloaded with artificial wants and with ever increasing comforts and conveniences which are multiplied enticingly for mercenary ends. They enmesh the human being in a web of nonessential requirements which become necessities by habit, and resistance to which demands strong powers of self-denial. The whetted appetite for material indulgences and worldly pleasures is not content with things which are already established in routine life, but craves for the new and extravagant. The surfeit does not produce contentment; on the contrary, it creates disillusionment and a state of ennui and satiety.

It lowers those moral forces which give virility to nations and to individual character and which can be preserved only where self-discipline and self-denial are widely practiced. Though wants multiply geometrically, and one want breeds a number of others, they are nevertheless controlled by laws of nature and they cannot transcend the limit of satiety and saturation which checks every extreme, whether in life or in nature. In the train of material pleasures follow ennui and disappointments, and often a strong aversion to the indulgences which have produced the reaction.

Violent reaction from material and worldly pleasures, and reversion to an abstemious and simple life, and even to a crude material existence, is not an uncommon occurrence in the life of the individual nor in the history of peoples and nations. In many instances it is produced by strongly aroused spiritual forces, and in others the reaction is the natural sequel of material overindulgence. The Puritan movement in England in the sixteenth and seventeenth centuries was the result of both, and effected revolutionary changes in the life of the individual and in the character of the nation and of the government. The worldly pleasures and the refinements of life which accompanied the spread of the Renaissance through western Europe violated the religious ideals and tenets of the Puritans, and led to internal conflicts which will forever form one of the remarkable episodes in English history. Out-

wardly it took the form of a revolt against all material indulgences, and where the spiritual forces proved inadequate to enforce a simple life among all classes, including the aristocracy and ecclesiastics, the powers of the state were resorted to and enforced the principles and ideals of Puritanism. The deep impress of this powerful movement left permanent traces on the character of its followers, which can still be traced at the present day in their descendents in the New England states and in some of the sects of that period, as, for instance, the Quakers who have preserved and still cherish simplicity of life and habits. The rigid moral code of the Puritans could not permanently suppress the material joys of life nor confine earthly existence within a narrow groove. It also had to suffer a reaction which was reflected in the licentiousness of the literature and of the stage, and in the free-and-easy life of the people following the reign of Oliver Cromwell. The mental and moral peculiarities of a people are in constant state of oscillation, and human progress is determined by this pendulum swing. The smaller the degree and the force of the swing, the lower the state of civilization, and mental and social stagnation prevails where the people are incapable of motion and change, as, for instance, the savage tribes.

The struggle between the material and spiritual forces in life commenced in the cradle of the human race and is eternally present in the course of human

progress. Both are subject to temporary exhaustion, and the ascendancy of the one leads to the decline of the other. The reciprocal movement of these two elementary human forces lend incentive and character to each stage of progress and stamps the tendency of the age and of individual life. It is solving the problems relating not only to earthly welfare of the present generation but also of coming generations. Present-day civilization emphasizes the importance and obligations of earthly existence, rather than the importance and joys of a hereafter. It stimulates human endeavors and desires for things that are worldly and offers tangible benefits either in material or cultural form. It gives impetus to discoveries and inventions, which, whether they tap the forces of nature to gratify the hunger for material indulgences, or whether they enrich science or increase knowledge, only tend to increase the tension of life without permanently adding to the joys of life. The human family is overloaded with new wants, overtaxed with anxieties and perplexities in the effort to keep pace with the exacting demands of modern life. The individual indulges in more comforts, exercises greater rights, and has greater opportunities to promote his welfare, yet disappointment with life and discontent and unrest are the universal reaction.

Unrest and discontent are the precursors of change, and pave the way to new conditions in life. Reversion

from the care and tension of modern life to simplicity and relaxation is in process now, unnoticed as it may be, and this symptom has been dwelt on in detail in Chapter XI. There it was shown that the problems and difficulties that are presented by our modern life were such as to force simplification, particularly in things that involve the employment of labor. Mechanical inventions, as, for instance, the telephone, railroad, automobile, etc., have greatly increased comforts and conveniences, but they have also intensified the mental strain and have multiplied the wants of the individual. As a relief from the pressure and hustle and bustle of modern life, "back to nature" is exerting a strong appeal.

A tendency not only toward greater freedom from the artificialities and complexities of present-day life, but also toward greater mental and physical relaxation, has been decidedly manifest in recent years. In the United States, for instance, where economic development has been most intensely pursued, and where the enjoyment of leisure is least characteristic of the people, a decided reaction from intensive labor, whether mental or physical, is evident among all classes and in all occupations. Leaving out of consideration the greatly curtailed daily hours of labor, which was effected largely by pressure of organized labor, a tendency toward more ease and relaxation is quite marked among all classes and in all walks of life. This is

evident in the increase and general observance of holidays, including the Saturday half holiday, which is, comparatively, a modern institution in this country, and which promises, at least during the summer months, to be generally observed in shops and in factories as a full week-end holiday. The custom of allowing not only the mental worker, but also the wage earner, a summer vacation of one or two weeks is becoming a widely accepted policy. The widespread popularity of the automobile and of outdoor sports, as golf, baseball, etc., testify to a decidedly changed attitude toward relaxation, and particularly among those engaged in business and professions, who formerly considered any diversion of time to recreation a sacrifice, if not a reproachable act. A professional baseball game attracts multitudes representing every walk of life, including men occupied with large affairs whose precious time is measured in gold.

Irrespective of the powerful incentive to wealth which greatly stimulated intensive work in the United States, work itself formed the chief source of diversion and pleasure. Relaxation played but a small part in the life of the average individual and he continued to work even when advancing years would have justified rest, and material success should have tempered ambition and invited leisure. The present generation is actuated by different principles, and intensive work as the means to wealth does not appeal to it with the

same force as it did to the older generation. Even wealth may become commonplace and democratic if it be distributed among a large number and its acquisition is made easy, not only through enterprise and shrewdness, but also through industry and thrift. The vast economic development in the United States in recent years has greatly increased material opportunities, and many who only a short time ago were struggling for a living are now in the ranks of the rich. Psychological peculiarities are attached to wealth as well as to poverty, and the easier it is to attain it and the less social prestige it offers, the less is it prized as the source of human happiness. The present generation recognizes that exertion is impelled in the struggle for existence, but it does not consider it or its achievements which are expressed in terms of wealth as the main purpose of life nor as the chief source of joy and happiness. The chase for wealth is becoming less tense, and more relaxation is the popular tendency, even though it may make riches more remote.

The present generation seeks relief from the strain and tedium of everyday life in play and diversion, and this principle actuates all classes, young and old, rich and poor, toilers with hand and with brain. It is contended that in health and happiness, as well as in increased efficiency, the results offset the economic effect of curtailed work on the individual and on so-

ciety. Curtailment of labor forms the vital factor in the humanization of labor and is a generally observed policy in the ranks of labor.

It is obvious that the modern tendency is toward more ease and less exertion; and to attain this end, the average human being prefers to restrain his nonessential wants rather than increase the strain of his existence. Modern civilization has overindulged the human family in wants and overstrained it in work, and an unconscious readjustment is now in process which will reverse the trend of modern life and create different aims and aspirations for human happiness. Whatever course the present industrial civilization may take it will no longer command the intensive efforts which have lent enormous impetus to the economic development of the nineteenth century. Nor is industrial civilization likely to stimulate material indulgences to the extent which has distinguished it until the present time, and which has immortalized it as the material age.

CHAPTER XIII

POLITICAL AND SOCIAL SATURATION

Two distinct and opposite forces have contributed to the extraordinary material and social achievements of modern civilization; the one arose from selfish, the other from humanitarian motives. Of the two achievements the social is all the more remarkable, not only because of the revolutionary changes it has effected in the social fabric, but because of the deep-rooted traditions and prejudices and strong class opposition it had to overcome. Suppression of the weak and indifference to their fate has been an outstanding feature in all ages and among all races. Even when the spiritual forces exerted their strongest power, this characteristic was still manifest. Social justice forms the fundamental tenet of every religion, and the evil of materialism has been expounded and condemned from time immemorial. Yet the materialism of the present age is accompanied by a powerful wave of social justice and humanitarian spirit, which in point of concrete achievements has no parallel in history. Social justice of the present age is not merely an emotional manifestation, but is the result of the intellect

and of ripe reasoning. Its spirit permeates every phase of the social order and is the impelling force to modern political and individual freedom, the elevation of the masses, compulsory education, universal suffrage, and to countless reform measures for the political, social, and economic improvement of the lower class of society. Laws are enacted and interpreted in the spirit of social justice, protecting the rights of the weak from the power of the strong, and regulating the human relationship by a code of ethics. Fellow sympathy, helpfulness, broad philanthropy, and a strong community spirit are outstanding features of the present so-called material age. Modern civilization has a strong materialistic tendency, nevertheless it is not a soulless creation without high ideals and achievements. It surpasses all preceding ages in human endeavors for the earthly welfare of the human race, even though it is deficient in those spiritual forces which are expressed in art, literature, philosophy, and in intense religious manifestations.

The present era may claim justly to have developed a higher degree of benevolence and sympathy, a greater sense of duty towards our fellow men, and to have established a higher humane level than any other age. Slavery and labor iniquities distinguished the first half of the nineteenth century. At the height of intellectual and cultural advance in the middle ages depravity and cruelty were outstanding characteristics, and the call-

ousness to human suffering and indifference to all moral laws at that time could not be surpassed at the present day in a savage state of society. Human ingenuity devised the most devilish instruments of torture which were applied not only against those who committed an offense, but also against those under suspicion of an offense, whether against the Church or State. The most eminent men of that period, as, for instance, Savonarola, Machiavelli, Giordano Bruno had to undergo torture or were burned at the stake for their supposed heresies or for utterances that displeased the rulers of the state. Galileo escaped torture only by recanting his theory that the earth moves. Burning a heretic at the stake was made a popular occasion of pomp and diversion, at which the dignitaries of both Church and State were present. At an *auto-da-fé* which Charles II held in Madrid, in 1680, in honor of his newly wedded wife, the king lighted the first brand which set fire to the pile. The human drama of that period forms a tragedy in which sublime human virtues stand out in bold contrast in the midst of the monstrous crimes and excesses which fill the pages of medieval history.

The laws enacted in England and Scotland reflect the same spirit of inhumanity and intolerance. A law was enacted by the Scotch Parliament in 1685, that whoever preached or heard a conventicle should be punished with death. Women were tied to stakes on

the sea sands and drowned by the slowly advancing tide, because they would not attend Episcopal worship. Nor were the civil laws less brutal and barbaric, as is illustrated by the act of 1531, under which a vagrant in England caught begging for the first time might be whipped at the cart tail; the second time his ears were to be slit; and by the act of 1535, if caught the third time he was to be put to death.¹ Life had little value and received no consideration, and this characteristic of the Middle Ages became all the more pronounced in the face of violent pestilences and the ravages of incessant wars which laid waste and depopulated the most flourishing parts of Europe and brutalized those who survived. Only fortified castles perched on high mountain tops offered a certain degree of security, and these often served as a base for marauding and pillaging the surrounding country.

Medieval history is filled with revolting illustrations of the general social debasement and moral depravity of western Europe when intellectually and culturally it was distinguished by great achievements and by refinements of life. The two conflicting phases, remarkable intellectual and cultural advance, and equally remarkable moral and human relapse which characterized civilized Europe at the zenith of the Renaissance form a psychological anomaly which still mystifies the students of the history of that period.

¹ John William Draper, *History of the Intellectual Development of Europe*, Vol. II, Chap. VII.

The scant picture presented here serves, however, the purpose of bringing out in contrast the tremendous social and humane progress of the present era in which aspirations and ideals for a higher humanity exert an irresistible moral force among all classes and in all lands.

Modern social progress, while strictly a humanitarian manifestation, did not spring from purely altruistic motives or from emotional forces. It rests upon the more substantial foundation of reason, and in the popular convictions that individual welfare is closely linked with social welfare. The welfare of the individual demands that the lowly be uplifted and that they do not become a menace to the community through poverty, crime, or disease. It demands a social order in which health, life, and property are protected, laws are justly enforced, ignorance is obliterated, and a higher human existence is generally promoted. The more education, enlightenment, and the opportunities for individual betterment are diffused among a people, the more social progress and public welfare become a common aim, and a high social order a common ideal. The twentieth century, notwithstanding its pronounced materialistic tendency, is particularly susceptible to every form of social progress. On the other hand, the sixteenth and seventeenth centuries, though noted for intellectual and cultural achievements, lacked the moral forces for social progress.

Popular pressure for social reform has gained extraordinary impulse since the outbreak of the European War in 1914, and the social organism of the civilized and even semi-civilized world has been subjected to a tremendous strain, and in frequent cases its functions were, and still are, seriously disturbed, owing to the radical changes which were imposed upon it. The movement has been distinguished by two powerful waves, the one directed to political reform, the other to the social and economic uplift of the common people. The wave of political reform has universally abolished the rule of absolutism and has replaced it with a parliamentary form of government, or with a democracy varying in type from mild Socialism to extreme Communism. Forming the predominating element in society, the common people are in control of the political machinery in most of the civilized countries, or they influence their policies, whether under a constitutional or democratic form of government.

Wherever it has overburdened the state with socialistic laws and economic policies, as it did in most of the newly democratized countries, it has degenerated to a reign of Communism, and although it still retains the label of Democracy, its rule forms the antithesis to it, as does, for instance, Bolshevism at the present time.

Even in firmly established democracies, as England and the United States, symptoms of reaction and of

popular opposition to the policies of progressive or, rather, radical democracy are clearly evident. The labor government in England after a brief existence has been succeeded by a conservative cabinet which is opposed to the main policies of the Labor Party. Similarly the overwhelming defeat of the progressive and anti-capitalistic candidate in the recent presidential election in the United States, and the reelection of Coolidge on a conservative platform, seems to indicate that the radical social and economic policies no longer find favor with the majority of voters.

Of all social institutions which control the affairs of the human family, none are more subject to popular whims and impulses than the political institutions. It follows the oscillatory motion of the pendulum, and its forward and backward swing determines the political character and functions of the institution and of the age.

The world at large has been saturated with democratic principles and theories, but only in rare instances are they interpreted in the spirit which can give life to a democracy and lend stability and security to the social organization. An enduring democracy is not, like a mushroom, an overnight growth; nor does it gain root in every soil or ripen in every atmosphere. The fundamental principles of a democracy are inflexible, and they cannot be stretched or broadened to meet the whims and impulses of a people without

affecting its character. Any deviation in its delicately balanced scale may change liberty into license, and democratic government into mob rule. Democracy demands individual restraint in the exercise of liberty, and moderation in the exercise of individual rights. As a political institution it can function only where the sense of justice and of individual responsibility is highly developed among a people, and the divergent social elements possess coöperative and coördinating virtues.

The wave of democracy which has overpowered the political institutions of the entire world is subsiding and is leaving in its track disappointed hopes, violent race and class conflicts, and political chaos. The newly democratized countries are in a state of ferment and are overloaded either with socialistic and communistic principles and theories or with intense nationalistic aspirations, and both are causes of fierce internal strife and deep unrest. In countries in which democracy had degenerated into mob rule and the term "democracy" had become synonymous with social and economic chaos, reactionary forces are removing every vestige of freedom and popular government. In Italy, Spain, Bavaria, and Hungary, autocratic, if not despotic, government has been restored under different names and titles, and the people are resigned to a dictatorship depriving them of their recently won political freedom, rather than endure the rule of the proletariat. The Fas-

cisti movement, which in spirit and influence extends far beyond the geographical boundary lines of Italy, constitutes a powerfully organized popular movement, avowedly against Socialism, but in reality it is an unmistakable reversion to the spirit of the Middle Ages and to the rule of absolutism. Mussolini, the self-appointed dictator, is hailed as the deliverer of Italy not only in his own country, but in foreign lands. His example is endangering popular government and individual freedom wherever political and economic instability interferes with the peaceful pursuits of the people.

The pressure for social progress and the revolutionary changes it has effected are not confined to the political institutions. The same social forces which have overthrown firmly established dynasties and governments as if they were card houses and replaced them by democracies of every shade of socialism and popular government, have also produced other far-reaching changes in the social status of the human family. The masses in the civilized and semi-civilized world have been lifted in the human scale to a social and economic importance never before attained in history. Labor, always treated as a degraded and an impotent social element, has been transformed into the most powerful social factor upon which rests the fate of modern civilization. The tremendous impulse of modern social progress has removed every disabil-

ity from which labor has suffered from time immemorial, and has surrounded it with safeguards for its permanent welfare.

Social reform as an abstract idea is boundless, but translated into practical form is restricted in its application and has well-defined limits beyond which its benefits may be productive of evil. Its necessity and justification are largely determined by local conditions, which are fluctuating, and hence what may promote social welfare at one period may cause retrogression at another. The former inhumane hours of labor demanded a reform, but whether indiscriminate curtailment of labor, regardless of the nature of the occupation and greatly increased hours of leisure, promotes the actual moral and intellectual welfare of the laborer any more than in the case of those engaged in other callings, is a highly debatable question. Restriction placed upon the employment of children is an essential reform, but whether youth between sixteen and eighteen years of age should, for the purpose of restrictive laws, come under the classification of children is a much disputed question in the United States and has been negatively decided in all civilized countries except as to work in mines in England. Overloading society with reforms may prove as detrimental as indifference to them.

As a social group, labor no longer stands out as the maltreated and maladjusted element upon which mod-

ern social science has been chiefly focused. It has advanced beyond the need of special reforms in every sphere of human endeavor. The individual laborer has now the same opportunities of improving his economic and social status as any other member of society, and he has demonstrated conclusively in recent years his ability to make use of those opportunities for promoting his welfare through his own individual efforts. That a certain residue should permanently remain at the bottom and form the dregs of society is not characteristic of labor alone but applies also to other classes. Biological laws are more powerful than the forces of human progress, and not all human beings nor peoples have the capacity of moving onward or have the power of permanently sustaining an advance, whether social, intellectual, or economic.

Social reform may have a religious aspect, as illustrated by the Puritan movement in England of the seventeenth century, or it may have a humane aspect, as distinguishes the movement of the present day. Both are the result of social conditions and evils which aroused public sentiment to remedial measures. The suppression of the liquor traffic in the United States to-day is, as an act of social reform, not different in its cause and aim from the suppression of stage performances or from other prohibitive laws during the Puritan period in England. Cigarette smoking in public is prohibited in one of the states of the Union,

also the Puritans have set the example of prohibiting in their days the use of tobacco.

Modern social progress has covered the entire field of political and social possibilities for human progress. It has reached the boundary line of political possibility in establishing freedom, universal suffrage in all civilized lands, and entrusting to the untrained and semi-educated masses the power and responsibilities of government. It cannot venture beyond this point and extend, for instance, the electorate to minors or grant unrestricted individual liberty without creating social and political chaos. In the social field of the human family the elevation of labor stands out as the pre-eminent feature, and here also the agencies of social progress have reached their limit, and any further advance that labor may make economically or otherwise will not be in the cause of social progress but will be the result of the power of labor to promote its own interest.

Modern social progress has imbued the human family with higher ideals regarding its earthly existence and its duties toward fellow men. It has created a powerful humanitarian spirit, and the welfare of the individual is merged closely with the welfare of society. World-wide agitation in the interest of the masses, or of any cause that promises to improve the existing social system or remove social blemishes, forms the outstanding characteristic of the age. Modern social

progress has effected revolutionary changes in the political, social, and economic status of the human family and is straining every human agency with a view of realizing the aspirations for a better world, and for a better man, woman, and child. Like all intense manifestations, however, this powerful movement also is producing reactionary forces, and for the time being is approaching the limit of possibility and the point of saturation. Only those achievements will permanently survive that conform with the tendencies and fit the conditions of coming generations.

