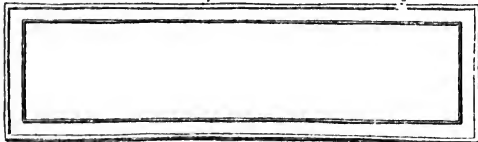
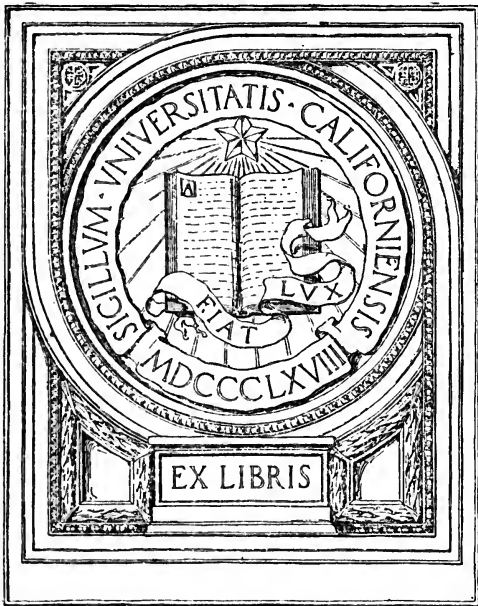


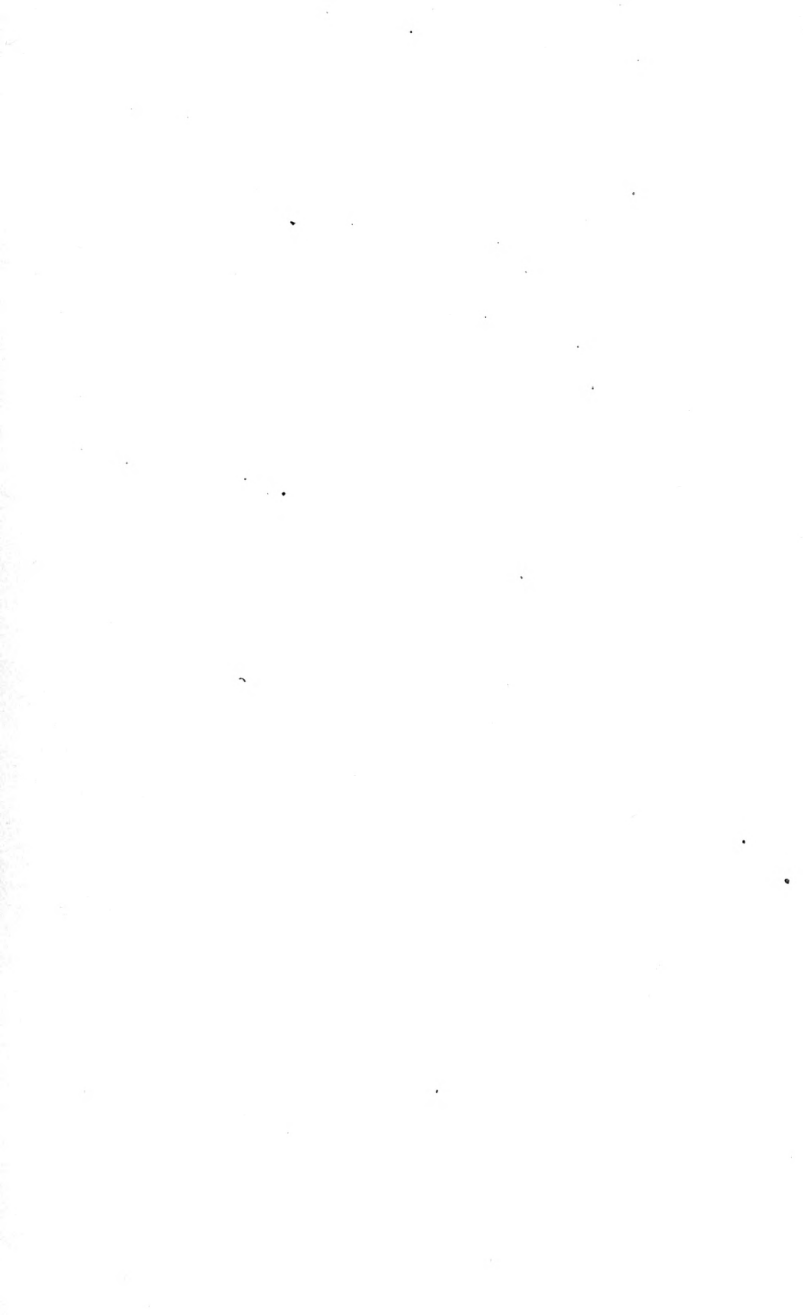
Capital To-Day

Herman Cahn

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Capital To-Day

A Study of Recent
Economic Development

By

Herman Cahn

Second Edition, Revised and Enlarged

G. P. Putnam's Sons
New York and London
The Knickerbocker Press

1918

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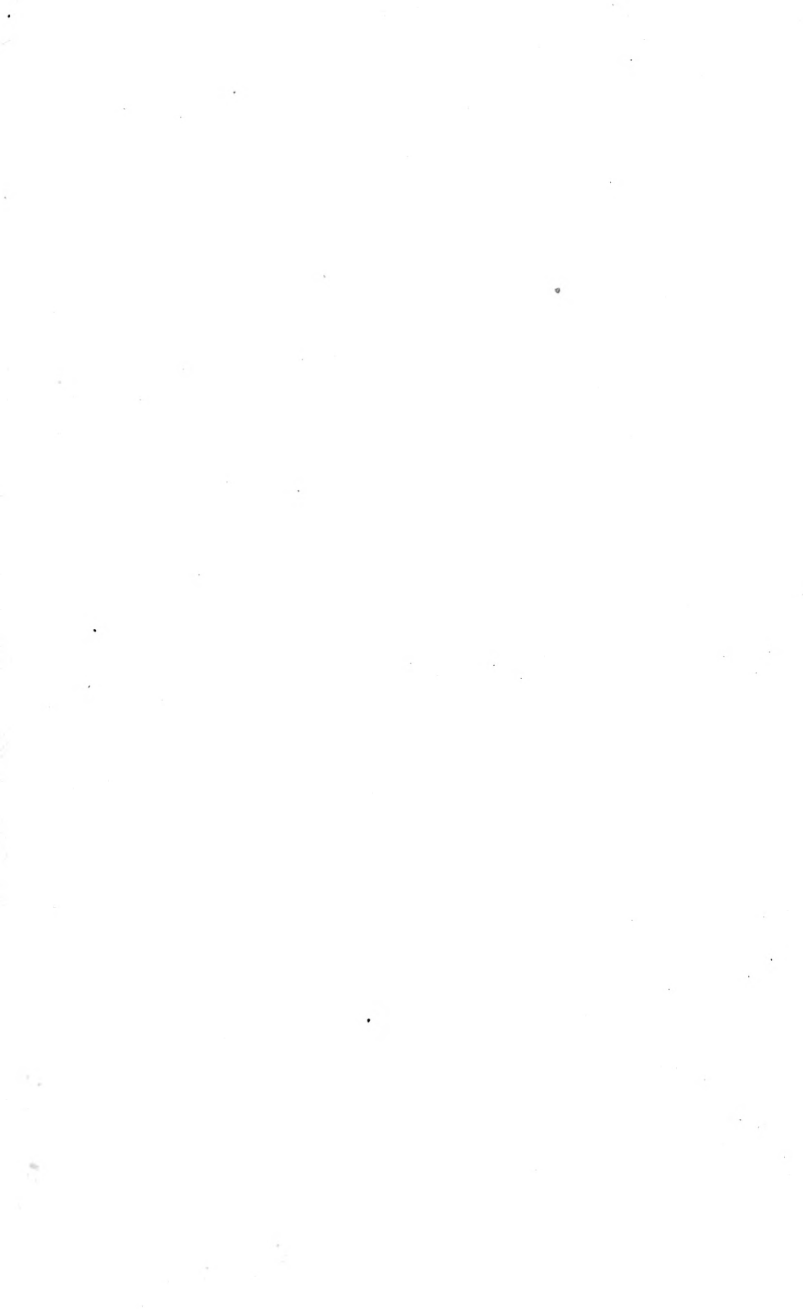
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To

MY DAUGHTER

ANITA C. BLOCK

589267



PREFACE TO SECOND EDITION

SINCE the publication of the first edition of this book a few years ago an amazing economic development, then undreamt of by economists and financiers, has unrolled itself before our eyes. It consists of an abnormal addition to the credit money ordinarily created by the banks and heretofore in existence in but moderate volume. This additional credit money, together with the illusory gains (for the capitalist class as a whole) from rising prices, has served to finance nine tenths of the stupendous total of the world's war loans. The former proportion of bank-created credit money to the banking capital and deposits built up gradually from profits has undergone a truly revolutionary change. This is destined to stand as an historic event of the first order.

In the face of the supreme economic importance suddenly attained by bank-made credit money, I realized that the treatment of the general subject of "Money of Account" in the first edition is no longer adequate. A more systematic analysis of the categories of bank money, of their relations to each other and to the social solvency, has become necessary. In preparing this new edition I have

used all the former material, but I have greatly added to the chapter in question which is now subdivided into classified sections.

Otherwise only a few slight corrections have been made.

HERMAN CAHN.

NEW YORK, December, 1917.

PREFACE

THE following study has been written with special reference to the present economic situation in the United States, the essential features of which have been developed since the Civil War. But as the laws underlying the capitalist mode of production and its tendencies are the same everywhere, such special reference to one country partakes of the character of an illustration of conditions obtaining or shaping themselves to-day in all advanced industrial countries.

The most momentous developments during this period are the centralization of control of capital and the modification of the money system. The latter is by far the more portentous. Yet it is the former which occupies public attention, while silence reigns concerning the menacing money question. True, when things financial are at sixes and sevens the facts are published and the means for overcoming the emergency discussed; but the theoretic treatment of this important subject is neglected or avoided by those whose particular function it is to study such subjects theoretically, namely, the paid specialists in political economy at the universities.

The seemingly mystic nature of money cannot be cleared up alone, that is, disconnected from the

general economics of the commodity-producing society, especially of its capitalist form. Such a society exists only by the exchange of the products of individuals; therefore value is the foundation of its economics. The theoretic analysis of value has been the work of the great economist Karl Marx. But, some readers may say, almost every economist has his own theory of value. Such a bewilderment of mind in our own time is tolerated only in that discipline which treats of the material interests of different classes. The investigators in the natural sciences can afford to employ methods and proofs which, consciously or unconsciously, are dictated by a theory of knowledge or human understanding. Are human affairs then the only thing closed to scientific understanding, the only thing in which truth cannot be positively distinguished from untruth, and regarding which there may therefore exist different theories? If the Marxian theory of value can be tested by the rules of science, based on the theory of understanding, then all deviating theories of value are unscientific and false. As a matter of fact the latter have merely the "marginal utility" of a barrier against the spread of scientific economics.

The foregoing considerations are responsible for the form of this book. Obviously it was necessary to start with an exposition of the foundation of all knowledge. Armed with this understanding the reader himself will be able to judge whether Marx's method was scientific, and whether or not in the further sequence of facts submitted by me I have been successful in following his method.

Shortly after the completion of my manuscript occurred the outbreak of the great war. It brought with it economic perturbations which, in spite of the fact that they have been partly overcome at this writing, have left behind them their portentous symptomatic significance. Such were the precipitous fall of stock exchange securities and the closing of the world's stock exchanges to prevent further official depreciation; the dropping of the gold reserve of the Bank of England in the course of a few days from about 52% to 14%; the decrees of moratoria or suspension of the laws for the collection of debts, including bank deposits, almost all over the world, except the United States; the practical cessation of foreign exchange as a medium for settling obligations, the rates for sterling having risen in New York at one time to \$6 @ \$7; the suspension of discounting by the English banks and its resumption by them under guaranty of payment of the private bills by the government, which also assumed the shipping risk on English commerce; the large issues of circulating notes in various countries, those of the Reichsbank increasing between July 23d and August 31st from \$472,500,000 to \$1,058,500,000 while its metallic stock fell off slightly, those of the Bank of France increasing from 6683 million francs on July 30th to 9299 millions on October 1st; the subsequent movement of exchange against neutral as well as belligerent European countries, so that for instance Germany and Italy could for some time past have saved one million dollars out of every eight of the cost of their purchases in the United States, had they been willing

to come forward with their gold; the universal industrial depression which in important industries in the United States reached the low point of 25% of capacity.

Some of these happenings have been referred to in this book as contingencies. But I flatter myself with the hope that the thoughtful reader will be assisted by its perusal in understanding the significance of all these past events, as well as of others that may follow in the future. In a few instances new statistics were published between the completion of my manuscript and the printing of this book. Of these I have not hesitated to avail myself.

I realize that the dialectics of the first few chapters make somewhat difficult reading, but this was hardly avoidable.

HERMAN CAHN.

NEW YORK, May, 1915.

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Capital To-Day

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INTRODUCTION

THE economic developments of overshadowing importance produced by the last fifty years are the high degree of concentration of capital attained in the leading industrial countries of the world, the United States and Germany, and the creation of a vast amount of nominal money consisting of tokens and bank deposits, all of which represent gold, notwithstanding the non-existence of the latter as their counterpart.

It is to-day plainly observable that concentration of capital tends to increase the control of the social forces of production by the capitalist class. The question is whether this tendency can continue to operate also in the future as a result of continued concentration, or whether there exist factors which will at a certain stage of development of the industrial countries halt the further progress of capitalist control of the productive forces.

The increase of control so far gained by the capitalists appears, for the time being, as a refutation of Marx's prediction that they would ultimately reach

a state of inability to cope with the social forces of production growing irresistibly under the compulsion of competition. What he apprehended was that this inability would lead to unbearable conditions before a high degree of concentration of capital could be accomplished by the competitive method, then the main operating force. The industries of England, in his time the only industrial country in the world, had grown up spontaneously from small beginnings and were then owned, as were also the banks, by individuals and partnerships, many of which, to be sure, had grown very rich. The competitive struggle, resulting in the survival of a few giants, was evidently to be long and painful, unless terminated by the intelligent action of the proletariat. We shall, however, find that among the advanced industrial countries of the present day it is only the United States in which economic conditions have developed that may present the possibility of an exception to the fulfillment of that prediction. Fifty years ago this country had only just emerged from colonial conditions, taken the reins of government out of the hands of the free-trade agrarians, and placing them into those of the protectionist industrial capitalists, begun its wonderful industrial career.

Since that time, under customs tariffs designed originally as a protection against England's well-established industries, we have seen the rise of the United States and Germany to leadership in the organization of industrial and banking capital, although England still remains the international

financial center and clearing house. The new industrial countries were spared the early stages of industrial evolution in England and could start their plants at once on a scale called for by modern technique. When success was assured, the tariffs, which had been instituted for the protection of "infant industries," furnished the condition for something entirely different—the combining of industries into trusts or *kartells*. The present purpose of protective tariffs is to secure for the combinations monopolistic extra profits in the home markets, thereby enabling them to export the surplus of a production, conducted without limits as to the scale necessary to attain the minimum cost of their products, at whatever might be the world market price, even if it entailed a loss. Both the United States and Germany have evolved a high degree of identity of banking and industrial capital and both countries are still on the ascending curve of capitalist development. Nothing proves the latter statement better than the fact that Germany has ceased to be a country of emigration and has instead become one rather of immigration, as also the United States continues to be.

So far the economic development of both countries has been parallel. Is it possible for this parallelism to continue?

Large-scale production by any nation is dependent on two conditions: first, the assurance of the supply of its raw and accessory materials; second, a sufficient market for its products.

Only territorially very extensive economic units may possibly be so situated as to approximate these

conditions. In this most important respect the contrast between this country and Germany could scarcely be much greater. And this remark holds good also in comparing this country with the other new industrial countries, all of whom are under the necessity of maintaining protective tariffs at least as high as the leading nations.

The United States is a country of continental dimensions producing, or able to produce, all important raw and accessory materials with few exceptions (such as silk, tin, and rubber). It has a large and growing population accustomed to a high standard of comfort. On such a basis an orderly continuance of the process of concentration and increasing control of the forces of production by the capitalist class must be admitted, so far as the merely technical conditions of industry are concerned.

Germany, on the other hand, is a country so small in area that it would only equal Texas after a slice as large as New England had been cut off that State. Aside from coal and iron it is deficient in all important raw and accessory materials. Its home market has been growing, but has narrow limitations.

How to overcome the precariousness of the supply of materials and to secure a reliable market, commensurate with production on the largest scale, is therefore Germany's problem. But a market, in the mind of the German trust magnates, is no longer identical with the old-fashioned conception of a place where you try to sell a little cheaper than your competitor. They have outgrown the idea of competition and become accustomed to monopolistic extra profits.

Also these extra profits seek investment, not to be lent out to foreigners at simple interest in the manner of the French and the Dutch, and to a certain extent by the English, but as industrial capital operating in more backward countries to the exclusion of competition. A leading rôle is played in this movement of industrial capital by the metal and other heavy industries which export to such countries rails and rolling stock for railroads and tramways, machinery and chemicals for the mining of metals and other minerals, apparatus and wire for electrical plants, etc. Thus these industries have become most efficient agents for the introduction of the capitalist mode of production into every part of the world, and have gained the most influential position in shaping the economic policies of their countries. For the part they play in revolutionizing the world the textile industry, up to fifty years ago the leader, was not adapted,—its products having been adapted only for exportation as merchandise, and not for exportation as capital.

But permanent industrial investment requires an entirely different degree of security from that of commerce in which the relation is ended by the mere changing hands of commodities and money. That degree of security can be obtained only by the exercise of control over the regions to which products or money are to be exported as capital investments, aside from the exportation to them of products as merchandise on a non-competitive price basis.

This is the modern animus of industrial countries for the acquisition of colonies and the annexation of

contiguous territory. To expansion by these means have been added protectorates, spheres of influence, financial control of dependent countries, and special concessions, contracts, and treaties as collateral conditions of loans. It needs political power to back up a policy by which the former commercial competition has been changed into political competition in which military power lends support to the demand of economic advantages, as well as the promise of protection against others. Modern industrial states must therefore above all else be "powers." At present the "powers" stand at the gates of China, their eyes greedily directed at her fabulous resources, but each power waiting the favorable moment for compassing the undoing of its competitors in order to grab as much as possible of this greatest prize in the world.

The customs barriers erected around every country by the flood tide of capitalism in the last half-century and the striking success of protectionism, especially in Germany, produce a favorable milieu for engendering a nationalistic spirit (as evidenced by the ever-increasing armaments) which is a standing menace to the peace of Europe. The spirit of national antagonism has again decidedly gained the upper hand over the cosmopolitan tendencies of the bourgeoisie of the free-trade era of Cobden and Bright.

It is therefore evident that an orderly development of industrial and financial concentration in Germany and the other aspiring industrial countries of Europe, a development such as is technically possible in the

United States, meets with insurmountable political obstacles. With regard to all European industrial countries no factors have developed since Marx to modify his prediction of the coming inability of the capitalist class to cope with the forces of production.

But even in the United States the attainment of the ultimate goal of the present centralizing tendencies, namely capitalist oligarchy, though technically unimpeded, is likely to be crossed by developments which are in store in relation to the financial mechanism of all capitalist countries, including the United States.

The development of this mechanism has reached a pass where it has become the most momentous fact in economics. Money has been a fundamental and indispensable tool ever since use-values were produced to any considerable extent for exchange, instead of for consumption by the family or community, as theretofore. The commodity-producing society effected first the social division of labor (the distribution of the products being effected by exchange) and later, during its capitalist period, the partial socialization of the means of production. This socialization consists:

First, in the working out of an average profit rate for all industrial capital, so that the profit of each special capital or sphere is not determined by its own rate of surplus value, but by the total surplus value produced by the total industrial capital, in which each special capital participates pro rata, as in a social dividend. The fact that the social dividend has more recently been apportioned according

to two average rates of profit, one for competitive capital and the other for monopolies, is not to be interpreted as reactionary and as nullifying socialization, but on the contrary as the powerful lever, employed by evolution, to advance the socialization of the means of production to a higher form by concentration.

Second, in the function of the banks as agents for placing the social money capital at the disposal of the industrial capitalists, so that the lenders are not the owners of the money. It is the depositors' money which the banks are lending. On the other hand the borrowers of the great bulk of the money are not its users. The users, from the president of a corporation down to the flagman or floor-sweeper, are only employees.

But social production, without social control, is possible in no other way than by the social recognition of a single exclusive commodity as the standard of value and the universal medium of exchange. This recognition has been the only absolutely social act of the human race. By this act gold became the world's money.

But the above-mentioned two functions of money are contradictory, the first requiring scarcity, the second abundance. The contradiction did not manifest itself with any severity during the long period of small production. Nor even when the needs of capitalist machine production on a large scale led to the invention of paper money and of bookkeeping money, called bank deposits, as an addition to the required, but delinquent gold, did the purely nominal

money excite any particular suspicion. Marx, of course, distinguished between the reality and the fiction, and also recognized the latter's capacity for producing crises. Yet it was impossible in his England of the sixties, when bookkeeping money was in its infancy, to suspect that this infant would grow up into a Frankenstein, threatening to destroy its maker, and that it was just the necessity of commodity money which would prove to be the most fatal defect of the commodity-producing society. The development of the financial mechanism since then makes it plain that the phenomenon of money, the basis of *every* form of commodity-producing society, is of more fundamental and momentous import than that of the mere accumulation and concentration of capital, which latter phenomenon accompanies only the latest development of that society, the *capitalist* system. When the financial mechanism gives way under the strain of its inherent contradictions, the only remaining obstacle will have been removed to the social control of social production.

Now, this commodity money, gold, is woefully insufficient in every country for the performance of its functions of medium of exchange and means of deferred payment, the latter being an additional function added in modern times. These two functions are again contradictory, but we need not enter into details at present.

In spite of the tariff walls with which the capitalist countries have surrounded themselves, they were never so interdependent on each other as they are to-day. Especially are they all extremely sensitive

to any disturbance of a financial nature in one among them. This is so, because they all stand in relation to each other not only as sources of materials and customers for products, in spite of tariffs, but also because the money capitalists everywhere make their investments with little regard to country.

All these countries are mortally afraid of parting with any material part of their stock of gold. This is largely concentrated in the central bank of each country, partly in order to sustain the social faith in the parity with it of various kinds of token money, and partly for the emergency of an adverse balance of international obligations. In some countries the central bank's gold reserve is looked on besides as a possible emergency fund in case of war to serve for the purchase in foreign countries of army supplies and foodstuffs. The business of the other banks consists mainly in receiving deposits and employing them as loan capital by discounting the bills receivable of manufacturers and merchants.

When the alarm sounds, either in the due course of the cycle of crises, inseparable from competitive capitalism, or in consequence of the outbreak of war, the first thought of the productive and mercantile capitalists is to get possession of the money which they have on deposit in the banks. This cannot be done by drawing a check on the bank and depositing the same in another bank. It must be drawn in cash. But the banks of deposit keep on hand as little unproductive money as possible and now turn to the central (national) bank for the re-discounting of their bulging *portefeuilles*. In an endeavor to

keep the demand for re-discount within bounds the central bank doubles or trebles its discount rate. But the dire need of the banks of deposit breaks down this barrier and threatens to deplete the central bank of its holdings of paper currency and even of its gold reserve. At this juncture governments are obliged to decree the abrogation of laws fixing the limit of note issues by the central banks and to open the gates wider for the issue of fiat money which they endow with the quality of a forced currency. Understanding well enough what a great inflation would mean to the national economy, if not to the social fabric, the governments reduce the need of money by decreeing moratoria, *i. e.*, the suspension for a certain period of the legal enforcement of private money obligations, including bank deposits, except such percentage of the latter as may be fixed by governments both for commercial and savings banks. During the régime of the moratorium the further extension of merchandise credits must be in the main suspended, as it becomes too difficult to distinguish between the solvent and insolvent buyer. Therefore the moratorium actually means just this, that a great reduction of production is considered the lesser evil, compared with the widespread bankruptcy that would follow were payments to be enforced.

The social faith in credit is shaken. There seems to be nothing real but gold. Everybody tries to hoard as much of it as possible. Paper money is looked at askance by many. On the stock exchanges paper titles fall tremendously. In his fear of much greater depreciation to come only one thought

obsesses the money capitalist: sell as quickly as possible! And the cables transmit an avalanche of selling orders to the New York stock exchange.

Quickly the situation here likewise becomes critical. What is to become of the value of our paper currency, if we are to ship gold against all the American securities which Europe might be willing to unload here? And if this debacle of quotations is to continue what is to become of the solvency of our banks, whose assets largely consist of, or have been loaned against, stock exchange securities—solvency not in the sense of the economist who knows that it cannot exist, who knows that insolvency is the normal condition of all banks in the world, but solvency according to the rules laid down for bank examiners. There is only one escape from these two terrible contingencies and their consequences—the annihilation of the market for securities, the closing of the stock exchange.

But what a costly escape! It resembles the European escape by moratorium in that it is effected at the cost of a partial paralysis of industry. The conversion, where needed, of revenue titles (stocks, bonds, short term notes) into money and as such into industrial capital, for which conversion the stock exchange is the agency, stagnates.

The foregoing is far from being a vision of capitalist society in its death struggle. It presents merely the sequence of the symptoms during an acute attack of a disease which is congenital to the capitalist system, from which the United States is not exempt, in spite of its industrial advantages. Every one of

these symptoms has already been recorded in the history of crises. But the attacks of the disease must grow more virulent in the future under the growing strain of the contradictions of money.

It follows, then, that the orderly development of capitalist society in the United States, while possible industrially, is dependent not only on the development of its own money system, but on that of international finance.

For an understanding of these subjects we must turn to Economics, the science which treats of the laws governing the production and exchange of the material means of life in human society.

CHAPTER I

ECONOMICS A SCIENCE

IN the realm of the natural sciences any new discovery must submit to the test of universally recognized rules of proof, by means of which not only the result claimed but also the methods employed in arriving at the result may be verified. The requirements of these rules of proof serve to preclude any possibility of error, sophistry, or mystery, and that discovery which has stood the test is recognized by all men as an established scientific fact. Hence, while scientists may entertain different hypotheses regarding the problems on the solution of which they are engaged, there is no room left for individual opinions among them concerning the positive results already secured by the various natural sciences. There are no opposing schools of chemistry, astronomy, etc., and we do not read that in relation to gravitation or evolution Mr. A. holds one view, while Prof. B. differs from it, and Dr. C. denies altogether that such phenomena exist.

All over the world the universities which are the appointed institutions for the dissemination of scientific knowledge teach the identical unquestioned facts, so far as the natural sciences are concerned.

In certain other departments, however, the universities maintain courses of studies to which the application of the same rules of evidence as required in the case of the natural sciences is not enforced, but is allowed to go by default. Among these studies we single out Philosophy, History, and Economics as directly concerning us here.

What is there behind this difference in the attitude of the world's universities toward the natural sciences on the one hand and toward the above-mentioned three studies on the other hand?

In the first place be it noted in regard to Philosophy that what the universities are teaching is not a history of the development and final positive outcome of this discipline, which would be a highly useful pursuit, but they persist in teaching it still, the same as in former centuries, as a source of understanding. In other words the universities hold on to two sources of understanding, the scientific and the philosophic, and this dualism leaves them free to range the various studies under one head or the other. Thus, while having adopted the scientific source of understanding for each individual study treating of, or directly connected with, objects in nature, they have chosen to subordinate History and Economics to Philosophy, thus taking the ground, or at least implying, that these two disciplines, which treat of human society past and present, are not subjects capable of scientific analysis.

Karl Marx has said that Economics is capable of being analyzed with the exactness of a natural science and he gave to the world the amazing proof for

this statement in his monumental work *Das Kapital*, in which the nature of the social processes of production and circulation, which together constitute the social alimentation, are disclosed. It is evident on every page that Marx consciously observed all rules of science, although he omitted to explain, just as all other great scientists have omitted to do, how the nature of the human mind is involved in scientific analysis or rather in human understanding generally. This missing feature in Marxism, in reality its foundation and that which renders its economic theory unassailable, was supplied by Joseph Dietzgen in a thorough and systematic manner in his two principal works, *The Nature of Human Brain Work* and *The Positive Outcome of Philosophy*. Therefore in order to realize fully the thoroughly scientific basis of *Das Kapital* as a product of thinking, it is necessary first to learn from Dietzgen what is correct thinking.

For thousands of years men, in their longing to understand the world they lived in, and aware that their senses often deceived them, turned to "pure reason," that is, reason uninfluenced by the senses, as the source of understanding. Mankind had not yet succeeded in supplementing and correcting its endowment of senses and their impressions by instruments and processes, more sensitive than the human sensory organs. For instance the gauging of temperature by our sense of feeling is largely subjective and always inexact, therefore unreliable; the invention of the thermometer substituted for this purpose the sense of sight for that of feeling and made the measurement of temperature objective and exact.

While thus the paucity of their experiences and the distrust of their senses caused the great thinkers to rely on abstract reasoning, the horizon of their thought processes was further limited by the social conditions with which they were surrounded and which they conceived as static, the same as they did all phenomena. These social conditions, ever since the commodity-producing society had evolved out of primitive communism, had presented a dualism. The Greek philosophers could not conceive of society as consisting of anything else than clearly defined classes—a leisure class to rule and think and a slave class to do the work. The essentially identical milieu of social dualism, although in modified form, governed the abstract thinking of the modern philosophers. The social dualism, conceived as eternal, has been and remains the fountain-head of all dualisms supported by the philosophers, such as mind and body, matter and force, ethical and unethical. Such an accepted and unquestioned dualism we find to-day in the philosophico-economic conception of capital and labor.

As knowledge increased, the results arrived at by successive philosophic systems were successively found to be at variance with the facts of nature and of history. The sciences branched off from the parent philosophy, which originally included all intellectual activity, and they became specialized as distinct pursuits, each in its sphere setting up its own tests of truth. The successes of the sciences, contrasted with the unreliability and barrenness of practical results of philosophic speculation, lessened the estimation in which the exercise of "pure

reason" had been held and reduced the function of philosophy more and more to an inquiry into the nature of the faculty of thought. This problem was finally solved by Dietzgen, whose work (first published in 1869) concludes the history of philosophy, now transformed into the natural science of the human mind. The transformation is analogous to that of alchemy into chemistry.

The quintessence of science consists of the discovery that phenomena are not static and existing by themselves, but that they are in a constant change and exist only through the action of one thing on another. Thus it is not the static nature of a tree to be green; if we recede from it at a certain speed, its natural color is red, and at a certain greater speed the phenomenon of vision of the tree ceases altogether. Our senses are organs developed for the purpose of being acted on by other things. To our tongue vinegar tastes sour, but the phenomenon of acidity does not exist in the vinegar by itself. To our eyes vinegar is only either a liquid or a solid, according to the temperature; to iron or eggshells it is nothing but a solvent.

The brain is an organ produced by evolution for the performance of one kind of work, as the legs are for another. The work of the brain and of the legs produce the same toxin of fatigue. We are as conscious of our thinking, as we are of pain. As all phenomena consist of the action of one thing on another, work requires material to work upon. What is walking? It is the rhythmic movement of the legs on some solid substance from one place to an-

other. The material for brain work is furnished by the perceptions of the senses. But each sense can only perceive that for which it has been adapted—the eye to see that which is visible in an object, the ear to hear that which is audible in it, etc. The faculty of thought, however, has everything for its object. Yet it is incapable of entirely dissociating the object from any connection with anything else, because phenomena consist of the relations of things with each other. These innumerable objects and relations have the concrete quality of being perceptible by our senses, but they also have the abstract quality of being thought of and understood. If we now vary our above question regarding walking and ask: What is thinking? we can answer that it is the co-ordination or generalization of the perceptions of the various senses, including in these perceptions the faculty of thought itself as a material fact.

Generalization, which includes simultaneously differentiation, is equivalent to systematization and is the essence of conscious, theoretical understanding. As soon as we have recognized the common characteristics (which includes recognizing their diverging characteristics) of salt, sand, and silver, we can generalize them all as minerals. If by the thought process, based on sense perceptions, we can identify profit, interest, and rent as differentiations of surplus value or unpaid labor, we have gained that much understanding of economics.

Science consists of the generalization of concrete facts. Its mode of thinking is from the external, inward to the mind: it is *inductive*. Philosophy

draws its thoughts from the mind and applies them outwardly: its mode of thinking is *deductive*. Of course, do what they may, men cannot get away from the concrete basis of their thinking. They cannot think transcendental thoughts or create transcendental images. All they can manage to do is to produce arbitrary combinations. They can combine the human form with characters of animals and produce images of angels and devils, or fetiches before which they prostrate themselves. They can defend as absolute and final a form of society, even more sacred, composed of a strange trinity,—capital, not a thing at all, but a relation; labor, an abstraction; land, with its lingering odor of the forest primeval,—which trinity divides the social revenue. But this metaphysical defense cannot get away from the concrete facts that capital is only a form of ownership of the concrete *means of production*, that labor is only the ghost of concrete work producing *use-values*, not wages, and that the land is cheated of its share which instead goes to certain persons known as landlords.

If, then, deductive thinking without previous induction is in reality a physical impossibility, if “pure reason” actually does not exist—then how is it that religion did, and the philosophical method does, arrive at untrue results? The answer is that these methods of thought use their inductions unconsciously, while the scientific method is critically inductive. Hence the materials the former work on are insufficient or incongruous, while science operates with materials brought together with proper discern-

ment. Science is based on the theory of understanding. Its method has system; the philosophical method has not.

Philosophy had been striving for absolute truth by mere thinking. But science deals with phenomena and it has discovered that they are in a constant state of change, perishable and transitory, therefore imperfect and contradictory. How then could science by a study of phenomena hope to lead us on toward the goal: absolute truth? Only by directing to any phenomenon the questions as to its origin and its contradictions with other phenomena; in other words by applying the theory of evolution, and the materialistic and dialectic mode of thought. Thus it is found that all phenomena are different appearances of the interactions upon one another of the imperfect and transmutable parts of one whole, the all-embracing universe, the one perfect existence. This conception of phenomena and of the universe is confirmed in physics by the doctrine of the indestructibility or eternity of matter and of the conservation and transformation of energy. And this revelation reconciles all contradictions in time and space by resolving them into ever more widely valid truths and disposes of the dualisms which were the bane of philosophy.

For instance, if we dip a straight, rigid stick into a brook, we see plainly that the submerged part is deflected at an angle. Again, nobody can point to anything but human labor as endowing with an exchangeable value the things existing in nature. Labor, therefore is the sole source of value; yet, the

laborer, under the capitalist system of production, is compensated for his labor with only a part of the value he creates, which part appears in the form of wages. We have here the phenomenon of the angular stick and the wage presenting contradictions with the straight stick and value. The former are just as true phenomena as the latter. But as all phenomena are true only within the special relation of two things, hence only within certain limits, we must guard against assigning to any single phenomenon a more general significance than warranted by sense perceptions produced under special conditions, lest instead of gaining general truths we fall into dangerous untruths. What is proclaimed as eternal morality at one time becomes the reverse at another, or vice versa; institutions good for one class may at the same time be bad for another class. Similar errors would be committed by one who, on the basis of limited sense perception, would pronounce the crooked stick and wages general and permanent, instead of special and temporary, phenomena. The dialectic, scientific method of thought seeks the contradictions and reconciles them in higher truths, in the same manner as it resolves the contradictions between the crooked and straight stick and between wages and value in the higher truths of optics and economics, respectively.

The progress of understanding is based on the faculty of thought, proceeding from the concrete and multiform to the general and harmonious on a constantly higher and broader plane of truth. Before this progress vanish all dualisms of philosophy, yet

by its very nature science never claims finality for its results, as it was in the nature of philosophy to do.

As the sun begins to shed light before it rises above the horizon, so the coming form of society, before its realization, announces its advent by the proclamation of its monistic mode of thought, presaging the complete disappearance of all dualisms, along with the fundamental dualism of social classes—fundamental, because the material conditions under which men live, especially the economic, have in all ages formed the groundwork of their ideology.

Now, every student of Marx's *Capital* knows that there is not a sentence in the whole stupendous work not based, in concrete statement, on sense-perceptions, nor a single abstract statement which is not a generalization of those same sense-perceptions. This is all that any discipline can be required to prove in demanding a charter as a true science.

But Economics, as expounded by Marx, is able to do better than that, in contrast to some of the so-called natural sciences. In a wider sense Economics is a natural science, its subject-matter being the naturally evolved economic status of the human species in former ages and to-day. Geology, for instance, of unquestioned standing as a science, teaches us on the basis of sense-perception that there have been periods of subsidence and elevation of the land, and periods of advancing and retreating glaciation, but it cannot prove these facts by experiment. On the other hand every sense-perceived economic phenomenon treated or mentioned in *Capital* is capable of demonstration by actual experiment.

Why, then, this strange indifference on the part of the governing bodies of the universities toward Marxian Economics? Are they so little interested in finding out whether Economics is still the sporting field of individual opinions and philosophizings as of yore, or whether there has not arisen in the meantime a science of Economics? Is there anywhere a university that still maintains alchemy against chemistry or astrology against astronomy?

A page in history tells of a situation quite analogous to the present one under discussion and furnishes an answer to the above questions.

During the whole long period of the struggle of the aspiring burgher class against feudalism, of which the Church was the main prop and beneficiary, the former had an interest in the cultivation of the natural sciences for the reason that they were means for its own enrichment, while at the same time serving as mental weapons with which to overcome the Church. As commerce chronologically preceded modern industrialism, so astronomical and geographical discoveries, mainly useful to the former, preceded the discoveries in physics, chemistry, geology, etc., which were profitable in the manufactures stimulated by those previous geographical discoveries. But the Church, representing the feudal privileges and seeing them menaced by the revolutionary burgher class and its new knowledge, tried to prevent the spread of the sciences by all means at its command. Copernicus, even though he did not live in Rome, but in Koenigsberg, Germany, did not dare publish his work in his lifetime. What befell Galileo

everybody knows; many "heretics" fared even worse.

Feudalism was overthrown. What was the revolutionary class is now the ruling class, itself confronted by a new revolutionary class, the modern proletariat. What religion was to feudalism, philosophy is to capitalism. It may be objected that capitalism does not take philosophy very seriously. That may be true, as capitalism, revolutionary in its innermost nature, has not much reverence for anything and takes nothing very seriously except profit making. But it must maintain philosophy in its universities as a theoretical ground on which they can refuse admittance to genuine History and genuine Economics.

Real History, as well as the knowledge we possess of the advance of humanity from savagery to barbarism and from that stage to civilization (thanks to the researches to which Lewis H. Morgan so fruitfully devoted his life and which have cast light on the origin of the family, private property, and the state), can have no other logical interpretation than in the light of the material conditions of existence, chief of which are the modes of production and distribution of the necessaries of life. It teaches the rise of the ruling classes as useful new organs of society, the ultimate atrophy of these organs consequent to their having become useless, and their substitution by new ones historically prepared to assume the task of leading the race forward on the path of progress.

These two sciences, then, History and Economics,

which proclaim in our day the early advent of a new social order, are barred from the universities together with the foundation of these sciences, the monistic Theory of Understanding. Instead they cultivate under the protective wing of speculative philosophy such studies as speculative sociology, speculative psychology, speculative logic, speculative economics, and a kind of history of which the facts are largely irrelevant and incoherent and always unexplained.

What has been said regarding the attitude of the universities toward History and Economics should by no means be taken as a polemic directed at these institutions. Either our colleges are state institutions, and the state, while theoretically representing the whole nation through universal suffrage, actually represents only the interests of the capitalist class so long as the working class is not yet class-conscious; or else they are founded and endowed by individual capitalists, and there the control is even more direct. In either case it would be foolish to expect or ask the universities to help in undermining intellectually the class to which belong their financial backers as well as the bulk of the student body; moreover it would be contrary to the lessons of history. Scientific Economics never will be taught within the universities, while the state remains a class state, though millions may be familiar with its conclusions outside.

The purpose of these introductory paragraphs has been to convince the reader that the validity of Marxian Economics is not impaired because the universities choose to ignore its existence. There-

fore that fact should not deter from the frank approach of the subject any person willing to think for himself and sincere in the desire to learn what is the origin of our present form of society, what are the laws underlying its system of production and circulation, and whether these laws tend to give birth to a different form of society, independent of the will and purposes of men.

The foundation of Marxism is the Theory of Value of which we shall give a brief outline in the next chapter.

CHAPTER II

MARXIAN THEORY OF VALUE BRIEFLY STATED

THE wealth of society, under the capitalistic system of production, appears as an immense collection of commodities, the single commodity being its elementary form.

To be a commodity a thing must present at the same time two phenomena: that of being a use-value and that of being an exchange-value.

Use-value is the generalization or abstraction of things as regards their concrete relations to human uses by reason of the individual, physical or chemical, properties of each thing. Use-value therefore is the *natural* form of things and remains identical in all forms of society.

Exchange-value is the generalization or abstraction of things as regards their concrete relations with each other in the act of exchange in which the things are represented by their owners. Exchange-value therefore is the *social* form of things and exists only in a commodity-producing society.

As use-values commodities are *qualitatively different* from each other and therefore cannot be brought into relation with each other.

As values (this term will be used in these pages

hereafter for exchange-value) commodities are *qualitatively alike* and can be brought into relation or equated with each other.

The quality which, as values, makes all commodities alike, is the concrete substance common to them all and generalized as *abstract human labor*.

The abstraction "human labor" is derived from *concrete labors*, such as weaving or mining. When we touch a table we touch the union of the concrete labors of the woodman, cabinetmaker, etc., with nature. Labor is the father, nature the mother. Her gifts are gratis and do not enter into the determination of value.

The *unit* of abstract labor is *common* labor.

Common and complicated labor are equated with each other, both being *qualitatively* comprised in the abstraction "human labor" and differing only *quantitatively*, complicated labor figuring as a multiple of the unit.

Commodities, then, being qualitatively connatural as values, can be related and are related to each other quantitatively, viz., as to the quantity of labor embodied in each. This quantity is measured by the time socially necessary for the production of each commodity.

We now know that—

The substance of value is labor.

The measure of value is labor-time.

What remains to be analyzed is the form of value in the act of exchange.

The most simple expression of this form is the relation between two commodities; but this *simple* rela-

tion must cover the mystery of all forms of value, the relation of *many* commodities to *one*, and the outcome of this latter relation: the *money form of value*. Let us take as an example for the simple form of value:

20 yards linen = 1 coat, or 20 yards linen are worth 1 coat.

In Chapter I. the general scientific principle has been mentioned that phenomena consist of the action of one thing on another. In this action one thing may be considered as the subjective or active, the other as the objective or passive element. In our own case the phenomenon of value arises by the linen comparing itself to the coat.

By expressing its value relative to the coat, the linen places itself in the subjective or *Relative Form of Value*.

The coat, serving as material for the expression of the value of the linen, finds itself in the objective or *Equivalent Form of Value*.

Both forms are inseparably linked together in the equation.

On the other hand they are mutually exclusive poles of the equation. The relative form of the value of the linen supposes a different commodity to be in the equivalent form. That different commodity, the coat, cannot at the same time be in the relative form of value. It is not its own value which is to be expressed.

Of course the equation may be inverted: 1 coat = 20 yards linen; in which case the coat is in the relative, the linen in the equivalent form. Or both com-

modities may be simultaneously in the relative and equivalent forms of value, but merely so from the point of view of each commodity, not simultaneously in one expression of value.

We have seen that all commodities are alike as connatural and commensurable, and thus exchangeable values. The possibility of exchanging commodities therefore rests on our regarding them only in reference to the one substance of which they all consist, namely, abstract human labor, and by disregarding them as to the various concrete labors by which they are individually produced and which impressed on them their individual characters as use-values.

In proceeding thus, however, we encounter a contradiction which must be overcome. *Abstract* human labor is a creature of the mind, but commodities are *concrete* things, the products of concrete labors, such as weaving and tailoring. Their value consists of course of the labor spent, but that value is not reflected in their physical existence, wherein they are only use-values. It is only revealed by one commodity entering into a value relation with another commodity.

But there can be no phenomenon outside of material things, and the material existence of the linen, which is naturally nothing but a use-value, has been disregarded in the inquiry concerning its value. This material existence as a value, missing in the linen, has been supplied by the coat as the equivalent of the linen. Thus the coat becomes the substantiation of the value of the linen, the value form of the

linen, as apart from the material existence of the linen.

If any two commodities are compared with each other merely in their *quantitative* relation, the only result is the determination of their relative values. But if we realize the *qualitative* side of the comparison, whereby the natural form of one commodity becomes the value form of the other commodity, we discover in the simple expression of value the secret of money.

To clothe this theory in illustrative form:

The coat which is in the equivalent form of value is not itself the subject of inquiry as to its value. There lies the coat in its natural form of use-value, the product of tailoring, concrete labor. Just as it is, it is to be used as the mirror of the value of a different commodity. Without changing its physical existence, it now appears no longer as use-value or the product of concrete labor, but as the product of abstract human labor and the embodiment of the generalization "value." Being value materialized, the coat is also the materialization of the value of the linen. It is the sense-perceived form of existence of the value of the linen. Thus the linen gains a form of existence as a value which is different from its natural form and of which the magnitude is measured by its proportion to the coat. That is, the linen has no other way of expressing its own value than by referring to a definite quantity of the use-value "coat" as representing a *given* quantity of human labor. The *equivalent* form does not in fact include quantitative definiteness, except in so far as called forth by statement of the quantity of the

commodity in the *relative* form of value. It does not include definiteness as to its value quantity. The coat is entirely passive, not seeking to ascertain its own value. It is proud to be a mere use-value and as such directly exchangeable with any commodity whatever, without being required to legitimize itself. If the value of coats changes, so will the relation to it of linen, but the latter cannot form this new relation, unless the value of coats is a *given* quantity.

When a commodity is recognized in relation to other commodities as a universal equivalent, it is directly exchangeable with them, which means that it is so exchangeable without being required to first express its own value in something else. In this way the natural form of the commodity so recognized, namely that of a use-value, is transformed into its exact opposite; it becomes the materialization of exchange-value. It is now nothing but exchange-value. But this holds good for such commodity only within the value relation, in which it functions as the general equivalent; outside of the same it remains a simple commodity with all the attributes of such.

As such commodity, whether it be a coat or gold, develops into the form of being the substantiation of value, so does of course the concrete labor by which it is produced assume the form of substantiation of abstract labor. And on account of the social function of the commodity which is in the equivalent form of value, the production of such a commodity, which is directly exchangeable, assumes the char-

acter of directly social production, although conducted by private persons for their own profit, whereas the production of commodities in the relative form of value is only indirectly social, these being only indirectly exchangeable.

This rôle of a commodity in the equivalent form of value may be illustrated by an analogous rôle of a commodity in the equivalent form of weight. To ascertain the definite weight of a loaf of sugar we equate it with stamped iron weights. Iron is no more the concrete form of gravity than sugar, but the former has come to be adopted as the embodiment of weight, all its other physical qualities being disregarded and its weight relation to other things being considered exclusively. As the iron is to the sugar nothing but weight, so the coat is to the linen nothing but value.

In the statement: 20 yards linen = 1 coat there is expressed, as regards the linen, that it is first a use-value (linen), secondly an exchange-value (something akin to the coat), thirdly a union of both—consequently that it is a commodity as defined at the beginning of this chapter.

A product of useful labor is naturally a use-value.

To become a commodity it needs the additional character of value, which it cannot possess in an isolated state. The material existence of its value is supplied by another commodity.

The development of the commodity form includes that of the value form. The development of the equivalent form of value is the expression and result

of the development of the relative form of value, as we shall presently see.

The simple value relation between two commodities has been analyzed as the contradiction between use-value and non-use-value (exchange value) inherent in the commodity and as the polarity of two different kinds of commodities.

This *simple form of value* corresponds to that stage in history in which exchanges were only occasional, but it contains the germ which through a series of metamorphoses led to the price form.

The inadequacy of the simple form of value as an expression of value in general is apparent, just as would be any limited phenomenon for the enunciation of a general truth. The proportion in which two commodities exchange with each other might be accidental.

With the production of a particular thing in excess of the needs of the community, as for instance of sheep in the case of nomads, the surplus seeks exchange with foreign products. Hence arises the necessity of comparing the relative value of one product with a multiplicity of equivalents. These appear as so many simple expressions of value; in point of fact it is the *sum* of the single expressions of value which constitutes the *expanded form of relative value*, viz.:

$$20 \text{ yards linen} = \begin{cases} 1 \text{ coat} \\ 1 \text{ ton iron} \\ 10 \text{ bushels wheat} \\ \frac{1}{2} \text{ oz. gold} \end{cases}$$

Now, indeed, the value of the linen appears as the substantiation of abstract, undifferentiated human labor, the equal of every kind of concrete work. It is seen at the same time that the production of $\frac{1}{4}$ ounce of gold requires as much labor as five bushels of wheat.

But this form of value is still imperfect, first, because every commodity differs from every other in the expression of its relative value; secondly, because the expression of relative value is endless owing to the constant appearance of new products; thirdly, because of the limitation as a value expression of each product in the equivalent form of value, which products in this position mutually exclude each other—hence a complete lack of unity in the expression of value; fourthly, because the list of equivalents never ends.

When the production of some specialty for the express purpose of exchange has reached a certain volume, the owners of the variety of commodities acquire the habit of expressing their value in terms of the overshadowing specialty, thus:

$$\left. \begin{array}{l} 1 \text{ coat} \\ 1 \text{ ton iron} \\ 10 \text{ bushels wheat} \\ \frac{1}{2} \text{ oz. gold} \end{array} \right\} = 20 \text{ yards linen}$$

They have arrived at a *general form of value* in its simple expression, *i. e.*, in one exclusive commodity, and in its uniform expression, which enables all commodities to compare their values with each other. In other words they have arrived at a general

social form of value. The polarity of the simple form of value, which had been merely formal, has now acquired objective consistency and social validity.

During the historical processes many commodities have served as general equivalents within a greater or narrower circle, but finally gold, from having been a simple commodity, then a money commodity, alongside of others, conquered the position of monopoly as the world's one general equivalent,—the thing that can directly buy anything anywhere. The evolution has carried us to the *money form of value*, like this:

$$\left. \begin{array}{l} 20 \text{ yards linen} \\ 1 \text{ ton iron} \\ 10 \text{ bushels wheat} \\ 1 \text{ coat} \end{array} \right\} = \frac{1}{2} \text{ oz. gold or } \$10$$

While the weaver may have expressed in terms of linen the value of all commodities, including that of the coat, the money form of value changes his individual and subjective mode of expression of value to a socially objective mode in the *price form*. Previous to such social expression of the value of products, as the embodiment of undifferentiated human labor in a single material, no perfect form of commodity could exist and therefore no world market. The value of a commodity expresses the relation of the necessary, normal labor time which must be spent in its production to the social labor time. The accident of a crop above or below the average affects temporarily the *price* of the particular product, but not its *value* in so far as there is no permanent change

in the time necessary for the production of a given quantity of that product. It follows that if the average price of any product for a number of years be taken, this average is likely to be fairly indicative of the value.

Furthermore, in the capitalist system of society the economic equality of the workers of the pre-capitalist era is supplanted by the economic equality of the capitalists which decrees the principle: "equal profit for equal capital," and enforces this in industry, commerce, and finance, as long as free competition survives in any of these spheres. This means that capital, instead of labor, has become the decisive factor. No longer the quantity of labor incorporated in a commodity, but the cost of production determines the price. Hence the tendency of competing capitalists to reduce the cost of production by increasing the labor of the workers.

In such industries in which the competitive stage of capitalism is already passed, the price of a commodity is also not determined by the quantity of labor incorporated in such commodity, as in pre-capitalist days; nor is it determined by the cost of production, as in competitive capitalism. The price now becomes purely arbitrary within the limitation of "what the traffic will bear," to use an expression which has become famous.

Finally price in certain cases loses all connection with value and becomes purely imaginary, as in the case of land, which, not being a product of labor, has no value, or when we speak of the price of a man's honor.

The economic fact that the two phases of capitalist

society have evolved their own methods of determining price, both in disregard of value, is a negation, but not an annulment of the theory of value, precisely as the optic fact of the bent stick in the brook, to recur to an illustration used in the previous chapter, fails to disprove the rigidity of the stick. The determination of price under capitalism on principles other than value merely indicates that the exchange of equivalents is not the essential characteristic of the commodity-producing society. Only during its pre-capitalist phase, owing to the social equality of the members of society, all working under equal conditions of production as owners of their simple tools, price was equal to value. Hence this phase is the starting-point for an inquiry into the modifications of the conditions which have resulted in the divergence of price from value. With the transformation of the independent workers into the modern proletariat, their labor power, bought by the capitalist's money, became capital while in the possession of the latter, the same as any other commodity he had bought. Therefore the product was no longer the fruit of labor, but of capital. It belonged to capital and its price was determined by the conditions of capital.

The former social equality had given way to social inequality. But exchange is a relation of equality. This necessary equality appeared now as that of the capitalists, who, in free competition for the spheres of investment, worked out a general profit rate for all capital. At the same time uneven technical progress in different industries and uneven intensity

of labor, even as between individual capitalists in the same industry, resulted in uneven productivity of labor, therefore in uneven cost of production.

Commodity production, in spite of private property and individual initiative, is essentially social production. Commodities are produced for the social alimentation under a system of social division of labor. Exchange of the products is the social fact without which there would be no economic society, no value, and no theory of economics. The responsibility of the individual producer consists in the relation of his product to the social need. Only socially necessary labor counts, both in relation to the state of social efficiency in production and to the total quantity of a given product socially required.

In capitalist society social efficiency is gauged by reduced cost of production. The average cost of production, regardless of quantity of labor, determines price and average profit rate. The equation is no longer: for value equal value, but: for equal capital, equal profit.

It follows from the foregoing considerations that in all forms of the commodity-producing society the essential basis of exchange is *not the equivalent* of commodities, but *socially necessary labor*.

After society has duly and to the best of its ability compared the individual product in its relation to the social requirement, it either confirms to the producer that the labor embodied in his product was "socially necessary," in the double sense here given to this expression, by allowing him for it in full the socially recognized equivalent, money; or, if the (otherwise

useful) commodity has been produced in excess of the social requirement or under subnormal conditions of efficiency, society reduces the sum allowable for it to the average of socially necessary labor.

But society is doing neither the one thing nor the other *consciously* by fixing the quantity to be produced of each variety of useful things, or the labor time to be devoted to the production of each. Production being induced primarily by the needs of the individual, although ultimately social in character, the social will enters only into play subsequently to the fact of production and makes its laws felt only indirectly in the process of exchange of commodities. The exchange itself is only a relation of things, not of collectively conscious persons. The individuals representing the things become cognizant of the social will only by the effected exchange which enables them to proceed with reproduction. The social coherence of the commodity-producing society being only a relation of things, it can do no more than clothe *one* special thing with absolute social power to express the social recognition of each separate commodity as socially necessary labor. This special thing is money. It goes without saying that money was likewise no conscious social creation, but a form developed by one particular commodity in the course of the development of commodity production in general. That money must be a thing of value, representing general labor time, is founded on the innermost nature of the commodity-producing society.

Money is the absolutely social form of wealth. It can readily buy every other form of wealth. Therein

lies its power. Its erstwhile social function has been converted by the logic of history into private power. From having been a handmaiden of the commodity, money has become its master. No profit, no production! All this has come about because what is at bottom a social relation of men has taken the form of a relation of things. They control. Man merely represents them, his ownership is only a juridical relation, a mere reflection of the economic relation of things. He is controlled. Gold is the exclusive thing of things, because it is the incarnation of all labor. It appears as a fetich created by man's hands, ruling him in his material affairs, as the creations of his mind rule him in religion. A period of unemployment sets in for the workers. The Fetich wills it! Vocational disease attacks the breadwinner. The Fetich wills it! The storm clouds of panic gather over the heads of the capitalists. Like a desperate wolf the creditor flies at the throat of the debtor. What!—commodities? What!—personal honesty? They are all sham. There is nothing real but gold; there is no protection but the Fetich! But the real fetich is not the yellow, glittering gold which dazzles the eyes: behind it, more concealed from view, is the arch-fetich, its parent—the commodity.

Man's emancipation from his fetich, which will be accomplished by his passing out of the commodity-producing form of society, means that he has ceased to be the unconscious object of evolution and that he has arrived at the point when he will be the master of his destiny. With that he passes definitely out of the animal kingdom: the free man.

CHAPTER III

THE CONTRADICTIONARY FUNCTIONS OF MONEY

a. Circulating medium.

MOST of the more desirable or valuable commodities seem at one time or other, and in one part of the world or other, to have officiated as general or at least widely accepted equivalents and even, in certain cases in comparatively recent times, as lawful money. Thus in our own country tobacco was legal tender in Virginia during the first half of the seventeenth century, while wampum shells officiated as general equivalent between the Indians and whites of the Northeast, and were even for a short time legal tender for a limited amount in Connecticut. These shells were a use-value to the Indians for ornamentation and to the whites by their convertibility into furs, having in the latter respect a certain resemblance to our present-day circulating medium made of intrinsically worthless paper. With the decline of fur catching and the counterfeiting of the black shells (one worth two white ones) by the white men, wampum lost its use-value for both sides and therefore its exchange-value. Even very recently among the Indians of British Columbia "Haiqua-

shells worn as ornamental borders to their dresses serve them also as currency to trade with,—a string of ordinary quality being reckoned as worth one beaver's skin."¹

In general the tendency has been toward the increased use of the metals as money, and, with increasing wealth, toward the displacement of the cheaper and less suitable metals like iron, lead, tin, and copper by the more precious and eminently suitable metals silver and gold.

In the long process of selection of one material to the position of world-money, gold won by its natural qualities, as soon as it existed in sufficient quantity. This metal, besides being of beautiful and unchanging color and luster, the only yellow one, and having the power of resisting oxidation, has remarkable properties of malleability and ductibility. One grain of gold has been beaten out to the extent of 75 square inches, so that 367,650 leaves were only one inch in thickness or the 1200th part of ordinary printing paper, although in practice only about two thirds of this tenuity is made use of. Gold is so extremely ductile that one grain may be drawn into a wire 500 feet long, and one ounce made to cover a silver wire 1300 miles long. It established itself as a universally coveted use-value in being the raw material for articles of adornment of places of worship, palaces, and tombs, and for personal ornaments. The quality, however, which pre-eminently adapts gold for the rôle of world-money is its homogeneity, which makes it easy of standardization, divisible into

¹ E. B. Tylor, *Anthropology*.

minor quantities which are again fusible into larger bulk.

Gold is now the sole international money as well as the basis of value of all national systems of currency, except in China, which has no national monetary system, silver being, however, the only money or general equivalent in use (aside from copper).

Economists ascribe the origin of money to the difficulties of barter, considering money a cunning device to overcome them. Commodities as use-values cannot be subdivided at will—a property which they should possess as exchange-values. Economists do not notice, or they fail to elucidate, the contradiction between the two characters inherent in the same thing. Sufficient for them that money has overcome the particular difficulty referred to, as well as others of similar nature,—for instance that a commodity offered by A in exchange for another belonging to B may not have use-value for the latter. Money, for which gold was the natural material by reason of its homogeneity, divisibility, indestructibility, gravity, and other exceptional properties, is the result of the evolution of a pre-existing rudimentary form, similar to the evolution of other institutions, or of the categories of biology, and the necessity for it developed with the production of commodities instead of mere use-values. Concrete work became abstract social labor, homogeneous and divisible into units of universal labor-time. But as the production of commodities is not *directly* social labor, or the labor of associated individuals, and is only *indirectly* social through the universal

alienation of the products of private and uncontrolled producers, the social validity of their labor could be confirmed to them in no other way than by giving them an equivalent representing social labor-time and therefore exchangeable for any existing commodity in any quantity desired. Without such social equivalent there would be no exchange value, without exchange value no commodities, without commodities no capitalistic mode of production. As long as this mode of production exists, "the antagonism of commodity and money is the abstract and general form of all antagonisms with which the capitalistic form of labor is pregnant,"¹ because commodity stands for private production, and money for the social form of labor-time.

Gold is the crystallized form of the exchange value of concrete commodities of which the abstraction is expressed by the word "wealth." Every commodity satisfies only one particular want, but gold satisfies every want. Therefore gold is the material form of the abstraction "wealth." But the quantitative limitation of the material is in contradiction with its qualitative universality,—a stupendous fact which will receive due attention in the course of this volume. None the less does it appear that "the universal product of the social process, or the social process itself as a product, is a peculiar natural product, a metal hidden in the bowels of the earth and extracted therefrom."²

¹ *A Contribution to the Critique of Political Economy*, by Karl Marx. Translation by N. I. Stone, p. 122.

² *Ibid.*, p. 212.

The fact that the money form of value is derived from the commodity form is evidenced by the fact that the unit value of the precious metals, previous to their coinage, was weight, generally the pound silver. Instance the pound sterling, now a mere name having no relation to the substance, or the old French livre, debased by the progressive counterfeiting by the kings during centuries up to the Revolution to one seventy-eighth of its original value, so that 81 livres were taken as the basis for 80 francs, the new coin of the Revolution. Even to-day (or at least until a few years ago) bulk silver circulates as a money commodity in China—the sycee, which for easier circulation is assayed by some well-known merchant who impresses his stamp on it. This is recognized within a narrower or wider circumscription until the sycee finds its way into regions where this merchant is not known, when another reputable merchant repeats the assay and stamping.

To the state, as the highest manifestation of social consciousness so far attained, has been assigned the function of determining the technical details of the issue of money and its legal status between the citizens of the state. It has not arbitrarily selected either the material which was to constitute money, nor has it endowed it with various functions and characters, as for instance the potential character of capital. The material of money, as well as its functions and character, are the results of economic evolution subsequently recognized by the state and fixed in law, as all accomplished facts in social evolution have always been.

In coinage the state departed from the weight unit, issuing pieces of a convenient weight and fineness. In these respects as well as in the national dress in which they all appear, they differ from each other in the various countries, but they all perpetuate, so far as *gold* is concerned, the principle of weight and fineness, viz. of exchange-value, in their conventional units.

Gold being ill adapted for denominations below a certain bulk, the necessary circulation of such smaller denominations is effected by subsidiary coin of less than face value in gold and made of silver, copper, or a nickel alloy. Such we find in the United States in the silver "Standard Dollars" or the storage certificates of such dollars, called silver certificates. They are of much less than their face value in gold, with which they have nevertheless so far remained on a footing of equality as a circulating medium within the boundaries of the country. All coins, whose intrinsic or bullion value is less than their face value, are not money in the historical and theoretical sense of the word, but only tokens of money (gold). Failing to maintain themselves as such, they become tokens of value in general down to the minimum given by their own values as commodities. As tokens they will be considered more in detail in future chapters.

Fractional currency is generally a token of nominal value and in the United States consisted for a number of years after the Civil War almost entirely of paper slips which answered the purposes of retail trade and were only inconvenient from becoming

crumpled and dirty and being easily lost. Fractional currency is coined only to the extent of its requirement in retail trade and is legal tender only for a very limited amount.

For the settlement of international trade balances or for international loans there is recognized no money but gold (bars or coins) by weight

b. Measure of value.

Gold, being the universal equivalent, has no expressed value, unless it were to be stated in terms of all kinds of commodities by placing them all in the equivalent and gold alone in the relative form of value. The measure of the value of gold itself, like that of every other commodity, is the labor time necessary for its production. The equation of its value with commodities is made by barter at the mines, but part of the gold not so disposed of may be sent to the nearest mint for coinage, whereupon its value is given.

Commodities appear on the market in a double form: in their concrete form they are useful things, in their abstract form they are values. This abstraction is by social agreement represented in concrete form by gold. The value of the commodities exists therefore merely abstractly in the imagination of their owners as an equally imagined quantity of gold until by the act of sale the abstract value of the commodity is realized by and assumes the concrete value form of money. It is in this abstract form that money, or a quantity of gold, serves as the money name or price of a commodity.

Commodities and money, then, confront and complement each other in the process of exchange as follows:

COMMODITIES

concrete—objects generalized as use-value
 abstract—objects of ideal exchange-value

MONEY

concrete—embodiment of exchange-value
 abstract—expression of prices, namely, ideal use-value

A change in the value of money can arise only from a change in the labor time required in mining a given quantity of gold. Such a change does not interfere with the usefulness of gold as a measure of value, since all commodities are affected alike. While commodity prices advance or decline, according to the increase or decrease of their own value, they may also do so inversely to the change of value of money. This statement by no means precludes the possibility of a number of commodities remaining at stationary prices, if their value changes are in the same direction as those of gold and are proceeding in the same tempo.

The usefulness of gold as the measure of value, in spite of the variations in its own value, is due to the fact that its supply has never been equal to the demand and that therefore this commodity could at all times and everywhere be relied on as being acceptable in exchange for any other commodity.

But *scarcity*, a necessary condition in any commodity for the money function of measure of value, is a contradiction to the requirement of *abundance* of money as means for the circulation of the stock of commodities. Yet the two functions are inseparably united in the same money commodity.

This contradiction did not give rise to any serious economic problem so long as the production of commodities had only partly displaced production by the community or family for their own use, and tributes, rents, services, etc., were mainly paid in products; so long, then, as the production of commodities had not become the prevailing mode of production. It was possible for the money in circulation to be relatively scarce, notwithstanding the fact that every purchase or sale called for the duplication of value, because a given quantity of the money commodity sufficed to effect the necessary exchanges of commodities of a much greater aggregate value than itself by passing successively and more or less rapidly from hand to hand.

But when the commodity-producing society had graduated into its capitalistic form, the production of commodities became more and more the prevailing, and ultimately practically the universal, mode of production. Payment in money superseded generally payment in products. Machine production on a large scale for the greatly increased populations far outran in value the scale of production of gold, which has its natural limitations. To all these developments was added the separation in time of purchase and payment, creating an additional

function of money as means of deferred payment, the subject of the next division of this chapter. This latter function includes the entire capitalist credit system in which the quantity of money needed at any particular time becomes utterly incalculable, but in its vastness is out of all proportion to the supply of gold.

Fully developed capitalist society must have gold, or some other single commodity at least equally well adapted, as a universal equivalent. The legal coexistence of more than one commodity as general equivalent, as for instance of silver alongside of gold, would be possible only if the one were a by-product of the other in an unvarying proportion, and neither occurred independently in nature. On such a supposition the value changes of such different products would always run parallel, although the value of each differed from the other. But no such combination exists. As to the value relation of gold and silver, it remains stationary scarcely for two successive days, and all attempts in the past to fix it by law have proven futile.

Without a socially recognized equivalent for every other commodity, the commodity-producing society cannot live a day. The selection of thousands of years has fallen on gold as the standard commodity, and this form of society stands or falls on this foundation. It has required the maturing of capital within the last fifty years to reveal the inherent contradictions of money and the impossibility of permanent commodity production. The contradictions between the different functions to be per-

formed by the identical money material, and nothing else as much as these contradictions, are the fundamental and fatal defect of commodity production.

So far these contradictions have been met by the device of various forms of imaginary money, discussion of which is reserved for later chapters. We shall see that these forms of money cannot reconcile the contradictions, but can be helpful only in affording a delay of the inevitable cataclysm, which must be the final outcome of these contradictions, meanwhile enabling capitalism to progress further in its historic mission, the organization of the productive forces.

c. Means of deferred payment.

During the pre-capitalist period of commodity production the worker, himself the owner of the limited means of production required in his trade, produced his specialty for a local market which also afforded the means of satisfying his own wants by an exchange of equivalents through the medium of money. Every sale or purchase entailed an actual exchange of places between commodity and money, therefore the duplication of value.

The condition of immediate exchange of values underwent a change in the course of the development of the capitalist system of large-scale production for a wider market, with the accumulation of profit as the object. This system called for continuity of the process of production so as to avoid the disintegration of the labor force employed in a factory,

as well as the relatively high general expenses which result from interruptions of production. On the other hand the demand for many kinds of goods is seasonal. For these and other reasons, unnecessary to recount, the seller would appear on the market before the buyer was ready, and hence arose the necessity for the former to accept in realization of his commodities, not money, but a civil obligation, on the part of the buyer, of future money. Again, the necessity of selling for future money entails the necessity of procuring the present money needed for reproduction by borrowing. Discounting the buyer's promissory note or acceptance, or his banker's acceptance, amounts also to borrowing. The entire capitalist credit system, in all its ramifications, is the outcome of selling commodities for future money.

Credit can be traced back for thousands of years, but the capitalist credit system differs essentially from the ancient and pre-capitalist lending. It is inseparable from the capitalist mode of production in which money is borrowed for the purpose of making profit in industry, while in previous forms of society money was borrowed by kings and other spendthrifts or by the distressed poor. In the course of this subdivision we shall take occasion to tell of the load of interest, amounting annually to a billion and a half of dollars, weighing on the miserably poor ryots of India, a country still mainly under ancient social forms. The difference between credit as a form of exploitation and credit as an aid to industry accounts for the moral

condemnation of former times of the taking of interest, while to-day it is considered most respectable.

The separation in time of the entrance into circulation of the commodity and of the money of the buyer creates a new and distinctive function for money as a means of deferred payment. In the sale and purchase itself, money figures only in its function of measure of value, and then as ideal money or a promise of payment at a certain due date.

In its concrete form of circulating medium money expresses a present relation of buyer and seller, its rôle in any exchange being momentary, although its mission is to remain permanently in circulation, unlike the commodity which drops out of circulation and goes into consumption. Money in this function is endowed with the legal guaranty of society that it is a universal equivalent, even, within certain limits to be discussed later, if the gold is represented by mere tokens.

But money in its concrete form as means of deferred payment enters into circulation independently, a reflection of a past relation, at a time when the commodity has dropped out of circulation and has perhaps been consumed. Instead of the social guaranty of money as medium of circulation, the seller has the merely juridical guaranty of a private person. As in circulation mere tokens are symbols of money and are made legal tender, so now the buyer himself becomes symbolic of money, and his obligation is made legally enforceable. The relation of seller and buyer has produced the new relation

of creditor and debtor. If the latter fails to pay at maturity, the state authorizes the forced sale of his belongings. When money functions as means of circulation, value is covered by value in the act of purchase and sale. With the sale of commodities for money in its function of means of deferred payment, the existence of the equivalent of the commodities sold, either in money or in other commodities, is unknown. In practice this fact has grown in economic importance since the actual payment of the concrete money at maturity has given way to the mutual balancing of all obligations by special institutions established for this purpose, leaving merely a small proportion of all obligations to be paid in gold. Thus the irresistible tendency of capitalist society to expansion has been freed from the fetters imposed on it by the existing stock of money. It is a highly important phase of that evolution which is to end with the demonstration of the impossibility of the permanent rule of money.

Just as the functions of money as measure of value and as means of circulation must be united in the same money material, in spite of the contradictions between these two functions, so must that same material also perform the function of means of deferred payment, in spite of the further contradictions involved. These further contradictions manifest themselves in the financial crisis.

An interruption of the regular course of production from such a cause did not and could not exist during the prevalence of simple production of commodities, only outside events, as war, crop failure, or pestilence,

interfered in those days with production and caused occasional want.

In contrast with that period, the crisis—industrial as well as financial—is an inherent and unavoidable accompaniment of the capitalist competitive system of production.

During the period of small-scale production the scarcity of commodity money occasioned no serious problem. But with the development of capitalist production, especially since its great expansion which began about the middle of the last century, the necessity of substituting imaginary money, such as paper tokens and bank checks, for the deficient gold, made itself felt more and more and has created a very serious problem. So far this development has produced nothing worse than financial crises with partial liquidation through bankruptcy. But the defect, as already explained, is a fundamental one, and tends irresistibly, as our diagnosis in other chapters will show, to a cataclysm which will prove the impossibility of competitive capitalism. Nothing can stay this outcome, except the previous transition of capitalist society from competitive anarchy into the perfect monopoly of an oligarchy, which can dispense with money. The latter eventuality, however, presents little likelihood, inasmuch as the process of monopolization is slower than the development of money. Every day brings the latter nearer to the critical point. Meanwhile the financial mechanism remains in a precarious situation; it rests on the faith in the general solvency and the faith that imaginary money is real money,—a faith which will

be rudely shaken by financial panics of increasing severity.

The contradiction between money as a means of circulation and money as means of deferred payment complicates, as already stated, the question as to the sum needed in a country at a given time. It is evidently impossible for financial experts to estimate even approximately the sum of obligations maturing at any time, inasmuch as to-day an obligation may be entered into, maturing four months hence, and next month another maturing in three months, so that the coincident maturity of many obligations which originated in the deliveries of commodities at very different dates must be assumed. Society relies on the individual capitalist concern to make its calculations for meeting its own obligations. But the individual capitalist concern A is depending on prompt payment by B, and what if through any disturbance the chain of credit breaks? One bankruptcy brings on another, confidence is shaken, and creditors who have been selling for ideal money now storm the debtors for real money. The crisis is on. In it the visionary and nebulous shape of money, which in the sale had served only in its function of measure of value, suddenly assumes the definite shape of means of payment, or its cash reality.

On the other hand, the more specific industrial crisis, of which the various causes may be summed up in the two words, "planless production," tends to disappear more and more with increasing concentration. These causes, analyzed by Marx with

arithmetical precision, are therefore losing economic importance in our time.

The condition of disturbance or crisis would recur much more frequently than is actually the case, if there did not exist perennially a reserve fund which can be drawn upon in ordinary times to replace the broken links in the chain of credit. The existence of this reserve fund is not the result of the forethought and conservatism of the individual capitalists, the great majority of whom are only intent on doing all the business they can with the capital at their command. It is the capitalist system itself which compels the creation and constant renewal of a reserve fund of money.

Let us observe a capitalist (or a combination of capitalists) starting an industrial enterprise.

In the first place before he can realize a revenue from surplus product he must be in possession of an additional sum of money above his investment to enable him to live for a considerable time in his established style. This money remains idle to a diminishing degree until used up.

Suppose next that his investment is \$15,000, the weekly requirement for material and wages \$1000, the period of production ten weeks and of circulation five weeks. At the end of the fifteenth week the capital is spent, but at the same time part of the money returns. Now, if the manufactured article is sold in arbitrary quantities and each unit requires ten weeks for its production, all the capitalist will collect at the end of the fifteenth week is the value of the first week's product or \$1000, just sufficient for

the continuity of the process of production. If, on the other hand, the product is an indivisible entity and has required ten weeks for its completion, then the amount returning at the end of the fifteenth week will be \$10,000, or \$9000 more than required for reproduction for the time being. These \$9000 are thrown out of function again and again.

An extensive manufacturer of larger units of products may say that he is not cognizant of any such ebb and flood tide in his concern. Nevertheless it exists mathematically, although concealed by elements of taking and giving credit, prompt or slow collections, varying extent of stocks of material and products, fluctuations in prices, etc.

Let us now assume that the capitalist, in addition to the \$15,000 advanced for raw and accessory materials and wages, has also invested for this business \$10,000 in machinery and tools. Besides the necessary repairs which he will probably charge to expense account, there exists, in spite of the repairs, an element of physical depreciation, irremediable with age, and also of moral depreciation on account of the invention of improvements. This physical and moral depreciation enters pro rata into the value of each unit of the product and returns in money form to the capitalist. If the normal life of his machinery is put at ten years, there will have accumulated at the end of each year \$1000, or at the end of the period the \$10,000 necessary for replacement. During these years the machinery has continued to function, or at least in part, and its owner has held the depreciation reserve for amortization in the form of hoarded money.

With every turn-over there remains in the hands of the industrialist a deposit of profit which cannot be immediately employed as additional capital, because the technical composition of modern industry requires a certain minimum outlay for machinery, as well as corresponding material and wages. Until the accumulation has reached the necessary minimum for an enlarged scale of production, this money does not function as industrial capital, but remains a hoard in the hands of the industrial capitalist. Even the large corporation, identified with and supported by the great banking capital and therefore independent of such accumulation for its expansion, creates a surplus which, aside from its regular purposes, enables the corporation to pursue an established dividend policy, if thought desirable by those in control.

Many capitalists collect continually smaller sums from many quarters which they are obliged to arrest in their circulation and retain as a hoard in order to be certain of being able to meet a larger obligation maturing at a future date; or they may accumulate such funds with a view to using them for purchases in more favorable market conditions, or for other purposes.

The expression "hoard" in these pages, then, signifies money which is temporarily arrested in its circulation and out of function as capital, in consequence of laws inherent in the capitalist system and operating permanently. In the sense used here the term has no relation to the action of people in times of panic when they hide all the money they can

as the only thing in which rests safety or profitable possibilities; nor to the old stocking of our progenitors which has a more pathetic counterpart in the backward land of India. It will be helpful to the understanding of other passages in this book to refer more than cursorily to the hoarding of money in the old sense of the term in that important country.

Much of the silver painfully dug out of the earth by poor humanity in Mexico and Peru in the seventeenth and eighteenth centuries was as assiduously buried again by poor humanity in India who received it from Europe. The import of silver into India (from England and China) was about £12,000,000 yearly in the middle of last century. This has been going on ever since, even on somewhat increasing scale (the amount of precious metal imported directly from England having been £14,000,000 in 1905-6), yet the known circulation of money in India, according to the report of the U. S. Director of the Mint,¹ was only \$.78 per capita, compared with \$52.81 per capita in Australia.

This individual hoarding expresses the fear of the vicissitudes to which the workers are exposed in an almost purely agricultural and fertile country, but in which the primitive conditions have become dislocated by the forcible introduction of capitalistic changes. Thus it is that famines occur, that the worker consumes his seed corn and beasts and then in the last extremity, when the choice has narrowed down to death or practical slavery for himself and progeny, the distressed man turns to the money-

¹ Report 1912, p. 67.

lender to enable him to buy his means of production and to tide him over until the next crop.

Sir Andrew Fraser, in *Among the Indian Rajahs and Ryots* (published 1911), informs us that the rate of interest in country districts used to be fixed by custom at 25% for six months. An anti-usury law had the opposite from the intended effect, because then the lender deducted the 25% beforehand, which raised the real rate to 33 $\frac{1}{3}$ % for six months. Upon the abrogation of the law many lenders continued the practice of deducting the interest from the principal in advance, so that the prevailing rate of interest is to-day 50 to 66 $\frac{2}{3}$ % on an indebtedness of the agricultural community of £500,000,000. The parasite takes the entire product, except what is absolutely necessary to the existence of the worker, therefore it is easy to understand that the debts never decrease, but always increase, in spite of the "habits of prudence and thrift characteristic of the people generally" to which Fraser testifies.¹

As capitalist society develops in a country the individual hoards, produced automatically as described, take more and more the form of social capital. Collecting the individual hoards and placing them at the disposal of the money market is the function of the banks. There are considerations of individual expediency regarding the extent to which capitalists will leave funds in banks of deposit subject to check

¹ In addition to this load, India's excess of exports over imports is about £30,000,000 yearly, mostly in payment for "good government." This excess is all paid for in London. Besides India pays for the army to keep her in order, etc.

at no interest or on time at low rates of interest. For it is not the purpose of capitalists to accommodate society at large, but to make profit—in fact as much profit as possible. The credit relations thus organized or extended by the banks have further resulted in public “security” markets or stock exchanges where the hoards of the industrial capitalists can be invested for shorter or longer periods in bonds and stocks yielding the current rate of interest.

Hoarding on a social scale, finally, is imposed on the banks themselves for seasonal demands of money, as for instance for moving the crops, or quite temporarily in preparation for dividend days, when call rates of interest are apt to advance considerably.

Thus has the individual hoarding of old become an element of social coöperation, though still conducted for private profit.

CHAPTER IV

THE HANDICAPS OF THE MONEY SYSTEM

a. Wastefulness of the gold basis.

THE total amount of metallic money in this country in 1904 was 1994 million dollars.¹ The quantity of human labor expended in the production of this money, not for any use, but merely that we may be able to distribute our products among ourselves, would have duplicated three fourths of all the manufacturing buildings which existed in this country at the same time, valued at 2610 millions (see p. 175).

What is the reason why capitalist society must sustain such a dead-weight or item of *faux frais*, as the French call it? The answer is founded deep on a general biological truth.

Human society is an organism in course of evolution along lines analogous to those of individual organisms in the organic world. This evolution may be considered as the gradual advance from physiological independence and social unconsciousness of the units of the organism to their physiological interdependence and social consciousness.

Animal life, beginning with the free single cell,

¹ *Statistical Abstract of the United States* (35th), Table 314.

evolves a higher order in the cohesion of a number of cells, all capable of the identical functions. This stage is followed by a degree of specialization and interdependence of the cells. The final development is that of complex organisms whose parts are increasingly interdependent on each other, until absolute solidarity and social consciousness of the parts of the whole organism are attained.

If human society had achieved the stage of social consciousness, then the production and circulation of the means of sustaining life would have become the function of certain organs created by society for the purpose of predetermining by experience and statistics the quantities and varieties of products required and subordinating the means of production to the desired end. Production and distribution would then be a directly social relation.

Under the capitalist system production is conducted seemingly as the private business of independent persons, but is nevertheless indirectly social, inasmuch as the social division of labor compels these private owners of the products to enter into social relations with each other the world over by the general exchange of their products.

The process of exchange is the only one in its economy of which society is conscious, and as this process is subsequent to that of production, taking place at a time when it is too late to remedy mistakes or technical shortcomings in production, society can only attest to the social value of the work done by individuals by giving for it something of equal solid value and as such socially recognized—namely

money. Its necessity is a corollary of an imperfect and anarchical system of society.

b. Inadequacy of gold basis.

At first sight it would seem contradictory to speak at the same time of the great wastefulness of money by reason of the great amount of labor expended on its production for no rational purpose, and of its insufficiency for the function it has to perform. But the seeming contradiction is only a reflection of the enormous contrast between on the one hand the small value of the more permanent wealth existing at any one time, and on the other hand, the immense consumption continuously going on, to which must be added the immense sum of fictitious capital and the price of land, all of which subjects will be more fully dealt with in subsequent chapters.

For the circulation of their products earlier forms of the commodity-producing society required a sum of money equal to the total price of all commodities circulating alongside of each other within a certain space of time and at a given speed of circulation.

The development of the new function of money, as means of deferred payment, has modified and further complicated the question as to the mass of money required at any particular time. Theoretically this mass is to be computed as follows:

total price of all commodities circulating within a certain space of time—
 divided by the number of turns in which each money unit functions during that time—
 plus the sum of maturing obligations—
 minus the sum of balanced obligations.

Such a formula, however, amounts only to a statement of the problems involved. Practical application of the elements of the computation is impossible in a society which is not a conscious economic organism, but rather an agglomeration of semi-independent units.

That the requirements for gold have not been lessened by the outgrowths of, and additions to, gold money in its capacity as a circulating medium, such as overvalued silver coins, irredeemable or uncovered paper currency, and bank checks, is plainly evident from the concern with which the financial world is continually estimating the prospect of the flow of gold from one country to another, and from the diligence with which the banks of the different countries apply themselves to forestall or further, according to the respective financial situations of their countries, the movement of relatively very moderate amounts of gold.

While thus the outflow of even a few million dollars gold is at times viewed with an uncomfortable feeling in any country, much satisfaction is derived from the good showing made by those factors which militate in opposition to gold exports.

The more permanent of those factors are the "favorable" trade balance and income from foreign investments.

What is called a favorable trade balance is the excess of exports of commodities over imports resulting from a home production in certain spheres of industry above the buying power of the home consumers, although many of these had need of more of

these products, as for instance of foodstuffs in the United States,¹ which are largely exported. However, the return of the money advanced for the production of commodities, including the realization of the profit, is the final and all-important phase of the capitalist system and therefore, as already said, a matter of eminent satisfaction regardless of the detail whether this is accomplished at home or abroad.

England and France import more than they export. Nevertheless the balance of account with foreign countries is in their favor as a result of their income from foreign investments. This state of affairs is likewise quite satisfactory, according to the French author of the report on the Bank of France to the United States National Monetary Commission, where the doctrine is expressed that "it is more advantageous for a nation to cause other nations to work and to draw from them 2,000,000,000 francs yearly than to procure similar results by work at home."² What he has reference to is the income from French investments abroad, which investments amount to about thirty billion francs.³ As the working class is part of the nation, the advantage accruing to this class from the investments in foreign

¹ An article in the *New York Times Annalist* of Feb. 9, 1914, says of the period since 1908: ". . . and (so far as we can get the figures, which is to the end of 1911) the consumption of food per capita have all been decidedly lower."

² National Monetary Commission, *The Bank of France in its Relation to National and International Credit*, by Maurice Patron, p. 14, Senate Doc. No. 494, 61st Congress, 2d Session, 1910.

³ *Ibidem*, p. 13.

countries is apparently a corresponding dispensation from work, but it is not stated that this dispensation is accompanied by a share in the income from the investments.

We have now discussed the leading outside factors which influence the international movements of gold. But what about this material itself? What is there in its own relation to the financial system that rivets the attention, and frequently, now in one country and then in another, works on the nerves of the financiers?

In the first place let us look into the world's production of gold. According to estimates by the Director of the Mint, or figures adopted by him,¹ this amounted

		Million dollars
From the discovery of America	1492 to 1899 to	9,811
	1900 to 1912 to	4,964
Total		14,775

On the other hand for many years past the consumption in the arts has absorbed fully one third of the annual production; in 1912 174 millions out of 466 millions.² In addition to this consumption "the movement of gold to India continues to be a matter of world-wide importance. . . . It appears that India has taken during the last two years

¹ Annual Report of the Director of the Mint, 1913, p. 315. As everywhere in this book, we omit fractions of millions.

² *Ibidem*, p. 259.

about 28 per cent. of the world's production of gold."¹ The exports of gold to India are almost as definite a deduction from the world's supply of money as is the consumption in the arts, for the reason that none of this gold ever returns. The bulk of it is either hoarded or made into personal ornaments, the latter being the only form in which the Hindu inheritance laws permit property to descend to the female members of a family.

In the face of these figures it is no wonder that the world's whole stock of gold on Dec. 31, 1912, was estimated (with unimportant omissions) at not more than the following²:

	Million dollars
United States.....	1,880
British Empire.....	1,482
France.....	1,200
Russia.....	1,000
Germany.....	863
South America.....	455
Austria.....	294
Italy.....	248
Others.....	1,059
Total	8,481

Now just what is the significance of say nine billion dollars gold in the world's economy?

There is here only to be considered the relation of this sum of gold to the credit system in which, in all

¹ Annual Report of the Director of the Mint, 1913, p. 66.

² *Ibidem*, p. 64.

its vastness, money is the stated object and consideration. The credit system includes all purely fictitious capital, like national debts, shares of corporations capitalized on the proportion of their earning power to ordinary interest, mortgages on land which has no value at all but only a monopoly price, credit money arising from deferred payments for commodities, such as acceptances and promissory notes. The amounts involved are out of all proportion to the value of existing permanent capital and even of all wealth. The kingdom of credit is imposing by a mere recital of its subdivisions. To quote again from the enthusiastic author of the already-mentioned Senate Document (page 8):

Let us for a moment consider these instruments of credit which justly do honor to our modern civilization; their number increases constantly; in addition to bank notes, checks, transfer orders, certificates of deposit, bills of exchange, bills payable to order, drafts, storage certificates, we have stock market securities, treasury bonds, mortgages, warehouse receipts, coupons.

In this enumeration we miss promissory notes, which in the United States are of such importance that their discounting is the main operation contemplated by the new banking system established by the so-called Glass-Owen law enacted by the United States Congress in 1913, and discussed in detail in Chapter VII., section b.

And yet only the visible, negotiable, and transferable instruments or evidences of credit have been

touched on, not all credits. Think of all the open accounts on the books of all business concerns in the United States and in the whole world! They all originated in a value relation to gold and are payable in gold or in money symbolizing gold.

If it were possible to translate all credits into the total sum of money by which they are supposed to be redeemable, that sum, like the figures in astronomy, would transcend human appreciation and a comparison with the nine billions gold, the only absolute value basis, would cause one to marvel how such a highly artificial system can exist for a day.

It would be interesting to catch a glimpse, even if only a passing and imperfect one, at the figures concerned.

Out of the kingdom of credits, genus stock exchange securities, family bonds, we pick the species government bonds. The national debts of the world (not including state, provincial, and municipal) amount to about forty-four billion dollars.¹

The value of the annual imports and exports of the same countries was almost as large, exceeding forty billion dollars.² This international commerce calls into existence a portion of that variety of instruments of credit called bills of exchange.

In this international commerce the United States participates to the extent of one tenth. Here, as everywhere, the foreign commerce cuts a small fig-

¹ *Statistical Abstract of the United States*, 1914, p. 693. This was the amount before the outbreak of the war in 1914.

² *Ibidem*, p. 685.

ure compared with the domestic. In a compilation of the "national" wealth essayed by the Census for 1904 the value of the stock of products totaled fifteen to twenty billion dollars.¹ The annual turnover of products varies of course greatly, according to the nature of each product, but the total stock existing at any one moment must on the average be consumed and replaced a number of times during a year. Therefore the sum-total of the domestic commerce which took place in 1904 must have been enormous, compared with our exports during that year of 1460 millions.² Other countries, we may be sure, show a similar contrast between the volume of their domestic and their foreign trade.

So far as this country is concerned, an approximate idea may be gained from the existing records of bank clearings. They include, of course, the foreign trade and the immense stock-exchange transactions, for which however the money turn-over is greatly reduced by the stock-exchange clearing-house. They also include payments for land which are an unknown quantity. It is, however, easily realized that the great bulk of the bank clearings represents the sale of commodities.

Now, in the census year 1904 and in 1913, the clearings and their proportion to the stock of gold in the United States, including the government stock, were:

¹ *Statistical Abstract of the United States* (35th), Table 335.

² *Ibid.*, Table 242.

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1904	Clearings	102,356	million dollars
"	Gold	1,328	" "
1913	Clearings	173,193	" "
"	Gold	1,905	" "

This shows that there existed in this country, for every \$100 cleared, a sum of gold in

1904 of \$1.30

1913 of 1.10

The progress of clearings during this period has been quite steady and normal for each year, except during the year of depression following the panic of 1907.

Incidentally these figures show further that (notwithstanding the great increase of gold production since the beginning of this century, equaling the production of the previous forty years) the stock of gold has not only gained no headway, relatively to the total money turn-over, but has actually shrunk. And this in the United States, the most favored country!

No such accurate records exist in the United Kingdom, but we shall presently see that its stock of gold is known to be so nominal as to make the country more dependent on the continuance of fair weather than the United States.

The check turn-over of the kingdom was estimated to have been over 25,000 million pounds in 1906. The banks are supposed to carry adequate reserves, but in reality they deposit their entire

reserves in the Banking Department of the Bank of England. The latter invests these deposits in securities and loans, keeping only about a third as reserves. This is surely close financiering, but the situation is aggravated by other factors. The bankers of London constitute the world's clearing house, and this function subjects the London market to unusual perturbations. On this account the gold reserves of the Bank of England, which means the gold and notes of the Issue Department held by the Banking Department, fluctuate greatly. The relations of the two departments will be explained presently. In round million pounds these reserves were: 15 in 1885, 13 in 1888, 30 in 1895, 35 in 1896, 21 in 1899, and 32 in January, 1914. With these fluctuations correspond the frequent changes in the Bank's rate of discount, of which there were 273 between 1870 and 1907 as against only 41 of the Bank of France during the same period.

Furthermore England's imports exceed the exports (in 1906 by 147 million pounds). This creates a natural tendency toward an outflow of gold, held in check by the income from foreign investments (which are estimated at 4000 million pounds), income from maritime carrying trade, and India's tribute.

In order to prevent over-issues of bank notes which had so often caused panics in England, the Peel Act of 1844 separated the note issue department of the Bank from its banking business. The Issue Department was only to issue notes to persons depositing an equal amount of gold with it. Aside from such covered notes, the Issue Department could

only issue notes for the amount of the debt which the government owed to the Bank and for some minor items, in all at present £18,450,000. It is plain that the gold in the Issue Department is a fiduciary fund, belonging to the holders of notes and held subject to any call for their redemption, just as our Treasury has the exact amount of gold against our circulation of gold certificates.

It is necessary to understand that the relations of the Banking Department to the Issue Department are essentially the same as those of any other bank or person. Nevertheless the Peel Act has been suspended four times during panics, giving the Banking Department access to the treasure held by the Issue Department in trust for others; otherwise the Bank of England would have failed.

There are some students of finance who realize the precariousness of the proportion of the gold reserve to credits in England. In proof of this it is necessary to quote from the aforementioned report on the Bank of France, p. 110, inasmuch as Senate Document 591, dealing with the Bank of England, is strangely silent on this topic:

At a meeting of the Bankers' Institute, which was held in London in November, 1906, the insufficiency of the reserve was discussed. It was recognized that, in general, the banks do not appear to realize the necessity of having sufficient reserves to maintain the immense credit structure they must support. . . . The last crisis has especially drawn attention to the general scarcity, and every country has perceived that it lacked gold [p. 111].

The New York *Times* of Jan. 24, 1914, contained a one-column telegram from London, beginning:

Sir Edward Holden, Chairman of the London City and Midland Bank, has raised an alarm as to the inadequacy of the British gold reserves, which is attracting serious attention. For a long time past he has advocated publication by the joint stock banks of their gold reserves, arguing that the present system, whereby only the Bank of England is bound to make such an exposition . . . constituted a national danger.

What Holden is after, is to make the joint stock banks turn their pockets inside out so that it may be publicly realized to what extent the gold reserves, supposed to exist there, are an actuality or only a myth, having been already accounted for in the Bank of England reserve, where they are deposited by the joint stock banks.

In the further course of his statement Holden refers to the foreign and colonial banks in London, regarding the magnitude of whose operations we are left in the dark, saying:

We have at the present time carrying on banking operations and creating credit in London no fewer than 120 foreign and colonial banks. The credit created here by the operations of these banks really is based on the small gold reserve in the Bank of England, which works between a minimum of £24,000,000 and a maximum of £40,000,000 sterling. The gold in the Issue Department is largely contributed through a portion of the reserve

of the joint stock banks being held in the Bank of England and also through notes which are held by bankers and by the public. The total liabilities on current and deposit accounts of the joint stock banks of this country, including the banks of Scotland and Ireland, amount approximately to £860,000,000 sterling, while the total amount due to depositors in the Post Office and Trustee Savings Banks is about £250,000,000 sterling.

What troubles Holden is the thought of what would happen to the "credit created here by the operations of these [foreign and colonial] banks" and which was "based on the small gold reserve in the Bank of England," if the joint stock banks were to need that portion of their reserve which, by way of the Banking Department, contributed largely to the gold in the Issue Department and if at the same time the "notes [Bank of England notes] which are held by bankers and by the public" were presented for redemption in order to export the gold on account of the state of exchange.

In Germany the discount rate is generally higher than in England and France, but as it is not always feasible to protect the gold by raising the rate high enough, other means are applied to this purpose. A demand for gold may be met by a bureaucratic frown from the director of the Reichsbank and a hint that insistence on gold might be injurious to the business of the applicant, who readily interprets this as meaning a rejection of his discounts and possibly a closing of his account.

The following is an indication of the close financiering of Germany:

In order to reduce the demands for gold, which became alarming, a circular was sent at the end of December, 1907, to all public officials, recalling another circular, quite recent but already forgotten, which advised officials to take their salary in bank notes and not to insist upon gold.¹

In 1898 the note circulation of the Bank of France was covered to the extent of more than 100% by metallic reserves,² which dwindled down to 68% of the note circulation in the first week of February, 1914.³

This institution resorts occasionally to the expedient of dodging gold payments by tendering silver (which is legal tender) or charging a discouraging premium on gold.

Having reviewed the status of the gold supply in the principal countries, the question is now in order as to the meaning of their great solicitude for their little piles of the yellow metal. It is as if its guardians were addressing the capitalists in this wise:

We know that the balance of account with foreign countries has to be settled in gold or in something else acceptable to them; we know that, as our raising the discount rate tightens money all around, the need of money induces forced sales of commodities and stock

¹ Sen. Doc. No. 494, 61st Cong., 2d Sess., 1910, p. 111.

² *Ibidem*, p. 16.

³ *New York Times Annalist*, Feb. 9, 1914, p. 176: Note circulation 6029 million francs; gold on hand 3459 million francs, silver 650 millions.

exchange securities, and that the account due to the creditor country must be settled with commodities or securities at the decimated prices resulting from this process. The losses to you from the low prices will be exceedingly severe, but they will be the lesser evil by far compared to a suspension of specie payments with its disastrous consequences—a depreciating currency and the unsettlement of all values.

Such were the conditions presented by the Baring panic in 1890 when England was obliged to return American investments to the United States. The latter country, during its own panic of 1893, exported securities estimated at 237 million dollars at “bargain prices.”

In the Baring panic the Bank of England would have been obliged to suspend, if it had not been for the assistance lent to it by the Bank of France. Had the suspension not been prevented by the French bank the whole world would have been disastrously affected.

The modern credit system is a complex and highly developed social organism. While each nation aims naturally to protect itself in the first place, yet an injury to one capitalist nation communicates itself promptly to all the others. This has been a regularly observed phenomenon. Even the New Zealand crisis had a world-wide effect. The vast credit system, social in its nature, rests on the very narrow basis of the existing stock of money, and being an organism of a very high order is correspondingly sensitive, especially in relation to its basis of existence—gold. It is a fact in nature that the

higher the organism and the more complete its integration, the more sensitive it becomes. Certain worms may be cut into several pieces and each piece will reconstitute the complete animal; the starfish can reproduce its arms; the sea-slug its stomach; the lobster its claws; the spider its legs; the fish its fins; the lizard its tail; but in the higher organisms an injury to a part is beyond repair and may be fatal to the whole.

Of the world's annual production of gold more than half is derived from two countries—South Africa and Australia. In the first-named country there exists a state of class antagonism which in 1913 broke out into a condition closely resembling a state of civil war, with the whole army on a war footing, a proclamation of state of siege, suspension of law,¹ and prohibition of code words in foreign cable dispatches. The workers were beaten into submission. In Australia, where the workers have the vote, there exists a labor party at present about equal to the combined strength of the other parties.

It has been said that the coal miners and transportation workers occupy strategical positions in coming class contests. If this anticipation has any value, may it not be that the gold diggers in those outlying regions, the Transvaal and Australia, hold the lever at an equally dangerous point in our social system, the gold supply?

The London *Times*, as reported by the *Annalist* of Feb. 9, 1914, in referring to the Union Govern-

¹ The deportation of English subjects has since been somewhat atoned for by the resignation of the Governor General.

ment Economic Commission, appointed to survey conditions in the South African mining fields, says "that the proceedings of the commission have been in camera, or private, because of the acute labor troubles. . . . As the production of gold elsewhere in the world had become a stationary, if not a shrinking industry, while at the same time the demand for gold was steadily increasing, the economic effect of a decline in the Rand's production, owing to labor troubles alone, was a matter requiring serious thought."¹

¹ The *Annalist* comments: "If the world's production of gold is going to decline, actually or relatively, it will be necessary to increase the ratio of instrumentalities of credit to a certain gold base." So the remedy for the present deficiency of the gold supply relative to the volume of credit is more credit!

CHAPTER V

MONEY TOKENS

a. General theory.

THE analysis of value by Marx has shown that money originated in a commodity whose value became by social consent the standard of value of all other commodities. As such a commodity gold continues to function in international finance, in which sphere it moves in bulk and by weight. Within the boundaries and by authority of states certain arbitrary quantities are coined into units of money which are the legal tender to which all money obligations have reference.

Gold, then, as the standard of value, may be called the Standard Money, if we wish to differentiate it from those substitutes in use whose material is of a value inferior to that at which they are rated or of no value whatever. Such substitutes are designated as *tokens*, and the principal materials used are silver and paper. They are issued under the same authority as the gold coins, *i. e.*, by the state, but their legal tender quality differs in the various countries. In some of these certain tokens may be legal tender, while in others, as in the United

States, they are not absolute tenders for all purposes or at least may be excluded by private contract.

How is it possible for a state to endow an intrinsically worthless thing like a slip of paper with the power of functioning as money within its borders?

Be it noted first, in answering this question, that tokens cannot perform all the functions of money. Not being value themselves,¹ they cannot serve as measures of value any more than anything imponderable can serve as a measure of weight. Furthermore, they cannot serve as means of deferred payment, because that function likewise requires a money material of standard value in order that the value payable and receivable at maturity may be fixed with exactness, whereas tokens are subject both to overvaluation and to depreciation. The only function of which tokens are capable, and that only within limitations presently to be discussed, is that of medium of circulation.

It is a common observation in countries where gold in active circulation is not such an unusual sight as with us, that coins considerably worn pass current at their face value. Similarly, subsidiary coins everywhere are issued much below their indicated metal values, our own being worth, as silver, when not worn, about thirty-seven cents on the dollar. Evidently such worn coins or debased subsidiary silver coins are merely symbols of their pretended value, continuing to circulate as if they were other than their own shadows. This points the way to the

¹ To avoid repetitions references to silver and subsidiary coins are omitted.

possibility of substituting for gold a paper currency, not in the sense of our gold certificates, which are representative of corresponding coins stored in the Treasury, but of an *unsecured* paper currency. It generally matters little whether the latter be nominally redeemable in gold or frankly irredeemable. For if there is no provision, or only inadequate provision, for its redemption, and if obtaining the gold for this purpose is a moral, if not physical impossibility, then where is the important distinction? The difference between debased or over-valued coin and intrinsically worthless paper money is only one of degree, not of principle, and whoever insists on money of full value will have the same argument in refusing a 40 per cent. silver dollar, 37 per cent. subsidiary coins, or 0 per cent. paper dollar.

Let us now examine the economic ground on which rests the feasibility of a paper currency and the limitations of its use.

For the alimentation of the social body the essential thing is the exchange of the privately produced use-values. This exchange must be mediated by money which, its function performed between two commodities here, hurries away to repeat its mediation elsewhere. This ephemeral rôle of money in the process of exchange, like the quasi-social character of money, is concealed by the fact that it is itself value, as is the commodity. Being thus devoid of any importance in itself as regards the social alimentation, and being a quantitatively insufficient and clumsy tool, as well as causing unprofitable expense, its elimi-

nation by means of tokens and other contrivances has always been aimed at. The modern state has discovered that it may substitute largely, by its authority as the supreme organ of society, the *directly social paper tokens* issued by itself, for the *indirectly social gold*, originating in private production. But as society is not yet a conscious economic organism, the power of the state to issue tokens is limited in quantity by the economic laws which are at the base of the existing form of society.

The state originates the paper token by printing and issuing it in payment of commodities. For value received it gives an acknowledgment of a non-interest bearing debt. To the recipients the acknowledgments serve as the money form of value of their commodities, after which the notes pass current as money from hand to hand. Theoretically they should finally be received by the governments in payment of taxes and imposts, products and services, but practically this is far from being the case. If so received by governments, these must be considered to have given value against the return of their acknowledgments of debt. Thus the cycle would be complete and the accounts balanced. What, under the theory, would have taken place is a simple exchange of commodities (products and labor power) owned respectively by individuals and by the state, the tokens having performed the fleeting function of money in the circulation process. In reality there exists nowhere the slightest intention of canceling the tokens upon their being received by the governments, as that would *reduce*

the sum of the circulating medium, whereas the requirements are constantly on the *increase*, not only absolutely with the increase of population, but even, though to a much lesser degree, per capita. Nor would it be possible for them to replace the tokens in the circulation by redeeming them with standard money, gold, of which the enormous quantity needed for this purpose would be practically unobtainable.

In the latter respect there is a radical difference between the redemption of tokens and of government bonds. The United States has paid off a bonded indebtedness much larger than its token indebtedness, although a redemption of the latter would have been out of the question. The process by which it was enabled to do this was the following: the customs duties, fixed not so much for revenue, as for protection purposes, were made payable in gold, and as the receipts were in excess of the needs of the government, it used the surplus to call in bonds, whereupon the gold became again available for the payment of duties, and this cycle repeated itself over and over. This was possible, because the general circulation was attended to by tokens. Thus on account of the constant inflow of gold into the Treasury a relatively small amount of gold was adequate to effect the gradual extinction of the bonded debt. The movement of the gold was rotary, with the Treasury as a point of passage in each rotation, while redemption of the tokens by standard money would mean a movement of gold in a straight line—away from the Treasury into the general circulation, a stream that

would continue until the whole face value of the tokens was replaced by gold.

We have already found (Chapter IV.) that the total quantity of money needed in a country results from the addition of the sums required by money functioning as a circulating medium and as a means of deferred payments minus the balanced payments. In this country the deferred payments are almost wholly effected by checks of which the clearance leaves only a balance of about 5% to be paid in actual money. The relative unimportance of these money payments of check balances is easily realized if calculated on the total clearings mentioned in the preceding chapter, when it will be found that a sum of thirty million dollars, set aside and daily turned over at the clearing houses, can do the entire work. This seems a small sum for the settlement of the checks, when compared with the 1800 millions of money in real circulation among the people (outside of assets of the Treasury and reserves of the banks). Furthermore, any fluctuations in the volume of deferred payments, which after all form only a part of the clearances, are apt to follow the fluctuations in the volume and speed of the circulation. Why circulation alone is considered in the following pages the above digression explains.

The fluctuations in the circulation are very considerable, but the latter can never fall below a certain minimum which is found by experience. If we consult the national clearings as the best indicator, we find that the figure of 1908, in the depression following the panic of 1907, fell 30% below that of 1906,

while the clearings of 1909 rose 33% above those of the preceding year.¹

Within this minimum circulation in years of depression and in such seasons of such years of depression when there is no special demand for currency, as for instance for crop-moving purposes, lies the limit of the usefulness of tokens. The law of their use rests on their representative relation to gold, and Marx formulates the law to the effect that "the issue of paper money must not exceed in amount the gold which would actually circulate if not replaced by symbols."² Of course Marx relates this law to a minimum circulation, but even at the extreme ebb tide a temporary depreciation of the tokens may be precipitated by the mere contingency rather than by the fact of the complete disappearance of gold. If the channels of circulation become so filled up with paper as to leave little or no room for gold, the very fear of a depreciation of the paper currency will bring it about.

Imagine a country possessing a certain stock of gold, the major part of which is hoarded as reserves or stores of value in the treasury, central and other banks, and in special funds. The active circulation devolves on tokens to the amount of 500 millions at par with a margin of free gold of 100 millions. Now there occurs an additional issue of paper money, doubling the sum of tokens in circulation. All these tokens pretend to represent gold. This, however, they are only capable of doing within the lim-

¹ *Statistical Abstract of the United States*, 1914, p. 631.

² *Capital* (American edition), vol. i., p. 143.

itations of the economic law already referred to. Presently it is found that the tokens circulate at a discount compared with gold.¹ What has happened?

Being legal tenders the tokens are used preferably to pay debts with, and the gold, being apparently in excess of the needs of circulation, retires therefrom. The fact of the matter is that the price of the commodities to be purchased within a given limited time (making allowance for any irregularity caused by the function of money as means of deferred payment as between one period and another, which irregularity, however, is not influential in countries where such payments are made by checks) is only 700 millions. This total commodity value is confronted by 1000 millions in tokens which are the measure of value. But they are no longer gold tokens; they are value tokens, a reflection of the value of the commodities. 1000 units in tokens now equal 700 in gold. The latter has itself become a commodity which may be sold and the proceeds used to settle obligations. Gold as a commodity differs from other commodities in that it is the only one in which the depreciation of the tokens appears. Besides it continues as the world's money commodity, and it is for this reason that the depreciation of a country's currency always

¹ In *Faust*, Second Part, Mephistopheles becomes the inventor of paper money. This spreads quickly, amidst general enthusiasm, but does not long remain at par:

“Mit Blitzeswink zerstreute sich's im Lauf.
Die Wechsler—Bänke stehen sperrig auf,
Man honorirt daselbst ein jedes Blatt
Durch Gold und Silber, *freilich mit Rabatt.*”

reveals itself first by an adverse movement of foreign exchange rates.

A firm, regularly importing a certain kind of product, and being expert in financial matters, will not sell at the market price, if it foresees that the cost of the next importation might be higher than the price realized in the sale, owing to a higher exchange rate. Therefore it will first cover exchange on future importations, which is the same as saying that it buys gold to be paid out in the country of exportation or in one of the foreign banking centres. Similar demand for exchange from a number of importers of commodities (or at times of securities) causes an advance of the rate which may rise to a point where it is cheaper to procure and ship gold. The competition for gold then results in the payment of a premium, which is identical with a depreciation of the paper currency. The depreciation reacts immediately on the prices of exportable goods and ultimately on those of all other things.

If the eventuality of even a moderate or possibly temporary depreciation is to be avoided, the maximum paper issue must remain below the minimum circulation by such a margin as to compel the entrance into circulation of some gold at all times. As long as gold fills up part of the needed circulation the paper will remain a symbol of gold whose value is reflected in it.

What is said here of a paper currency in excess of the minimum requirements of money holds good for a circulation of silver or a combination of both, except that while paper issued to excess may become utterly

worthless, silver coins, which are practically bills printed on metal, cannot depreciate below their melting value.

The historical instances of great depreciation, followed generally by repudiation of paper money, are not few in number. The large-scale experiment of the French Revolution with "assignats" ended with repudiation. England, until the passage of the Peel act in 1844, was again and again shaken by panics and the bankruptcy of the paper issues which had caused them. The colonial governments of the North American colonies again and again repudiated their notes. What became of the Continental bills issued by the federal government during the War of Independence is remembered by the expression of utter disparagement of the worth of a thing: "not worth a Continental." The Confederacy met rising prices by fresh issues of paper (which raised prices) until Richmond market prices in May, 1864, were: boots \$200; coats \$350; flour \$275 per barrel; beans \$120 per bushel; butter \$15 per pound.¹ Even our greenbacks at one time were down to 35 cents gold.

It is this quantitative aspect of money, put into relief by the history of depreciation and repudiation of paper money, that has led the political economists and similar "authorities" even to this day to transfer the quantity idea indiscriminately to all money, hence also to gold. They cannot afford to notice, much less to acknowledge, the Marxian theory of value, on account of its far-reaching consequences (to which we will devote a later chapter), and they

¹ *Enc. Brit.*, 9th ed., vol. 23, p. 776.

therefore look in any direction but the right one for an explanation of changes of money value. This quantity idea we shall treat more fully in the next division of this chapter.

In spite of the teachings of history, there have arisen in our own generation and country three distinct political movements having as their object the arbitrary augmentation of the circulating medium by tokens. The earlier ones (the Greenback and People's parties) demanded a redundant paper currency "based on the credit of the nation." The more recent one was engineered by the Democratic party under the leadership of Bryan, and demanded the free and unlimited coinage of silver at the ratio of 16 to 1. All these movements were essentially of the debt-laden middle class against the capitalist class, incidentally menacing the interests of the wage-working class. Their defeat at the polls on the square issue does not disprove the possibility of a measure of success for similar, though perhaps less sweeping, demands by even an inconsiderable minority, if it holds the balance of power or if its power is otherwise feared by the politicians, as illustrated by the silver purchase acts which we shall discuss farther on.

The Greenbackers, Populists, and Democrats may not have cared about the ultimate consequences of debt-extinguishing inflation, and declamations against the "gold bugs" and the "golden cross" appealed to their debt-laden middle class adherents. To the working class, however, a correct understanding of the nature of money is of the greatest importance,

in order to be safe against being led astray by financial will-o'-the-wisps.

b. Proof of general theory by deviating hypotheses.

The law governing the issue of paper currency has been stated in the preceding division of this chapter. Let us now proceed to an illustration of this law by the use of various deviating hypotheses.

Suppose the total price of commodities in circulation at a given moment to be ten million dollars. Divide them into two groups of the aggregate price of five millions each. These two groups are to be exchanged against each other. The gold needed to effect the exchange would be five million dollars, because, whereas each commodity calls for the duplication of its value in gold, in the act of exchange the money changes its place twice (or makes two turns), while each commodity (or group of commodities, as here assumed) changes its place only once. In other words, first the owners of one group of commodities sell the same for five million dollars, then, with the money received for the sold commodities, buy the other group of commodities, thus completing the exchange.

Now imagine gold abolished in the country as money, and paper slips substituted, to continue the foregoing example, say, to the number of a million, each of the denomination of five dollars. The value of the commodities in each group swells to seven and a half million dollars, still confronted by the unchanged sum of the paper slips. But the two groups

of commodities must absolutely be exchanged with each other. They cannot be exchanged with each other directly, but only through the medium of socially recognized money. Therefore the sum of the paper slips comes to represent the increased value of the group of commodities which is to be turned over and each slip acquires a buying power of seven and a half dollars, although its denomination is five dollars. Inversely, if the total value of the commodities in circulation be reduced to half, or five million dollars, the single slip will represent two and a half dollars, regardless of what is printed on it.

It is thus seen that the currency value of a fixed volume of paper money is determined by, and fluctuates with, the total price of the commodities in circulation at a given moment. The original issue of this paper money, which purported to serve as a substitute for the previous gold, has been found to be subject both to overvaluation and depreciation.

The hypothesis of an exclusive paper currency leads to the conclusion that such a currency affords no standard of value by which can be determined money obligations to be fulfilled in the future. It is true that the paper currency continues after a fashion to be the measure of value inasmuch as the prices of commodities are expressed in this currency, but this expression of prices is subsequent to the revelation of the value of the currency by the volume of commodities which are to be turned over and which are themselves a variable value.

It may be objected that gold also is subject to variations of value. These, however, are not nearly

as frequent or abrupt as the changes in the requirement of means of circulation caused by the cycles of industrial expansion and contraction. And if history has made a mistake in selecting gold as the world's money, by what other single product of labor could capitalist society advantageously replace it?

So far the supposition has been that the paper currency is a fixed quantity. But once the principle of money of value has been abandoned, what guaranty is there against undue augmentation of the paper? Whatever may have been the theories or forces which brought about additional issues of paper, once they are issued they will thereafter be required in the circulation, because of the adjustment of commodity prices to the increased circulation. Any subsequent reduction of its mass could only be effected either by gradual cancellation of the government's excess of revenue in paper currency over its expenditure or by the return of the paper to the government by the capitalists to whom it had been issued as loans. As regards the first mode, the concern of most governments is not so much to dispose of any surplus, as to discover new sources of taxation and of borrowing to meet the constantly increasing expenditures. The latter mode is the one alleged for the Glass-Owen law.

The fundamental difference between paper money and gold may be summarized as follows:

Paper money is only of value in circulation, where it performs the social function of facilitating the exchange of commodities. Once put into circulation, the paper must stay there, because the sum of such

money, however large or small it might be, is always equal to the total price of the commodities it confronts, and is therefore needed in circulation. Take away from paper the function of medium of circulation, and it becomes utterly worthless stuff.

Gold, on the other hand, is itself value, therefore available as measure of value. It encounters the commodity as an equivalent. If the need of the circulating medium is lessened, gold departs from the circulation to take the commodity form or to retire into bank vaults, or anywhere else, as a hoard or store of value, ever ready to act as the world's recognized universal equivalent. In doing so, its own value and that of the commodity remain entirely undisturbed; on the other hand, a deficiency of gold relative to the increased value of the commodities in circulation may be filled, within certain limits, by tokens symbolizing gold, as already stated.

Gold circulates because it has value; paper has value because it circulates.

The value of commodities given, the quantity of gold in circulation depends on its value; the value of the paper in circulation on its quantity.

The price of commodities changing, the quantity of gold in circulation changes; the changing quantity of paper effects a change in the price of commodities.

The circulation of commodities can absorb only a definite quantity of gold, but any amount of paper.

A state is guilty of debasing coin, if it issues pieces ever so little below the nominal weight; but it is considered to be acting with perfect propriety in issuing tokens containing no metal whatever.

The foregoing considerations of an exclusive paper currency as a national monetary system show its practical impossibility. But even were such a system practicable, the paper would only be valid within the country; for the settlement of foreign and related obligations gold would still be needed. These obligations consist of government and other bonds payable in gold and adverse balances of account of the capitalists of one country with those of another. Whether the bonds have been placed entirely or only partly abroad, they are based on gold not only for the foreign, but for the home bondholders. The government, to secure the gold needed for interest and redemption of the principal, levies in gold certain imposts, especially customs duties. The gold needed by the capitalists is procured by them as a commodity at the market price and is subject to corners, like the one on the memorable "Black Friday" in our history, September 24, 1869, on which day hundreds of firms and individuals were swept into bankruptcy.

Passing from the consideration of the hypothesis of an exclusive paper currency, fixed in amount, (an unlimited issue involves the more serious danger of great depreciation), to the other extreme, an hypothesis of the exclusive use of gold as money, (minor coin excepted), with limited coinage of gold, we may be met at the outset with the objection that this latter hypothesis is entirely unnecessary in view of the existing deficiency in the supply of gold, as described in a previous chapter. But there are many people who are under the impression that there exists of late years a progressive depreciation of gold,

owing to the increase in the supply now in existence, notwithstanding the uncontradicted fact that the need of gold remains undiminished, to say the least.

G. E. Roberts, Director of the Mint, looked upon in some quarters as one of the world's highest authorities on monetary phenomena, says in his report for 1913 on the one hand: "That there is a relationship between the supply of gold and the prices of commodities scarcely admits of controversy"; and on the other: ". . . what results would ensue from the discovery of a cheap process of artificially producing gold. Will anybody contend that such a discovery would have no effect upon monetary . . . conditions?" If Mr. Roberts were familiar with the Marxian theory of value he would have realized that the two statements above quoted are not arguments along the same line, but bear on two different conditions, mutually exclusive of each other.

The first statement connects the supply of gold with commodity prices. The latter are indicated by a given quantity of gold. If the value of gold is to be stated, it can only be done in terms of commodities. But value expresses the quantity of labor crystallized in a thing, and changes in value express changes in the quantity of labor necessary to reproduce that thing. Supply is not an element in the determination of value, but merely affects the temporary market price. Supply (and demand) explains the fluctuations of the market price which take place without there being any change in value. If supply and demand balance each other, they, like any opposing

forces in nature in a state of balance, cease to exist as phenomena. Consequently the operation of supply and demand indicates nothing but a disturbance of the equilibrium. It cannot indicate value itself.

The second statement supposes a reduction in the value of gold in consequence of greater productivity of labor or, to use an expression better understood by capitalists, of lower cost of production.

The first quotation refers to a fluctuation in the market price of gold, a temporary condition to be corrected by a change in the relation of supply and demand. The second quotation refers to a permanent change of value.

Which one of the two contradictory statements of the Director of the Mint may be the true one is of interest to us, as we are concerned with a wide-spread belief that the increase in the stock of gold is the reason for its depreciation.

The empirical appearances do not favor the hypothesis of a temporary depression of the market value of gold owing to its abundance. The concern about the national bank reserves and the competition in international finance for the gold, reminds us rather of the too narrow blanket which is pulled hither and thither by several persons trying to keep warm.

Also we should have expected a considerable diminution in the gold output as a result of the depression of its market value and the growing unprofitableness of the mining industry. There has taken place not only no recession in its production, but the same has actually advanced from about 300 million dollars

about the turn of the century to 466 millions in 1912,¹ although during the last five years the annual increase has averaged only 1%. Evidently the gold mining industry as a whole is yielding a fair profit on the capital employed. Of the Witwatersrand mines, collectively the largest producers, it is known that their profits in 1912 and 1913 equaled one third of their output. Other African and Russian mines were not quite so remunerative, but one American company, the Goldfield Consolidated, paid out over 70% of its output in dividends in 1911.² It is even possible that, owing to improved methods of production, or the easier accessibility to or the better yield of the ores, the profits from gold production are at present higher than when gold was of higher value.

It is clear, then, that the recent depreciation of gold is not a matter of increased supply, resulting in a market price lower than the value, but of a lowering of the value itself. The industry continues to be "socially necessary labor" as much as ever, and its owners are not under the necessity of operating at less than the general rate of profit.

The quantity idea which is uppermost in Mr. Roberts's mind, and which he fails to separate from the value idea, is derived from the paper money experiences of many countries, but it has no relation to gold which is itself value. The argument of all those who think like him amounts to this: we have produced so much gold that commodities have so much

¹ Report of Director of the Mint, 1913, p. 314.

² *Moody's Manual of Railroads and Corporation Securities*, 1912, p. 3998.

risen in price that we have not gold enough to pay for them.

It follows then that if there has actually taken place of late years a depreciation of gold, it is not a mere temporary fluctuation of the market due to increased supply, but a permanent change of value due to reduced cost of production.

Under unlimited coinage, gold, whatever changes in its value might take place in one or the other direction, continues as the measure of value of the commodities which are all affected alike by the change.

It is true, however, that the gold basis, which is inseparable from the competitive capitalist system, is bound to work injustice to creditors or debtors by any change in the value of the metal.

The above statement that a change in the value of gold affects all commodities alike, calls for further elucidation in view of the fact that in the rise of prices during recent years, some commodities participated in a high degree, some moderately, while still others remained stationary. These discrepancies are due to changes in their own values or prices relative to the depreciation of gold. For instance, to quote price advances of ordinary necessities of life in index numbers¹:

	1900	1913	Advance
Farm products	109.5	165.8	49.6
Clothing	106.8	123.7	15.8
Manufactured articles	110.2	132	19.8

¹ U. S. Bureau of Labor Statistics, Bulletin No. 149, Wholesale Prices, 1890 to 1913, pp. 11, 13, and 14.

Against all the labored theories regarding the causes of the high cost of living we advance as the principal explanation the following points (realizing that there are contributory ones): (1) that the comparatively slight rise in the prices of clothing and other manufactured articles corresponds to the somewhat slower technical progress in the average manufacturing industry than has taken place in gold mining with its use of high explosives, compressed air, electric power transmission, its improvements in machinery, reduction processes, and transportation—all this combined with unparalleled auriferous formations, as in the Rand; (2) that agriculture lags behind in technical progress, compared with gold mining or even with the average of manufacturing industries; that while its products, with the exception of meat, have actually somewhat declined in value by reason of increasing yield per acre, due to improved methods of farming, their market prices advanced greatly from the increased demand by the rapidly growing urban centers to which there is no counterpart in a corresponding increase of the rural population; (3) that the rising prices of the necessaries of life are therefore due mainly to the reduced value of gold, but also to some extent to an advance of their market prices beyond their values, the result of maladjustment of the labor force, which is drawn away from the production of necessaries toward the production of luxuries in which the enormous and growing revenues of the capitalists are spent.

It is sometimes asserted that the high freights imposed by the Railroad Trust are largely responsi-

ble for the high cost of foodstuffs; but in Chapter VIII. the authority of the Secretary of Agriculture is quoted to show how small a percentage of their cost is represented by freight.

It is sometimes thought convenient to make a case out of the advance in the wages of agricultural laborers. This advance has been considerable and is linked with the general rise of wages which has taken place. But the history of strikes teaches that they are more frequently defensive than aggressive, that they are the consequence rather than the cause of a higher cost of living. In spite of the rise of agricultural wages, these represent a declining quantity in the following proportion, when compared with the value of the crops:

1899	7.6%
1909	7.4%

The causes indicated above as the principal ones which have brought about the high prices of the necessaries of life are in themselves sufficient to preclude the hope that the phenomenon may be only a transient one. The ascending movement of prices which began in 1897 is fatally connected with the maturing of capitalism, and a struggle against the high cost of living can be nothing else than a struggle against capitalism.

If the depreciation of various "values," including tokens and bank deposits, and of the loan capital,¹

¹ One of our popular magazines runs a department for advising its investing readers. Each issue begins with a "Fable of Finance" as a text for the dispensation of some political economy in which the writer is not consciously fabulizing, and concludes with invest-

as well as the rising cost of living, are hardships for the majority of the people,¹ then the believers in the supply doctrine will no doubt welcome a suggestion how to overcome these evils by neutralizing the effect of gold depreciation on the value of money. The realization of the hypothesis we are now considering of an exclusive gold currency, with limited coinage, would during the few years needed for the demand to catch up with the supply of gold, effect a divorce between gold as money and gold as metal, in the same manner as some religions have effected a similar divorce between the spiritual man and the old Adam. The example of our silver dollar, the five franc piece, or the rupee, in their emancipation from the silver price, proves that their overvaluation is maintained not by any promise of redemption in gold, but by their being needed in circulation. Just so gold money, in our hypothesis, would cease to represent gold as given value and instead its money value would be determined by the needs of circulation. Our friends

ment advice. To him nothing but the increased gold supply has "decreased the value of the world's savings by one third in 15 years" and advanced the rate of interest. So the rate of interest advances because of the greater supply of money! It is to be hoped in the interest of intending investors that the editor is more lucky in his investment advice than in his guesses at economics.

¹ David A. Wells says that prices and rents rose 90%, but wages only 60% between 1861 and 1866 (in spite of war and slight female and child labor competition).

In the period from 1907 to 1912, retail prices of food, as measured by index numbers, increased from 125.9 to 154.2 or 22.5% while weekly wages, similarly measured, increased from 123 to 131.6 or only 7%, resulting in a decline of the purchasing power of weekly wages of 12.7% (I. M. Rubinow, "The Recent Trend of Real Wages," *American Economic Review*, Dec., 1914, p. 812).

may confidently expect to see the value of money and "savings" greatly enhanced and commodity prices reduced. The suggestion seems perfectly simple.

Probatum est!

But stop! What really would be the measure of value while such an exclusive gold system, with limited coinage, lasted? There would be none,—gold no more than the previously discussed paper tokens, except that gold coin can only be overvalued, never depreciated below the bullion value.

It follows then that nothing can perform the function of money but a material circulating on the basis of its own value, supplemented within certain limits by tokens symbolizing that valuable material, which can be no other than gold.

c. Silver tokens.

From the beginning of the capitalist era, which may be allowed to coincide with the "modern period" of the school histories, the ratio of value, weight for weight, of silver to gold, up to 1873, fluctuated around 14-16 to 1, the highest ratio during that period being 14.14 in 1760 and the lowest 16.25 in 1813.¹ Then began a gradual decline of the relative value of silver until it reached a ratio of 26½ to 1 or 38¾ d. per ounce in 1893.¹ At this point the British Government closed the India mint to free coinage, apparently without the world having an inkling of the intended coup, for the market price of silver dropped so to say overnight to 30 d. The government succeeded after five years of suspension of rupee coinage in raising

¹ Report of Director of the Mint, 1914, p. 213.

the exchange to the intended rate of 16 d. per rupee, at a time (September, 1897) when its metal value was little more than half of its artificial value of 43 d. per ounce, silver having reached then the low quotation of $23\frac{3}{4}$ d. It has already been noted in Chapter III. that the per capita circulation of India is a mere pittance: any influence of the present rupee circulation on world finance may therefore be dismissed from the mind as non-existent.

The lowest price reached by silver was in 1902 and 1903, when it touched $21\frac{1}{8}$ d.,¹ being a ratio of about 47 to 1. During the recent advance of commodity prices in general, silver about kept step with copper and is fluctuating (July, 1914) around $24\frac{1}{2}$ d. or a ratio of 42 ounces silver to 1 ounce gold worth $\$20\frac{2}{3}$. The fall in the price of silver had not the effect of curtailing its production, which through all its vicissitudes, from the time of the closing of the India mint until 1906, remained practically stationary at about 165 million ounces yearly, and from that year until 1911 even gradually increased to the materially higher quantity of 226 million ounces in the latter year,² the larger part as a by-product in mining other metals. No silver mines are working in the United States.

Of this production nearly 128 million ounces were exported to China and to India where this silver is used for coinage or made into ornaments, in either case ceasing to be a factor in the world's economy.³

¹ Report of the Director of the Mint, 1914, p. 212.

² *Ibidem*, p. 267.

³ According to the report of the Bureau of the Mint the exports

The balance remained in countries more advanced in capitalist economy.¹

Thus silver, so far as it affects the economics of the capitalist countries, has fallen to the low estate of a modest commodity of very moderate total value produced annually. Now what about the importance of the already existing silver stocks?

Every country has a circulation of silver as required in the small transactions of daily life for which gold or paper, for obvious reasons, are ill adapted. In the last week of 1893, the year of the abolition of free coinage in India, the Bank of France held silver of the nominal value of 1261 million

of silver from London and the United States to India, Hongkong, and China amounted in 1912 to 127,891,032 ounces. "The silver coinage of the India mints, which included British dollars for Hongkong banks, required 46,971,959 ounces, and the coinage of China, as reported to the bureau, required 52,077,305 fine ounces, or together 99,049,264 ounces. The remainder, 28,841,768, plus existing stocks at the beginning of the year, was available for industrial consumption."—Report of the Director of the Mint, 1913, p. 258.

¹ The quantity used by non-Asiatic countries for coinage and in the arts respectively is not given in the report, but can be calculated as follows: The total amount used for coinage throughout the world is estimated by the Director of the Mint (*ibidem*, p. 259) at 142 million ounces, deducting from this 99 million ounces used for coinage by Asia (see preceding footnote), leaves a balance for coinage for countries outside of Asia of 43 million ounces. The total industrial consumption is given at 99 million ounces (*id.*, p. 259); deducting from this 29 million ounces used by Asia for the same purposes (preceding footnote), leaves a balance for the rest of the world of 70 million.

It will be observed that the total world consumption of silver for all purposes thus amounts to about 241 million ounces, or about 15 million ounces in excess of the world production. The difference is made up partly of stocks carried from the previous year and partly of melted old metal.

francs.¹ Since then (up to July 30, 1914) the Bank has managed to get rid of 610 millions² in the colonies and in the Congo.³ The balance may be redeemed by the other members of the Latin Union.

It is only in the United States that a large stock of silver exists which nobody seems concerned to reduce. It circulates in the form of silver certificates, standard silver dollars, and subsidiary coin which together amounted to 748 million dollars December 31, 1913.⁴

We happen, alone among nations, to be loaded with a heavy stock of a commodity which was being forsaken as money material by one nation after the other, prior to its great degradation, and the price of which had been tending continually downward. Briefly, this is the story of the origin of this stock:

Momentary political exigencies of the Republican politicians (notwithstanding the natural mission of their party as the capitalist, therefore gold, party) resulted in the Bland-Allison compromise bill, enacted February 28, 1878, over President Hayes's veto. This act directed the monthly purchase at market prices of not less than two million dollars' worth of silver to be coined into dollars, which were

¹ Report of National Monetary Commission on the Bank of France, 1910, p. 16.

² *New York Times Annalist*, December 21, 1914, p. 486.

³ Previous to the exposure of the Congo horrors, the natives were paid in rice and salt, that is they were given something to eat. The great majority of the population had died before the murders by King Leopold II. of Belgium and his confederates were stopped.

⁴ Annual Report of the Director of the Mint, 1914, p. 205.

to be legal tender.¹ Under the operation of the act until 1890 the purchases aggregated 291 million ounces at an average price of about \$1.06 and resulted in the coining of 378 million dollars.²

During this period the price of silver continued to fall, and in the latter year the Republican politicians became afraid of losing the States controlled by the silver mine owners, unless they did something for the latter. On July 14 the Sherman act was passed, ordering the monthly purchase of $4\frac{1}{2}$ million ounces and the issue of silver certificates as legal tender, against the stock of metal.³ Under this act there were bought 169 million ounces at an average price of $92\frac{1}{2}$ cents.

Owing to the return of securities by foreign holders, as already mentioned in the preceding chapter, and to the government's monthly investment in silver, the gold reserve against the greenbacks, already referred to, threatened to disappear entirely in 1893, the year of a severe panic in the United States and also of the closing of the India mint, and the Sherman act was repealed November 1, 1893.

In 1898 the stock was ordered coined, including the seigniorage amounting to about 62 million dollars. This seigniorage consisted of the difference between the prices paid for the silver and the number

¹ Laws Concerning Money, Banking, and Loans, Sen. Doc. No. 580, 61st Cong., 2d Session, 1910. Law of February 28, 1878, sec. 1, p. 579.

² Annual Report of the Director of the Mint, 1914, p. 89.

³ Laws concerning Money, Banking, and Loans, Sen. Doc. No. 580, 61st Cong., 2d Session, 1910. Act of July 14, 1890, pp. 589, 590.

of overvalued dollars which could be coined from it. These dollars of $412\frac{1}{2}$ grains, 900 fine, equivalent to $371\frac{1}{4}$ grains, 1000 fine, are worth at this writing (July, 1914), on the basis of the New York quotation of $52\frac{1}{2}$ cents per fine ounce, 40 cents each.

The people can now make an estimate of how much their peculiar institution, the politicians, has cost them in relation to silver. They bought altogether over 500 million ounces at the average price of \$1.01 $\frac{1}{2}$, now down to $52\frac{1}{2}$ cents. But there is no doubt that any attempt by the government to sell this stock of merchandise, in competition with the producers of silver, would result in a further decline of the market price.

The present nominal commercial value of our standard dollars, 578 million pieces,¹ is about 231 million dollars. As they constitute by far the greatest and the only stationary stock of silver in the world, it is at once evident that the white metal has fallen to unimportance as a constituent of the world's monetary system. An understanding of the present day silver situation can only find an application in connection with the already mooted question of the gold supply and the by no means remote contingency of a gold famine.

The propositions, advanced by various people, which might be considered before long by the governments, embrace the following:

Would the establishment of bi-metallism by agreement of all nations be practicable and offer a solution, considering

¹ Report of Director of the Mint, 1914, p. 89.

(a) The difficulty of maintaining a permanent ratio in spite of all contingencies;

(b) The difficulty of preventing the accumulation of one metal only as reserves and hoards which may result from a tendency to a relatively more abundant production of the other metal, and the consequent danger of the breaking up of the international agreement;

(c) The unimportance of the now existing stock of silver as a prompt addition to the supply of money and as a basis for a ratio;

(d) That a large demand for coinage would raise the market price of silver, stimulating production to an unknown extent, as the price continues to rise, and rendering an arbitrary ratio a matter of great difficulty;

(e) The possibility of an international mint for the limited coinage of silver, with branches in each country, and the abolition of national monetary systems;

(f) The possibility of an international bank;

(g) The time at the disposal of the governments, considering the urgency of the gold situation, for carrying into effect one or the other of these more or less chimerical measures of salvation.

CHAPTER VI

MONEY OF ACCOUNT

a. Introductory.

WITHIN the memory of many a man, that is looking back fifty years, there has arisen in this country a system of money of account which has largely supplanted or added itself to the use of gold and token money as means of purchase and of deferred payment. This money of account consists of the banks' own resources and of deposits in the banks to the credit of other capitalists, who make transfers to one another on the books of the banks by means of written orders called checks.

The total of these individual deposits (so called technically) amounted on June 4, 1913, to.....\$17,936,000,000¹
to which we add as similar in origin and economic function the surplus and undivided profits of the banks..... 2,287,000,000²
and as equally logical that part of the capitalization of the banks which had not been paid in, but consists of profit, as for instance in the case of the First Na-

¹ Report of Comptroller of the Currency, 1913, p. 45.

² *Ibidem*, p. 46.

tional Bank of New York, whose original capital of \$500,000 was increased in 1901 to \$10,000,000 by the distribution of a stock dividend of 1900%; but as no record of capitalization from profits is available, we will merely add the difference between the alleged total capital of the banks.....\$2,162,000,000¹ and the amount of their

reserves..... 1,561,000,000² 601,000,000

Total money of account in 1913..... \$20,824,000,000

Against individual deposits in 1863³..... 394,000,000

In these same years the total current money in the country is reported as follows⁴: in 1913.....

in 1863..... \$3,720,000,000

in 1863..... 675,000,000

It is seen that while current money has increased at the rate of 1 to 5, money of account has increased as 1 to 53.

In what manner has this money of account originated and what is its true inwardness?

Anybody unfamiliar with the history of banking may be pardoned for supposing, in comparing the figures of the deposits in 1863 and 1913, that the beginnings of the banks of deposit coincided with the rise of capitalism about the middle of last century. Such, however, is not the case. Banks, conducted

¹ Report of Comptroller of the Currency, 1913, p. 46.

² *Id.*, p. 43.

³ There were no accumulated bank profits.

⁴ Report of Secretary of the Treasury, 1913, Table J.

with the technique of the present day, existed already in precapitalist times, even in antiquity.

The banks of ancient Greece and Rome were primarily dealers in bullion and foreign coins. This business was a natural outgrowth of international trade and a technical necessity for the merchants traveling to strange lands for the purchase of goods, whither they carried gold and silver in bullion and in their home coins. The banks not only issued bills of exchange on their confrères in other cities and countries, but they also received deposits either on time against certificates of deposit, or subject to checks, paying interest on deposits or not according to circumstances, and lending the money to others at generally high rates of interest.¹ The depositors' money as well as their own was used by these ancient banks as an instrument of exploitation of the masses, the agricultural workers, similar to the exploitation in recent centuries of the Indian ryot by the money lenders. Indeed, the relations of creditors and debtors constituted the issue in the class struggles of Greece and Rome, and as debts were secured not only by mortgage on the land, but by bond on the body of the debtor, much of the chattel slavery of antiquity owed its existence to this source. The power of the state was vested in the plutocracy. In Athens, at the time of the enactment of a new bankruptcy law by Solon, 594 B.C., abolishing security

¹"This traffic with the money of others constituted the principal part of the business of the money changers, although they sometimes employed their own money also in the same way." A. Boeckh, *Public Economy of the Athenians*, p. 176.

by the body, the yeomanry had largely sunk into debt. Cæsar's adoption of Solon's law, 500 years later, came too late to save Rome.

Upon the reawakening of civilization toward the end of the Middle Ages, banks reappear in the cities of Northern Italy, especially in Venice and in Florence, the latter then a great silk and woolen weaving center. Among the scores of bankers in Florence some attained to immense wealth, as the Medici, the Peruzzi, and the Bardi, the last Bardo being the object of George Eliot's sympathetic study in *Romola*. A general statement of the assets and liabilities of the Bardi and the Peruzzi at the time of their failures shows that their loans to kings far exceeded the amounts due their depositors.

From the foregoing brief recital of the principal facts of earlier banking history it appears that, notwithstanding the similarity of methods with those of modern banking, it differed from the latter in that its main object was not to aid industry and commerce. Modern banking represents money capital originally derived from the industrial (productive and mercantile) capitalists which has become specialized as a distinctive form of capital, having its own particular function in the capitalist system of society, equally with the two other divisions of the social capital, the productive and the mercantile.

The rudiments of banking by the capitalist class for its own purposes are to be found in the clearing association of the merchants of Venice and in the business of the private "Kassiers" of the Dutch commercial cities. In both cases the aim

was of purely technical advantages, the initial act having been the deposit of a certain sum of money by the member or client for safe-keeping, and available for transfer to the accounts of other members or clients on written orders. These agencies were the social bookkeepers and cashiers within their narrow circumscriptions. With the extension of this social function over a wider field and the addition of trading in credits for their own account, modern banking was complete.

So long as the banks (the "Kassiers'" original and principal business was dealing in foreign coin and bullion) or bank-like institutions acted merely in a clerical capacity, the category of money of account could not arise; they were not supposed to make any transfers on their books without having the actual cash in their strong boxes. It was only when increasing wealth made credits possible and safe, both as regards bankers and borrowers, and the use of the idle deposits as loan capital by and for the account and risk of the bankers became the practice, that the conditions were given for the creation of the new kind of money and for the concentration and specialization of money capital for a separate and distinct social function.

In Marx's time this new kind of money had reached a considerable development only in Great Britain, where payment by check was common among the more advanced capitalists. Also he discerned the danger of panics lurking behind the "clearing" system already in vogue. To-day in Great Britain and the United States the use of bank money, or

money of account, in place of current money, is well-nigh universal among all people, except the wage workers, and in Germany it has been gaining ground rapidly of late years.

The great extension of the system of banks for checking accounts had its beginning about the middle of last century. At that time the building of the railroads and the launching of many new industries made it necessary to collect all the scattered funds which, thus concentrated by the banks, were put at the disposal of the industrial capitalists. But that sum, as we have already seen above by the example of the United States, was not very large and in fact may be considered formally as having been cancelled long ago by withdrawals of the deposits in cash, or otherwise by bank failures.

The real origin of the immense total of the world's bank money is therefore still to be investigated. In order to facilitate the understanding of a somewhat intricate subject let me state at once that the investigation will show the origin to be essentially twofold, producing two categories of such money. They are designated respectively:

Money of Account originated in profit, and

Money of Account originated in bank credit.

For the sake of completeness we mention a third category which originates in savings from wages. A subdivision of this chapter is devoted to this category merely to show that it is relatively so unimportant as to warrant completely disregarding it in considering the practical inwardness of money of account.

In practice the two essential categories of money of account intermingle, become indistinguishable from certain angles and would be inextricably mixed, if it were not theoretically possible to eliminate and cancel the last-named category, leaving only the first-named to continue in existence. Practically, however, such a contingency is entirely out of the question, either now or during whatever may be the span of life of capitalism. For at the stage of industrial and financial development which we have reached, the industrial capitalists cannot dispense with the bank-made credit money.

In spite of the constant intermingling of the two categories of money of account it is, however, necessary in an analysis of the whole subject to keep each category distinctly separate as far as possible—that is, until we finally observe their manner of intermingling and the ever-recurring cancellation of bank-created money of account by the profit-originated kind.

b. Profit-originated Money of Account.

Under this heading we will inquire into the origin and growth of profit-originated money of account in its pure form, that is to say, free from its complication by the bank-made credit money. The existence of the latter category is therefore entirely disregarded at present.

It is obvious from the start that bank capital and deposits represent an immense amount of money which once did not exist and now does. Before the

rise of modern banking there was nothing to pay with but actual cash. Clearly the money so represented by banking capital and deposits is a gain. Therefore the first questions are: whose gain? and how gained?

The manner in which the present great amount of money of account, non-existent at the inception of modern banking, has been built up can be seen by observing what is going on continually in our own time, just as other sciences interpret by observation of present processes the great changes wrought in the past, when their records are not self-explanatory.

Observe what becomes of the deposit made by the retail merchant of the currency taken in by him during the day. Being a thrifty man, who looks out for all there is in the cash discount, he at once mails a check against this deposit to his wholesale purveyor, let us assume for the cost of precisely the goods sold that day by the said retail merchant. The amount of the check will be less than the deposit, because the retailer retains his share of the surplus value produced by the workers, his share being fixed by certain economic laws laid bare by Marx, to which we shall revert later. The wholesale merchant, in his turn, against the money so obtained, gives a check to the productive capitalist which likewise leaves behind on the wholesaler's bank account a sediment, representing his share of the surplus value. The productive capitalist now draws against the deposit of the merchant's check as much currency as may be needed in the process of reproduction for the payment of the wages to the workers, whereupon the latter are ready to start at the retail counter the

second rotation of the currency. The same thing occurs daily not only with the revenue of the workers, but partly also with that portion of the revenue of the capitalists which the latter use for their individual consumption.

This rotation of the currency in which the banks are a channel of passage is repeated every day and as often increases the sediment on each capitalist's account until the accumulation of these sediments, which are plainly nothing but profits, suffices for the settlement between the capitalists of their mutual obligations by simple transfers on the books of the banks. In proportion as the settlements by mere transfers on written orders or checks increase, the relative importance of current money as a constituent of the daily deposits decreases. The latter consist now in the United States, as they have done since many years, of about 94% checks and about 6% current money. The deposits of money of one day are generally drawn from the banks on the next day, in the interim counting as bank reserves, in addition to a certain earlier accumulation of money deposited, but not again withdrawn, because not needed in the active circulation. Gold is very largely withheld by the banks from circulation. Currency continues in the main to be needed only for the country's weekly or fortnightly payroll and for part of the individual consumption of the capitalists, the far greater part being paid by them in checks.

If the profits of the individual capitalists constantly accumulated as current money in the banks

and were kept intact by the latter, except as withdrawn by the selfsame capitalists, it is evident that after a time the greater part of a country's stock of money would be virtually locked up as hoards in bank vaults and that an extreme scarcity of the medium of circulation would ensue. But then the banks would not be banks, but mere custodians and disbursers of the money of their clients. The revenue of the banks, however, is not derived from any payment for the services of storage and handling of money, but from interest on loans made with their depositors' money. This constitutes essentially the business of a bank. But the current money deposited in the banks on one day is used freely by them the next day to pay any applying depositor, and thus the money reënters regularly the general circulation (except for a certain reserve fund). In fact the loans made by banks no longer consist of current money but of titles to money. They transfer to borrowers the titles to money vested in the depositors, without, however, any cancellation of the depositors' titles, nor with their legal consent. In other words the banks transmute the profit accumulations of the industrial capitalists, which are for these in money form, into debts owing them by the banks. On the other hand the banks, in their name and for their own account and risk, become creditors of their borrowers. The banks' debts, known as bank deposits, function as money in a somewhat similar manner to the government's non-interest-paying debt, its notes, the difference being that the former are private, the latter social debts.

Now how can the banks respond to the normally large demands for money by their depositors who never formally consented to the diversion of their funds, which are in fact supposed to be ever at their disposal?

It operates in this manner: depositor A draws a check on bank Y for \$100, depositor B on bank Z for \$90. A's check in the usual course is deposited by the payee in Z, B's check by the other payee in Y. The two banks exchange the checks they hold against each other, Y paying to Z the difference of \$10. Collectively the two banks have liquidated two debts aggregating \$190 without having paid out a cent. This is not necromancy; the performance was made possible because two new depositors or creditors for the identical amounts took the places of the former ones. But what if depositors were to call extensively or universally for actual repayment to themselves, that is, without furnishing substitute creditors? That would be quite a different case about which we shall have more to say later.

Money of account, then, or the whole banking capital and the deposits, is that part of the capitalists' revenue which has for the time being not been realized in money, but only in a title primarily to money and secondarily to value in general.

Let us clearly understand this point.

The total annual product of labor, beyond the reproduction of old value, is a certain exact quantity of which one portion serves in the form of wages to reconstitute and perpetuate labor power, while the other portion constitutes the revenue of the capi-

talists and landowners. No other value has been created.

This product of labor appears as a mass of commodities, including the money commodity—gold. Money of account is not a product of labor, therefore not of intrinsic value itself, any more than token money. Both are mere titles to value. They differ in this, that while the token, issued by the government, is a social debt to the individual holder and is therefore a legal tender in discharge of private obligations, money of account has the form of a debt owing by private institutions and is therefore not a legal tender. Not being value, the sum of money of account added during the year cannot be something produced in addition to or aside from the year's product value. It is a record kept by the banks, as social bookkeepers, of part of the value newly created, namely of that part of the surplus value, appropriated by the capitalist class, which exists at any time in money form. It is also a record of the constantly changing share of each capitalist in the social accumulation of profit in money form.

The sum added annually to the previously existing money of account represents profits. But while the former is an intangible creation of the mind, mere bookkeeping, profit itself is something concrete and very definite. So are the annual profit additions to the capital account on the ledger of an industrial concern, which profit additions appear there in terms of dollars, purely creations of the mind, but the profits, as seen in additional buildings, machinery, raw materials, etc., are none the less real for not

consisting of actual dollars. Profit is that part of the new product value for which the workers received no equivalent from the capitalists. The surplus product, for which the latter did not pay, is integrally united with, and indistinguishable from, the part of the product for which they did or will pay. But it is only the element of unpaid surplus product, metamorphosed by its sale into the money form of its value, which can give rise to the formation of additional money of account. That part of the proceeds of the sale which represents merely preserved value and wages, in other words the money capital advanced for production, is merely restored, and the money returns to its point of departure. In having made the sale the capitalists have effected the first phase in the necessary exchange of commodities, the transformation of the commodity into money. They now hold the money form of the commodity value which must perforce complete the second phase of the exchange of commodities, viz., the transformation of money into commodity by purchase for the individual consumption of the capitalists or of means of production. The second phase is forced, because continuous selling without buying—that is, the continuous movement of commodities in one direction with a continuous movement of money in the opposite direction—is an absurdity. Commodities must be exchanged with each other, and this is only possible through selling and buying with money. All money of account is destined to complete this exchange which at any given moment it has left only half performed.

True, some industrial concerns abstain from actually transforming all their money into commodities. They withdraw part of it from its circulation as industrial capital and divert it to the sphere of land-ownership and of fictitious capital, the latter consisting mainly of shares, bonds, and real-estate mortgages. Land prices and fictitious capital are subjects the more lengthy discussion of which we have to defer to another chapter. In connection with our immediate subject it is only necessary to state that a conversion of industrial capital into land-ownership or fictitious capital amounts to a transfer of money, therefore of title to commodities, to the sellers of land or fictitious capital who now become the buyers of those commodities in the place of the industrial capitalists. The purchase of commodities must always be the outcome. Useful labor and the consumption of the products is the economic alpha and omega of any form of society, no matter into what intricate forms those simple objects may be clothed. If the sellers of land and securities, or others in their places, refuse to consume, production will be reduced correspondingly, in which case the owners of land and securities would soon enough miss their incomes.

If it is clear, then, on the one hand, that profit is a concrete thing, the surplus product of the workers which is appropriated by the capitalists, and if, on the other hand, money of account is the money form of part of that profit and yet not value, what has become of the concrete substance, the product of labor? Where is the commodity or its equivalent in gold?

The productive capitalists, who were the owners of the surplus product, have parted with it by sale and accepted from the buyers their checks in payment. The latter may have consumed the great bulk of the goods, while the sellers have become the possessors of an accumulation of checks. These are transferred from one to the other as money, but there is no recourse in case of non-payment against the original creators of this money of account, those who consumed the goods. Whether these checks will prove to be good in the end or whether they will eventually be rubber-stamped "No Funds" is another question which we shall have to consider later.

In view of the fact that the goods, by the sale of which the money of account has been built up, have partly (at the point where we have now arrived to a still unknown extent) been consumed, it follows that the steady increase in the volume of money of account is by no means reflected in a corresponding increase in the value of the stock of commodities which are to satisfy the money titles. The extreme example of the consequences of a great war will serve best to make the point clear.

A war may cost daily a number of millions as the regular money expense of the armies concerned. It is spoken of as a loss of money. In reality there is no destruction of money. The governments pay it over to the purveyors of supplies who in their turn circulate it further in the usual course. What has taken place is the consumption of commodities without any reproduction whatever, so far as the combatants

are concerned, and with but curtailed reproduction by the civilians of those articles which are ordinarily consumed by the people at large, partly to give way to the increased production of war materials. The effect is a rise of prices, first of the class of commodities which had been mainly consumed—the necessities of life. This coincides with a temporary decline of the prices of commodities not absolutely necessary, or which may be classed as luxuries. But eventually, in consequence of the price advance of the necessities, all other commodities follow suit. The latter effect is of course conditioned on the workers being able to maintain their standard of life. Evidently the accumulated imaginary and real money as the value form of *former* commodities may lack the necessary counterpart of *present* commodities for its realization.

Money of account, therefore, being a title to and representing current money, is the money form of value of sold commodities and held for the time being for completion of the exchange against other commodities (which may or may not exist at the time). After each act of circulation it continues to exist as before. It is indestructible, except either by the theoretically normal process of conversion into current money, which, as we shall presently find, is possible only to an exceedingly small extent; or by the theoretically abnormal process of the failure of banks of deposit. Therefore, in the absence of private hoarding and bank failures the sum of money of account always goes on increasing; it never decreases.

But just what is the mechanism of increase? If C receives a check from D which realizes for C the money form of value, that money is not newly created money. It is a transfer of already existing money of account which previously had been recorded in D's name. Evidently no amount of check payments can account for the continual increase in deposits, no matter how much new value may constantly be produced. If we hold fast in our mind for a moment, the same as if it could be a reality, the absurdity of an exclusive money of account, no other money whatever existing, we realize at once that the constantly growing commodity value would have to be circulated by transfers of the existing money of account, the sum of which would be stationary—fixed once and for all. An inventory of the year's accumulation of the capitalist class would show that the same consists entirely of commodities; none of it would appear as additional money.

But, really, we already have the answer to our problem. We have observed how our friend, the retail merchant, deposited currency which included his profit. If we follow merely that part of it which represents profit (the part which represents capital advanced for production necessarily returns to its source for reproduction) we find that it presently passes out of the bank as concrete money to continue its perpetual journey. But the departed concrete money has nevertheless left behind its shadow on the credit side of the retail merchant's deposit account. The money has apparently doubled: the reality existing in general circulation as current money, the

shadow existing in the bank as money of account. This remarkable independence of the shadow from the substance, and the daily repetition of the wonder, opens the prospect of endless increase of such shadows produced by the identical money substance, until the mass of the latter becomes quite insignificant compared to the extent of its own shadows. The social belief in this wonder rests on the faith that all these shadows can easily be resubstantiated.

In the world of reality an inventory of the year's accumulation of the capitalist class shows that the same consists not only of commodities, but also of an addition of a quantity of gold or current money, supposed to exist, and to which money of account is the title.

Money of account is a record of profits which at any given moment are realized in money form, but not in money. It is only a nominal realization. The actual realization of profits consists of commodities (the existing stock of means of production and means of consumption) and gold, and it includes also the individual consumption of the capitalists for which the identical money or money of account has served as means of purchase over and over again throughout the years. It would be incorrect to include in the realization of profits the market price of the land and securities. There can be no concrete existence of profit, but in the product of labor.

It is clear, then, that the current money deposited in the banks is derived partly from the consumption of the workers, which part is withdrawn again from the banks in current money by the depositors in order

to use it over again for the payment of wages. Another part is derived from those items in the individual consumption of the depositors for which they paid in current money, not by checks, which part they will again withdraw from the banks in current money for the renewal of their individual consumption. All that part of the deposits of current money which is again withdrawn from the banks by depositors for consumption, whether directly for their own consumption or indirectly (by way of wages) for consumption by the workers, cancelling such deposits *pro tanto*, fails to increase the volume of money of account. It is only that part of the deposits of current money which is *not* again withdrawn by its depositors, but which remains as capital accumulation, and as such is lent by the banks to other capitalists, which increases the volume of money of account. For this to be true, it is by no means necessary that the banks make loans of actual current money. The deposits of the latter had increased the banks' loanable funds and the money reënters circulation in consequence of the loans. The current money passing out of the banks as a direct consequence of loans leaves the volume of permanent money of account entirely unaffected, just because it is drawn against loans and not against deposits. If the borrower were to repay the loan with current money, only the banks' loans would be reduced, not their permanent debts to their depositors, the accumulated mass of money of account. Of course, current money drawn from the banks against loans may be used by the borrowers for their individual consumption or in payment of wages,

but for the borrowers it remains the money of the lenders, and only becomes new money in the hands of the capitalists or workers who receive it for commodities (products or labor power). In short, current money drawn from banks by depositors reduces the volume of money of account, but not that drawn by borrowers.

For the reason that the banks, acting, not as agents of the depositors, but as principals, have no reason for keeping separate accounts of cash drawings against deposits and against loans, it is manifestly impossible, for the purpose of practical experiment, to prove the correctness of the above theory by actual figures. But if we divide the capitalists formally into two groups, lenders and borrowers,—a purely mental operation, of course, but one which does no violence to the absolute facts, as it, indeed, conforms with them at every particular moment—we can perceive without difficulty that the various elements of the current money passing through the banks either increase, reduce, or fail to affect the volume of the money of account, each in accordance with the above analysis. The various elements thus at work in a highly complicated process finally produce the increases of the money of account shown in the periodical bank statistics. The theory cannot be otherwise than mathematically exact.

Another factor continually at work tending to check the growth of the volume of money of account, which would otherwise proceed much faster than it does, exists in the constant withdrawal of current money from the banks, now by one productive

capitalist, now by another, for the purpose of enlarging their scale of production, principally for the payment of additional wages. This process represents a permanent conversion of *money capital*, having for its owner, as a deposit, the form of a quiescent loan to the bank, into active *industrial capital* for which thereafter the bank is a mere point of frequent passage. Such conversion of money capital into industrial capital, or bank deposits into current money, does not automatically increase the mass of the latter. The immediate effect is that the existing mass of current money has to do more work than before; it must circulate ever faster, until after a time a point is reached when the issue of additional paper money imposes itself.

We have said above that the volume of money of account never decreases. This is practically the case, although some slight recessions have actually occurred.

Such recessions occurred during or after the panics of 1893 and 1907 to the extent of $\frac{3}{4}\%$ and $2\frac{1}{2}\%$ respectively of the total of individual deposits.¹ In the latter panic a larger crop of bank failures than in normal times, with liabilities of 210 million dollars,² added to contraction of loans, which ordinarily appear as deposits, are amply sufficient to account for the recession in the total of the deposits, in spite of the accumulation of cash in the banks, due to the reduced need of money in active circulation after the panic. In so far as the recessions may

¹ See Comptroller's Report, 1913, p. 44.

² *Ibidem*, p. 73.

have been due to reductions of bank-made credit money, however, the matter belongs to the following section of this chapter.

But even profit-originated money of account in its here assumed pure state is subject to recession which, however, is only apparent. When a depositor takes up a loan at his bank, the amount (less the interest) is credited to his regular deposit account. Thus the addition to the bank's loans is offset by what appears as an addition to the bank's deposits. This nominal deposit disappears for the lending bank only when the borrower's checks, issued against the loan, reach the bank, usually within a few days.

But these checks swell the "real" deposits of other banks, although it must be said that this swelling of the deposits only seems real and genuine from the point of view of the depositors of the checks and the banks receiving them. But as viewed in their general aspect, these operations have effected an inflation of the deposits, which disappears only with the repayment of the loan which gave rise to it. This repayment is effected by the amount becoming a charge against the borrower's deposit account. Thus the fictitious deposit, engendered by the loan and transferred by check to others on whose account it then appears as a real deposit, is offset by blotting out of existence later a similar amount of real deposit on the borrower's account.

It might, in fact, seem for a moment as if the amounts thus wiped out are always larger than the amounts originally created, the difference being the amount of interest deducted beforehand when

the loan was credited as a deposit; but in reality the interest is transferred in the unchanged form of profit-originated money of account from the borrower to the bank. This is an important part of the process by which the productive capitalists hand over to the money capitalists part of the profit which only the former can abstract from the workers.

When we say that the practice of crediting loans as deposits is unavoidable, we recognize that the cause lies in a contradiction inherent in banking. The banks are not making loans as agents for their depositors, but for their own account as uncontrolled principals. They are supposed to collect the social money capital for the use of the industrial capitalists and at the same time hold the money subject to recall by its depositors; they are supposed to lend it out and at the same time not lend it out. This contradiction is the original sin, the *premier pas*, which led naturally and imperceptibly to the practice by the banks of creating a wholly fictitious category of money which has no semblance of any concrete background, except the small reserve of actual money legally required to be held against deposits, as will be explained in section *c* of this chapter.

c. Bank-made Credit Money.

Before speaking in the preceding subdivision of "fictitious deposits," due to the crediting of loans to the borrower's deposit account, we made the express statement that what was said at the time referred purely to profit-originated money of account.

With this understanding it was, therefore, assumed as helpful in theory, that bank loans were made only out of funds actually deposited.

However, there are periods when the practice of crediting loans to the deposit accounts of the borrowers may assume such great proportions in a comparatively very short time as to make it seem to the uninitiated that a rapid and wonderful increase of the existing money of account from profits has taken place. Such a phenomenon presents itself when there takes place in a country within a limited period a material increase in its stock of current money, as, for instance, through the inflow of gold from abroad in consequence of a strong swing of the balance of international obligations in favor of such country. This gold reaches the banks, in whose possession it constitutes an addition to their free and available cash reserves. A similar result ensues when by legal enactment a reduction is authorized in the percentage of cash reserves hitherto required to be held by the banks against their deposits. The liberated part of the former compulsory reserves now becomes available as a reserve for new loans, in the same way as the imported gold.

Now, when an applicant for a loan appears in a bank, must the official, before granting the loan, know whether he has an actual surplus of money of account to lend? By no means! All he needs to know is whether the bank has any cash in excess of the legal requirement, and if so, he is free to grant loans against its surplus reserve in the same proportion as deposits bear to legal reserve without

regard to any preëxisting money of account. Presently the loan is credited to the borrower's deposit account, and presto! the bank has an asset in the form of a loan, offset by a liability in the form of a deposit, against which latter the former surplus reserve now serves as legal reserve. There will be ample opportunity to observe this feat in the operation of the new Federal Reserve Act, which reduces the percentage of reserves to be held by member banks from about 20% to about 15%¹ on demand deposits (on time deposits the reserve requirement is much lower, and mutual savings banks carry only about ½% of their deposits in actual cash²). If, then, by this reduction of 5% in the legal reserve requirement, a bank finds that it has a surplus of \$15,000 free and available as a reserve, it may lend \$100,000. It is consequently clear that any increase in the amount of free money held by the banks may lead to an expansion of loans to the tune of six times the sum of the former.

What enables banks to indulge in this practice is the general knowledge that the other banks are doing the same thing; that therefore all checks drawn against such loans, meeting at the clearing house, are likely to balance each other approximately without any unusual strain on any one bank by large

¹ By amendment of June 21, 1917, the reserves required were further reduced, making it legally possible to keep a gold reserve of only about 3.39% against the demand deposits. Reserve requirements against time deposits were reduced to 3%. See article by Mr. Theodore H. Price in *Outlook*, 1917, p. 476.

² Seventeen million dollars against deposits of 3770 million dollars. See Comptroller of the Currency Report, 1913, p. 65.

demands upon it for cash to settle clearing-house balances. If, nevertheless, the single bank notices that the clearing-house balances against it are growing heavier, it will take the fact as a sign that it must reduce its loans. But in any event the money paid into the clearing house by one bank passes on to another bank, which can in its turn use it as legal reserve, so that it is correct to say that any surplus reserves furnish the basis in the United States for about six times as much of new money of account.

This new money of account thus differs qualitatively from the profit-originated kind. It is a distinct category which we designate as "Bank-made Credit Money." So far as the borrowers are concerned, this new category is indistinguishable from the other variety. But its distinctiveness from the latter is very important, first, to the banks who lend this bank-made money, and secondly, as regards its general economic effect.

For while it is true that a bank, even were it to lend only against real deposits, can never know whether this, that, or the other depositor might draw heavily against his deposit, yet under normal conditions it knows fairly well the proportion of total drawings to total deposits.

It is obvious that such conservative banking would be much less lucrative for the banks. At the same time it would restrain industrial development which would be handicapped by the limits fixed for it by the money capital actually in existence and realized from past profits, instead of enabling the industrial

capitalists to operate with money capital provided by discounting future profits.

A bank which would make loans up to the amount of checks received by it on deposit, would have the certitude that its debits at the clearing house cannot exceed its credits.

On the other hand, the bank making loans, not of funds deposited, but of a kind of money which represents only its promise to pay, does so on the general knowledge that other banks are engaged in the same practice, but the extent to which this may be the case at any particular time or in any particular locality remains a matter of surmise. The banks, making loans on the surmise that everything will go right at the clearing house, instead of on positive foreknowledge to that effect, may find themselves facing surprises. The timely reduction of outstanding loans is not always easy.

To the distinctiveness of the two categories of money of account as regards their general economic effect we shall revert later in this chapter.

From the moment the borrower makes use of a loan, consisting in reality of bank-made credit money, by issuing a check against it to another in consideration of value received, the sum involved is added to the existing mass of profit-originated money of account. It is such to the payee, and it thus becomes indestructible forever, save by redemption in current money or by bank failures. But this money is not the result of labor—it is not gold, nor any other money form of the value of a com-

modity; it is purely fictitious. Therefore it becomes necessary that this inflation of the profit-originated money of account be removed in due time. The deflation is effected by the cancellation of an equal amount of profit-originated money of account on the deposit account of the borrower at maturity of the loan.

The entire mass of bank-made credit money overlays the great substratum of profit-originated money of account, and the former must be redeemed by the latter. If, therefore, during a period of prosperity and speculation, bank-made credit money has been issued to excess, then of a sudden it is discovered that its redemption has struck an obstacle. It looks as if the general conditions were reversed. Commodities decline in price or become unsalable, and the profit-originated money of account is unable to fulfill its task of redemption. Failures multiply, a crisis is at hand.

Regarding the part which bank-made credit money may play for financing a great war in our time the following is to be said. Since Jean Bloch, the banker-author, called the world's attention to the social dislocation which must result from the tremendous destructiveness of a modern war, economists and financiers generally believed that such a war would necessarily be of short duration, owing to the failure of the money supply. These men were thinking along the lines of fairly conservative banking. They knew the sum of ordinary annual capitalization, or profit in money form available for temporary investment in new issues of securities, and this new

profit, this addition to what we have termed profit-originated money of account, was supposed to furnish the main, if not exclusive, money supply for war loans. There is, however, no reason why, in the desperation of the struggle, bank-made credit money might not be resorted to. If this is done to a great extent, it would hasten abnormally the breakdown of the financial mechanism on which capitalism rests. For such financing might be carried to a point where the redemption of the bank-made credit money might absorb every penny of the profits in money form, on the pre-war scale, for many years. There are no underlying commodities by the sale of which the banks can be paid off, since production during war was carried on for prompt destruction of the products. The approximate extent to which the banks are involved in war debts at any particular time during war (and loans made to intending subscribers to war loans ease the banking situation but slightly compared to direct subscriptions by the banks), as also the number of years required to redeem the bank-made credit money, is easily calculated, if one knows these two factors: the sum of the war loans and the pre-war rate of capitalization. Deducting from the loans the normal capitalization for a corresponding length of time gives the amount of bank-made credit money. Dividing the latter by the normal annual capitalization, the dividend represents the number of years required for the redemption of the credit money.

It is true that the continuity and greater effectiveness of production in war time result in increased

profit. This additional profit, however, is not necessarily available for war loans. It must be remembered that governments are in a position to appropriate the additional profit either by arbitrarily restricting prices or by increasing the taxation. Furthermore, the additional profits appearing on the books of the capitalists may be altogether illusory, representing, not a greater accumulation of commodity value, but merely higher prices, themselves perhaps mainly the reflection of token depreciation. After the individual capitalist has sold at the higher prices he must again enter the market and buy on the new price level, or possibly a still higher one. He is compelled to yield up part of his book profit to others. If he invested it all in war loans, his capital will now be insufficient to continue production on the old scale. The capitalists of a particular country may, indeed, make extra profits, but only at the expense of those of other countries. For the whole capitalist-class gains from rising prices are offset by later losses during a subsequently falling market. They are not profit, the modified form of surplus-value, but purely illusory gain and not at all available for war loans. Should such gains, which are a pledge to meet the future losses, nevertheless be invested in this unproductive undertaking, so much more severe must be the coming crisis.

Supposing, however, that something new happens under the sun and that the usual falling market fails to appear. Then only one of two explanations is possible: either the value of gold has suddenly dropped or prices are expressed in depreciated paper

money. The latter would be worse for the existing form of society than a decline of prices to the level of value.

The calculation for which the rules were given above presupposes that the number of years required for redemption remain, above all, years of undisturbed peace and, further, that the pre-war rate of accumulation of profit in money form can be restored. The latter presupposition, however, would have to face a number of most important circumstances adverse to the restoration of the pre-war mass of profit, all its forms included. Of these circumstances it is sufficient to mention the two following:

First, a great war under highly developed capitalism necessitates much social regulation of production and consumption. The lesson learned of the superior efficiency of social over capitalist management forbids a complete return to the old anarchy and inefficiency. According to the extent to which social regulation, if not social ownership, survives, the mass of profit will be impaired.

Secondly, and more definitely, when the bank-made credit money has been inflated to an extreme degree by war loans, the unliquid banks can hardly consider adding to their already almost back-breaking load of demand liabilities in lending out more of such money, now to the industrial capitalists. The restriction, if not suspension, of loans of bank-made credit money results in a loss of profit greater than indicated by the mere proportion, whatever it was before war, of the sum of such loans to the sum of

the profit-originated money of account employed by the industrial capitalists, owing to the well-known fact that overhead expenses do not diminish at the same ratio at which the working capital may be reduced.

In normal times the constant process of redemption of bank-made credit money does not wipe out or even lessen its mass. On the contrary it increases steadily with the expansion of capitalism in general and of banking in particular. New formations of this credit money more than take the place of those which have been redeemed by profits. The individual capitalist must strive for ever more profit and smarts under any restraint. The present is a restraint; the future must also be made a part of the present.

The limit to which bank-made credit money may be issued at any particular time is given by the percentage of cash "reserves" legally required, or considered by the banks as prudent to maintain. This limit, however, holds good only as long as tokens remain at par with gold. Once the gold basis must be abandoned, every limit to the issue of this credit money is removed, short of the final collapse of capitalism. With the tokens on the road of depreciation, the increased demand on the banks by the depositors for current money reduces the "reserves" to a minimum. The demand can be met only by issues of fresh paper money which, of course, again further depreciation. At such time the old-fashioned idea of "reserves" loses its meaning; they become, indeed, unnecessary. Nothing seems to

stand in the way of an unlimited augmentation of bank-made credit money.

The creating of money, so purely imaginary as this bank-made kind, must aggravate further a banking situation already sufficiently delicate.

Aside from this fundamental and far-reaching difference between the two categories of money of account there exists between them a difference in their immediate economic effects.

Profit-originated money of account consists of the orderly, legitimate, and gradual accumulations of capital in money form by the individual capitalist concerns. Industrial development depending on such accumulation tends to remain normal.

On the other hand the possibility of creating—*deus ex machina*—billions of money, not representing any labor performed previously, but mere mutual promises to pay, can have no other effect than initiating a period of abnormal expansion, speculation, and extravagance.

The chance of earning interest on a sum of money of which only one sixth is a reality, while the other five sixths are a mere figment of the mind, is not one by which the lenders, the banks, will ordinarily fail to be tempted.

On the other hand the sudden abundance of loanable money and the prospect of a "business boom" stir up the spirit of "enterprise" in all those able to borrow, with few conservative exceptions. While it is historically true that modern industrialism was conditioned on a sufficient accumulation of money (which Mexico and Peru began to furnish in the

sixteenth century), yet the production of a plentiful substitute for money by hothouse methods can only end in a panic.

About all the official political economists of our day and other writers on finance declare that if such a panic occurs, it will be the result of exaggerated commodity, land, and security prices, themselves due to the increased supply of money and its consequent depreciation. Their vagaries are due to a firm resolution to ignore the scientific theory of value.

The general pretension is that the innovations excogitated by our professors constitute an advance on classical political economy. In reality they are attempts of reactionaries to retire from the positions to which the classics had gradually pushed forward, thanks to their freedom from considerations of policy and to the progressive ascendancy of scientific over philosophic thinking. The fundamental and, therefore, as is now plainly realized by the official economists, the most dangerous among these advanced positions, was the classical theory of value, even in its pre-Marxian imperfect form. To establish this theory on a scientific basis the efforts of the classics had been devoted during a hundred and fifty years. Petty, conscious of being the founder of a new science, which he called Political Arithmetick, says of his method that "it is not yet very usual, for instead of using only comparative and superlative Words, and intellectual Arguments" he has undertaken to speak "in Terms of Number, Weight, or Measure; to use only Arguments of Sense, and to consider only such Causes as have visible Founda-

tions in Nature; leaving those that depend upon the unstable Minds, Opinions, Appetites, and Passions of particular Men, to the Consideration of others.”¹ In these words Petty, genius as he was, not only points the way for the science of political economy, but foreshadows the need of a theory of cognition which was finally perfected by Dietzgen more than a century and a half later. Of material wealth Petty says that “labor is its father, the earth its mother”; and that labor devoted to the production of the commodities gold and silver determines exchange value.

Adam Smith arrived at this definition of value: “Labor, therefore, it appears evidently, is the only universal as well as the only accurate measure of value, or the only standard by which we can compare the value of different commodities, at all times, and at all places,”² and reiterates the definition more concisely a few pages later: “Labor is the real measure of the exchangeable value of all commodities.” That, nevertheless, Smith becomes often confused in the further elaboration of the theory is largely due to the resistance which philosophic tradition offered to his scientific instinct.

Ricardo, with much greater clearness, defined labor as the substance of, and labor-time as the measure of, value. He shows that, the cost of living being given, any change in the rate of wages affects profits in the opposite direction. He takes the

¹ Quoted in N. I. Stone's translation of *Critique of Political Economy*, p. 57.

² *Wealth of Nations*, Book i., Chap. v., p. 15, London, 1901.

trouble of devoting a chapter in his *Principles of Political Economy* to expose the absurdity of the belief that supply and demand are the causes of value. To an economist, however, writing in the first quarter of the nineteenth century, at a time when the working class of England had sunk to the lowest depth of degradation, the important inquiry was the measure of value, and it was outside of his horizon to inquire how it is that, if labor is the substance of value, wages are not equal to the value produced. Ricardo's attention being centered on the *measure* of value, he failed to perceive the *forms* of value—the commodity form, the money form, the capital form—which are facts of evolution.

Finally Marx gave to the world a complete, scientific, and unassailable theory of value.

But even if the later political economists choose to ignore Marx, why should they wish to consign to oblivion the whole development of the theory of value and its eventful formulation by Ricardo? Why their desperate attempts to base value on anything in the world other than labor? Why befuddle the subject by introducing the conditions and motives of Robinson Crusoe, the favorite illustration used by the professors, or discussing the "value" (not the usefulness, mind) to a man of a twentieth cartridge, which is to save his life, compared to the other nineteen used for ordinary purposes?¹ In the real world with which economics alone deals, cartridges are manufactured and sold by the billions by

¹ Professor Seager, *Introduction to Economics*, par. 47.

great capitalist concerns on general capitalistic principles, and it is this that determines their value. Why treat us to a long-winded apple story in connection with a starving man and the "value" to him of the first apple found, compared to the second one, the third, etc?¹ We may appreciate the dire necessity for our professors to invent something or other in order to dodge the Ricardo-Marxian theory of value, *coûte qui coûte*, even if they can hit on nothing better than "marginal utility." This latter is nothing but a clever mask which, when raised a little, quickly reveals the old stupid face of the "demand and supply theory of value." The dupe thinks he has an additional and profound explanation of value, when in reality he has only a choice between supply and demand on the one hand and demand and supply on the other, or that of using both versions. But now comes along the head of the department of economics of a leading American university who fears evidently that the subject of value is not yet sufficiently mystified, and he therefore discovers that use-value and exchange-value are really not distinguishable.² Now the haze ought to be sufficiently dense so that the little mouse can make its escape from a hundred cats. There has been happily effected a retreat back of Marx, Ricardo, Sismondi, Smith, Boisguillebert, and even Aristotle of antiquity.

The theory of value being the foundation of economics, its thorough analysis would naturally form the subject of the first chapter of our hand-

¹ Professor Seligman, *Principles of Economics*, par. 73.

² *Ibid.*, par. 75.

books. This had been the method pursued by the classics. Why is it, then, that we find this theory touched on by our professors somewhere along the middle of their volumes and disposed of in a few pages, although the volumes are so loquacious on irrelevancies? Is it the intention to create the impression that value is something merely casual in economics, something which it is quite correct to mention, though really of no particular importance?

After the creation of all these promises to pay, or titles to money, is there any difference in the regard in which a dollar in gold, a dollar in paper, or a dollar in a check are held? No, they are on a parity. There has been no inflation of the paper tokens, hence no depreciation of the same. The titles to money are still sustained by the faith in the social solvency. The promises to pay in standard money, or in symbols thereof, are still believed to be good. Therefore all these substitutes of gold circulate on the basis of the value of the latter. Has this value declined, because of the activity of the paper mills and the bookkeepers in the banks? Have paper mills and bookkeepers brought about a reduction in the cost of mining gold? And if not, have the mines stopped working because of the decline in the exchangeable value of gold? No, we shall hear nothing of that; the mines, with unchanged cost of production, will still be working profitably.

The world's stock of gold, as detailed in Chapter IV., Sec. *b*, amounts to more than eight billion dollars. This immense stock, which exceeds in value the stock of any other single commodity, is not, like the pyra-

mids, an inheritance from olden times. It is largely of very recent origin. According to the best authority the production of gold during the last four centuries is exceeded fifty per cent. by that of the first twelve years of this century, though the longer period includes the California gold discoveries.

This gold is a stock of raw material of which the bar and the coin are the divisional forms passing as money from country to country and from hand to hand. A twenty-dollar gold piece, for all its elegant appearance and exclusive social function, which cause it to be regarded almost with veneration, never ceases to be a commodity—a raw material just like the more plebeian steel billet or copper ingot. This coined piece of raw material may, in spite of its aristocratic dress, be thrown unceremoniously into the melting pot and converted by any artificer into a finished article or filling for hollow teeth without any loss of value.

As a matter of fact, however, every year's production of gold is about twice as large as its consumption. If the production of gold were subject to the demands of consumption, like the production of other commodities, it would have ceased long ago for all but the more favorably situated producers. The reduced quantity of labor needed by the latter to produce a unit of gold would have reduced the value of the product. The lower value would again have stimulated consumption, etc. In short, the production of this raw material would be subject to the same laws as that of all other commodities. In reality the producers of gold need not pay the

least attention to the state of consumption. Even if the latter came to be greatly curtailed, all the additional gold saved from consumption would be needed for a function in our economic system for which it is indispensable and cannot be replaced by any other material that exists on this planet or by any device that human intelligence could invent.

The value of the stock of gold is large, when compared with the value of the other preserved and enduring products of labor, especially of other raw materials, but small, when compared with the sum of money necessary for the turnover of commodities for current productive and individual consumption. For the money function of means of circulation, the supply of gold became continually less adequate with the progress of large-scale production, and this process is bound to continue.

The value of money has not, as our political economists profess to believe, declined owing to the mere increase of the volume of imaginary money, while this is on a parity with gold. Given this parity, the labor required for producing gold is the sole determining factor.

Our political economists, seeing the general advance of prices, after having resolutely closed their eyes to the classical theory of value, perfected by Marx, naturally enough connect this phenomenon with the increase in the supply of money: gold and the bank-made credit money based on the gold. They imagine all the money in one pile and all commodities in another and think that the purchasing power of the pile of money, no matter how large or

small, always equals the price of the pile of commodities. If the sum of all money increases, prices rise. The rise of prices, they say, can also be expressed as depreciation of the value of gold. According to this view it would make no practical difference whether the supply of money were increased within a limited time by a billion new gold and, based on this as additional bank reserve, by six billions in bank-made credit money, or whether the increase were all new gold without any addition whatever to the credit money.

There is, however, a vast difference between these two hypotheses. The increase of the credit money means merely the multiplication of the title to the existing, or very slowly increasing, stock of gold of which the units remain of stable value, owing to the evident fact that under the circumstances no important change can have taken place in the cost of its production. On the other hand, an enormous increase of the stock of gold itself within a short time could only be the result of the discovery of a new source of supply, indicating a greatly reduced cost of production. Then the political economists would be in a position to speak of the depreciation of gold. They would, indeed, live to see their nine days' wonder. Such a depreciation of gold as would then ensue within a comparatively very short time would be as fatal to the existing order of society, as the general realization of the social insolvency, which is in a sense its antithesis.

We have enlarged thus extensively on the theory of value and its bearing on substitutes for real money

(gold) in order to settle accounts with the university political economists. These ascribe the hypothetical panic, which gave rise to this discussion, to the increased supply of substitutes for money and their depreciation which they identify with depreciation of gold. It was necessary to show that, given the parity of money substitutes with gold, there was no depreciation at all.

What really has occurred is an increased demand for means of production, resulting in the advance, not of their value, but of their prices, as well as eventually of the prices of articles of consumption. It is the violent deviation of price from value which is precarious and which calls for rectification by the violent means of a panic.

The bank-made credit money inflates the deposits by the primary fact that the loans are credited to the deposit account of the borrower. He issues his checks against it to others who deposit them for what they actually are to them in the last analysis, namely, the money form of value of performed labor, and as such this particular amount continues to circulate. Each individual case of inflation of money of account disappears finally by the repayment of the loan which is effected by the cancellation of a similar amount of profit-originated money of account belonging to the borrower. Thus the two kinds of money continually co-exist and become merged one with the other.

The fact that it is impossible to separate the two varieties of bookkeeping money in practice is no

reason why they should not be separated as distinct categories in economic theory.

d. Savings from Wages.

Before leaving this special inquiry, it is worth while to take a closer look at the deposits in the savings banks, which are included in the total deposits given in section *a* of this chapter, on account of the widespread belief that these particular banks represent the savings of the workingman. This unfounded belief is taken advantage of by the capitalists, whenever some political issue is raised inimical to their interests, in order to enlist the support of the wage workers on the ground of the latter's interest as capitalists. This appeal to the self-interest of the workers as capitalists is of a piece with that other in which the capitalists, unselfishly forgetful of themselves, work on the sympathy of the general public for the widows and orphans who must make shift, poor things, to live on their income from stocks and bonds, and whose income is held up to the public conscience as if it were the principal interest menaced by said political issue.

Without losing our time with the bedevilment of the question by the Comptroller of the Currency in his report of 1913, where he makes out (p. 57) 17,600,000 savings accounts, including therein any deposits at interest in any kind of bank, let us at once direct our attention to the mutual savings banks, the only ones in which working people deposit savings. These

the Comptroller reports (p. 65) as having 3770 million dollars deposits from 8,101,238 depositors, the average being \$465.31.

Now, this information about the number of depositors and their average deposit is absolutely meaningless, as we shall understand presently.

First as to the number of depositors. This subject was most fully investigated in Massachusetts as early as 1872 by the Bureau of Statistics of Labor which reported: "Repeated instances were found of men having in each of many banks deposits to the limit of the law. . . . One man was reported to have a deposit in each bank of the State; another will deposit for each member of his family and a part of the alphabet." From these facts it is plain that depositors can, to comply with the law, easily multiply their persons many times, and that the number of accounts is no indication as to the number of depositors or to the importance of their deposits individually.

Now as to the average deposit. If Mr. Rockefeller has a billion dollars and I nary a dollar, the two of us own on the average half a billion each, but I fail to derive any satisfaction from the calculation. The Massachusetts Bureau just mentioned found that in 1871 one fourteenth of the deposit accounts amounted to nearly one half of the total in amount and that the proportion of large depositors in the savings banks was on the increase.

From what we have learned from the Bureau regarding plural depositors, it is clear to us that one fourteenth of the deposit accounts is by no means

equivalent to that proportion of depositors. And what of those only nearly as large? However, the statement furnishes a sufficient index to the fact of real interest that, while the immense majority of depositors may be wage workers, the great bulk of the deposits are those of others than wage workers. Considering the workingmen's deposits, not in relation merely to their depositors, but to the wage-working class in its entirety, it will be found that this class, which constitutes the overwhelming majority of the American people, is practically penniless.

Since the publication of the Massachusetts report, which at the time created an awkward situation for the high-tariff manufacturers of Massachusetts, who pleaded then, unselfishly forgetful of themselves, for the protection of the American workingman against the pauper labor of Europe, similar publications have been suppressed and it is preferred to leave the questions involved in a fog. Recently a demand has been voiced by a number of social-welfare people in Chicago and New York for the publication of the classification of savings-banks deposits according to amounts. Such publication would be instructive only to a limited degree on account of the plurality of deposits representing the identical ownership. The only way to admit the light is by removing the limitation of amount which may be deposited by anyone and recognizing the savings banks in law as what they are essentially in fact—investment concerns for small capitalists and middle-class people.

e. The Social Insolvency.

Now we have arrived at the point where we may consider the question:

How good are these titles to money?

In the first place they are not titles to gold, but only to legal tender. Should the tokens which are such tender depreciate relatively to gold, the money of account would depreciate in exactly the same measure.

In the second place these titles are only enforceable by the owners against the banks as technically their debtors. We have seen above that the accumulation of profits to the extent that they are concentrated in the banks, and so far realized only on paper, amount to 20,824 million dollars. Out of this sum 17,936 millions represent practically profits of industrial capitalists in the shape of claims against the banks. To satisfy these claims in money the banks had on the same date, as also stated above, 1561 million dollars. That is they held less than nine cents in money against every dollar they owed. But, it may be thought, if the creditors demand their money, the banks could convert their other assets into money. For money it now must be, the real thing—no make-believe. The checks had been deposited theoretically for collection of their amounts in money; if the bank, instead of collecting the money, had squared with another bank holding a similar check against itself, that is its own affair. Now, where is the money to pay for the banks' assets which are to be realized?

On June 30, 1913, the stock of money in the United States was distributed as follows¹:

United States Treasury	\$ 356,000,000
Banks as reserves	1,552,000,000
Active circulation	1,812,000,000
Total	<u>\$3,720,000,000</u>

The banks cannot get the money of the government which is held as reserve against the greenbacks and for current expenses; they also cannot get the money in circulation, and needed in circulation, because the moment they were to stop the exit of currency, its deposit by the capitalists would stop likewise. Besides they would be confessing their insolvency and expose themselves to bankruptcy. During the panic of 1907 the banks generally were obliged to suspend payment; on that occasion, however, only comparatively few, like the Knickerbocker Trust Co., were actually forced into bankruptcy, but the storm will not always blow over so easily.

And bank failures are ominous things to happen to the system of money of account. The banks are the bearers of the social credit. Although private institutions, their indebtedness, in being transferred from one to the other as the world's money, is the basis of the whole social indebtedness, and their solvency involves the social solvency. Their virtue, like that of Cæsar's wife, must be above suspicion. A single bank failure in a community is a shock to the depositors in other banks in the same community,

¹ Report of Comptroller of the Currency, 1913, p. 54.

and two or three bank failures spread panic and produce runs which may endanger the entire monetary mechanism.

These considerations direct our attention to a profound economic change which has taken place since Marx.

In his time the problems of the commodity formed almost the entire subject of economic science. The answer was that the capitalist mode of production was destined to pass away as a result of the fundamental contradictions of the *Commodity*. In the last instance these narrow down to the conflict of the irresistibly growing means of production with the conditions for realizing the profit, the workers being able to buy only a constantly decreasing proportion of the value they produce, while they constitute a constantly increasing proportion of the population.

This conclusion was the outcome of the employment of such thoroughly scientific methods by Marx that its truth is unassailable, barring any unforeseen new development. But all sciences are subject to change. At one time it was sufficient to define a mammal as a warm-blooded animal bearing living young—until on an unexplored continent egg-laying mammals were discovered. Important cities which once were described in geographies as sea-ports are such no longer, being now miles away from the coast.

Looking at this conclusion to-day in the light of modern imperialism, we see that it implies the capitalistic development of all backward countries through the export of capital thither from the old

capitalistic ones. This process by itself would afford capitalism a very long lease of life indeed. China alone is capable of absorbing a capitalization almost boundless, more than a hundred thousand millions of dollars, to suggest a figure.

But this long vista of capitalism, conceded to it by the economics of Marx, has become a chimera in the face of a more recent and more profound economic development—that of *Money*.

The necessity of commodity money followed logically from Marx's theory of value; but that this necessity is the really fatal defect of capitalist society—this fact had not yet forced itself to the surface. The production of gold seemed to keep fairly abreast with that of commodities, and money of account was in its infancy. The latter appeared as a mere technical convenience, indeed apt to give rise to occasional disturbance, but not as an embryo whose development would prove to be overshadowing in economic life and place *Money* in the center of the stage, instead of *Commodity*. The vital organ of capitalism to-day is not any longer the industrial capitalist, but the bank.

In his study of the tendential fall of the profit rate, Marx, after clearing up the laws governing this tendency, was obliged, in order to explain the slowness of their operation, to look for counteracting influences. One of these he found in the constant destruction of industrial capital by bankruptcies which, while individually disastrous, are socially preservative in tending to raise the profit rate for the successful capitalists.

That is the reason why these individual bankruptcies fail to stir the public profoundly, their greater or lesser frequency merely indicating the undulations of economic depression and prosperity.

The possibility of losses on commodities is never lost sight of by the industrial capitalists. In selling on credit they assume a risk in consideration of the profit to be realized. A given percentage of casualties is taken into account as a sort of fatality and provided against by credit insurance or otherwise.

The possibility of losses on money, however, is never contemplated. Checking accounts are a convenience, not a source of profit to the industrial capitalist. Therefore the failure of his bank is positively shocking to him. It also spreads apprehension regarding other banks among depositors in general for the same reason. And when the fateful day shall have come, then the vanishing of confidence will reveal the universal insolvency of the banks and with it the social insolvency.

Commodities are individual. So are the bankruptcies of their producers and distributors.

Money is social. Bankruptcies of banks—the institutions whose indebtedness represents money—are symptomatic of the social insolvency and so interpreted instinctively by the depositors.

Whereas bankruptcies of industrial capitalists tend to check the tendential fall of the general profit rate and are thus socially preservative, bankruptcies of banks are a direct menace to the monetary mechanism and thus to the capitalist form of society.

Another plan to meet this menace has been re-

sorted to successfully in former panics. The Bank of England has been saved from collapse three times by the issue, especially authorized by the government in these emergencies, of fiat paper money in any amount necessary to satisfy the demand for the redemption of money of account, without regard to the gold holdings of the bank which were then in fact nearly exhausted. Our own Federal Reserve law contains, and contained from the very start, a provision authorizing the governing body of the organization, the Federal Reserve Board, to suspend all reserve requirements. This provision was dictated by the recognition of the inadequacy of any ordinary reserves to meet a widespread run and that it can be met in no other way than by the issue of any amount of Federal Reserve Notes which may be required. But the means which were found adequate many years ago to prevent the breakdown of the financial structure cannot be relied on to accomplish the same purpose in the future, when the artificiality of the system has attained a so much higher degree. Not merely to allay a panic of the old style, but to meet the widespread and persistent demand of depositors for their money by the issue of new paper money would differ from regular bankruptcy only in form. The very idea that any form of society can be saved from its historic end, and perhaps be preserved forever, by printing something on slips of paper is ridiculous and infantile. It is worthy of the mind of the savage who is in wonder and awe of the "talking leaves."

How much value would be added to the value of

the previously existing money in *active* circulation by the accession of this immense mass of paper tokens? Not one iota. They can be conceived as circulating in company with the previously existing currency, but, according to the law governing the issue of tokens, the total of old and new tokens would have no greater value than the old possessed alone. The old tokens were symbols of gold; now the totality of the tokens reflect merely the value of the commodities in circulation, as shown in Chapter V. Every vestige of the value of the formerly existing money of account has been destroyed without adding one iota to the value of the current money. The bankruptcy is complete.

It has always been accepted unquestioningly that the bank deposits were to be redeemed on demand by "lawful money." We now see what this means in the end. The banks' debts must remain unpaid in all eternity, for were they really ever paid with "lawful money," the pay would be worth nothing whatever.

After all that has been said it might still seem strange that the dollars which seemed perfectly good as bank deposits should become worthless when actually paid in accordance with the law and with the common understanding. Yet there is no mystery about it. The system, like some other things which have a hold on the poor human mind, rested simply on faith. No doubt arose that the bank deposits could be paid if not in gold, at least in *tokens capable of representing gold*. This faith sustained the value of the dollar in the bank check. But when this

dollar is transformed into a token, subject to the economic law of depreciation, and under this rule becomes utterly worthless, then the power of faith is broken and the nullity of it all is realized.

But even in the improbable, though not impossible, event of the discovery of a new source of gold supply of such magnitude as to afford the means of redeeming the world's money of account in gold, the monetary situation would be practically the same as in the above assumed case of its redemption by tokens. That gold could have but extremely little value. In this event the value of the former money of account would be likewise destroyed without adding to the value of the former aggregate sum of gold and tokens, both of which would be greatly depreciated.

Such is the final and deadly logic of the contradiction (referred to in Chapter III., Sec. *b*) between the function of the money commodity as measure of value, which demands scarcity, and its function of means of circulation, which demands abundance.

Thus there remains, as the only thing that could be thought of, the exportation and sale abroad of the bank assets. These, however, are mainly non-exportable, the principal item being real-estate mortgages and promissory notes. So far as their holdings of public securities are concerned, we already had occasion to note in Chapter IV., Section *b*, that the export of a relatively small amount of these had to be made at panic prices; for the payment of the entire indebtedness of our banks we know that the gold in the whole world would only half suffice, while on the other hand insistent selling by this country at any price would

mean the utter extinction not only of American, but of the whole world's fictitious capital. All banks in the world would fail—it would be a social cataclysm.

For when men have been seized with doubt as to the convertibility of their titles to money into the substance, the cry for money will not cease at the paying tellers' windows as long as there are unpaid depositors. But the disparity between the mass of the illusory money of account and the means of its realization is too great to be overcome.

Without closer examination the impression might arise that this disparity might be very materially lessened by the banks' refusal to honor the checks of depositors who are at the same time their debtors. Such action on their part would be arbitrary, the claims of such persons as depositors being very generally due before their debts to the banks. Nevertheless the banks would be successful in their attitude, assuming a disposition on the part of the judges to come to the rescue of the banks and of society. Now, what is the extent to which the banks might repress the demand for money?

Of their total loans, amounting in round figures to $14\frac{1}{2}$ billions,¹ eight billions are secured by real estate, stocks and bonds, warehouse certificates, etc., by borrowers having generally no direct banking relations with the lending bank. For instance, savings-bank depositors are not borrowers; call and time loans against collateral security are open-market operations. Of the remaining $6\frac{1}{2}$ billions, judging

¹ Comptroller of the Currency Report, 1913, p. 51.

by the proportion of double name to single name paper held by the national banks, it would seem that one third of these unsecured loans represents commercial paper bought by banks in the open market through brokers. The makers of this class of paper have no relations with its holders, do not even know their names. Thus out of the entire sum of eighteen billion deposits, probably not more than four billions represent accommodation loans by banks direct to their own depositors, and as the latter are supposed to maintain an average balance of one fourth or one fifth of their loans on deposit, the total sum that the banks might succeed in holding up would be under present conditions about one billion. The difference would not raise the ratio of the current money held by the banks to the money of account to ten cents on the dollar, instead of nine.

So far as the deposits in the savings banks are concerned, they are at present protected against sudden demands by laws entitling these banks to notice of withdrawal by their depositors. In the State of New York, where the savings deposits do not fall far short of two billion dollars, more than half of the country's total, the notice which may be required by the savings banks is sixty days. This length of time heretofore has been found sufficient to allay excitement and restore confidence. In the real and profound crisis to come it will be realized that the respite is altogether too short to permit the banks to maintain their solvency. For where are they to get the money from? They have almost none themselves, and further deposits by their clien-

tele will have stopped. The savings banks may withdraw their own deposits from the commercial banks where they keep checking accounts; but these unremunerative balances are not relatively large, as it is the aim of the savings banks to invest their funds as soon as possible. In any case, to the extent that the savings banks may draw money out of the commercial banks, they weaken the reserves of the latter, thus forcing them to recall loans.

It might be proposed to meet the situation by a decree of moratorium for savings-banks deposits extending over a considerable time. This would also give time to the depositors to revolve in their minds the chance of eventually losing their money or part of it—a dangerous contemplation. However, the proposition would be impracticable. Formerly the current money deposited in savings banks by workers and others, such as persons who live on income from a tenement house, was redeposited by these banks in commercial banks where they keep their checking accounts and thus savings and rents became again available for the payment of wages. Now, however, under the moratorium, all this money would be hoarded in nooks and old stockings, instead of reaching the banks and then reëntering the active circulation. The banks, seeing the ebbing of their reserves, would have to look to the reduction of deposits by reducing the loan account. The industrial capitalists must curtail production, interest rates must rise, stock exchange securities decline, the whole industrial movement languishes—in fact

we have arrived at the general crisis as a result of the savings-bank moratorium and the consequent hoarding. The moratorium would not even prove a serviceable respite, much less a solution.

The danger of the failure of individual banks is greatly lessened by the establishment in every capitalist country of central banks, as the Federal Reserve Bank in the United States and the National Banks in other countries, whose function it is to re-discount for the individual banks, when needed by these, commercial paper (promissory notes or acceptances) considered self-liquidating, because originated in actual sales of merchandise. The central institutions do this with paper money which they are authorized to issue up to certain limits fixed by laws. Evidently this engine of safety for the individual banks, when they are hard pressed for money, may also be used by them for the purpose of making new loans, gaining the difference between the central bank's rate of discount and that which the banks are able to charge on accommodation loans to their borrowing customers.

But to enable the banks to make additional profits in this way is not the theory of the system, and, leaving any abuse of it in the manner indicated out of consideration, there is no doubt that the system is capable of forestalling such bank runs as we have known in the past and which threatened a premature collapse of the financial mechanism. Failures of single banks may be rendered infrequent, but no methods that may be devised—neither central banks, nor any degree of centralization of the strength

of the banks; neither nation-wide clearing of checks and other instruments of credit, nor guarantee of deposits by the governments—can perpetuate the structure of money of account and its outgrowth, the bank-made credit money. The only ultimate effect will be to produce an analogy to what happened to the deacon's "logically built" chaise which

. . . went to pieces all at once,
All at once, and nothing first.

And yet, as we have seen, money of account has been increasing ten times as fast as gold and token money combined. If the capitalist class continues to be blessed with prosperity in the future as in the past, its bank account will arrive at the point where it will rest on a comparatively infinitesimally small basis—the proverbial pyramid nicely balanced on its apex! This feat the capitalist class will have to perform with its bank account.

Already in the panic of 1907 money of account was at a discount of as much as 5 per cent. compared not alone with gold, but with any kind of current money, and it remained at a discount for a month. So long as the conviction abides with every capitalist that he can personally make good his title to money at any moment, he will of course abstain from doing so, especially as checks are more handy and otherwise more advantageous. If it were only a question of the transfer of money of account from one depositor to another, their relative titles to value would remain unchanged under any circumstances. But transfers *without* purchase of commodities, such transfers as

loans, settlement of losses, etc., can only be incidental to the regular course of the exchange of commodities; and the capitalists who own the commodities are, as such owners, not identical with the capitalists who own the money of account and will only part with their commodities, which are absolute value, against money of account so long as the latter's realizability in other values remains undoubted. But if confidence is shaken, it is only a question of the degree of severity of the resultant panic, to what extent the money of account may be depreciated, or whether it may become extinguished altogether, carrying down in its debacle not only the superimposed system of fictitious values of all kinds, but the entire capitalist system of society.

At first sight it might seem as if such complete destruction would affect only one division of capital, the fictitious, and would leave intact all real capital values. A little reflection, however, will suffice to show that such an impression would be erroneous. Of what use to the capitalists would be the ownership of mills, machinery, and other fixed capital, without the money wherewith to buy the necessary materials and to pay wages? Or of what use to a man would be a warehouse full of such a most necessary product as flour, if he cannot obtain money for it? And the money practically does not exist. Real money, even in the heyday of capitalist prosperity, cut but a small figure in the sum which was needed to do the world's business. Now a great part of the gold and silver will have gone into hiding, as a provision against the most pressing needs. What

had but a short time ago been believed to be money is now recognized as having been a stupendous deception of great advantage to the capitalists while it lasted. But at the same time, in the light of a higher historical interpretation, it served as the final tool, when gold had failed, for carrying to completion the edifice of social harmony and happiness. The time has now matured when the mills, machinery, merchandise, etc., have ceased to serve their owners as the means of garnering profits; they have become as barren to them as sources of revenue as their now worthless pieces of lithographed "securities." They have lost their artificial, though historic, character as capital and are waiting to assume their natural character as means of production, no longer of commodities, but of use-values. Competitive capitalism had come to rest on a fiction and was an economic impossibility.

All that precedes is based on the assumption of a widespread, if not universal, loss of faith in the solvency of the banks. But it might be put forward that such an assumption is gratuitous; that the system of money of account, even if it cannot endure forever, will probably do so for a length of time beyond which its continued existence or failure will be of no interest to our generation, to our children or children's children. Such a mental attitude is that of faith which needs not be supported by proofs. It is for science to bring the durability of the contradictory monetary mechanism within a certain conceivable limit of time. There must

be processes which, within such limit of time, mechanically destroy this faith, resolve the contradictions in a higher truth, and vindicate the materialistic conception of history.

All money, whether of the current or of the book-keeping varieties, in the performance of its functions of means of circulation and of deferred payment, is destined to be metamorphosed back into commodity value from which it sprang, in order to complete the universal exchange of commodity for commodity. This destination seems somewhat obscured by the use of money for the purchase of land and securities, which items are not commodities, not products of labor, not values, but only fictitious values. But such purchases mean only that a sum of money, as a title to *existing* labor products, is parted with in exchange for a title to *future* labor products. The seller of this latter title takes the place of its purchaser as the buyer of existing labor products. For our present purposes all existing products may be divided into two classes: one consisting of articles destined for individual consumption, and the other of articles produced for the *extension* of the industrial plant. If it were possible for wages to rise generally so much above the historic value of labor power as to reduce the capitalists' share in the product to what is necessary for their personal consumption, then production would be limited to mere *maintenance* of the existing plant and to articles of individual consumption. Money of account would grow but very slowly and its proportion to current money probably not present a serious problem.

What we actually see is, on the one hand, subsistence wages, generally paid with current money, and, on the other hand, a constant increase of the industrial plant (and concomitantly of raw materials) paid for out of profit accumulation in the form of account. That a growing sum of current money for the payment of wages is called for by the expansion of capitalist enterprises is a matter of course and of historic experience. But the growth of the payroll, and therefore of the sum of current money required for it, lags away behind the profit accumulation in the form of money of account and available to the capitalists for the extension of their operations, although the identical money of account (aside from some current money), in being turned over and over during the years, has paid for their liberal personal support. When, therefore, we meet in governmental documents figures like the following:

(million dollars)

Individual deposits and banks'

own resources

1914 ¹	22.956
1898 ²	<u>7.416</u>
Increase	<u>15.540</u>
per cent.	<u>210</u>

Money in active circulation³

1914	1772
1898	<u>1150</u>
Increase	<u>622</u>
per cent.	54

¹ Report of Comptroller of the Currency, 1914, p. 71.

² *Ibid.*, 1898, p. LI.

³ *Ibid.*, 1914, p. 78.

we have in the fourfold greater *rate* of increase and in the twenty-five-fold greater *absolute* increase of money of account than of current money in active circulation a practical confirmation of the above theoretical conclusions.

In this comparison of the relative increases of the two kinds of money it is the absolute increase which must be accentuated, as showing the technical possibility of a great expansion of money of account so far as this depends on the simultaneous expansion of the volume of money in active circulation. The requirements of the latter, preëminently for wages, grow comparatively slowly. And as for this purpose gold is only necessary on a margin left in the active circulation by the mainly used tokens, more specifically bank notes, danger to the system of money of account on the score of depreciation is correspondingly remote.

So far this study does not seem to bring us nearer to a solution of our problem; rather does it seem to present a moment favorable to the durability of the monetary mechanism. But there is another side to the story. From the same source from which we have quoted the above figures we learn that the money held by the banks was in¹

	(million dollars)
1914	1630
1898	688
Increase	<u>942</u>
per cent.	137

¹ Comptroller of the Currency, 1914, p. 78.

Here we are struck by the fact that the money in the banks has increased at a rate two and one half times as fast as the money in active circulation. In making such comparison the emphasis must be laid on the relatively greater *rate* of increase of the money in the banks, because the comparative rate is significant of a tendency, necessarily becoming more and more pronounced in time, to a more rapid increase of the inactive than of the active circulation. The increase of the total volume of current money is required far more by the needs of the banks than by the needs of the active circulation. This matter will be dealt with more at length in the further course of this chapter. Here we will only say that the growth of deposits demands that there be an increase apace of the amount of reserves, or cash necessary to be held in readiness by the banks, both to provide against a sudden unusual demand by depositors and against the larger adverse balances apt to arise at the clearing house against any individual bank. Such reserves, at least, are necessary while the gold basis can be maintained. Once this basis must be abandoned and the fact imposes itself that the "solvency" of the banks can be made apparent only by paying with fiat paper money, then real reserves become an impossibility. In fact they would be unnecessary, provided the depositors, as well as the banks mutually, accept non-legal-tender bank notes, although they are depreciated.

For, properly speaking, what can constitute bank reserves? Nothing but gold or legal-tender tokens while they are capable of symbolizing gold. Not

bank notes. Can two banks print notes, each for, say, a million dollars, exchange them with each other, and then claim that they now have jointly increased their reserves by two millions? Neither can an entire national and unified banking system perform a similar trick. Loss of confidence in the whole system would be the inevitable result. Legal enactments may leave the depositors and the individual banks no alternative but to accept the fiat money, but that cannot avert the fate of money—its progressive depreciation and ultimate destruction.

Bank notes can attend to the great bulk of the active circulation within the limits of the economic law regulating the value of tokens, but only gold can constitute an absolute reserve against deposits.

And now we are able to see where the definite answer to our inquiry regarding the durability of the monetary mechanism for a conceivable length of time is to be found. Its time limit is given by the mathematical relation of the respective ratios of increase of the volume of the money of account and of the gold supply so indispensable as reserves in spite of the most perfect organization of banking.

With these ratios the reader is already familiar as regards the normal past. They are subject to a shifting, unfavorable to the system, by an abnormal increase of bank-made credit money during war. On the other hand, as regards the future gold output Prof. R. M. Raymond of the Columbia University School of Mines says¹:

¹ *New York Times*, December 12, 1917.

The world cannot turn out more gold than it is producing now. Its mines are working at top notch. . . . The chances are that Mexican mines, now running full blast, will last only a few years. Alaska already has been pretty well picked over. While it is possible that new fields may be found there, yet up to this time there are no new spots anywhere to take the place of those producing now . . . gold production probably would be diminished rather than increased.

For these reasons, and others following in their train in relation to the active circulation to be considered later, the maintenance of any gold reserve whatever in a rapidly approaching time becomes an impossibility. It is conceivable as a theoretical possibility that the deposits might be reduced by the redemption and non-renewal of the bank-made credit money so long as this remains in normal volume, *i.e.* not extensively inflated for the purposes of war. To that extent the premature growth of deposits would be checked, although, on the other hand, this withdrawal of credit would unsettle economic conditions, resulting in great hardship to the industrial capitalists and unemployment to the workers. But no resistance can be offered to the steady growth of the deposits from profits. It may be news to the gentlemen who manage the banks that this growth is the work of the deposits of current money, but they know, at any rate, that to bar such deposits would be an absurdity.

The destructive process ever gains in momentum and hurries the financial engine to the precipice.

The growth of the deposits calls for a proportionate increase of reserves to meet the increased demand of current money by the depositors, for the settlement of balances between banks and for the shipment of gold to other countries. When the reserves of gold, and of legal tenders so far maintained at par with it, become impaired, and the issue of fiat paper money has started the depreciation of all paper tokens, legal tenders included, the increase of deposits of depreciated money again accelerates the growth of money of account. Again the strain on the banks increases beyond what it was before. Prices and wages rise. Speculative buying of commodities sets in. Sales are rapid, production is intensive. More paper money is issued, as the banks must hold on to their gold reserves. Then comes the usual reaction. When that set in formerly, while the world was still on the gold basis, the lessened circulation permitted the superfluous money to accumulate in the banks. Not so under the sign of the depreciated tokens. The lessened value of the commodities to be paid for with current money always finds its price expression in the total sum of the tokens issued. These are, therefore, always needed in the active circulation; they cannot accumulate in the banks and they cannot be called back. In the capitalist cycle of prosperity and depression there is nothing which can reduce the quantity of paper tokens. It can only be further increased. Depression marks a big step forward in the depreciation. The end is when chaos threatens, when the farmer refuses to sell for paper money and the city

dweller faces starvation.¹ And this end is reached by a perfectly normal process, within a perfectly conceivable length of time, and independently of loss of faith in the social solvency, although such an event may occur at any time.

Under the capitalist system of society, production is carried on primarily for profit and only secondarily or incidentally for consumption. Things are produced as commodities and exchanged in the open market on the basis of the labor socially necessary for the production of each. Profit is made possible by the existence of one particular commodity, human labor power, whose use-value consists in its ability to create for its purchaser value in excess of the cost of production of human labor power, viz., the usual wages of subsistence. The "open market" (also called "liberty") meant in capitalist theory production under fairly equal conditions and exchange of the products without artificial restraints (a condition called "natural law"). This ideal was approached only in the youth of capitalism, when England was the only industrial country in the world. The capitalistic monopolies and the trade unions of our time are denials of capitalist theory and they herald the coming end of competitive commodity production.

This system of production was only possible with the social recognition of a single exclusive commodity as money. Gold, in having been set aside for the money functions, has not lost the attributes of a com-

¹ From Russia such a condition is now reported.

modity, as all gold money can be used as a commodity without loss of value.

These functions are contradictory among themselves, as already partly pointed out by Marx.

Marx notes that gold, in performing these money functions, appears in two different aspects:

Only *abstract* or ideal gold—gold in general—is needed for the money function of measure of value;

But *concrete*, particular, and definite quantities of gold are needed for the function of means of circulation (including the function of means of deferred payment, or credit).

Marx, of course, does not say that the distinction between abstract and concrete gold involves any incongruity apt to subject the system to ill effects and possibly prove fatal to it. Indeed, there can be no contradiction between sense-perceived objects and their generalization or abstraction. When we say "animal" we include in this abstraction a great variety of creatures; but although a whale and an amoeba differ greatly from each other, neither can present a contradiction with the abstraction "animal."

Nevertheless, since Marx's time economic evolution has actually produced a contradiction between concrete and abstract gold, speaking not, of course, of gold as a natural product, as a metal, but as a social institution, as the money material. But even so, how is this possible? Are not scientific principles universal, applying to the science of economics no less than to the other sciences?

There are cases in nature where a change of quantity transforms itself into quality. Water, losing

a certain quantity of heat, becomes ice. Similarly gold, as the money material, is undergoing a quantitative change considered in relation to the social need. But gold, as money, performs a dual function. When the quantitative change in one direction or the other, either by increase or decrease, transforms itself into a qualitative one, then the correspondence of the abstract with the concrete during the former state of balance is disturbed. A flood of gold deprives it of the quality of being a measure of value, while it favors the other function. Deficiency, on the other hand, deprives gold of the quality of being a means of circulation, whilst its function of measure of value remains unaffected. Concrete and abstract gold, as the money material, have reached a state of contradiction.

The mere statement by Marx of the distinctive uses of abstract and concrete gold seemed sufficient in his time, as gold existed and was being produced in fair proportion to the demand. But that statement is now seen to have contained the germ of a contradiction which can be formulated as follows:

Abstract gold can fulfill the money function of measure of value so long as the concrete quantities from which the abstraction is derived are *insufficient* relative to the social demand.

Concrete gold can fulfill the money function of means of circulation (including deferred payments) so long as the quantity is *sufficient* relative to the social demand.

What actually has been progressing since Marx with ever growing momentum is the congelation of

gold, as money material, into gold, as mere metal. This carries with it the loss of its quality of means of circulation, as water turning to ice loses the quality of drinkableness, and means the rapidly approaching end of the era of money.

Gold has become utterly incapable of fulfilling its functions of means of circulation and of deferred payment. The contrivances of money tokens and money of account, to take the place of the needed but deficient gold, are admissions of the fact. These substitutes have heretofore functioned tolerably in lieu of gold, only occasionally giving rise to difficulties. But the continuous and irresistible growth of the mass of these substitutes, and the increasing disparity in the proportion of this mass to that of the gold, renders their parity more and more precarious and will ultimately make it impossible. The financial system has operated, though with creaking and cracking, on the strength of the social faith that it will never be subjected to much worse than normal strain. However, it is plainly to be foreseen that the more artificial the system becomes, the more it is liable to call forth crises of increasing severity. An untoward event of sufficient magnitude, especially a great war, may put such a strain on the financial mechanism in all countries as to produce the most tremendous consequences to the form of society to which this mechanism is indispensable. The degree to which society loses faith in symbols of money expresses itself in their depreciation relatively to gold. The depreciation of paper money carries with it that of bank checks,

If tokens have been issued to the very limit of the economic law during a period of prosperity and high prices, and when in the following period of depression the value or price of the stock of commodities, or both, as measured by gold, are much lower, then the sum of tokens in existence must be in excess of the sum in which gold would be required for circulation. In other words tokens will have depreciated. A case, somewhat analogous to the foregoing, is that of depreciation setting in during war, at a time when production, mainly for the warring governments, is most intensive. Peace returning, production ceases for those customers who were buying without much considering cost and paying with drafts on the future. Instead, consumers must now be found able to buy at a profit to the producers and to pay for the products out of current income. Inevitably production will be reduced, and it is therefore only when war is over that depreciation can really tell its full story.

In the following considerations we assume a depreciation of 50%, a rate often surpassed in financial history and also by no means extravagant in view of the reduction of 30% in the money turnover already noted in Chap. V., Sec. *a*, a reduction sure to reach a greater proportion in case of a widespread international disturbance of credit.

In no country is the stock of gold at any time sufficient for the function of medium of circulation. The deficiency is made up by tokens. Certain empiric facts impose the question: Have *all* tokens been issued because they were directly needed for

that function, or has any part of them been issued primarily with a different purpose in view, notwithstanding the fact that it is the active circulation among the people where practically alone tokens are to be found? In order to answer this question we must endeavor to ascertain the circulation requirement in a country, not in terms of theory, in which alone this subject has up to now been mainly treated by us, but in terms of practical experience as expressed by concrete figures taken from existing data, and by logical deduction therefrom. We take for this investigation the United States, a favored country in regard to its gold supply, and with whose money system and customs the reader is the most familiar, or where access to the necessary data is more easily to be had.

In 1909 the total stock of money outside of the Treasury was 3106 million dollars, of which the banks and the active circulation claimed respectively 1444 and 1662 millions,¹ the excess of the latter over the former having been 218 million dollars. All this cash, whether in the hands of the people or in the banks, is the people's cash; the banks have no cash of their own and cannot get a dollar except through the voluntary cash deposits by the people. Now we are not at this time specially interested to learn why just a certain sum of current money is in active circulation among the people, but rather why a certain sum of current money is allowed by them to

¹ Report of Comptroller of the Currency, 1913, p. 54.

remain in the banks, and what the causes are which determine the quantitative relation of the inactive to the active part of the total circulation. It is, however, pertinent right here to state that, although the depositing in banks by the capitalists of their cash receipts and by workers of their savings is the normal way, all the money in active circulation does not pass through the banks. Such are the cases where employers pay wages out of cash receipts, instead of carrying the money to the bank and drawing it out again, or where foreign workers practice hoarding of their savings, lacking confidence in savings banks. The amount thus hoarded, including money lost and destroyed, is taken officially at 100 to 200 million dollars.¹ The deduction of this amount from the total active circulation leaves the latter but slightly above the level of the cash left inactive in the banks.

In an excerpt from an official document to follow presently, the daily deposits of cash in 1909 are given as 50 million dollars. It follows that the cash in the banks is an accumulation of the cash deposits of 29 days, after which it constitutes their reserve at the normal level, the normal demand of the depositors thereafter for current money being matched by the continued normal deposits of current money. The question now arises: Is it a necessary incident in the performance by current money of the function of medium of exchange to linger 29 days in the banks?

¹ Senate Document No. 399, 61st Congress, 2nd Session, p. 217.

These deposits are practically made by the retailers in which designation we include not only merchants, but productive capitalists who sell for individual consumption, such as steam and street railroads, and are withdrawn by the productive capitalists for the payment of wages. The wage period, or time in which occurs one turn-over of the country's pay-roll, is estimated by Irving Fisher at 20 days.¹ Consequently on the face of it the cash can only stay in the banks 20, instead of 29 days. But the workers do not spend their entire wages on the first of these 20 days; they distribute their expenditures equally over the entire wage-period. Therefore the money spent by the workers can on an average remain in the banks only 10, instead of 20 days. But that is not all. To prepare the pay envelopes the money must be drawn from the banks at least one day before pay-day. This reduces the quiescent period of current money to 9 days, or to one third of the period of accumulation to which the banks' daily cash receipts and total cash holdings point. The amount of money which leaves the active circulation to settle at any given time as a hoard in the banks cannot be more than 450 millions, the total receipts of 9 days at 50 millions per day, whereas the banks in reality had 1444 millions. How is this possible? How did they get possession of the additional billion?

Before proceeding further with our inquiry let us check the above presentation of the problem by

¹ Quoted in Sen. Doc. No. 399, 61st Congress, 2nd Session, p. 217.

the movement of the money of account. The total of individual deposits in 1909 was 14,035 million dollars.¹ As likewise stated in the official document already referred to, the daily deposits were 990 millions in that year. Dividing the sum of individual deposits by the sum deposited daily, the quotient shows the number of days it takes for the former to renew themselves entirely. They do so in 14 days. It is seen that money of account passes through the banks twice as fast as the cash seems to do, at least on surface appearances.

Why should the latter linger in the banks twice as long as the former? The circulation of currency should be at least as fast as, but more likely faster than, that of money of account. The former is deposited by the retailers and represents practically the prompt spending by the workers of the wages of a short wage-period (the spendings of the well-to-do and of late years by the farmers are generally believed, as stated in the repeatedly quoted Senate Document, to be mainly effected by checks—probably to the extent of 90%). The cash is withdrawn again with equal promptness for the payment of wages, while the money of account, in the performance of its regular function in capitalist circulation, must perforce settle largely as a hoard, as explained in Chapter III., Section *c*.

There is no other explanation for the fact that the current money in the banks is an accumulation of 29, instead of only 9 days, but the existence of an

¹ Report of Comptroller of the Currency, 1913, p. 55.

excess of the sum of tokens above their actual requirement for the circulation. If this excess did not exist and the banks had only an accumulation of 9 days, it would be saying that their cash reserves would be only one third of what they actually are. In that case also their loans and deposits could not be more than one third of what they are. But that would be an impossible situation in the face of the development of the forces of production. This development can not be cramped for such a reason as a lack of paper money.

The explanation must be, therefore, that a certain sum of tokens has been created not because they were needed in *circulation*, but because additional money was needed as *bank reserves* in order to make possible the expansion of loans which always means an expansion of deposits for the period of the duration of the loans. The extent to which such surplus paper money has been created must be equal to the cash deposits of 20 days, or the difference between 29 and 9 days. That would be about a billion dollars, as already stated.

And, indeed, of this sum nearly three quarters is accounted for by the issue of National Bank notes. That issue was 704 millions.¹ These notes are not legal reserves for this class of banks; naturally the system cannot print promises to pay and then consider them cash assets. They are reserves for State banks which is one very important lodgment for them, but the essential feature is that their existence enables

¹ Report of Comptroller of the Currency, 1913, p. 124.

the National Banks continually to sort out from the bills deposited and retain for their reserves those which are lawful money, using the bank notes for prompt disbursements. In this way the circulation, which would otherwise be filled with lawful money, is fed with bank notes, and the addition of a sum of paper money of a variety unfit for reserves for National Banks has nevertheless served the intended purpose of making possible an increase of their reserves as well as of those of the State banks. The existing United States bonds have no other reason for existence than to furnish collateral security for this private money. We need this debt, even if we must squander the money for pensions to descendants of veterans of the civil war.

As already stated, the question why just a particular amount of money is current among the *people* (a portion of it never passing through the banks) has no bearing on the subject we are discussing, namely, the origin, amount, and nature of the cash held by the *banks*. However, as the amount of the active circulation, 1662 million dollars in 1909, remains, according to our preceding analysis, wholly and habitually outside of the banks, and as we differ very materially in this conception from Senate Document No. 399, it might not be amiss to examine the cause of the divergence of the conclusions, directly as to the sum of cash resting in the banks, and indirectly as to the active circulation. These two divisions of the circulation are very conveniently adjusted to each other in the Document with which we take issue.

This Document was compiled by David Kinley, Dean of the University of Illinois, by order of the National Monetary Commission, in order to furnish the latter with statistical facts concerning the amount of current money needed by the country. The report concludes as follows:

. . . we get in round numbers \$990,000,000 as the bank deposits of the day. Of this amount 5 per cent., let us say, was in money, amounting to about \$50,000,000. If we add \$20,000,000 for business not "banked" we get \$70,000,000 as the amount of money passing in the business of one day. How often does this turn over? Probably once in about twenty-one days. For the week is a common wage period. . . . Let us take twenty days as the average. (I am indebted to Professor Irving Fisher for this estimate for 1896. It is based on the report of that year.) Then \$1,400,000,000 is the amount of money used in the turnover. The banks have \$1,500,000,000. Take \$100,000,000 to \$200,000,000 as the amount abroad hoarded, lost, and destroyed. This gives us a grand total of \$3,000,000,000 to \$3,100,000,000, or approximately our reported circulation.

After having undertaken a very comprehensive campaign for the collection and tabulation of a great mass of interesting data, putting the banks to much trouble and the government to an evidently not inconsiderable expense, the author finally answers the question propounded in a manner for which the elaborate preparations were entirely unnecessary. Let us take another look at his conclusions.

In the first place he takes at 20 millions a day the

unbanked transactions. Why? He gives not the least explanation for his estimate. Yet it is not difficult to perceive how the author's guess came about: there is the actual total circulation of 3000; deducting 100 hoarded and 1500 in the banks leaves 1400 for the turnover. Of this sum 1000 (20 days multiplied by 50) are deposited, consequently 400 remain unbanked. $400:20=20$, or 400 millions divided by 20 days equals 20 millions a day unbanked. The shrewd guess at 20 millions per day works out wonderfully to fit the fact lying on the surface, namely that a certain total sum of money was actually being used by the people or was in the banks.

Now we come to another phenomenon. Of the turnover of 1400 millions we learn that 1000 were deposited. Therefore they should form part of the 1500 millions in the banks. On the other hand, they don't. For they are still comprised in the active circulation of 1400 millions. But they cannot be both within the banks and abroad at the same time. If these 1000 millions of deposits are not included in the banks' cash, in what mysterious manner did the banks accumulate their 1500 millions? Professor Kinley does not touch the mystery. But there still remains the further question: why have the banks not 2500 millions cash, namely 1500 their own and 1000 on deposit? And if the 1000 millions already form part of the banks' holdings of 1500 millions, must not the "unbanked" circulation include all of the 1400 millions which are outside the banks and not merely 400 millions? And must not, there-

fore, the "unbanked" daily transactions be equal to 1400 millions divided by 20 days, or 70 millions daily instead of 20 millions, as accommodately figured by the Professor? Or, if the final conclusion is that so much money is in the banks and so much abroad, then the whole laborious investigation was unnecessary, since we knew those figures beforehand.

It is no part of the business we have in hand to criticize a report, although it was intended to serve as a basis for important financial legislation. Nor is the object of the foregoing criticism of the author's conclusions to show an instance of premises first made to fit what seemed to him a necessary result. The object is only to show from the data collected and compiled by the author himself, and which are in contradiction with his incredibly superficial conclusions, that the "unbanked" or active circulation was in 1909 1400 million dollars, the "deposited" or inactive circulation 450 millions, whereas the banks had actually a billion dollars of current money in excess of the necessary cash deposits by the people and therefore in excess of the total circulation requirements of the country.

The irrepressible necessity of constantly increasing the mass of tokens, even if their addition to the already existing volume of current money is not demanded by the requirements of circulation, has been already illustrated in this section by figures given by the Comptroller of the Currency for 1898 and 1914.

During those years the stock of gold in the United States grew from 862 millions to 1872 millions,¹ or by 1010 millions, while the active circulation, as we have seen, grew only by 622 millions. It is significant that, nevertheless, none of this additional billion gold entered the active circulation, but that it was all directed into bank vaults, where it was needed for additional reserves for the ever growing money of account. Although the gain of gold was even considerably in excess of the additional needs of the circulation, yet for this latter more bank notes had to be issued during the period, trebling the amount originally authorized.

It is only in the United States, among the leading capitalist countries, that tokens may be claimed to be at par with gold. This parity is explained² by an analysis of the figures given above, in conjunction with others to be given in Chapter VII., Section *a*, in relation to the free gold, *i.e.* gold outside the

¹ Report of the Director of the Mint, 1916, p. 46.

² As it is not the purpose of this book to record the financial history since the outbreak of the war, but to advance economic theory, we abstain from altering the text to follow the rapid financial changes. Since writing the above the United States has followed the great European countries in putting an embargo on gold, although this country now holds three eighths of the world's supply. In each of the European countries at war the gold has been effectually sequestered and trading in it made impossible. At the same time their inflation of paper money ranges from four to twelve times the pre-war issues. Under the circumstances depreciation cannot be expressed by gold premiums. The nearest indication of the depreciation is found in the rates of international exchanges some of which are at great discounts, while others are maintained by the more favorably situated friendly countries which thus assume the risks involved.

Treasury. We have seen that the active circulation required 1662 millions in the year 1909, and that, in addition to this, an accumulation in the banks of 9 days' deposits is normally necessary in the process of circulation. Adding these deposits of say 500 millions to the active circulation gives about 2200 millions as the total circulation requirement. This was met by the stock of 1414 millions free *gold*¹ and 800 millions *legal tenders* (which latter were then already in existence to the amount of a billion). The issue of *bank notes* carried the token circulation to a total of about 1700 millions, or 900 millions beyond the needs of circulation. However, there still remained a margin of about 500 millions which had to be filled in the circulation by gold. As long as a sufficient margin for the circulation of gold exists, tokens remain at par.

When the banks withhold gold from circulation, feeding the latter instead with tokens issued for that purpose, they do so mainly in order to make possible a relative amount of money of account, in the United States to the tune of about eleven times as much (including demand, time, and savings deposits). This particular part of the free gold functions as a hoard or store of value, in reality covering an undetermined number of checks of the aggregate amount of itself and no more. It is debarred from entering the active circulation, from performing the money functions of medium of exchange and means of deferred payment, and is therefore without influence

¹ Statistical Abstract of the U. S., 1912, p. 606.

on the value of the tokens. Any part of the gold which the banks might be obliged to surrender for export not only decreases a country's supply, but necessitates under equal conditions a corresponding increase of the amount of tokens. Should the necessity arise for the export of say 300 million dollars gold from a country in such a situation as described in the previous paragraph, and should this amount have to be replaced, other conditions being equal, by a new issue of paper money, that country's circulation would then be mediated by tokens 2000 millions, gold 200 millions. In the event of a pronounced business depression then supervening, depreciation would knock at the door, unless the banks put gold into circulation and kept back tokens. It may be that the banks will be confronted more than once with the alternative: depreciation of the tokens or liberation of their gold reserves,—until this process finds its natural end.

The National Bank notes were originally authorized with a different purpose in view and with a limitation to 300 million dollars. But the fact that their issue is kept alive and has even been greatly increased, not because of the original purpose or because they were or are needed in circulation, but merely to bolster up the money of account, is the precursor of similar cases which must follow inevitably in all advanced countries and lead inexorably to depreciation of the tokens. The inflation of token money, as an accompaniment of the system of money of account, is not only a necessary theoretic conclusion, but a process already initiated, as we have seen,

and one which will be further advanced by the newly instituted Federal Reserve system to be considered in detail later in this volume.

By the foregoing criticism of Professor Kinley's report to the National Monetary Commission and by the analysis following it of government monetary statistics we are at last in a position to clear up the question why the depreciation of tokens and money of account could not be avoided, even if the danger of such depreciation to the existing social order is understood. It might be admitted that the value of the stock of commodities, the world's wealth, is increasing at a much greater rate than the stock of gold; that a great rise of prices, such as especially results from great wars, affects the financial mechanism within a short time in the same way as the increase of value of the world's commodities does in a longer time. Yet why could not capitalistic society set itself firmly against a dangerous augmentation of the paper money? Why not rather restrict the circulating medium so that each unit of gold or its symbol can buy a greater commodity value, thus counteracting the increasing value of the stock of commodities or the tendency of their prices to rise? And fast rising prices are more immediately threatening because of the possibility that the tendency may be suddenly reversed.

Deliberate restriction of the circulating medium implies the over-valuation of gold and would have to overcome the desperate resistance of the debtor class which is less interested in the maintenance of

capitalism than the creditor class. The idea would further have to be reconciled with the prospect of the concentration of an inordinate and constantly growing share of the world's wealth in the hands of the owners of gold mines.

But far more important than these considerations is the conclusion to which we must come by a joint study of the statistical material derived from the above two sources, namely, that restriction of the issue of paper money to a permanent proportion with the gold in a country is incompatible with money of account, therefore with capitalism whose expansion is a condition of its life. A longer lease of life for the things that are is promised by permitting further inflation as the need of it arises. Inflation, therefore, it is going to be.

But now inflation is not the belated realization of the erstwhile aims of the Greenback and Populist political parties. These movements were not founded on a scientific insight into the nature of money; nor were they imbued with a revolutionary spirit, meaning to use inflation as sabotage against the existing order of society. Inflation, as demanded by those parties, was simply a wilful measure designed to relieve the debt-laden middle class. As such a measure it was free to go to an arbitrary length and then stop. At all events it was controversial and challenged the determined opposition of a large, and partly very influential, portion of the people. Now inflation is the logical outcome of economic evolution which is a force superior to human will.

There is no doubt that a refusal to follow up the

increase of the value or the rising price of the stock of commodities with additional issues of paper money, regardless of the state of supply of gold, would check the expansion of the cash requirement for circulation, but the latter cannot be impaled. In time it would become impossible to circulate commodities below a certain minimum value. The increase in the circulation requirement is imperative. Whether due to the growing value of the commodities to be turned over or to advancing prices, it forces the depositors to make greater demands on the banks for cash. The industrial capitalists must draw larger sums for payrolls and expenses, the consumers of all classes must collectively retain more spending money. Instead of there being money enough to allow cash deposits to stay in the banks 29 days, as we found they do, this period of inactivity would progressively shorten until the banks' "reserves" were practically exhausted. Reaching that point does not by any means exhaust the demand for money by the depositors whose needs are imperative, but it does exhaust the solvency of the banks. The world then realizes that the banks really never had "reserves." They had cash, but the length of time this might be left in their possession depended entirely on the will of the people who had a claim to this cash.

A merely transitional form of society cannot be made permanent by following one policy any more than another. As all roads lead to Rome, so contraction leads in the end to exactly the same point as inflation—to the social insolvency.

Now what effect would an important depreciation of emblematic money have on the economic condition of the world?

That kind of money has been created to the extent that the gold would have been needed at any given time. Every dollar of it had passed from hand to hand as the equal of a gold dollar. Now it is found that the world's stock of money, as expressed in the value of gold, is reduced say by 25%, 50%, 75%. The destruction of billions of money cannot be made good by printing more tokens. No matter how great their mass, their sum would always represent the same total money value. If former stringencies in the money market have resulted in periods of industrial depression, with widespread unemployment and misery, what may be expected if say half of the existing money value is destroyed? How carry on the industries on the then existing scale? How conduct international business after a country has parted with its gold or hoarded it, whether in a central fortress or in many "safe deposit" boxes or old stockings?

The striving for a lower cost of production is dictated to the individual industrial concern by the competitive method of the international capitalistic mode of production. The social result is the constant growth of the forces of production. The consequent increase of the value of the existing stock of commodities calls for a relative increase of the sum of money necessary for the exchange of the commodities. Where in the early days of capitalist society gold and silver sufficed, the necessary and enor-

mously increased quantity of money is supplied in the course of time, and for a time, mainly in the form of money of account. Its limitation is found in a certain proportion to cash reserves which experience has taught must be held against it, whether the reserves are fixed by law, as in the United States, or discretionary with the banks, as in England. There is no difficulty in supplying the means for additional reserves by increasing the quantity of legal-tender paper money when the necessity for it arises in a period of intensive production and high prices. But now comes the rub. The use of tokens is limited by a certain economic law, more powerful than the law of any land,—namely, that their sum must bear a certain relation to the gold supply. And the latter fails woefully to keep pace. Therefore when in due course the period of prosperity comes to an end, and small production and low prices set in, the tokens are subject to depreciation. That is the beginning of the last chapter of credit.

If the tokens should depreciate 50%, the sum which the banks will be called on to pay out within a given time would be twice what it was under parity. It is done with brand new bank notes. Subsequently part of this money returns to the banks as a deposit, but as it is needed in the active circulation (the factor which had caused the depreciation and determined its degree), it will be allowed to remain in the bank only so long as technically necessary—not to abide there for a greater length of time, as gold or its symbols could do. Moreover, it would impair the confidence in the banks, if by a legal enactment they

were to be allowed to count their own notes as reserves. Therefore the reserves could not be increased by anything like the amount necessary to offset the depreciation.

The depreciation of the value of the tokens affects the value of the money of account to precisely the same degree. As a depreciation of 50% means that the sum of tokens is twice as large as the sum of gold which they have replaced, it follows that the sum of money of account *needed* would be likewise double of what it was before depreciation. This duplication of the money of account is imperative for the turnover of the commodities, if half of the means of production and of the workers are not to be reduced to idleness. Where could the additional twenty billion dollars for the United States come from at short notice?

The increase in individual deposits during the four years from 1909 to 1913 has been 24%.¹ It would take at this rate and compounded at the rate of 24% every four years, thirteen years for the money of account to grow to the dimension needed *immediately*.

There would be nothing to prevent the banks from duplicating their loans out of nothing—that is, from creating more titles to money, provided they had the necessary surplus reserve. This is an impossibility. The banks would be already in possession of all the gold and all legal-tender tokens which reached their hands, while the entire active circulation would be filled with non-legal tenders (bank notes), on further issues of which the banks would be

¹ Report of Comptroller of the Currency, 1913, p. 40.

depending to continue in their nominal solvency, and provided further that the depositors accept these non-legal tenders in payment of their claims against the banks. The idea of "reserves" must be abandoned.

Not only is there nothing to prevent the banks from doubling their loans,—they *must* do so under the stress of the moment. If they do not, the virtual halving of the loan capital threatens the immediate bankruptcy of too many industrial capitalists who, calculating on a certain amount of borrowed capital, to be furnished them by the banks, had conducted their entire operations on this basis. But many banks have outstanding loans to the tune of ten or more times their capital and surplus,¹ so that the loss of 10 per cent. and even less of their outstanding loans would wipe out both their capital and surplus, and destroy the "solvency" of such banks. A loss of 25% would strike fatally all banks. In stating these percentages we leave entirely out of consideration that banks are heavy creditors of each other, and as such creditors may be involved also in losses through the failure of other banks.

At all events this inevitable step is the final cutting loose from the gold basis, and the final bacchanalia of rising prices and feverish speculation. The capitalist ship has been cut from its moorings, without compass, sextant, or chart. Deprived of the given quantity as a measure, exchange-value becomes as unstable as the wave. Deprived of a means of de-

¹ A very large bank in England even to the extent of twenty times.

ferred payment, credit, the *sine qua non* of developed capitalism, becomes a gamble, ruinous now to the creditor, now to the debtor. Bankruptcies are the order of the day, private credit is an enigma, the crisis has become perpetual. Money has lost two of its three functions, and those two the more important. The only function remaining is that of means of circulation or, popularly expressed, of cash payment for purchases.

The commodity gold becomes a subject of speculative manipulation. But international commerce can be conducted only on a gold basis. During the régime of the parity of the national currencies with gold, international transactions in the great staples not infrequently aborted on account of differences of less than one per cent. in the lay-down cost. Now the value of gold itself fluctuates daily, sometimes violently; the orderly current of the international commerce of earlier days is lost. That pursuit becomes largely a gamble.

The outcome here outlined is not the consequence of loss of faith in the social solvency, a condition which might arise in a great crisis before the logical development of the money system has been reached. That outcome is mathematically inevitable as the consequence of the development of the fundamental factors at work in the commodity-producing society and especially in its capitalistic form. The final process has already started, so far as the United States is concerned, with the bank-note issue, but it is to be greatly furthered by the Federal Reserve system.

In what precedes we have used the more familiar

financial conditions in the United States for illustration, but the reader must not forget that conditions are much more precarious in the other leading capitalist countries of the world. When their monetary systems are threatened with collapse, it devolves on the dollar, still of intact, or but slightly impaired, value to jump into the breach in the hope of saving world capitalism from the worst.

That the United States came unscathed out of the depreciation of its greenbacks to as low a value as thirty-five cents for the gold dollar cannot be cited as an argument against our thesis. That happened prior to the great financial expansion, in a single country, then neither financially nor industrially of the highest importance. It was able to draw on Europe for the needed money. The condition will be altogether different when depreciation is international and simultaneous; when, owing to the very fact of the reduced value of emblematic money, the banks of the world are subjected to an abnormal strain by the demand for gold or for large sums of tokens as would match the gold; when all nations would fain borrow gold, but no nation can afford to lend. And when the world's banks find it impossible to meet the unprecedented and never-in-the-past contemplated demands for money, then no man living can fail to see that the financial mechanism, a tool whose usefulness in its day can scarcely be exaggerated, has broken down finally and irretrievably. Necessity will then prompt everybody to put his hand to the removal of the débris and the bringing of the New Order out of the chaos.

CHAPTER VII

TOTALITY OF THE MONEY SYSTEM IN THE UNITED STATES

a. Conditions prior to Federal Reserve Act.

IN Chapter VI. has been shown the division or ownership of the stock of money in the country as between the Treasury, the banks, and individuals, the latter division representing the active circulation. We shall now have to see what are the kinds of money of which this stock consists. It is reported Nov. 1, 1913,¹ as follows:

	Million dollars
Gold inclusive of gold certificates representing stored gold.....	1,636
Silver inclusive of silver certificates representing stored silver.....	554
Silver subsidiary	160
United States notes.....	344
National bank notes.....	723
	<hr/>
Total outside of Treasury	3,417

In addition to a gold reserve of 150 millions against the United States note circulation, the government

¹ Report of Secretary of the Treasury 1913, p. 78.

held on June 30, 1913 about 200 million dollars in gold, tokens, and bank deposits for current expenses and other purposes, which fund we leave out of consideration as not materially affecting our purpose. Equally without practical importance are discrepancies between statements issued a few months apart, reflecting such minor changes as result from current transactions.

The only absolute legal tender is gold coin, which in the above specification is lumped with the gold certificates, as the latter can be converted into the former on presentation at the Treasury, which holds the corresponding coins.

Standard silver dollars (similarly lumped with the silver certificates convertible into them) and United States paper currency are legal tenders, but may be eliminated by contract. This is being done in the issue of bonds by the government and by the corporations through the stipulation making the principal and interest payable in gold.

Bank notes are not legal tender.

Grouping the currency as to value we find:

	Million dollars
Money of full value (gold in circulation)....	1,636
Silver having an average value of 39%, nominal value.....	714
United States paper, covered to extent of 150 million dollars in gold.....	344
Bank notes not covered by value.....	723

As to that part of the currency which is issued by the government, we have already noted above that

the law permits a distinction to be made by contract between gold and the tokens. Such a legal distinction between the two kinds of money appears as a contradiction to the gold standard law of 1900, which directs the Treasurer of the United States to maintain all the forms of money issued by the United States at a parity with this standard.

If it is sufficient for the maintenance of the parity to give the necessary legal directions to the Treasurer, and if these are expected to be acceptable, as equivalent to fulfilment, to the lending capitalists (especially in foreign countries), the buyers of our long term bonds, there would seem to be no reason for the existence of such a contradiction. But in reality the lending capitalists understand full well that there can be no dependence on the continuance of the parity on the strength of a mere declaration of purpose to maintain the parity.

The demand promissory notes of the banks are private credit instruments issued against another kind of credit instruments, viz., United States bonds, deposited by the banks with the Treasury together with 5% cash as a redemption fund against the event of the failure of any banks. These notes are redeemable at the banks of issue or at the Treasury in legal tender. If we contemplate what would happen in case of a general scramble for money of value, this would be the picture: The holders of 150 million dollars greenbacks would draw out the gold reserve, leaving the holders of 194 million dollars greenbacks in the lurch; the holders of bank notes might have to accept silver tokens of a low intrinsic value or

greenbacks which might turn out to be convertible into gold or into nothing; or the holders of bank notes might retain them until the eventual redemption by the government, in gold, of the bonds which were security for the notes.

Practically in the question of parity between tokens and gold neither the credit of any government, nor the particular metal in which the tokens may be redeemable, nor their irredeemability is involved. Their usefulness as a circulating medium depends solely on their quantitative limitation relative to the minimum circulation requirement of gold in a country at any given time. Tokens may be augmented with an increase in the stock of gold, but not independently of the latter on pain of their depreciation. The full bearing of this principle may not be realized by those who think only of the fact that our country has passed through a period of depreciated paper currency without fatal consequences. These failed to arise because of the general confidence in the ability of the government eventually to work out of the situation, which was then not complicated by a top-heavy money of account. The case will be altogether different, if the logic of the development of capitalism leads to a deadlock,—the need of expansion of the currency on the one hand, and the impossibility of such expansion on the other hand. For the token is ruled by the gold—that gold from which an anarchical society cannot emancipate itself.

Grouping now the country's total cash resources in their three main qualitative divisions, we have:

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	Million dollars
Gold (1636 free, 150 in treasury)	1,786
Token money (deducting 150 covered)	1,631
Money of account	20,824

The parity of token money with gold, we repeat, depends on the limitation of the issue of the former relatively to the latter; the value of the money of account depends on the value of the tokens and on its being readily redeemable in them or in gold.

Any shrinkage in the sum of money used in circulation, owing to industrial depression or declining prices, affects solely gold, which, as absolute value, is retired, hoarded, or exported without loss, at a time when commodities or securities would have to be sacrificed, whereas tokens are only of value in circulation. Acting on these premises, the banks maintain their more permanent reserves in gold and are generally able to hold on to at least *half* of the free gold.¹ Of course, the banks are bound to have in their possession at any given moment large sums of tokens, but they pass them on by preference, and so it happens that in contrast to their heavy holdings of gold (or gold certificates), the bank notes in their possession on June 4, 1913, were only 107 million dollars or *one seventh* of the total issue.

But among the public nobody thinks of discriminating between different kinds of paper money, and naturally so—they are all on a par and circulation is rapid.

The necessary gold basis of competitive capitalism

¹ Annual Report of the Comptroller of the Currency, 1913, p. 37.

and the incompatibility of this basis with the irresistibly growing mass of money of account is a sign of the approaching maturity of capital and a part of the general contradiction between the old individualistic form of society and the developing need of social regulation of social functions.

Capitalists are not inclined to take a serious view of the problems involved. No ruling class ever estimated at their true value the forces making for its undoing. The capitalists' cheerful view is that panics have come and panics have gone, and after each one we grew richer than ever before; that no doubt there will be runs on banks again, and if the small cash reserve is in danger, we can suspend payments, the same as in 1907, when, nevertheless, only a few banks were forced into bankruptcy; in short that nothing different from the past will happen in the future.

The main source of this view lies in the ignorance of those expressing it regarding the age of the present form of society. They believe society has been constituted as at present for a very long time. But the capitalist form of society has not existed for a very long time, and especially its greatest development, including the creation of the entire mass of money of account, is a matter of very recent history. The development of the system of fictitious money is progressing at such a furious rate that there is no telling how soon the hour may come when it may be wrecked by its negation of the theory of value.

The belief that what has never happened before will not happen hereafter, while comforting in some

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cases, is in contradiction to the theory of evolution, which is as applicable to human affairs as to things in nature. In its very money system, quite apart from other vital problems which will confront it, changed conditions will challenge capitalism to prove that it need not be superseded by a superior organization of society.

b. Federal Reserve Act.

The experiences during the panic of 1907, when the banks stopped payment and currency went to a premium over checks, have furnished the ostensible grounds for the enactment on December 23, 1913, of the "Federal Reserve Act," of which the principal purpose, as stated in the Act, is "to furnish an elastic currency." By the term "elastic" currency is ordinarily meant one having the faculty of expanding, when required by the need of an increased circulation, and contracting when that need is decreasing. To be sure an elastic currency is needed by a form of society which is not master of its material affairs and therefore finds itself swept periodically from the height of prosperity into the depth of economic depression. We know that the element of elasticity inheres only in gold, which, being value, is as free to leave circulation as to enter it.

Now, the panic of 1907 had been ascribed to the lack of elasticity in our present monetary system, in which the currency was a given maximum quantity limited, once and for all, by the definite government issue thereof, and limited also by the sum of govern-

ment bonds which could serve as security for the issue of notes by the national banks. Such a criticism of a system of money, consisting partly of gold and partly of tokens, is based on the belief that the tokens can be made to furnish the element of elasticity, and on this alleged belief the new banking and currency law has been enacted.

What was really patent in 1907 was the insufficiency of the cash holdings of the banks to meet the demands of the depositors for their money; at no time since has there been discernible any sign of redundancy of the currency. It could therefore only be said that the currency was deficient in elasticity in the direction of expansion, which is a matter of course, inasmuch as the mass of the circulating medium must depend on the existing quantity of gold, and this cannot be increased at will. But it could not be argued that elasticity did not exist in the direction of contraction by gold dropping out of circulation when not needed. Instead of stating the purpose of the Act by the current and threadbare expression, "to furnish an elastic currency," which does not quite fit the case, it would have sounded less pleasing, perhaps, but would have been more to the point, to have described the purpose of the Act as instituting new machinery for the issue of an additional kind of paper money. The utmost extent to which this issue may take place cannot be foretold, but the workings of the new system will be about as follows:

The national banks, and probably many State banks as soon as the State laws shall have been amended,

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will be associated together in twelve Federal Reserve Banks, located in as many cities, each member bank becoming a stockholder *pro rata* of its capital and surplus, three per cent. being contemplated, although calls up to six per cent. are provided. The President of the United States appoints the governing body of the Federal bank system, the Federal Reserve Board, consisting of seven members, including the Secretary of the Treasury and the Comptroller of the Currency. The system, as we already see, is partly private, partly governmental. The stockholders are entitled to a cumulative dividend of 6% per annum before the government derives a revenue from surplus profits. As the President is the head of one of the political parties which is in power, his appointments to the Board, if confirmed by the Senate, are apt to express the wishes of the ruling party with regard to the policy of the Federal banks. The capital of these will be further made up by the mandatory transfer to them of about a third of the member banks' cash reserves and by the government's deposit of its cash assets (money belonging to it, not that held by it in trust). The total capital of the new banks will thus at the beginning be about 600 millions dollars gold.

Of course, this is not new gold—a legislative act cannot produce that, though it may produce new paper money. This gold, either in its yellow, glittering reality or by representation, had been lying elsewhere, mainly in bank vaults, as "reserves," doing nothing, just waiting for something to turn up. The ownership of money being a social title to profit

under capitalism, the sterility of all these "reserves" goes against the grain of the standard "human nature" of the capitalist epoch. Thus arose the idea of "mobilizing the reserves," realized now by the enactment of the Glass-Owen law without specific statement of such being one of its purposes, although this favorite expression is as euphonious in its way as "elastic currency" in another.

It must not be imagined that the word "reserves" means a sum of money laid aside in order to be immediately available in a time of sudden stress. The word includes all cash funds held by the banks, including those which they need in the regular course of their everyday business and which are as necessary to them daily, in the most calm times, as their tellers' windows.

Why were these reserves removed from one place to another? Because in their new place they are under the control of the government, which is to mobilize them with a vengeance by issuing two and one-half to nearly three times as much paper money against them in accordance with the following method:

After a member bank has lent to somebody say \$1000 and received for this sum a promissory note or similar evidence of debt (commercial paper), it can have this note rediscounted by the reserve bank with brand new government bills, provided said member bank has \$400 gold on reserve with the reserve bank or can produce that much gold from its own vault. Then the member bank can lend out the same \$1000 for a second time, and can continue the operation as

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long as it can take \$400 gold from its reserves, which are idle anyhow, and transfer them to the reserve bank.

Appreciation of the opportunity thus afforded to the banks to make an additional profit was expressed by Newton D. Alling, Vice-President of the National Nassau Bank, New York, as reported in the *New York Times* of Dec. 21, 1913:

What would an intelligent manager of a mercantile business do if he were afforded an opportunity to invest 10 per cent. of his capital in something which could result in at once doubling the capital at his command? He would seize it. This is exactly what is afforded to the national banks by the Federal Reserve Act.

The initial capital of the reserve banks of about 600 million dollars will furnish the groundwork for the issue of new paper tokens to the tune of 1500 million dollars. The quantity of gold in the land will have remained unchanged, but the paper circulation will have increased by 1500 million dollars. Nor is this all. As other than national banks join in the reserve system or avail themselves of it indirectly through member banks, and as the gold certificates which still circulate rather freely among the people are more assiduously collected by the banks for reserve bank purposes, the new paper tokens will further be augmented to an extent limited only by the available gold required as reserve against the new paper tokens and by the degree of discretion exercised by the Federal Reserve Board, there being no limit set by the law itself. And during all this

time there is no increase in the gold; on the contrary this might have occasion to exercise its contractile faculty, after the tokens have furnished the demonstration of their power as the expansive element of "elastic currency."

As the greater part of the new reserve notes will be issued in the rediscounting of commercial paper having not over ninety days to run, it might be held that the reserve board could, on indications of an approaching squall, retire notes by refusing renewals of discounts. Who cannot already hear the outcry of the involved capitalists that such action will precipitate the worst panic, etc.? Will the board have the nerve to weather the storm of protest raised by them? Besides commodity prices may have adjusted themselves to the inflated volume of currency, which therefore will be actually needed, as set forth in Chapter V., Sec. *b*.

But we are forgetting all about the bank deposits as a sort of protection to which, though found inadequate in the emergency of 1907, the gold was once held. Of course, nobody can serve two masters, and the gold cannot at the same time serve as a protection to the bank deposits and to the new government notes. If it had been the purpose of the Federal Reserve Act to concentrate the banks for times of stress only, under the management and with the aid of the government, their maintenance of the former volume of individual reserves would have become correspondingly less imperative for the time being. But these Federal Reserve banks have a wider scope than that; they are expected year in and year out to

earn their expenses, including no doubt the maintenance of a number of branch offices, pay a dividend to the stockholders and a revenue to the government. They are to be in active business in fair weather, as well as in foul, and the easy money obtainable through the banks when all is well will not fail to stimulate the enterprise of the capitalists. And when the test comes for the new currency to prove its elasticity by coming to the relief of the money market in time of panic, said currency, or rather the gold necessary for getting it, will be "introuvable,"—unfindable,—as the French say, having already been absorbed in the general capitalist expansion.

The situation then existing will resemble that in which we see the banking system of Great Britain and Ireland, thus referred to by a standard authority¹: "The deposits in the savings banks have now (end of 1905) increased to upwards of £206,000,000," "but of cash . . . in reserve against a panic—the savings banks have not a sixpence." "They hold securities of the best kind," but "if in a general panic there were a run on the savings banks, those banks could not sell £100,000 of consols without the help of the Bank of England." "This is only a single additional instance beyond . . . innumerable ones."

In this state of affairs this authority has "pointed out a deep malady," but being "a system of credit which has slowly grown up" "it is of no manner of use proposing to alter it," any more than "try to

¹ *Lombard Street*, by Walter Bagehot, chap. xiii., p. 332, edition of 1910.

alter the English monarchy and substitute a republic,"—which would of course be the height of absurdity.

Speaking of the ratio of cash to bank deposits in general, the same authority says¹: "The amount of that cash is so exceedingly small that a bystander almost trembles, when he compares its minuteness with the immensity of the credit which rests upon it."

It is perfectly clear that if the Bank of England fails all other banks in Great Britain and Ireland are liable to fail. Heretofore it has been possible on several occasions to save the Bank of England from failure by breaking the Peel Act,² from which it can by no means be concluded that the issue of fiat paper money will accomplish the same purpose in the future. Obviously we are living under a system which is becoming more artificial every day and is bound sometime to come down like a house of cards.

On the one hand the great addition to our token money endangers the gold basis; on the other, the reserves, even with the addition of the whole issue of tokens, successfully maintained at par with gold, cut but a small figure when confronted with the cry for the cashing of 18 billions of money of account. And the money of account, from formerly less than ten times, is now growing twenty times faster than the money of value!

With the collection by the banks of all the gold in

¹ *Lombard Street*, by Walter Bagehot, chap. i., p. 18.

² See Chap. IV., Section b.

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the land, except that held by the Treasury, and the transfer of the gold to the reserve banks for the purpose of obtaining $2\frac{1}{2}$ times its amount in paper money, the cash reserves which the banks are required to maintain in their own vaults and which by the act are reduced to about one quarter of their former proportion to demand and time deposits, will consist entirely of the tokens which accumulate in the banks in the ordinary routine of receiving deposits of currency and subsequently paying the same out again. Deposits will have lost all direct connection with gold, but must perforce have indirect relation to it on account of the value relation of the *tokens* to the gold. This indirect relation therefore remains highly important. The following figures show the enormously growing disparity between money of account and gold:

	Millions
Individual deposits, ¹ surplus, and profits in 1913	20,185
" 1908	<u>15,031</u>
Increase	<u><u>5,154</u></u>
Gold in the country ²	in 1913 1,897
	" 1908 <u>1,615</u>
	Increase <u><u>252</u></u>

The increase in the volume of individual deposits, bank surplus, and undivided profits since 1908 is seen by the above comparison to be proceeding at a

¹ Comptroller, 1913, pp. 44 and 45.

² Director Mint, 1913, p. 62.

rate twenty times greater than that of gold. In other words against every dollar gold added to the national supply during the five years from 1908 to 1913, there have been created twenty dollars in money of account, aside from any increase of the latter which may be hidden from view by the issue of stock dividends by banks against their accumulated cash profits. In 1908 the increasing gold production reached the high-water mark and has since remained stationary. Authorities are not aware of any new sources from which an additional supply might be expected in the future, notwithstanding the fact that gold mining is a profitable industry.

To restate the matter in a few words: every dollar gold is expected to serve as a guaranty of value of

- (1) \$20 money of account;
- (2) Any possible increase in the ratio in which money of account may be created hereafter as compared with any increase in the gold supply;
- (3) \$1 token money;
- (4) Any addition to the token money from the operation of the Federal Reserve Act or from any further issue independent of that act.

In other words the entire money system is to rest on a basis of gold to which recent development assigns a narrowness of $4\frac{1}{2}\%$ of the whole, and which is subject to further contraction from the causes above recapitulated.

Between the Frankenstein monster of its bank account on one side and the gold to which it is chained on the other side the capitalist class is indeed confronted by a problem.

In thus criticizing adversely the Federal Reserve Act, we are far from impugning the motives or questioning the ability of the men who had a hand in the enactment of the same. It is perfectly true that the old monetary system was inelastic, but only so far as paper tokens were concerned. It was certainly not more inelastic than that of England, where nevertheless there is no agitation for currency reform. However, it would not be correct to judge of the needs of one country by those of another. It is equally true that the need of money is continually growing with the increasing value of commodities which are to be circulated; but a permanent augmentation of paper money is not stated as the object of the act. At the same time the increase in the amount of money of account goes on automatically, and its supply is always equal to the demand. It is only a matter of employing more clerks at the clearing houses to double the amount of exchanges. But the sum of money of account bears a relation to the sum of gold, as shown in the preceding chapter.

The need of additions to the volume of money is a concomitance of the growth of money of account. This need gold, so sorely deficient, is unable to fill. Recourse must be had to paper money. The Federal Reserve Act will provide paper money on a more systematic and comprehensive plan than the previous expedient of the Aldrich-Vreeland emergency currency instituted in consequence of the experiences in the panic of 1907. There is no occasion, and there has been no intention, to consider the act from the narrower point of view of the financier who must

necessarily be guided in his actions by the empirical conditions he has to meet directly, conditions to which he is subject and which he cannot change. It may be readily admitted that nobody could have suggested a better financial measure than this act. It may also be granted that the members of the Federal Reserve Board, on whom will rest the responsibility of governing the new system, will always be men of the highest moral and professional qualifications. Yet the Federal Reserve Act must fail as a solution of the money problem. No legislation can reach down to the bottom of that problem. For in the stage we have reached in social integration man is not master of his economic affairs. They rule him.

CHAPTER VIII

THE CYCLE OF INDUSTRIAL CAPITAL

FORMULA:

$$\begin{array}{c}
 m \text{---} c \dots\dots\dots (\quad p \quad) \dots\dots C \text{---} M \\
 \left. \begin{array}{l} \text{money commodity} \\ \text{means of production} \\ \text{labor power} \end{array} \right\} \dots \text{(productive process)} \text{ COMMODITY MONEY}
 \end{array}$$

JUST as the development of the individual animal from the cell to the adult represents, more or less clearly, the story of the origin and development of the species, so does the new individual industrial enterprise repeat the origin and development of its species—the capitalist system of production. It may not be necessary to recall here that the original industrial capital was derived largely from the older merchants' capital and usury capital, no more than it is necessary here to inquire into the origin of any money which in our time begins its career as industrial capital. It is sufficient to know that it exists and appears for the first time in the chosen sphere of production.

Marx divides Industrial Capital into the following component elements:

(1) *Constant Capital*, consisting of the means of production, inanimate things which cannot of

themselves increase in value, therefore a given or constant quantity;

(2) *Variable Capital*, the living labor power which adds value to the product.

Constant Capital he subdivides into:

Circulating or Liquid Constant Capital, such as raw materials and accessories; whereof the value is transferred entirely to the new product;

Fixed Capital, such as buildings, machinery, work animals, whereof only the wear and tear is transferred to the value of the product.

Industrial capital in the course of its function passes through the following stages which together are called its cycle:

m—c money transformed into commodities (means of production and labor power).

(p) arrest of circulation by the productive process resulting in a commodity of greater value than the elements of its production.

C—M COMMODITY (of increased value) transformed into and returning as MONEY (including the increment) to its starting point.

The value added to a commodity during the process of production beyond the value of the elements which entered into it (labor power, liquid constant capital, and wear and tear of fixed capital) is called by Marx, *Surplus Value*.

It is not within the purpose of this work to restate with even approximate adequacy the Marxian analysis of surplus value. The same bears directly on the relations of capital and labor which have not under-

gone any material change since Marx formulated the theory of surplus value on the groundwork of his theory of value. The significant changes since his time affect directly only the relations of the capitalists to each other; although indirectly these changes are of transcendent interest to the working class. However, an understanding of the theory of surplus value is indispensable for an understanding of the complete fabric of the capitalist system of production. For the sake of those readers who are not as yet familiar with Marx's *Capital*, the following brief outline of the general theory is inserted.

We have seen in Chapter II. that the value of commodities is determined by the quantity of labor socially necessary to produce them. Since labor power is a commodity, its value on the market is determined by the same factor, in other words by the cost of its perennial production or reproduction. But labor power differs in one important respect from other commodities in that it is the only commodity which during its consumption (the act of labor) replaces the consumed value besides creating additional value. Thus while the capitalists buy labor power at its exchange-value based on part of a work day, they enjoy its use-value during a whole work day. For that part of the working time which is in excess of the necessary work time (necessary for the reproduction of labor power) no equivalent is paid to the worker. The increment thus accruing to the capitalists in the value of the product, beyond the value of the elements of production, is surplus value.

The *rate of surplus value* expresses the proportion

which the surplus value created bears to the *wages* paid. It is the capitalists' share in the value produced by labor, as measured by the worker's share.

Profit is surplus value considered in its relation to the capital advanced for production. The *rate of profit* is the surplus value, as measured by the *capital* invested.

The surplus value produced by the workers in any establishment is not necessarily equal to the net profit realized by that establishment. Its net profit is generally only the residue of the surplus value remaining as its share, after having relinquished part of the surplus value to other capitalists or their retainers under the titles of merchants' profits, interest, rent, premiums of insurance against losses caused by bankruptcy, theft, burglary, excessive fire risk, etc., the cost of advertisers, lawyers, politicians, and judges,¹ and under various other forms. But the total profit appropriated by the capitalist class equals (though not entirely, on account of constant depreciations) the surplus value surrendered by the workers.

The proportion of the actual (not nominal) revenue of the workers in their collectivity to the revenue of the capitalists in their collectivity in the entire manufacturing industry of the United States, including in the revenue of the capitalists the part of the surplus value paid over by them to landowners and retainers, is shown in figures arrived at by a calculation based on the United States Census found

¹ See W. J. Connolly's series of articles in *Everybody's Magazine*, 1913, "Big Business and the Bench."

on pages 232-233. These figures of the Census are confirmed by a similar elaboration of statistics furnished by another source, the New Jersey Bureau of Statistics, found on pages 241-242, relative to the important silk industry in that State. This industry is of undoubtedly average organic composition, that is, one in which the proportion of constant to variable capital represents the average of manufacturing industries.

That some people are aware of the fact that the division of the product between the capitalist and the worker is effected on about the basis deducible from the Census figures here referred to, is shown by an address delivered at the University of Maine commencement in the spring of 1914 by Mr. Marshall, Vice-President of the United States, in which this sentence occurs:

“Sixty years later [from 1850] the proportion had changed to less than one fifth to labor and more than four fifths to capital.”

Previous to the present era of capitalist production, during that of simple production of commodities, the worker owned his tools, with which he produced some special kind of commodity in accordance with the historical development of the division of labor. His wants, however, were manifold, and to supply the same he exchanged his special product, value for value, with his various equals. In this exchange money played only the fleeting rôle of first serving as a measure of equivalence and then to facilitate the exchange of one product into various other products of various quantities, as required at

various times by the worker. It was this commodity which circulated, the direct substance of social alimentation and digestion, not money. When we say money did not circulate during pre-capitalist production we mean that its movement was centrifugal in contrast to its centripetal movement in the capitalist system of society. In the latter, money, after describing a circle, returns to its starting point augmented by profit. On the contrary when our old friend, the weaver, had realized the money value of his linen, he started some of the money traveling along the line of his fellow-workers. It first reached the butcher, then the baker, then the candlestick maker, and ere long the weaver himself was in the line again, not on account of anything uncompleted in his previous transaction, but for the purpose of effecting a similar metamorphosis with a fresh lot of linen. The underlying principle of that system of society was production for the purpose of consumption. Its formula was

$$c—m—c$$

The essence of the circulation was

$$c—c$$

The capitalist mode of production substitutes for the pre-capitalist formula $c—m—c$ the (abbreviated) formula

$$m—c—M$$

Capitalist circulation begins with money and ends with more money.

Its essence is

m—M

which is in fact the formula of loan capital in its modest 5 or 6% sort of way.

c—c represents different qualities, equal quantity.

m—M represents identical qualities, unequal quantity.

Profit is revealed as the sole motive of capitalist production.

Money was a fleeting medium in c—m—c.

Alas! that the commodity cannot be made equally fleeting in m—c—M.

The ideal is m—M, and from its standpoint production is merely an unavoidable evil. And it is this ideal which at one time or another has inspired every capitalistic nation and started it on a course of mad speculation.

However, the capitalist class has almost overcome this unavoidable evil by the development of the large corporation. Whereas in the early days of capitalist production, the individual capitalist performed a conspicuous function in the system of production by his personal command of labor, that service is now delegated to managers, superintendents, engineers, accountants, etc., salaried by the corporation. The stockholders do not as much as attend the annual meeting for the election of directors, contenting themselves with depositing in their banks the dividend checks received by mail.

This is by no means the first time in history that economic evolution deprived an originally useful ruling class of its social function. The early feudal lord performed a social service in donning his armor to defend his territory and its population. But his descendants were relieved of this hardship and instead of armor donned velvet coats and silken breeches to attend court functions, none the less maintaining their claim to tithes on the mere ground of their ownership of the means of production. The French Revolution ended the purely parasitic existence of this class.

CALCULATION, BASED ON UNITED STATES CENSUS, OF
PROPORTION OF WAGES AND SALARIES TO SURPLUS
VALUE ACCUMULATED IN THE MANUFACTURING IN-
DUSTRIES IN THE YEAR 1904.

(Unit—1 million dollars)

Value of manufactured products in 1904 (13th Census of the United States, 1910, v. viii., Manufactures, p. 32).....	14,794
Cost of materials (Census of Manufactures 1905 part i., p. ci.):	
Raw materials.....	8,059
Accessories: fuel, mill supplies, oil, waste, freight, rent of power and heat, packing boxes and wrapping paper.....	445
Wear and tear: values given in Census of Manufactures, 1905, part i., Table xv., p. lxx., as land 980, buildings 1996, machinery 3489. Report adds,	

p. lxx: "Rent paid for land, buildings, and machinery, \$73,267,209. If this gross rent were capitalized at 8 per cent., it would represent \$915,840,112 as the value of rented property." Machinery included in rent, aside from some power machinery, can have reference only to shoe and other patented machines, all of which is a negligible quantity. Separating the value of rented property in the same proportion as owned, we arrive at totals:

Land	1282		
Buildings	2610	2%	52
Machinery	3489 (4 to		
	10%, say)	7%	244
			<u>296</u>
Taxes, real estate and general			
(13th Census U. S., 1910, v.			
viii., p. 129)			59
			<u>8,859</u>
Value added by labor			5,935
Divided (Census of Manufactures			
1905, part i., table xix., p. lxxi.)			
as follows:			
Wages	5,470,321 workers		2,612
Salaries	<u>519,751 employees</u>		<u>575</u>
Total	5,990,072	54%	3,187
Owners of	216,180 estab-		
lishments		46%	<u>2,748</u>
		<u>100%</u>	<u>5,935</u>

PROPORTION OF WAGES AND SALARIES TO TOTAL SURPLUS
VALUE

Per cent.

Proportion of wages and salaries to product in sphere of production		54
Rent of dwelling, in proportion to wages generally per cent.	25.	
less maintenance 15% of rent =	3.75	
less profit	<u>1.25</u>	2.50
" depreciation (off-set by increase in land value)		
" taxes for common pur- poses $\frac{1}{8}$ of rent	<u>3.33</u>	
		<u>5.83</u>
	Net	19.17%
	of revenue of	54%
		<u>10</u>
balance for all other necessities of life		44
Profits to middlemen 50% (see below)		<u>22</u>
Ultimate realization by workers and employees of value produced		22
Total surplus value retained by capitalists of value produced		<u>78</u>
		<u><u>100%</u></u>

As seen on the preceding page, the workers constitute eleven twelfths of the persons who run the manufactures. Of the consumption of the workers the New York State Food Investigating Commission say in their report dated August 1, 1912 (from which also all the following facts are taken) that food

supplies "make up from 40% to 50% of the entire budget of the families of laboring people. There are over 25,000 establishments selling food products" (in New York City) (p. 23), "one store to every 250 persons" (p. 7), instead of "retail stores capable of supplying 25,000 to 50,000 people each" (p. 33) in properly distributed buildings owned by the city and operated, under supervision as to prices, etc., of a State commission on markets, by one corporation at limited profit (p. 36). At present "commission men, receivers, wholesalers, jobbers, speculators, storage men, retailers, and truckers make profits or charges against the stuff which aggregate from 40% to 70% of the amount finally paid by the consumer" (p. 35). This would make an average of 55%; adding only 5% profit for the shipper makes total 60%; deducting out of 15% expenses claimed by private retail markets (p. 11) 10% for actual labor (the balance being rent) leaves net profit 50%. There are certainly further expenses, but they are largely mere waste.

We have now accounted for 70% (25% rent and 45% food) of the worker's wages. The balance is largely spent for manufactured articles sold by retailers in the poorer quarters at higher prices than charged by the large stores in the department store districts. In assuming 50% profit on all of a worker's purchases, such a rate seems reasonable, if one considers further the smallness of purchases (coal by the pail, etc.), poor quality, adulteration, and cheating in weights and measures.

Merely by way of comparison with the above

figures of the New York State Commission we abstract from the Report of the Secretary of Agriculture of 1910 the following percentages of increase of prices to consumers over cost (pp. 24 and 25):

Cabbage 135% by the head over farm price

Onions 260% " " peck " " "

Oranges 400% " " dozen " " "

Coffee 150 to 337½% over import "

Cost 7.80 cents

Freight 0.28 "

Total 8.08 cents per lb., sold at 20 to 35 cents
per lb.

Tea 212½ to 337½% over import price

Cost 16 cents, sold 50 to 75 cents per lb.

The extent to which freights (themselves impregnated with profits) enter into cost of domestic products is estimated by the Secretary on farm prices as low as:

0.9%	on butter (factory price)
1.3%	" eggs
4.5%	" live poultry
4.8%	" beans
5. %	" sweet potatoes
13.6%	" apples
14.8%	" potatoes

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COMPARISON OF TOTAL SURPLUS VALUE TO VALUE OF MANUFACTURING PLANT

	Unit 1 million dollars
Value added in 1904 by workers and employees ...	5,935
Wages and Salaries in manufacturing industry 3,187 reduced by rent and surplus value accumulated in sphere of circulation from 54% to 22%, or.....	1,298
Total surplus value in 12 months, 1904.....	<u>4,637</u>
Surplus value per month.....	<u><u>386</u></u>

RESULT

Value of buildings in 1904 (p. 175).....	2,610
Value machinery in 1904 (p. 175.).....	<u>3,489</u>
Total value of plant.....	6,099
Surplus value for 15.8 months at 386 per month...	6,099

DIVISION OF LABOR TIME BASED ON 10 HOUR DAY

Necessary labor time	22%	2 hours	12 minutes	
Surplus	" "	78%	7 " 48 "	

Another striking fact in the United States Census figures here presented is the relatively large number of *salaried employees* to that of the *wage workers*, their numbers being respectively 519,751 and 5,470,321, or nearly one employee to every ten workers.

Nevertheless this proportion has since become even more unfavorable, for according to the Census

of 1909, that is within a term of five years, their numbers increased:

Employees to 790,267 or 52% over 1904
Workers to 6,615,046 or 21% " "

The percentage of employees increased two and one half times as much as the workers.

This is a perfectly natural phenomenon. Production on an enlarged scale is accompanied by technical improvements increasing the mass of products turned out by the existing army of workers, and while the latter has nevertheless increased at the rate of 4% annually, the number of persons required to handle, sell, and account for the increased mass of products has increased at the rate of 10% annually, so that in 1909 the proportion of employees to workers was as 1 to 8.

In our calculation we have made no distinction between workers and employees for the following reasons:

The class of employees may be generally divided into two sections.

One is composed of the hierarchy of factory organization (managers, superintendents, foremen), engineers, chemists, bookkeepers and clerks. These would be just as necessary in any other than a capitalist system of production, for instance in a system of associated labor. Therefore while not directly productive through the performance of manual labor, these people are indirectly productive equally with the workers themselves.

It is true that the salaries paid to some of the

employees are enormous compared to common wages, and that the average remuneration for the whole class of employees is materially higher than for the working class. This is because the work of the salaried class is considered complicated labor, or a multiple of common labor, to which matter we have referred already in Chapter II.

Salaries are regulated by the market price, like wages, although the price fluctuations of the former, or the deviations from value, are greater than those of wages. This greater irregularity, as well as the high level of many salaries, is due to our manner of producing the higher capacities. Suppose that by some freak of fate we had never invented a contrivance for making pins otherwise than by hand; evidently pins would then be expensive compared with other goods. This is precisely what our social system (which also determines the degree of general education we can afford to give) is doing: it manufactures unskilled labor more and more, as it were, by machine (for the machine) and the skilled workers by hand. Technicians, like hand-made commodities, represent a greater quantum of social endeavor or labor time than machine-made workers. Germany, which is ahead of the United States in technical and educational matters, has by its technical and trade schools reached the transition from hand to machine industry in the making of skilled workers, and for a number of years we hear much of its educated proletariat. The exchange-value of the technical profession must be declining.

The other section of the class of employees has no

connection with the sphere of production and belongs to that of circulation. This is mainly composed of salesmen whose activity adds no value to the product. Their usefulness consists in realizing for the capitalists the surplus value contained in the commodities, on which realization the whole capitalist system is conditioned. Not only do they realize the surplus value but the labor time and salary of every one of them leaves a profit to his employer.

Inasmuch as this class is an indispensable adjunct to the existing system and is itself exploited, it is included in the class of productive agents in our presentation of the Census figures. Under conditions as they are the most modest drummer and the hundred-thousand-a-year electrician Steinmetz must be assumed to perform social service in proportion to their respective remunerations. And therein lies the difference between them and the capitalist owning paper titles to income or the landlord owning real estate of which the ground rent swells by the mere birth of children to other people. These gentry perform no function.

Viewing, however, the activity of salesmen from the standpoint of a higher social organization, it must be considered as social waste, and their share in the income of the class of employees represents a deduction from the 22% of the social product falling to the productive agents.

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CALCULATION, BASED ON THIRTY-FOURTH ANNUAL REPORT
(1911) OF THE BUREAU OF STATISTICS OF NEW JERSEY,
OF PROPORTION OF WAGES AND SALARIES TO
SURPLUS VALUE ACCUMULATED IN THE SILK INDUSTRY
IN THE YEAR 1910.

Value of manufactured broad silks and ribbons (p. 16)	\$52,572,837
Materials: raw, oils, fuel, waste, packing cases, lighting, etc. (p. 40)	\$29,115,893
Depreciation: land and buildings owned by establishments (p. 38), \$4,733,819. Adding value of rented property and separating lands and buildings by method used on United States Census calculation, result is:	
Land, \$2,039,000	
Buildings, very solid \$4,151,000 @ 1% \$41,510	
Machinery (p. 38), 10,210,675 @ 7% <u>\$714,747</u>	
	756,257
Taxes on real estate and general, estimated	<u>200,000</u>
	<u>30,072,150</u>
Value added by labor	\$22,500,687

Divided as follows:

Salaries not reported; U. S. Census 1910, vol. viii., p. 771, gives for N. J. as of Dec. 15, 1909,

silk employees 1774, salaries \$2,317,000. Allowing six months increase for average of 1910 makes

	1,814 em-		
ployees		\$ 2,364,000	
Wages (p. 76)	<u>21,745</u> workers	<u>10,526,801</u>	
Total	23,559	57%	12,890,801
Surplus value	43%	<u>9,609,886</u>	<u>\$22,500,687</u>

TOTAL RATE OF EXPLOITATION

Assuming the value per yard to be \$1.00 and the figures of the Bureau accordingly to stand for yards instead of dollars, it is plain that after 30,072,150 yards are sold and have replaced the consumed capital, fixed as well as liquid, the remaining 22,500,687 yards are to be divided

12,890,801 yards to the workers and salaried employees
 9,609,886 " " " manufacturers.

But instead of each worker taking his quota of yards silk *in natura*, we can view him as then and there selling it to the manufacturers at the factory price of a yard for a dollar and with the money (after paying his rent) buying the necessaries of life at the retail price. The difference between the factory prices at which the working class sell their share in the product to the capitalist class and the retail prices at which they buy back the same from the capitalist class, allowing however for the necessary

circulation cost, as freight, storage, etc., is the further surplus value collected by the landlords and by the capitalists in the *sphere of circulation*, in addition to the surplus value collected by the capitalists in the *sphere of production*, as shown in the calculation of "Proportion of Wages and Salaries to Total Surplus Value" (p. 176).

CHAPTER IX

THE MYSTERY OF CAPITALISM

IN the preceding chapter the cycle of industrial capital as a whole has been depicted as starting on its career and completing its first turn, the same as any individual capital in a new sphere of enterprise may be seen to do any day. The beginning and the completion of the turn have shown the motive which is expressed in the formula $m-c-M$. The money capital invested does not, however, pass simultaneously in its entirety through the successive phases of the cycle, but in due course portions of the capital may be found in all the different phases at the same time, especially with the repetition of the turns, in other words with reproduction.

Of course, when a wheel is actually revolving any point is as much the beginning as any other, and what had been fixed in the formula as the beginning becomes a mere point of passage like all the others. Then we are in a position to exercise freedom of choice for looking upon any other point on the wheel as the beginning. For instance our good friends, the political economists, prefer to represent the productive process (. . . p. . .) as the beginning of the story. Certainly such a view of the matter has its ad-

vantages. It throws at once into relief the fact that the object of the captains of industry is really the production of the necessaries of life for mankind, probably supplying them as cheaply and as plentifully as possible. As soon as we gain a good realization of this view, we comprehend readily that circulation is in our day not different from former times, it is always $c-m-c$, production for the sake of consumption. We shall also have no suspicion that the technical revolution in the instruments of production during the last two centuries has brought about a revolution in the division of the classes by concentrating the ownership of the new instruments of production in the hands of the new capitalist class and divorcing the workers from their antiquated tools, thus subordinating them as the wage-working class in the new capitalist order of society. We shall further be saved the racking of our brains in trying to understand that $c-m-c$, a relation of social equality, has been superseded by $m-c-M$, production for the sake of profit, a relation of social inequality.

That the laudable zeal of the capitalists to provide mankind with the necessaries of life, and even with luxuries, carries with it its own recompense by enriching them, it would be of course impracticable to deny. The national wealth is in their custody, without check and without bond, a condition said to have been described by the late lamented President Baer of the Reading Co., leader of the anthracite trust and Morgan satellite, in a letter to a Wilkes-barre minister referring to "the Christian men to

whom God in His infinite wisdom has given the control of the property interests of the country." On the other side the wage-workers, as we already had occasion to notice, are practically penniless. Political economy deals only with wealth, not with poverty; the representatives of the latter, therefore, do not count, a fact wittily reflected by George Bernard Shaw in a letter to a New York gentleman who had requested an appointment: "I shall not be in London at that time. In fact nobody stays in London during the summer, except a few million cockneys."

Now, what is the source of the wealth? Any child knows enough to answer that it is an accumulation of profits. But just how do the profits originate? On this point the political economists disagree, and their disagreements should impress us with their originality and independence of thinking. On the other hand they thereby expose themselves to the reproach that their methods are philosophic, not scientific, for no science offers opposing theories, differences among scientists existing only during the stage of hypothesis. Time was when political economy bid fair to develop into a real science; that was in the days of the classics Petty, Smith, and Ricardo, whose vision was of course limited by the empirical conditions of their time and by the lack of the theory of understanding, given to the world later by Dietzgen and which we have already outlined. But historical development atrophied the nascent science. The awakened realization by the workers that they constituted a distinct class, having

common interests opposed to those of the capitalist class, and the class struggle to which this realization gave rise, paralyzed a science having for its theme the laws governing the economic relations of the warring classes. The frank investigator of the youthful days of capitalist society degenerated into the latter-day professor, who no longer searches for truth, but for lawyer's arguments in conducting a defense.

So instead of unity through scientific methods which would be fatal to the defense, we find among the political economists conflicting philosophic views as to the best way of conducting the defense, each professor adding some immaterial frill of his own which in his estimation grows to the importance of the saving thought. Essentially they have only two ways of accounting for profit: one is that it originates in the productive process in a manner too mysterious and contradictory to permit of a clear-cut analysis, while the other attributes it entirely to the sphere of circulation, as a phenomenon accompanying the sale of the product.

Let us first dispose of the latter explanation. Here the postulate is that the value of the product cannot be larger than the value of the capital which had gone into and has been consumed in the productive process, all the elements of production (including of course labor) having been paid for at their full value and the addition of the value of these elements constituting the value of the new product. In other words, the capitalists sell to each other their products (raw, partly manufactured, and accessory

materials, buildings, machinery, and articles of individual consumption) above their value by adding a profit.

When Robert and Bertram, the merry vagabonds, met again after a long interval and in the exuberance of their feelings embraced each other, each improved the occasion by deftly abstracting the other's handkerchief. It is impossible to see how these worthies, by cheating each other, increased the value of the stock of handkerchiefs one particle. If only one had been successful, the result for them as a class would have been the same—what one gained the other lost. As a class they could not grow richer except at the expense of those outside their class.

But, it is maintained, the value of a commodity is less in the hands of the producers, than in those of the consumers (in which are included the capitalists in their capacity as productive consumers). The fact of the matter is that the producer does not look on his commodity as a use-value to himself; it is to be realized as such only by the consumer, productive or individual, who acquires its use-value by paying for its exchange-value. He does not pay twice for the commodity, first for its exchange-value and then something extra for its use-value.

This doctrine aims to steer clear of a discussion of the part played by labor in the creation of value and therefore of surplus value or profit. The intention is good; it is better this discussion were avoided. But the road to perdition is paved with good intentions. What if the workers should seize this doctrine and say:

Things seem to be fixed so that everyone can make a profit on the commodities he sells, except us who, do what we may, must sell our only commodity, our labor power, at the cost of production. We want the rules of the game changed so that we are the exception no longer. We want some of the smart men on our side to find out what is the proper profit of labor, and if they come to the conclusion that this adding a profit all around is only tomfoolery we will abolish the whole profit system for you and for us.

Such language, we all agree, would not be elegant; for our own part we might add that the demands would not thus be stated with scientific correctness, but they certainly would be dangerous to our social system.

Indeed, something resembling this idea, but without the formulation of any demand, privately, so to say, has been carried out by the English, Belgian, and German coöperative societies. The first mentioned do five hundred and fifty million dollars' worth of business annually¹ and these associated workers employ as salaried managers, etc., many a former employer of theirs.

We can now turn our attention to the principal strain of political economists, that which leaves the question of profits in a mystic haze. Since Adam Smith there has been no real, only pretended, progress in economics, so far as the universities are concerned, but his candor and repose have been replaced by very active wriggling and dodging on the part of

¹ *Socialism and Democracy in Europe*, by S. P. Orth, Professor of Politics, Cornell University, p. 218,

the present-day professors, a concomitant of the changed psychology of the working class. It will therefore be more direct and useful to follow Smith's thoughts, rather than the gymnastics of the exponents of economics in its period of degeneration.

If the capitalist cycle begins with . . . p . . . we must perforce presuppose the entrance into it of something. What was it? From the standpoint of the capitalist (and there is no other standpoint, as we shall see presently) it was a certain value of capital in divers forms. One of these forms is human labor. But the capitalist has not bought the laborer as a slave. Also the laborer is not a capitalist; he has a commodity to sell, but that becomes capital (the means of producing surplus value) only in the hands of the capitalist; it is not capital while owned by the laborer. He cannot be made to fit as a man into a system which expresses itself in terms of capital. What capital then do wages represent? Why that part of the circulating capital of the nation necessary to the keep of the laborer, exactly as of working animals. Smith expresses this result in *Wealth of Nations*, book ii., chap. v., p. 279: "Not only his laboring servants, but his laboring cattle, are productive laborers"—and again in book i., chap. vi., p. 38: "In the price of corn, for example, one part pays the rent of the landlord, another pays the wages or maintenance of the laborer and laboring cattle employed in producing it."

This analogy of the wages of laborers and of the wages of cattle was as far as the empirical conditions of his time permitted Smith to see. In making it,

he was under no restraint by consideration of politeness or expedience; his book was not written for the workers, who could then neither read nor write. His placing the laborer and the laboring cattle on the same level cannot fail to attract our attention to the points of similarity between the economic conditions of the different workers, the slave, the wage-worker, and the animal. The slave thinks he is not paid at all for his labor; he has no opportunity to make a comparison between the meal set before him and that with which Jack London's "People of the Abyss" have to get along. The wage-worker thinks he is paid the full value of his labor. That they are all partly paid is concealed in one case by the relation of ownership and in the other by the money relation. The situation was really only clear to the feudal serf who worked a number of days on his own land, and a number of days on his lord's, without pay.

In Smith's time the workers had no conception of their human dignity or of having any rights. It could not be expected of him to analyze economic issues which had not yet arisen. Our ideas and concepts are the reflection of the material conditions surrounding us. A remarkable illustration of this profound truth is given by Marx in the case of Aristotle, the greatest thinker of antiquity, who started to analyze why commodities exchange with each other or with money in given proportions. Exchange, he saw, is conditioned on commensurability, and this on qualitative likeness. Here the great man threw up his hands; he was unable to penetrate to a definition of value of which the secret is the concep-

tion of the equivalence of human labor, of human equality. But Greek society was based on inequality, on slave labor; nothing different was conceivable,—it was the “natural” order, just as to Smith production and capitalist production were synonymous, his “natural” order.

Inquiry into the question whether the worker’s sustenance was really one of the elements which entered the productive process (. . . p . . .), or whether it was not rather the worker himself, whose living labor power, the active element, entered that process in a different manner from the dead means of production, the passive element, was reserved for a later time, when capitalism had accomplished the concentration of the population in cities and of the rather isolated workers into mass employment, thereby awakening their consciousness of class interests. *Das Kapital* appeared ninety-one years after *Wealth of Nations*.

As soon as the solution had been found that it was the worker’s necessities of life which entered . . . p . . . and in precisely the same way as the other elements of production, it was clear that the profit arises from all of them indiscriminately. They are now all elements of capital, and the commodity is the product of capital, not of labor. No longer is labor the source of value, but capital. Where labor has been buried, there now hovers a mystery.

When particularly capable workers had developed into industrial capitalists, or existing mercantile capitalists had entered the field of production, the new methods employed, first, of division of labor,

subsequently of machinery, lessened the labor necessary for the production of commodities and thereby their value. But the new commanders of industry did not originally sell their products at their reduced value. The capitalistic pioneers in any particular industry were able to dispose easily of their production by selling but slightly under the prices of the independent workers, pocketing the extra profit and accumulating additional capital to be employed in forcing the former free workers, whose ground was cut from under their feet, into the new class of industrial wage-workers. The extension of the capitalist mode of production in time, however, sharpened the competition between the capitalists and brought down the pioneer's profit rates to a general or average level in any given industry. A new capital seeking investment would then only be interested in ascertaining in which trade or industry the returns promised to be highest for the amount of capital to be invested. Also capital in a less remunerative sphere might be transferred to a more profitable one,—a transfer effected without much difficulty by that part of the industrial capital which governs the process of circulation, the mercantile capital. This competition for the best spheres of investment, withholding capital from those yielding inferior returns and exerting pressure on those yielding higher returns, results in the establishment of a general or average rate of profit for all industrial capital whether functioning in production or in circulation.

The profit to be derived from every hundred of money in a definite period, say annually, is the

controlling social fact which supersedes all individual differences entering into the determination of commodity prices, such as rates of surplus value, lengths of turn-over, etc. Not only those elements of any capital which enter into the constituency of prices, such as material, wages, and wear and tear of fixed capital, but also those elements of capital which do not so enter, as the unconsumed part of the fixed capital, are entitled to the average profit rate. Under this rate the profit accruing to each individual capital investment is added to the cost of production by the rule of percentage. It is in practical effect the same as if the capitalist class constituted a joint-stock company which divides the total surplus value extracted from the working class according to the number of shares each capitalist holds, and not according to the quantity of surplus value extracted by particular industries. The loose organization of this stock company permits the making of extra profits by individual capitalists through superior ability or unscrupulousness or luck, but the total surplus value appropriated by the company equals the total dividend, and if some capitalists collect more than the average rate of profit, which forms the working basis of the system, others must be collecting less than the average rate.

Now let us see the results of capitalistic price fixing. In the following little table it is assumed that the rate of surplus value is 100% (that is in a 10 hour day, 5 hours reproduce the wages and 5 hours are unpaid labor) and that the rate of profit added to the cost price of the commodity is 20%:

<i>Consumed capital</i>	<i>Wages</i>	<i>Surplus value</i>	<i>Value of articles</i>	<i>Capitalist's prices</i>
95	5	5	105	120
80	20	20	120	120
65	35	35	135	120

Some of these articles may enter a further process of manufacture as materials and at their false price falsify from the start the value of the new product. It is impossible in capitalist society that products be exchanged at their value; to so exchange them would result in very different profit rates, a condition inimical to the capitalist bottom principle of free competition.

The fact that competition has been largely eliminated during the last quarter of a century, especially in the sphere of production, resulting in an increase of economic power of the capitalists, appears like a denial of competition as a life principle of capitalism. But the logical result of competition is the survival of a small number of the strongest who may continue the warfare between themselves or combine. The process shows the revolutionary nature of capitalism, which is condemned to undermine its own foundation. The degree of concentration in trusts, a matter to which we shall devote more detailed attention further on, the same as the status of money, the supreme *Thing* which rules the whole fabric of capitalist society, indicate how far the evolution of capitalism has

progressed. We can foresee the eventual concentration of the still competitive industries; we can also conceive of the power of indirect taxation of the people, now exercised by the individual trusts, being held in check by a controlling money trust; we may even go so far as to conceive of an industrial feudalism which could dispense with money along with competition. But such a logical outcome of evolution would breed a degree of social consciousness which would be deadly to class privilege. History has a way of knocking off the ripe fruit before it falls to the ground.

Meanwhile we may console ourselves with understanding that the capitalists must somehow leave enough to the workers to enable them to reproduce labor power and perpetuate the capitalist system, much as they did yesterday and as they do to-day. No monopoly raises the price of any article, which is *not* a necessity, beyond the level at which the consumers can afford to buy it. But if monopolies raise the prices of *necessaries* of life, they are thereby raising the cost of production of labor power, resulting in necessarily higher wages, unless the workers submit to a lowering of their standard of life.

Within these limits monopolies are able to fix prices without regard to cost of production and uninfluenced by the average profit rate. The extra profit thus gained by them is a deduction from the dividend that remains available for the other capitalists out of the total surplus value collected by the whole class.

We have said that value was buried and only a mystery remained.

What is seen is that the more labor is ground out of the workers, the less the cost of the product. How then can labor be the source of value? Is not saving in the labor cost the same as buying your material cheap? What do we care how much of the labor of others is embodied in a product? It is the cost of production that counts. The capitalist is not interested in measuring his profits by the worker's share, but by the capital invested. The fact is that capital is the controlling social factor; capital, not labor, regulates prices. The equation: equal labor for equal labor, is forgotten; it reads now: for equal capital equal profit.

Labor has become wages.

Value has become cost of production.

Surplus product, formerly reserve stock, has become profit.

Thus more rubbish has been piled up where labor was buried; its remembrance has grown dim and the mystery is greater than ever.

At the beginning of this chapter we had occasion to remark that parts of any industrial capital may be found simultaneously in the several phases of the industrial cycle. On the other hand an individually owned industrial capital does not necessarily describe the whole cycle. Some concerns may be so situated, owing to the size of their capital, the nature of their products, the terms or usances in vogue in their particular industry, as to be able to sell their products at the full market price to the productive or individual consumers, generally the former. But others, differently situated, sell their

products to merchants at less than the full prices, abandoning to them the completion of the circulation and the realization of the balance of the surplus value contained in the products. The merchants' capital, therefore, forms part of the industrial capital, but in a specialized form. It enables the productive capital to devote itself entirely to increasing the production, while its own efficiency in the sphere of circulation shortens the duration of circulation, to that extent increasing the profit rate of industrial capital as a whole.

What price concession must the productive capitalists make to the merchants?

The latter expect a return on their investment equal to that of the producers; if they were denied full participation in the average profit rate, they would turn manufacturers themselves. Consequently the price reduction to the mercantile capitalists must be such as to enable them to realize from their annual sales the average income accruing to a productive capital of equal size.

Now, the annual sales engineered by two merchants' capitals of equal size may vary enormously from each other in amount of money. The discrepancy is due to the difference in the length of turn-over required by the two different classes of commodities. The cause of the difference may be found in the nature of the commodities or in the existence of banking assistance in one case and its absence in the other. It is evident, if the principle of equal profit for equal capital is to live, that the percentage of profit to be added to the cost price of

a commodity turning twenty times a year cannot be the same as that of one turning only twice a year, otherwise the annual profit rate for the former would be ten times as much as for the latter.

The different percentages added to the cost of the respective commodities, as exemplified by these two merchants' capitals, further falsifies value.

Of course, the gentleman of many turns and corresponding profit addition has no idea of any connection of his method with the question of labor and value. When he advertises: "Our motto is quick sales and small profits," he may possibly sometimes believe it himself. The shallowest views of the political economists are generally derived from the merchants' conception. To the latter the mystery of profit is complete, the duration of the period of circulation appearing to them as an important element of value, whereas the productive capitalists, more directly in contact with labor, have at least a glimmer of the truth, as has ever been evident from their unalterable resistance to any reduction of the hours of labor.

In the wholesale market the great staples are dealt in on the basis of well-defined quality gradings, so cheap an article as cotton, for instance, being ranged in about a dozen quality grades. The market prices of the leading staples, as grain, cotton, metals, and others, are fixed daily by the respective Exchanges. For other commodities regular price currents are published, and many manufactured articles are sold according to price lists. The market prices of products not standardized are generally

estimated closely by the expert merchants handling them.

All this is quite different in the retail trade. It is impossible for the consumer to possess the knowledge to judge of the values of the variety of things he has to buy, and this circumstance exposes him to being taken advantage of by retail merchants. The reader will remember some figures given in the previous chapter regarding the landing cost of tea and coffee in New York and the retail prices in the same city. But what are we to say when so competent a writer on economic topics as William Hard¹ asserts that the identical tea is sold by the same firm in the same city of New York in its different branch stores at thirty-five and seventy cents? General stores, heading their newspaper advertisements by the quotation of a standardized or proprietary article at or even below cost, while the remainder of the quoted prices is of not standardized articles, may possibly be selling the latter at the proper prices. The consumer is not able to judge, but the use of a decoy by such stores creates a moral presumption against them. That a small shopkeeper, in trying to eke out a living, sizes you up to decide whether to charge you a certain price or twice as much for a watch or a potted plant, may be a necessity for him, although it plays havoc with value. However, the writer had the personal proof of advantage-taking by a large millionaire concern when they asked for a certain wooden article \$3.50 plain and \$9 with carving. The difference he knew to be at wholesale only \$9

¹ "Better Business," *Everybody's Magazine*, May, 1914.

per dozen, *i.e.*, 75 cents apiece. Of cheating by adulteration and false weights and measures it is not necessary to more than remind the reader in this connection.

The barons of the middle ages and other freebooters of the time waylaid the merchants and robbed or blackmailed them in a brutal but straightforward manner. Present-day methods are more refined, but more underhanded. Neither the former violence nor the present-day cheating form legitimate parts of the respective social systems, feudalism and capitalism, but are nevertheless economic factors significant of the respective general character of each system.

Altogether the mercantile capitalists contribute their honest share of additional material to pile on the rubbish heap which conceals value and which assumes the proportion of a mound. It appears hardly credible that anything could lie buried underneath.

We have so far in this chapter considered the two divisions of capital, the productive and the mercantile, whose representatives are the functioning agents, personally or by proxy, in the cycle of reproduction and who participate equally in the average profit rate. In addition to these two divisions, and originally grown out of their technical need in relation to the movements of money, there has arisen, with the fuller development of the credit system, a new division of capital, the loanable capital represented by dealers in money.

In the capitalist system of society any sum of

money whatever is *per se* a title to the labor of others, which title however can only be realized by that sum being put into the hands of productive or mercantile capitalists for use as capital in the purchase of means of production or commodities respectively.

The scattered sums of money, consisting of the individual hoards of the industrial capitalists (see Chap. III., div. *c*), of the money of money capitalists, the savings and revenue funds of all classes, are collected by these dealers in money, the banks, and placed by them at the disposal of the entire class of industrial capitalists.

The bankers, like the merchants, are commodity dealers, but the commodities dealt in by the two kinds of capitalists differ much from each other. The commodity handled by the former is money capital. Its use-value consists in the production of profit. While the consumption of the use-value of the merchant's commodity destroys its exchange-value, the consumption of money capital increases its exchange-value. This mysterious nature of money capital brings it about that this commodity is not exchanged for an equivalent, but is only parted with for a time, coming back to its owner in a state of perfect preservation with an added increment. In other words the transfer takes the form of the loan and the use-value of the money to the borrower is expressed by the rate of interest.

The formula of interest-bearing capital (money or its equivalent) is $m-M$. Money becomes more money. A given quantity is not only itself, but also another quantity. 100 is also 106. Value begets

additional value. Kant's *Ding an sich* becomes worse confounded; it changes its specific weight. When the productive or individual consumer gives money for commodities, both buyer and seller receive equivalents; only given values are involved. But in the transfer of money capital as a commodity the same object has two values. In the formula of industrial capital, $m-c-M$, there is at least expressed an economic relation: production, the buying and selling of commodities. All we see in $m-M$ is a juridical transaction without economic connection. Does capital bear interest, the same as a pear tree bears pears? But the pear tree runs a chemical factory in which inorganic matter is changed to organic. Yet the political economists teach us that it is a natural power of money to bear interest. Indeed, they base on this argument their justification of profits, for if capitalists were not allowed to make profits, could they not convert their assets into money and invest it at interest? Suppose they all, or a considerable number of them, tried it—what would become of their capital value and what of the rate of interest?

In the cycle of industrial capital we see nothing of interest-bearing capital. The cycle does not care whether any part of the capital is borrowed or not. The movement of the loan capital is from the outside, directed towards and merged in the current of the cycle as an indistinguishable part of the industrial capital.

If the memory of the true source of value were not all but extinguished by this time, we should suspect that the interest-bearing capital went in on one side

of the witch's kitchen, called the productive process, and came out on the other side with an increased value, just as some other things have a way of doing in the same place, and that the result of the witchery is divided between the functioning capitalist and the lender.

That loan capital should appear as a distinct source of value to the mind of an industrial capitalist working with borrowed money is plain enough. This conception, however, spreads to the competing capitalist who works only with his own money. He is not going to deceive himself; he ought to show as good results in the way of profit rate as the borrowing competitor, plus the interest; he is rigorous with himself, not given to easy self-pacification. Says he to the bookkeeper: "Before making the final net profit entry, charge off $x\%$ of the capital account to interest account!" Then a light descends on him, his mind becomes as clear as mud, and he adds proudly: "This business has paid the workers the value of their labor; it has paid capital what is due to it as capital, and all the rest I have created with my own head and feet." The bookkeeper murmurs to himself: "Wonder how much he would pay to a principal clerk or how much salary he would command as a principal clerk." He was no doubt thinking of a passage in *Wealth of Nations* where Adam Smith, referring to a "principal clerk," says: "The owner of the capital, though he is thus discharged of almost all labor, still expects that his profits should bear a regular proportion to his capital."

Pile up the rubbish heap!

If it is a natural quality of money to bring an income, so, vice versa, any regular income may be regarded as the fruit of a certain capital. An annual income of \$600, supposing the prevailing interest rate to be 6%, represents a capital of \$10,000, and lo presto! this capital springs forth into existence where a minute before there was a vacuum, just as the world was created out of nothing under the hand of God. In beholding the performance of this "stunt," whether called capitalization or necromancy, the brain refuses any longer to think of the mystery of value.

Adam Smith's capitalist who expects the usual rate of profit, perhaps minus his manager's salary, although absolved from "almost all labor," is a rather limping figure in that author's "natural" system. But this system is very badly disfigured by another personage—the landlord, of whom Smith says his "rent costs him neither labor or care." However, Smith was a philosopher and did not mind if a "natural" system had a hole or two. The political economists have told us ever since that labor, capital, and the earth are the three creators of value. How the division of the value between labor and capital is effected has been referred to very cursorily in these pages. Now as to the earth! Surely, if the earth is a creator of value, it ought to get its share of it, perhaps in the shape of plenty of manure or other betterments. Now there come along a number of persons who claim that they are representatives of the earth and demand its share in the form

of rent. If anybody tries to hold out that the human race was put on this planet, etc., they interrupt impatiently saying that they do not know anything about planets; that the earth is real estate and always was; anyhow the law says it is and that in fact they need not rent out at all, but could tell the population to betake themselves off that "planet." And as the population knows that the law is always the expression of morality, they submit and pay rent. The ground rent pumped out by the landowners from the capitalists is part of what the latter have pumped out of the workers. If the capitalist is his own landlord that does not change the situation for other people.

The earth as one of the sources of value:—this completes the Mystery, and the truth seems buried beyond the possibility of resurrection.

Darwin in his *Formation of Vegetable Mold* describes how an abandoned city was eventually buried by the action of earthworms, so that the plowman of future centuries never suspected what was buried under his land. Is there in this not some analogy to the subject-matter of this chapter?

But there arose a man of such power of analysis and consecutive thinking, as the human race had perhaps not produced in the thousands of years since Aristotle. Even as the archæologists did in Egypt and Assyria, so he dug into the overlying accumulations which historic necessity had forced men to pile up, uncomprehended by themselves, and thus he laid bare the methods of social evolution. The name of this great man was Karl Marx,

CHAPTER X

FICTITIOUS CAPITAL

a. Transformation of profit-bearing into interest-bearing capital.

BEFORE the second quarter of the nineteenth century, business corporations did not exist, except for a number of banks (nearly all of them unimportant so far as this country is concerned), some gas companies, and perhaps a few others. Until then commercial and industrial enterprises were conducted by individual, functioning capitalists with their own money, at the most with some additional borrowed money entrusted to them by those who knew them personally.

Near the turn of the century the dynamic force of steam had come to be applied in manufacturing, and the resulting increase in production and widening of markets called for improved means of overland transportation of raw and accessory materials, as well as of finished products. Thus was suggested the use of the same force for moving wagons on iron rails. But the sum of money required for this great change in the means of transportation was so stupendous that appeal had to be made to all available funds.

In this way the railroad company became the real pioneer of the great modern corporations.

It is difficult to realize that it is only seventy-five years since New York and Philadelphia, or sixty-five years since New York and Boston were connected by rail. And in this short space of time what has been the growth of the corporate form of business?

We shall find the answer to this question in the United States Census from which the following figures are taken (in million dollars):

The total value of manufactured products in 1909¹ was 20,672, whereof was produced by corporations 16,341, so that the latter represented about 80% of the total.

It is true that many of these corporations represent merely a continuation of the ownership by former partnerships and even individuals under a changed legal organization; nevertheless the above figures afford an approximate picture of the change which has taken place, as we shall be able to recognize presently.

By the class of fair sized and large establishments, those whose annual production is valued at over one million dollars, a class which constituted only 1.1% of the total number of establishments, there was produced in 1909 not less than 43.8% of the total product.² As this same class had produced in 1904 only 38% of the total value of manufactures, it is fair to assume that it is at present contributing about one half of the total product value.

¹ Thirteenth Census of the United States, vol. viii., p. 135.

² *Ibid.*, p. 180.

Even so this class includes a large number of firms or "close" corporations, having an annual production of as little as one million dollars, who by their presence in the above 1.1%, small as this percentage of all concerns is, tend to obscure in the Census the greatness of the real corporations.

Were data available to separate the latter from the firms and close corporations, the result would still be inadequate to offer a complete picture of the importance of the corporations in the national economy. Manufacturing represents only one branch of productive capital and it is the one in which the corporation is least preponderating. In mineral production, including coal, petroleum, natural gas, iron, gold, copper, etc., the great corporations predominate overwhelmingly, and its importance appears in the sum of \$2,446,000,000 given as its value at the places of production in 1913.¹

Certain other branches of industry are almost entirely the domain of corporations, as the telephone, the telegraph, gas, electric light and power plants, expresses, and last but not least, the railroads. These are productive industries as much as any other. A railroad conveying materials from the place of production to the place of their transformation is a productive agent like the railroad or human carrier that conveys them from one building of a plant to another; the same holds good in the railroads' conveying the finished products from the place of production to the place where their use-value can be realized. The freight traffic is pro-

¹ *Statistical Abstract of the United States*, 1914, p. 665.

ductive consumption. The passenger transportation is the production of a commodity for instantaneous individual consumption. To classify the operation of railroads as commerce, as is done in official utterances and elsewhere, is false and confusing. The designation "Interstate Commerce Commission" for the board of control of transportation is a misnomer. The price of both kinds of commodities produced by the railroads is measured by the money received for them. In 1913 the receipts of the steam railroads were \$3,057,000,000 (not including, of course, revenues from investments, rents, etc.).¹

Apace with the formation of the industrial corporations and called forth by it, went the concentration and incorporation of the loanable capital as national, state, and savings banks, and trust, mortgage, and life insurance companies. With the exception of the savings banks and mortgage companies, which lend, the former partly, the latter entirely, on real estate mortgages, some fair sized banks in cities which continue as commercial banks, and small country banks which do a neighborhood business, all the others, comprising by far the largest national, state, trust, and life insurance banks, are welded into a "system" which is closely identified with the industrial capital. The fact that the central control of the system rests with a few firms and individuals should not confuse us as to the general corporate character of the banking capital.

In contrast with the now practically incorporated and united industrial and banking capital, the mer-

¹ Report of Interstate Commerce Commission, 1913, p. 46.

chants' capital presents the aspect of an uneven development. It has been eliminated largely as agent of circulation between the industrial capitalists, but is tending toward the corporation form in the retail trade. The once proud merchant class which had engineered the transformation from small scale production to capitalist production, and had long domineered over the petty individual productive capitalists, has been eliminated entirely as intermediary between the great corporations, who now keep themselves the portion of the surplus labor formerly ceded by them to the wholesale merchants. The latter now only maintain themselves in the competitive industries, notable among which are the textile industry and the derivations thereof. In the retail trade the merchants are being crowded on the one hand by industrial corporations, producing articles of individual consumption, which these sell direct to the ultimate consumer, and on the other hand by corporations handling all sorts of products of the competitive industries. Of the former class we might mention the producers of tobacco, ice, shoes, candy, wagons, automobiles, a single company operating as many as a hundred restaurants, etc. To the latter class belong corporations operating department stores in a number of cities; corporations operating several department stores under different names in the same city; corporations operating chain stores for groceries; one corporation (owned by the insiders of the Tobacco Trust) conducting a chain of nearly one hundred drug stores. Another corporation conducting nearly seven hundred five and ten

cent stores throughout the country has a turn-over as large as either the New Haven or the Erie railroads, according to the *Wall Street Journal*. For general rural retail trade a number of mail-order corporations are gaining ground very rapidly; one among them approaching a turn-over equalling that of the Erie and the New Haven railroads combined.

International trade, just as international banking, continues mainly in the hands of firms.

Such have been the astounding changes wrought in three quarters of a century. In England, the classic land of capitalism, the limitation of the liability of stockholders to the amount of their stock was not enacted into law until 1855. If capitalist society, during the first two centuries after its sprouting, moved forward at a rate never before seen, its gait was greatly accelerated by the mechanical inventions and the use of steam power, but since the advent of the railroads and great corporations it is traveling in seven league boots.

What means this victory of the corporation which has taken place under the eyes of our old men?

Generally this question is discussed from the ordinary subjective viewpoint of bourgeois philosophy; it would be too much to expect professors and journalists to approach the ticklish subject with an objective, scientific mind. Are corporations good or bad? Or are the smaller ones tolerable and the larger ones bad? What is the line of demarcation between the two? Are they the work of prophets or of evil-minded, selfish men? Should competition

be preserved? If so, and since it has not a robust constitution and is visibly growing feebler, were it better to prescribe a diet of pap to keep it on its legs, or administer an alcoholic stimulus?¹

Such discussions however bring us no nearer to an understanding of this evolution and again we must ask what means this victory of the corporation?

Foremost, and as a fundamental principle of the change, stands the abolition of the industrial capitalist as an organ for the performance of a certain social function.

The early owners of the means of production had naturally assumed the command of labor; but ruling is no sinecure, and as long as rulers have been a necessity, they have always themselves fixed their reward. So did the functioning industrial capitalists. During the period of individual industrial enterprise, now rapidly passing into history, cases

¹ For example, a modern political economist, Professor Jevons, says in the concluding chapter of *The State in Relation to Labor*: "the subject [industrial competition] is one in which we need above all things—discrimination. Restrictions on industry are not good nor bad *per se*, but according as they are imposed wisely and with good intentions, or foolishly and with sinister intentions." And who is to decide whether particular propositions are good or bad and pass judgment on intentions? Professor Jevons gives this answer: "We must agree to differ; and though we are bound to argue fearlessly, it should be with the consciousness that there is room for wide and bona fide difference of opinion." By all means let us agree to differ and let us have great argumentations, fearless of their unstable basis, therefore mutually forbearing and always good-natured, like a freshmen's debating society. Such argumentations are taken seriously by many people and have practical advantages in enabling us to arrive at any desired conclusion regarding any pending issue.

like Adam Smith's employer of a "principal clerk" were the exception. In the present-day corporation all the managers are employees, salaried as highly skilled workers at the market rate.

The loss of the managerial function by the industrial capitalists has been accompanied by their loss of all control over the use of the property. In fact the new condition involved a complete change in the conception of property. As far back as the memory of the capitalist runs, he understood property to consist of money, commodities, land, things tangible and absolutely in his control. Now he sees it as apparently no man's property, something in a way social, with himself in possession of nothing but a piece of paper giving him title to a share in the profits, but not to any of the capital, except to any residue thereof in case of bankruptcy of the enterprise.

But, someone may wish to remind us, the owners of the paper can exercise their control by voting at the annual meeting of stockholders. Correct theoretically, in practice absolutely illusory. For instance the Southern Pacific Co., an \$800,000,000 corporation, circularizes all its thousands of stockholders inviting them to the annual meeting at its office in Beechmont, Jefferson County, Kentucky, to elect directors and ratify the actions of the directors and executive committee. This office consists of a one-room shack in a back yard, serving as a storage place for a wheelbarrow and some other agricultural implements. The thousands, however, fail to appear at the appointed time in the company's office

at Beechmont, Jefferson County, Kentucky. In fact nobody appears on the scene but three employees of the company, one no doubt to act as chairman, the second as secretary, and the third probably as the stockholders, or maybe as the sergeant-at-arms.

Even when the stockholders of a similarly large corporation, the Atchison, Topeka & Santa Fé Co., are invited in their thousands, scattered from Maine to Oregon, to come to a Kansas town, where at least there exist accommodations for strangers, it is absurd to expect the stockholders to exercise their right either personally or by a perfectly free proxy.

If we go from a rural place in Kentucky to the other extreme, the great metropolitan center of the country, embracing a population of six millions, we meet with exactly the same condition. There an investigation by a legislative committee of the abuses and corrupt practices of the life insurance companies resulted in their mutualization. Do the policyholders living in the metropolitan district avail themselves of their right? Not one. The voting is done by a few office clerks and agents.

It is plain that we are confronted not by a theory, but by a condition, no matter whether the latter is due to a feeling of confidence, indifference, or helplessness on the part of the stockholders. Whatever the cause or causes may be, the simple fact is that the ordinary stockholder has no more influence on the control of the corporation than a fly on the wheel of a locomotive. The condition in the corporation republic is the same as in some of the Latin-American republics: a clique gets into the saddle and is "re-

elected" as long as it pleases. Down there they sometimes have successful "revolutions," but in this country since the union of the two leading financial groups, following their titanic struggle over the control of the Northern Pacific Railway Co. in 1901, any insurrection by outsiders against the "system" would be worse than futile for the insurrectionists.

But why is the control of a corporation so much coveted by the big capitalists? Are they perhaps altruists obeying the urge of their hearts to dedicate their time and their abilities to the benefit of all the shareholders, equally with themselves, rather than have others burden themselves with this service?

The real fact of the matter is that the control of a corporation offers immense opportunities for personal enrichment at the expense of the fellow-shareholders, exactly as the control of a city offers similar opportunities to Boss Murphy or Boss Cox at the expense of their fellow-citizens. They do not own New York or Cincinnati, they just control these cities.

The opportunities to the controllers of corporations present themselves in a variety of ways. One of them consists of contracts which the men in control of a corporation can bring about with certain construction, land, supply, advertising, etc., companies, of which they themselves are the principal owners. As instances of construction frauds, Professor Parsons mentions¹ the Union Pacific Railroad which paid 94 millions of dollars for work which cost 51 millions; 62 millions profit in the

¹ *Railways, Trusts, and the People*, p. 106.

construction of the Central Pacific Railroad; construction and other frauds in the Northern Pacific Railroad which made the capitalization of 600 miles of that line 143 millions, when only 22 millions had been spent.

They can divert the most remunerative business of a railroad to express or fast freight lines in which they are much more conspicuously interested as stockholders than in the railroad.

Control includes the power to direct the corporations where they shall keep their immense cash funds on deposit, and how long they shall so keep them; it means the power to chose the time for new issues of securities, which issues are bought or underwritten by those in control at prices fixed by themselves.

Another opportunity is referred to in the report of the Congressional Committee appointed to investigate the concentration of control of money and credit, popularly known as the Pujos Committee, as "the scandalous practices of officers and directors in speculating upon inside and advance information as to the action of their corporations."¹ The committee was polite in using the word "speculation" which includes in its meaning the possibility of loss. But these gentlemen enjoy a sure thing in putting other people's money into their own pockets.

But nothing could illustrate as clearly the value of control, and incidentally the power of J. Pierpont Morgan, the head of the "System," as his purchase from the lesser magnate T. F. Ryan of \$51,000 par

¹ Report of Committee, p. 115.

value of Equitable Life Assurance Society stock, yielding only \$3570 a year, for approximately \$3,000,000. The income on the investment therefore yielded less than $\frac{1}{8}\%$ per annum, but gave control over the Society's assets of over half a billion, which were not its property, but trust funds.¹ Questioned by the Pujó Committee as to his motives for making an investment yielding so low a rate of interest, Mr. Morgan emerged from the interrogation, leaving the committee to its own conclusions.

His testimony as to how he obtained the stock was as follows:²

Q. Did Mr. Ryan offer this stock to you?

A. I asked him to sell it to me.

Q. Did you tell him why you wanted it?

A. No. I told him I thought it was a good thing for me to have.

Q. What did he say when you told him you would like to have it and thought you ought to have it?

A. He hesitated about it and finally sold it.

It is transparent that Ryan came down as gracefully as the coon when it saw Davy Crockett's gun.

In short, the pecuniary benefits of control are limited only by the discretion of those exercising it.

We thus see that all semblance of the former functions of the industrial capitalist, the labor of exploitation and the control of property, is gone. He has been converted into a mere owner of a title to a share in the profits, converted into a mere money capitalist.

¹ Pujó Report, p. 83.

² *Id.*, p. 137.

We remember, however, from the preceding chapter that the money capitalist receives out of the industrial profits only a part in the form of interest, the toll of mere inactive ownership. As the corporation consists of profit-making industrial capital, we must examine the apparent contradiction which lies in the fact that its owners, the stockholders, are only interest-drawing money capitalists.

Let us first compare the points of similarity and dissimilarity between the shareholder and the lending capitalist. They both limit the sum which they will place in any particular enterprise *ad libitum*. The risk of loss for both is limited to the sum invested, neither being liable for the debts of the enterprise. They are both not concerned with the movements of the industrial capital, but both must presuppose its production of profit, if the principal is to flow back plus the increment. The rate of the last mentioned, however, is prearranged in the loan (bonds, commercial paper, corporation notes, real estate mortgages, etc.) but only approximately estimated in shares, with a tendency to a somewhat higher rate of increment than is ruling at the same time for loans at fixed interest, especially if these are secured by pledges. Besides this difference, which is not qualitative or essential, there is the further one, of equally little import, that the principal returns to the money capitalist directly from the borrower, and to the shareholder indirectly by the sale of his shares.

The latter was not always as readily effected as to-day. The subscriber to shares of the early corporations risked to tie himself up with the venture

to a certain degree, although of course less so than he would have in an individual enterprise. His position was intermediary between that of industrial and that of money capitalist and his revenue therefore included not only interest, but some profit of enterprise. But with the spread of corporations and with the institution of daily markets for shares or stock exchanges, the return of the principal to the shareholder at any time he desired became assured. It was then that all the conditions were given for the completion of the transformation of the industrial into money capitalists.

We have now arrived at the point when we can consider by what process the profits of the former were transformed into the interest of the latter, dividends being only another form of interest. The ready sale of shares presupposes the existence at all times of sums of money seeking investment and competing not only for the lending opportunities, but also for shares. The profit income attaching to the shares is reduced by the competitive bidding for them by the buyers until it approximates the ordinary rate of interest. This means that the buyers are willing to pay more for the share than the amount of industrial capital for which it was originally the certificate.

How is this possible? We have already recorded the fact that every sum of money is a title to revenue. Inversely any regular revenue is regarded as interest on an imaginary capital, and if not too precarious, like wages depending on the health of the workers, and if transferable, may be transferred against the

payment of a sum which would yield an equal revenue at interest. This creation of imaginary or fictitious capital out of a revenue is called "capitalization."

Now, our first investor has paid one hundred dollars into an industrial venture. This money begins to function as industrial capital by the purchase of means of production and continues through the metamorphoses of the industrial cycle.

The investor's money has been changed into industrial capital for all time. He received for it a share certificate which represents a title to profit. It does not represent a title to any capital. The capital exists only in the corporation. By the investment he has not doubled the existence of the value of the one hundred dollars, first as industrial capital vested in the corporation and second as share capital vested in himself.

When the shareholder sells his share, the latter enters a circulation of its own, as interest-bearing capital, quite independently of the circulation of the industrial capital itself to which it is referred for revenue. The circulation of the share therefore requires an additional and entirely different capital. The price of the share has no relation to the capital value of the corporation. It is determined, aside from speculative considerations, by the income attaching to the share and by the prevailing rate of interest. So far as the price depends on the last-mentioned entirely extraneous circumstance, it is clear that a share yielding \$10 annually is worth \$200, if the prevailing rate of interest is 5%, no matter

whether a nominal value of \$25 or \$100 is printed on it. This explains how a continued industrial depression, in due course resulting in an accumulation of idle funds, may cause a rise in the prices of interest-bearing securities, if there exist at the time no other special reasons for apprehensiveness. Thus a London correspondent in the *Annalist* of February 9, 1914, reports: "Bankers, . . . overloaded with funds . . . by . . . reduced productive activity, are falling over one another to buy the fewer bills"—"the effect of the scramble . . . has been the boom which we have seen on the Stock Exchange."

Here we have an illustration of the fact that the share is not representative of a quotient of the capital value of the corporation, but that its price is merely the capitalization of a revenue. In other words a capital value arises in the share which is entirely fictitious and dissociated from the value of the functioning industrial capital. The latter is condemned to "reduced productive activity," hence yielding reduced profits. Instead of reflecting the adverse circumstances into which the industrial capital has fallen, we see the shares enjoying an independent "boom" due to an outside factor, namely, the state of the money market, the ruling rate of interest expressing itself in the case of stocks and bonds by fluctuations in their prices.

As such periods of redundance in the money market, or the reverse condition, may seem a puzzling contradiction to the indestructibility of money of account, referred to in a previous chapter, which indestructibility implies a very high degree of

regularity in the supply of money of account, it will not be amiss to examine the question in connection with the creation of fictitious capital and its circulation at fluctuating prices.

Of course, one explanation presents itself at once in assuming a general disposition at certain times on the part of the money capitalists to hoard their funds, that is to leave them idle in the banks, rather than run the risk of employing them, under then existing doubtful conditions, as capital. This explanation is valid for a time when distrust sets in and when usually the banks themselves, from their better opportunity of seeing the shadows of coming events, are the first to start the hoarding. But this explanation fails in the case of a money stringency arising in a time of prosperity and optimism, when the willingness to employ money as money capital is general.

Inasmuch as money of account is indestructible, and as we are not venturing anything in assuming that there has been no reduction in the volume of current money, it is evident that the stringency is not due to there being at such time less money in existence than in a period of redundancy. It is, then, not a matter of variation in the volume of all existing money, but only in that part of it available at any given time as loan capital. And in our inquiry we must distinguish between the two functions of loan capital—whether it is to circulate as industrial or as fictitious capital.

In highly developed capitalist countries all money converges in the banks, the social agents for convert-

ing money into money capital. Aside from the capital and surplus of the banks themselves, what is usually termed "banking capital" consists of deposits, overwhelmingly the money of industrial capitalists.

We have seen in Chapter III., sec. *c*, how several factors in the industrial cycle of the single concern bring about the temporary inactivity of the money form of its capital. For the concern itself the money is in this state merely potential capital which is converted into active capital for another concern by the bank.

This money represents for its owner the various elements of value of sold commodities, viz.:

(1) The money advanced as constant liquid capital and variable capital and needed again in due time for reproduction. It must remain industrial capital and is not available for conversion into fictitious capital.

(2) Wear and tear of fixed capital. The amortization fund being built up by one set of productive capitalists is continually lent by the banks to the other set which is ready to renovate its plant. This money likewise must remain industrial, and cannot become fictitious capital.

(3) Surplus value.

Part of this money provides for the personal consumption of the capitalist and is not directly available either as industrial or fictitious capital. Indirectly, through other capitalists, it reenters the industrial cycle.

Another part must be applied as an addition to the

capital, reproduction on an enlarged scale being a life principle of competitive capitalism. This part consequently must remain in the industrial sphere and cannot be diverted into the realm of fictitious capital.

The residue of the surplus value may be converted into fictitious capital.

The bank's own money is available for, and usually invested in, fictitious capital.

Finally idle money of money capitalists, interests and rents, minus the living expenses of the money capitalists and landlords, may be converted into fictitious capital.

It follows that the sum of money available for the creation of additional fictitious capital is limited by certain economic laws. If these laws are violated by excessive issues of fictitious capital, the consequence is an insufficient supply of industrial capital, a rising rate of interest, reacting adversely on security prices, the whole ending in a crisis, precisely as happened in 1907.

The reverse condition, one in which the industrial capitalists are favored by loans to the detriment of makers of fictitious capital, is unimaginable. It would be as much as saying that the industrial and banking capitalizers were willing to forego the handsome profits of capitalization.

We must, of course, not overlook the fact that the requirement of money as industrial capital is itself a variable quantity, depending on the cycles of prosperity and depression, inseparable from competitive capitalism, as well as on other causes, such as great natural catastrophes and wars.

To be quite clear concerning the sums available at different times for conversion into either industrial or fictitious capital, which sums fluctuate greatly notwithstanding the high degree of regularity in the volume of money, we must possess a correct understanding of the situation of the banks. Although, as said above, all money converges in the banks, yet collectively they generally have no money, other than their reserves, consisting of current money of the realm. The banks are on the one hand debtors to two groups, their stockholders and their depositors. On the other hand they are creditors of two other groups, legal persons who borrowed, and legal documents which we call revenue titles. Between the two groups on one side and the two groups on the other side the banks continually make transfers forward and backward on their books. Nothing changes but the atoms of each group, and all that is of economic importance is that the transfers be made in the proper proportion from and to each separate group. This schematic grouping does not conflict with the fact that individuals figure simultaneously as creditors and debtors of the banks. Borrowers of large sums leave smaller sums on deposit, which presupposes large depositors who are not borrowing.

For the further elucidation of the question as to the source and limitation of the supply of money available for fictitious capital, we may here return profitably to the purveyor of war supplies whom we left in Chapter VI. in the possession of inactive money. Whether this will serve in reproduction or not,

depends on the renewal of the warring government's purchases. These again depend—we are only considering the economic aspect of things—on the government's ability to find the necessary money. When its treasure has been spent, its only remaining ordinary resource consists of its income from taxes, customs duties, and profits from state industries, such as railroads, telegraphs, mines, postal system, etc. But the tax receipts are greatly reduced owing to industrial depression; likewise the profits from state industries which are working now mainly for the army and not for sale of its products by the capitalist state to the public, while the receipts from customs duties may be entirely cut off by a blockade. To repair the deficit in income relative to expenditures by raising the tax rates is impossible; they would have to be raised to such an extent as to amount to a confiscation of profits and thus to the frustration of the purpose of capitalist production.

If the government cannot satisfy its financial needs from its *present* income, it may sell *future* income for present money,—in other words burden the future generations, who have had no say in the matter, with interest on a new loan. Where is the money for this loan to come from? We already understand that the money available for conversion into fictitious capital is a limited quantum. The banks may subscribe the entire loan, perhaps partly in calling other loans. But there can be no indefinite number of repetitions of loans, not only because of the normal limitation of the money supply applicable to this purpose, but because the curtailment in the produc-

tion of new value reduces the new surplus value to the bare needs of the capitalists for their personal consumption. The surplus value may besides be entirely offset for the capitalists by their losses from the temporary decline of the market prices of all their stagnant stocks of commodities which are not strict necessities. It is true that the capitalists producing such commodities as projectiles, explosives, and other war supplies are very busy and garnering large profits which they might lend to the government in order to push a good thing along. But the consumption by the government is rapid and continuous and the *whole* value of the commodities consumed is more than the *surplus* value incorporated in them, of which latter, as we have seen, even only a part is available for fictitious capital.

After the money available for fictitious capital has been transferred by the spendthrift governments from the bank accounts of the lenders to the bank accounts of the manufacturers of war supplies, the governments are at the end of their tether so far as borrowing is concerned. If the combatants, like desperate gamblers who hope that their last piece of money will win for them, should have recourse to printing press money, it would lead to the breakdown of the capitalist form of society. Let no one be confused by the fact that as recently as fifty years ago there occurred in the United States the repudiation of the paper money of one section of the country and the great depreciation of that of the other section, without leaving behind permanent ill effects.

That happened at the beginning of the world's great industrial forward movement, at a time when the world's production of coal and iron in a year was not more than what it now turns out in a few days. Money of account scarcely existed. What the social organism of that time could stand, the highly sensitive organism of to-day, especially so in its financial mechanism, could not stand. We must also not forget that the financial disturbance would accumulate enormously in force by affecting several leading countries, instead of only a semi-colonial country, as the United States was in the early sixties.

The sum of fictitious capital is largely in excess of the sum of money of account and of all money in existence. According to the Commissioner of Internal Revenue, the capitalization only of business corporations amounts in the United States to almost exactly one hundred billions of dollars, of which about two thirds represent capital stock and about one third bonds. The sum of the fictitious capital is thus five times as large as the sum of all money in existence, real and imaginary. How is it possible that any excess of fictitious capital over all money can exist? How was the excess paid for?

We can readily understand that the identical money can *circulate* fictitious capital values in any number of multiples of its own value, in the same manner as a dollar can circulate on one day a number of commodities, each of its own value, by passing from hand to hand. Besides the amount of money of account necessary for the circulation of the vast

amount of fictitious capital is reduced to moderate proportions by the stock exchange clearing house which balances sales and purchases in a manner similar to that in which the banks' clearing house balances checks.

It might seem for a moment, as if the identical money could also *create* multiples of its value. For instance, a number of citizens start a bank, which uses the paid-in capital to promote an industrial enterprise. Each hundred dollars cash has created a hundred dollar bank share and a ditto industrial one, a total of two hundred dollars fictitious capital. But looking closer, we find that the bank, as a profit-making institution in itself, is a nonentity; its existence is futile, if it can do nothing but hand over to its stockholders what these might have encashed direct.

The identical sum of money may serve in a chain of an indefinite number of loans; it is only the original owner who is able to retain the interest, and the last borrower who pays it. There is only one capital value and only this is entitled to interest.

Supposing, however, that the hundred dollars had circulated as follows: A lends them to B, B buys commodities from C, C lends the money to D. In this case the identical money yields interest to C as well as to A. This is because in C's hand the money no longer represents A's capital, but his own, namely the money form of the value of the commodity he sold.

We now see that the consecutiveness of two loans or of the creation of two fictitious capitals with the identical money is an absurdity, and that there must

take place at least one sale of commodities of equal amount between the two loans or stock creations. The bearing of this law on our inquiry will appear further on.

Since to reinvest as interest-bearing capital the proceeds of the sale of fictitious capital would be futile, according to the law referred to, the interesting and very relevant question arises whether, in using the money to buy commodities, the issuer chooses means of production or luxuries for his personal consumption, or if he buys of both, what proportion of each. We shall meet with some enlightenment on this point also later in this chapter.

If we now understand how a given sum of money can circulate a vastly greater sum of fictitious capital, but cannot create such capital in excess of itself, we are still confronted with the problem of the origin of the mass of fictitious capital in existence.

In the first place a great part of the same has been originally paid for at much lower than its present market prices. One important group, the railroad shares, were bought at bankruptcy prices, that is for very little, as will be told more in detail in Chapter XII.

Other shares were originally issued under par, especially when the share capital represented nothing but water; or they were issued not for money at all, but against the transfer to the corporation of the establishments and good will of the former owners, mostly good will.

Still other shares were issued gratis to the promoters of corporations, as reward for their services,

and to stockholders as extra dividends. The latter originated the bulk of the capitalization of many corporations.

Having thus accounted for a great, if not the greatest, part of the floating fictitious capital, and found that little money, or other value, has been given for it, there still remains for us to analyze the balance of the capitalization supposedly paid for in full by money.

It is here that the law of alternate loans and sales, above explained, is to be applied. The fictitious capital which has actually been paid for in money has been so paid by the identical money serving repeatedly as new capital, representing each time new commodities produced and sold. This fictitious capital was paid for nominally and directly by a comparatively small amount of money, in reality and indirectly by long-continued productive labor. The workers paid for it.

b. Capitalization applied at the source.

After the transformation of profit-bearing capital to interest-bearing capital through the agency of competition for the shares in circulation has reached a certain development, the process is applied at the source and fictitious interest-bearing capital is created at once in incorporating already existing industrial concerns or in starting new corporations, having a more or less definite prospect of earning the average rate of profit. The latter form of capitalization represents thus a further step forward

in the socialization of capital and the elimination of its owners as social functionaries.

For instance a firm employing a capital of \$1,000,000 and usually making a profit of \$400,000 yearly is gaining 40%; by the way not an unusual rate according to the testimony of John Moody, which is hardly needed, so well is the fact known. If the prevailing rate of interest on share investments is 7%, the aforementioned firm may be capitalized at nearly \$6,000,000. The immediate profit of \$5,000,000 is divided between the resigning industrial capitalist, just being metamorphosed into a money capitalist, and the underwriting bankers. It does not take much cogitation to see that the new capital originated by the profit of incorporation is fictitious, for the value of the establishment has not been increased one cent by the change. But a little reflection will show that the shares representing the one million are equally fictitious. This money was paid for an industrial establishment to produce a revenue; if then this revenue is used as the basis for sending forth into circulation another capital, in addition to the one already existing and functioning, the second one is fictitious.

If instead of the hypothetical, but normal, example of a sextuple capitalization given above, an incorporation offers prospects of more than the average profit, owing to monopolization of an industry, patent rights, tariff protection, etc., the capitalization may be relatively greater. The following is a beautiful example gleaned from a report of Herbert Knox Smith, Commissioner of Corporations, sub-

mitted in September, 1911, on the tobacco industry (American Tobacco Co.):

For example, one of the constituent businesses was valued in 1885, under competition, at \$250,000. Five years later, at the organization of the old American Tobacco Company, it formed the basis for the issue of \$7,500,000 of stock. By 1908, due to various readjustments, the securities based on this business had increased to \$22,000,000. Meantime, cash dividends and interest thereon had amounted to \$16,900,000. Thus, the total par value of these securities plus the dividends and interest paid up to 1908, amounted to nearly \$39,000,000, or 156 times the value of this particular business in 1885.

The business above referred to was that of the firm of W. Duke, Son & Co., Richmond, Va. Lest it might be thought that this is an isolated case of enormous capitalization, we present two other examples in the flotation, not of minor concerns happening to enjoy some special advantages, but of manufacturing corporations among the largest in the country.

In the formation of the Sugar Trust, Havemeyer's Brooklyn refinery, which had been capitalized at \$500,000 and taxed at less, was transferred and \$15,000,000 stock issued against it.¹

When the Steel Trust was organized, the constituent companies were already overcapitalized, nevertheless:

One of the constituent companies, the Carnegie Company, received \$492,000,000 of Trust securities, though

¹ See *The Truth about the Trusts*, by John Moody, pp. 62-67.

the value of the principal properties involved was only about \$34,000,000 as shown by the books of the company for the same year, 1900.¹

The deception regarding the fictitious nature of industrial "securities" (just as nice a word as "real estate") is facilitated by their relation to real, functioning capital. The illusory, purely arithmetical nature of the value of these pieces of paper appears plainer in another, but quite analogous, kind of paper capital. We mean the national debts, which have already been mentioned in another connection. The money borrowed by the governments was not used as capital (with unimportant exceptions), never was intended to be so used, although its use as capital was the only way of preserving its value, but instead has pretty generally been wasted in powder and smoke. Nothing is left but the debts. So here we have an illustration how not only nil, but less than nil,—a minus, a debt,—is capital in the eyes of the owners of the papers. What the states are doing, is to sell titles to taxes, derived from surplus value, similar to the titles to interest, also derived from surplus value. All these titles are supposed to stay valid till the end of days. We are drawn to a comparison of these papers, sold by the promoters, with the papers sold by Tetzl: pardons for sins. Such a comparison shows up the characteristic difference between the mental attitude of the beginning of the sixteenth century and our own time. Tetzl's papers were a title to everlasting happiness in

¹ *Railways, Trusts, and the People*, Frank Parsons, p. 112.

heaven, the modern capitalist class rather invests in papers guaranteeing everlasting happiness on earth.

The difference between bonds and shares is only this: the former are a mortgage on land, past labor and living labor; the latter are a mortgage on living labor only. It is therefore logical that shares, in consideration of their lesser security, should command on the money market a higher rate of interest than bonds, the difference being a premium of risk.

The mass of fictitious capital is growing continuously, partly from new incorporations or extension of existing corporations and partly from stock dividends distributed in order to change the accumulated mass of undivided profits into share capital or to capitalize the increasing inflow of profits. The expedient of stock dividends is used to make the rate of profit seem smaller to the uninitiated. Chap. VII., sec. *a*, contains an instance of the distribution of a stock dividend of 1900% at one fell swoop. These extra distributions are comprised in what the elegant and imaginative language of Wall Street calls "cutting a melon."

To give an idea at what rate fictitious capital is being piled on to the previously existing load we quote from testimony by Charles A. Conant before the Interstate Commerce Commission:

In the United States there was issued in 1908, \$1,423,000,000; in the year 1912, \$2,253,000,000.

In Great Britain capitalization of new companies carried the amount from approximately \$460,000,000 in 1904 to about \$1,050,000,000 in 1910.

Annual new issues listed on the Paris Stock Exchange were (in million francs):

1905	3,886
1906	5,076
1907	2,847
1908	3,480
1909	4,294
1910	5,612
1911	4,696
1912	5,041

The national debts were (in million dollars)¹:

1850	8,500
1900	31,250
1912	42,000

There are periods when the creation of fictitious capital is pursued with such zest as to outrun the available supply of money of account. Such a condition results in a tightness of the money market and ushers in a period of industrial depression. "Securities" quotations drop, which according to the newspapers is "great destruction of wealth."

In reality the price movements of securities leave the wealth of a country entirely unaffected. The transactions in these papers represent the sale and purchase of titles to income which have nothing to do with the functioning capital. What is wealth? A quantity of use-values. What is the use-value of rather stiff sheets of paper imprinted all over? We wait for an answer. The \$250,000 necklaces

¹ Bureau of Foreign and Domestic Commerce.

which are bought by capitalist magnates and of which Mr. Howard, the New York jeweler, wrote so entertainingly in a series of magazine articles, may be wealth, but wealth which has for us only a symptomatic, not an economic interest. Such a necklace may remain a family possession for a thousand years; it represents only past exploitation and as a mere personal ornament will never be the means for its owner to appropriate another iota of surplus value. The only element of wealth which is of interest in economics is capital, the thing which perpetuates capitalism.

Paper capital, however, is totally fictitious. We know very well that no amount of capitalization can add to the total of the surplus value handed over by the working class to the capitalist class. If the creation of fictitious capital, then, makes no difference in the division of the product between the two classes, why do we devote so much attention to an analysis of fictitious capital?

The evolution of our social system has progressed so far as to open the eyes of thinking men to an impending radical change in our social system. They see the impressive phenomena of the progressive organization of whole industries on a national basis; the capitalists deprived of their function which has passed to the workers; mere ownership on one side, possession on the other; growing interference in industrial matters by the government, national and municipal. All these developments point to the resumption of the control of the industries by the workers; not as individuals, as in pre-

capitalist times, but as associates, and to the ending of the existence of classes in the history of mankind. Already men on both sides, more preoccupied with the problems of to-morrow than with the facts of to-day, are hotly debating the question of purchase or confiscation by the workers, as if it were a terribly momentous question. Is it?

What impresses such men are the figures of capitalization. Where will you get the money to pay for the steam and electric railroads capitalized in 1911 at \$24,067,000,000?¹ If this were really their value, they would represent say one seventh of the national wealth adding up in 1912 to \$187,000,000,000.² This is preposterous on the face of it.

The real fact is that the shareholders are merely the titular owners of the railroads. This ownership was or still is in many corporations as much a fiction of law, as the shares are a fiction of value. In reality the shareholders of such corporations do not own a brick or a nail of the railroads. Richard T. Ely says³:

It is well understood that in some businesses, and especially in the case of railroads, the only real investment is that which is covered by the bonds. . . . This is admitted by those interested in the business.

It is more than admitted by James J. Hill, certainly a competent witness, who may be believed when he stated without reserve for newspaper publication

¹ *Statistical Abstract of the United States, 1912*, pp. 313 and 330.

² *Statistical Abstract of the United States, 1914*, p. 628.

³ *Monopolies and Trusts*, p. 140.

that many corporations are even bonded beyond the value of their properties (no doubt including their land).

Professor Ely wrote the above in 1900. In the following year the Steel Trust was organized by the issue of papers for a billion and a half, of which about a third in bonds was given as purchase price to the owners of the plants. These bonds were largely in excess of the value of the purchased mills, mines, etc., thus preëmpting future accumulation by improvements and extensions to a certain extent for the sellers, the principal one among whom was Andrew Carnegie. The shares sold to the public, amounting to many hundreds of millions of dollars, represented absolutely no value; their purchasers became the nominal owners of the industrial capital, but in reality they were speculators in the possibility of a surplus beyond the interest on the largely fictitious debt. This speculation has been successful, as the trust was able not only to pay dividends, but to accumulate value against the outstanding shares, as told in detail in the next chapter. Some railroads have of late years fattened their properties in the same way. Prospectuses of bond issues are apt to contain the assurance that millions have been expended for acquisitions of property and betterments, paid for out of income, although properly chargeable to capital account. This new real industrial capital has the same origin as the oldest capital—surplus value.

In the early and crude days of the corporation, the money of the investor was actually converted into industrial capital by the purchase of means of

production. This state of affairs exists no longer. Issues of shares are either sales of titles to profit being made or expected, the proceeds of such sales going into the pockets of the few who turn their business into corporations, including the dealers in issues, the magnates of credit who promote or underwrite the capitalization; or they are a gratis distribution to the shareholders of a corporation pro rata of their holdings, done for the purpose of avoiding startling rates of dividends which would in cases reach fifty times the prevailing rate of interest. The old way of allowing a \$100 share to rise to a price of \$5000 was clumsy, the new way is much sleeker.

The reader will also remember from our analysis of money of account that it is not value itself, but only a title to value, which title is transferred to the owners of land or of fictitious capital in the purchase of their specialties. Those gentlemen then realize the titles by the consumption of products. Now suppose that the curtain falls on the capitalist period of history on a certain day at twelve o'clock by the town clock, as some naïve persons imagine will happen. The buyers of land and of "securities" are on the proper spot to demand compensation for their value. Have they not paid out their good money for those things? Might they not have had "a good time" with that money, instead of having denied themselves? Did they not buy those privileges under the protection of the law for their own and their descendants' enjoyment forevermore?

All very true. But on the other hand have not

the landowners and the makers of fictitious capital received from society value, the products of labor, in satisfaction of the money of account transferred to them by the purchasers of the rights? And now these latter claim value on the same score from society? Why should society deliver up twice? Somebody has evidently been cheated, but not those *chevaliers d'industrie*, the land shark and the fictionist. They sold a bogus title to value which did not exist and with the proceeds had their "good time."

But what have the innocent buyers bought? They thought they had bought the right to exact from the human race rent for permission to stay on the land and profit for permission to work. Alas! for the transiency of class rule. It would have been better to have had a good time than to invest in "real estate" and "securities."

Now, if any capitalists are to be bought out, it must first be made clear just what are the objects of purchase and sale. Certainly these capitalists' personal possessions, as houses, yachts, country villas, jewelry, automobiles, etc., are not involved. The means of production are the only things of social importance and the only ones which would be the subject of discussion.

The most important means of production is the land. The North American continent has been converted into real estate for the most part during the last one hundred years. In the United States this was partly done by the Homestead Act, but largely also by land grants to corporations, and innumerable acts of corruption as set forth in court records,

reports of congressional and other investigation committees, and other authentic sources quoted in Gustavus Myers's *History of Great American Fortunes*, a painstaking compilation of facts. But neither the manner of acquisition of the land, nor its continually rising price (\$32.49 per acre in 1910 against \$19.81 in 1900),¹ including in congested cities an extra addition to the rent for access to more air, need detain us. The simple fact to stand on is that the earth is not the result of labor, the only substance and measure of value. Therefore land has no value.

Next in importance as means of production is fixed capital, consisting in the manufacturing and extractive industries of buildings and machinery and in the transportation industry of buildings and other constructions, rolling stock, docks, vessels, etc. This fixed capital is subject to an annual decrease in value by a certain percentage through wear and tear. This decrease had reappeared in the value of the products and, by their sale, had assumed the money form for the owners of the fixed capital.

Finally the capitalists own the liquid capital, consisting of raw and partly manufactured materials, accessory materials, commodities in circulation, and part of the gold and silver money. Of course, they also own part of the paper money and practically all of the money of account, but the illusory nature of this element of wealth has already been sufficiently discussed in these pages.

¹ Advance Statement of Census Director Durand, September 7, 1911.

We can now eliminate from consideration the following items:

(1) All personal possessions, former commodities dropped out of circulation and become mere use-values in course of consumption;

(2) The land, which has no value but only the price of usurpation and monopoly by a minority, and by an astonishingly small minority, in the centers, where the price of land is highest, as in the commercial, banking, and manufacturing quarters in the cities, the mineral bearing land, and in the great railroad and shipping centers;

(3) All mere papers, such as stocks, bonds, real estate mortgages, etc., which form practically all of what are colloquially called "investments" and are fictitious values;

(4) All money having no value, such as paper currency and money of account, the latter existing merely in bookkeeping.

There remain, then, as real, concrete capital value in the hands of the capitalists, as outcome of surplus labor preserved by them, only the following items:

(1) The fixed capital, actively functioning in the cycle of reproduction;

(2) The liquid capital, equally so functioning, barring fictitious money.

Of what importance as values are these two constituents of industrial capital?

The answer to this question is already given in our elaboration of the United States Census in Chapter VIII., so far as the fixed capital in the manufacturing industry is concerned. It is there shown that the

value of this capital is reproduced by the workers and surrendered by them to the capitalists in surplus value every fifteen and eight tenths months.

As to the liquid capital no figures are available. It is, however, a matter of common observation that every wide-spread or general strike in any industry soon results in an exhaustion of the supplies. Thus the great coal strike in England forced the shut-down of factories after a few weeks' duration. From coal to silks may be a far cry. Yet every silk manufacturer will confirm that the memorable strike in New Jersey in 1913 caused in a couple of months a "sold out" condition for all varieties of current sale and that the old guardians of the shelves, inventoried for some years at great discount, moved at unexpected prices. On the whole it is fair to assume that the liquid capital represents on the average a few months' labor, even with the inclusion of the average supply of agricultural products which are only reproduced once a year.

That the value of the total real capital should be so small, if compared to the actual labor performed by the multitude of human ants, may surprise many. The reason is that they have not realized the insignificance of the actual and real addition to capital as compared to the enormous consumption that is continually going on.

Take only the consumption of automobiles. Frank E. Dawson, statistician of the Automobile Club of America, states in the *Club Journal* that the industry employs in the United States directly and indirectly 600,000 men; that out of the estimated 15,000,000

families the income of 13,200,000 families is under \$1200. These, he says, are not interested in the purchase of a car. We should think that many families above the \$1200 line are in the same position. Mr. Dawson further says that there are 240,000 families above the \$5000 income line, and that there were in use at the close of 1913, 1,260,000 automobiles. To understand this, one must know that single capitalists own a dozen and more pleasure cars. Here we have one article entering into the consumption of a comparatively small number of people, but representing a very large industry.

So it is this ownership of *past* labor of an average of perhaps a year's time which is the title to *present* labor and which is to continue as such title for all eternity. No thanks are due to the capitalists for having saved a year's labor, instead of consuming it, as they had a right to do, for thus they preserved the goose which lays them golden eggs.

On the other hand we are now able to see in its true proportions the question, which seemed so momentous, of compensation or confiscation. Why, while the controversy might be going on, the hands of the clock move around, another year is past, and the workers have once more reproduced the capital.

The solution of the question is not for economics. Considering that capitalist society is the result of a historical process, the matter of compensation of the class that was its beneficiary by the class which suffered during its continuance will depend on the moral view which the majority will take of the question, and perhaps as much on expediency.

For those to whom, from life-long habit of thinking, the mere idea of confiscation is abhorrent and who consider the shares of a corporation as the corporation, let us quote from an opinion in the United States Supreme Court by Mr. Justice Brewer, than whom no more respected man ever sat on the Supreme Court bench, in which he said¹ that a railroad expresses its

willingness to do the work of the state, aware that the state in the discharge of its public duties is not guided solely by a question of profit. It may rightly determine that the particular service is of such importance to the public that it may be conducted at a pecuniary loss, having in view a larger general interest. . . . While we have said again and again that one volunteering to do such services cannot be compelled to expose his property to confiscation, that he cannot be compelled to submit its use to such rates as do not pay the expenses of the work, and therefore create a constantly increasing debt which ultimately works its appropriation, still is there not force in the suggestion that, as the state may do the work without profit, if he voluntarily undertakes to act for the state he must submit to a like determination as to the paramount interests of the public?

This means that the railroads may be compelled under our present constitution and laws to operate at cost, even to the extent of defaulting on the interest on their bonds. What good would it do the holders of the latter to proceed to foreclosure and become themselves the owners? The roads would still be operated at cost for the benefit of the railroad

¹ 183 United States, 93, 94.

workers and the general public. Their character as capital has been taken from them; they remain mere means of production for the benefit of the people. The same principle holds good for other corporations engaged in interstate trade, and nearly all the large corporations belong to this class.

CHAPTER XI

THE CONCENTRATION OF INDUSTRIAL CAPITAL

IN pre-capitalist times the object of production was to satisfy the wants of the workers by the exchange of their products with each other. The result of such surplus labor as some of the workers performed—surplus because in excess of the ordinary needs of men in that period—provided for them a fund which permitted them to indulge in more than the average comforts or which served them as a reserve against the vicissitudes of life. The surplus product remained in private possession and was not an economic factor.

The purpose of capitalist production is the reaping of profit. Profit was the end which the bourgeoisie had in view in its demand that every sphere of production should be open to the free movement of capital. Competition was to regulate prices and profits. And, indeed, competition became the whip that urged the human race to the fastest gait of which it had until then been capable along the road of progress.

Free competition forced every capitalist to try to attain the highest degree of productiveness of the labor he commanded and thus to reduce the cost of

his product to the lowest possible minimum. This was accomplished in the sequence of simple co-operation, division of labor, mechanical inventions, the application of steam power and of the scientific discoveries, and the introduction of machinery. Every step forward in the technical development meant an increased outlay for plant and materials. This process shut out the smaller or less successful capitalists. Only those who had succeeded in the accumulation of the profits necessary for production on an enlarged scale could remain in the race.

Therefore capitalist production, in contrast with its predecessor, is essentially a process of accumulation and concentration. This process operated slowly during the period of individual enterprise, when any increase in the scale of production, owing to its technical requirements, had to wait for a certain minimum accumulation of profits.

But this limitation was removed by the appearance of the industrial corporation, an organization of capital which is independent of the individual fortune. It appeals to the general money market and collects the scattered hoards, therein resembling the banks, the difference being only that for its owners, the money is converted by the industrial corporations into fictitious capital, whereas the banking capital remains loanable capital. Instead of awaiting the necessary accumulation of profits for its expansion, an existing concern need only convert itself into a corporation and increase its money capital by the issue of fictitious capital, or if already a corporation, increase its capitalization.

For new enterprises of every kind the limitation imposed formerly by the extent of the private fortune has disappeared ever since the builders of the first railroads accomplished their purpose by having recourse to the united capital of the capitalist class of the world. The whole social money capital is held in readiness to be converted into industrial capital. The lack of money no longer stands in the way of technical improvements on the largest scale, such as the foundation of Gary, or the Pennsylvania or New York Central railroad stations in New York, improvements which called for outlays of fifty to one hundred million dollars each; or of the consolidation of related industries, like steel manufacture with the mining of ore and coal, with the production of pig iron and coke, and with transportation by vessels and railroads; or of the annexation of competing concerns by the purchase of a controlling number of their shares, financed with money obtained from the sale of fictitious capital, as has been the common practice in railroad consolidations. Of the latter Professor Parsons gives the following example¹:

“The Pennsylvania R.R. is supposed to be peculiarly free from inflated capitalization. It claimed January 1, 1905, \$193,000,000 as the cost of road and equipment and *full value* of real estate, while the capitalization was then \$418,000,000. The difference of \$225,000,000 was issued to purchase securities of other corporations, mostly of railroads, for example a large amount of the stock of the Reading Co., which, in its turn, holds \$197,000,000 securities of other companies: 87 million dollars Phila-

¹ *Railways, Trusts, and the People*, p. 102,

delphia & Reading Coal & Iron Co., 110 million dollars of some 54 railroads. Among the latter is the Central of New Jersey which owns \$30,000,000 of securities of still other companies."

Professor Parsons adds:

If anybody could take a year off for the purpose, he *might* find out how much duplication, triplication, quadruplication, etc., there is hidden under the serene surface of the Pennsylvania R. R. capitalization.

The access which the corporation has to the general money market through the sale of fictitious capital frees it from the financial handicap of the individual concern, and enables it to confine any consideration of enlargement of plant, technical improvement, or annexation of related industries exclusively to the question of advisability on the score of a satisfactory increase in the corporation's profit rate. The industrial corporation is thus enabled to attain a technical superiority over the individual enterprises and maintain this advantage at least for a time, during which extra profits may be garnered and a further lead in the competitive struggle gained. The corporation so situated can employ the world's best scientific, technical, and managerial talent for which salaries of \$100,000 and over are not uncommon. This assures permanently the able conduct of the large corporate concern, when the fate of an individual concern depends on the capacity of whoever by the accident of inheritance succeeds to the management,

It is nowadays generally only the very large establishment which is in a financial and technical position to handle big things in the way of patents or scientific discoveries of great economic value. Time was when such discoveries were the free gifts of the scientists to the whole class of industrial capitalists. Now the great industrial corporations have their own well equipped chemical, physical, and mechanical laboratories, where staffs of scientists and technicians are working on the problems of their industries. The pursuit of important inventions by outsiders is generally discouraged. The mere fact that an invention presents a great improvement is far from being a reason for its adoption by the big corporation, often the only concern in a position to apply the same. The corporation managers are not at their post to safeguard the interests of society in general; they are intent only on one thing: to show as large profits as possible to their directors. Therefore it becomes a cold-blooded question with them whether to buy the outside patent in order to use it or in order to suppress its use, or whether it pays better to simply violate it and wear out the inventor by litigation ruinous to the latter.

While industrial corporations, no less than individual enterprises, are conducted with the single view to as large profits as possible, yet on the other hand it is not compulsory for the former to make any profit at all. The stagnant individual concern, owing to its owner's individual consumption, drifts into bankruptcy. Not so the corporation, which may go on forever selling at cost. The Southern Railway

has not paid a dividend in twenty years on its common stock and scarcely any on its preferred, yet it goes on serenely. Of course, its shares have only a speculative value, but they may change hands ever so often, the functioning capital itself does not change hands and is quite unmindful of what those papers are doing.

Any individual concern that in its annual statement made for the purpose of obtaining credit fails to show profit during the year is looked at askance and expected to explain; in case of repetition its rating is reduced and its credit suffers. On the other hand, a corporation like the Bethlehem Steel Works, which pays no dividends on its common and only sporadic ones on its preferred shares, can borrow millions at the ordinary market rate of interest. This is so because the banking capital is familiar with the status of the large corporations in which it is financially interested.

There are also other circumstances which affect the borrowing credit of individual (or close corporation) concerns, but not that of the large corporation. Generally the former can obtain credit on the proportion of its current liabilities to its liquid assets; in exceeding this limit the lender would become a party interested in the fixed capital and cease to be a mere money capitalist. Also the existence of a mortgage, especially if it includes chattels, for instance the machinery, usually militates against an individual concern's credit. The big corporations, per contra, may be bonded for their entire fixed capital and yet have easy borrowing credit, their real profit-producing

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capacity being understood by the men who control credit and who are often themselves directors of these industrial corporations.

The freedom of the corporation from the compulsion to furnish a revenue to any capitalists has been referred to above. Even when profits have been made by a corporation, it may abstain from distributing any part thereof to the stockholders and instead apply the profits to the economic needs of the concern, such as improvements of the plant, the overcoming of competition, or simply the creation of a contingency fund, regardless of the hardship which the absence of the revenue may entail on individual stockholders.

At the same time the few large stockholders, by whom every corporation is controlled, may utilize their advance knowledge either as to a coming suspension of dividends or a coming declaration of an extra dividend for "long" or "short" operations on the stock exchange. This safe speculation is an additional means for the concentration of wealth. During the period from April 1, 1901, to December 31, 1913, the Steel Trust made net profits of \$898,000,000 and paid \$546,000,000 dividends. There were years when there were available 14.4% and 15.6% respectively for dividends on common shares, but in which years only 2% was distributed. The market price of common shares has fluctuated all the way between $8\frac{3}{8}$ and $94\frac{7}{8}$. In all such cases the small and uninitiated stockholders sell out long before the fattening of the corporation reveals itself in increased profits and dividends.

To recapitulate, corporate industrial capital, owing to the separation of its function from its ownership, has freed itself of the handicaps and limitations of the individual enterprise which is dependent on the character of its accidental owner, his ability and personal needs, his fortune and his credit.

Corporate industrial capital incidentally removes that resistance to the tendency toward industrial concentration which consists of the partition of private fortunes. The latter now affects only stocks, not stock companies.

The tendency toward industrial concentration has been aided by the desire of individual capitalists, from private considerations, to convert future profits into present money. This desire of the owners is seconded by the prospect of the promoters' profits accruing to the dealers in credit by such conversions or by consolidations of private enterprises into corporations.

Testimony before the United States Industrial Commission indicates that in organizing the Standard Distilling Co. one hundred and fifty dollars stock was given as reward to a promoter for every one hundred dollars cash he was able to bring in. The stock so issued was apart from the stock bought by the underwriters and from that given to the owners for their properties.

Professor Parsons mentions the following as rewards to promoters: American Tin Plate Co., ten million stock (out of \$46,325,000 issued); American Steel & Wire Co., fifteen million stock.

It has been stated that J. P. Morgan & Co. re-

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ceived forty million dollars stock for organizing the Steel Trust.

Of course, these personal motives of owners and promoters can enter into play only once. The enduring benefit to the capitalists in the consolidation of their competing plants lies in the ability of the trusts to earn more than the average profit rate. Let us first take a look at some of those profits.

We have already had occasion to refer to the rate of profit made by the Tobacco Trust.

Earlier in this chapter are mentioned some of the profits of the Steel Trust, but not all of them. In addition to the dividends there mentioned, the corporation "has turned back into the property a surplus equal to sixty-six dollars a share on the common stock."¹ The reader already knows that the whole share capital originally represented no existing value: therefore the profits cannot be expressed in terms of percentage on industrial capital.

The same condition exists in regard to the Sugar Trust, of which the stock was likewise all water. The bonds alone amounted to \$10,000,000 and covered operating plants valued at only \$7,740,000. In addition thereto shares were issued for \$75,000,000, subsequently increased to \$90,000,000, on which dividends of 7% per annum have been paid since 1901. But this is not all. The bonds have been retired and a surplus has been accumulated which amounted on December 31, 1913, to nearly \$29,000,000.

¹ P. H. Carey, Editor *Poor's Manual*, in letter to *N. Y. Times*, November 25, 1913.

Adding the market value of the shares to the dividends and interest thereon, it appears that Havemeyer's \$500,000, regarding which there are some details in the chapter on fictitious capital, have borne fruit at the rate of over 700% for every year since 1901. It is said that not even is this all, as the men controlling the trust own as individuals the sources of supply of the trust's Cuban raw material.

The Oil Trust "has been known to make 530% on its whole capital year after year, and some of its investments and enterprises have netted it as high as 800% a year, and in one case, through railroad rebates, over 3000% profit per year was obtained."¹

In the government suit against the Harvester Trust the defense proved that the separate plants, before organization of the trust, earned 200% per annum in the years 1898 to 1902.

The Calumet and Hecla Mining Co. distributed as high as 583% on the paid-in capital (in 1906), which rate of dividend however fell in 1912 to 350%, no doubt in consequence of a lower market price for copper². No wonder that the stockholders, being thus hard put to it to make an honest living, fought like tigers against their striking miners, considerably disturbing the State of Michigan.

There are many instances known of smaller concerns doing quite as well.

Of the Farr Alpaca Co., Holyoke, Mass., "employ-

¹ See *Wealth against Commonwealth*, H. D. Lloyd, pp. 67, 99, 100.

² Average prices: 1906, 16.60c.; 1912, 13.52c. 35th Census Abstr., Table 282.

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ing upwards of 3000 hands" (meaning persons, not 1500 pairs of hands), David I. Walsh, Democratic candidate for Lieutenant Governor, now Governor of Massachusetts, said in a speech: "Its regular dividend . . . is equal to 576% on its original cash capital."¹

The Ford Motor Co., capitalized at \$2,000,000, made a profit in its fiscal year 1912-13 of \$37,597,312. We do not know whether the capital was actually paid in, at any rate we forgo figuring the percentage of profit.

In the case of Waltham Watch Co. *vs.* Charles A. Keene before the Supreme Court in 1911 it appeared that the defendant bought the plaintiff's products in London, shipped them to Arabia, thence to the United States, where he entered them free of duty as American manufacture and undersold the trust (the several watch companies act as a trust), although the long-distance transaction yielded Keene a net profit of 30% of the value of the watches.

Many similar cases are known where American goods are sold much cheaper abroad than at home. The same policy is pursued by the trusts in Germany.

When we come to franchise trusts we find similar rates of profits.

Postmaster General John Wanamaker wrote in 1890²: "An investment of \$1000 in 1858 in Western Union stock would have received up to the present time stock dividends of more than \$50,000 and cash dividends equal to \$100,000." As the stock was

¹ *Journal of Commerce*, N. Y., October 17, 1911.

² *Argument for a Postal Telegraph*.

then about par, the profits were 450% per annum on the real investment, not figuring interest.

In a speech in the House of Representatives on December 22, 1913, Mr. Lewis, the originator of the parcel post, said: "In postal-telephone countries the local toll tariffs tend to run about one half the charge for a letter, while here they run with the street-car fare and sometimes exceed it."

The list of examples of enormous profits could be easily lengthened, but it suffices to show that there exists in a variety of industrial spheres a higher than average rate of profit. How does this affect the competitive capitalists and the workers? To answer the question we must first understand the cause of the high rates of profit.

Not only Mr. Tom Lawson, the author of *Frenzied Finance*, but people whose business it should be to know better, accuse overcapitalization of being the cause of the exploitation of the many by the few. That the wish of being able to produce a return on a great overcapitalization, and therefore of obtaining as high prices as possible for the products, actuates the corporation managers is a matter of course, but the wish does not alter the law of prices. The fixed capital, whether of a corporation or of a firm, may have been written off entirely on the amortization account, yet that fact would not induce any capitalist to sell a bit cheaper than necessary. The shares of the Calumet Co. above mentioned or of the Fifth Avenue Bank of New York are worth forty times their face value. Was the former less determined in its fight against the strikers for profits, because a share

of its capital was worth \$1000, than if it had issued forty pieces of paper worth \$25 each? Does anybody think that the officers of the bank mentioned were less intent on profit, because its capital had not been watered? Mr. Lawson and those who think as he does confound cause and effect. High capitalization does not produce high profits, but the experience of a certain volume of profits or the anticipation thereof is made the basis of the capitalization. Probable profits are the foundation, capitalization is the superstructure. That advertised prognostications are often exaggerated to deceive the investing public does not alter the economic theory.

If there are industrial concerns able to maintain a higher than the average profit rate, then it must be that their spheres are no longer subject to the action of the agency which has produced the average profit rate,—namely, free competition. There are two primary ways in which competition manifests itself: first, by the transfer of capital from a sphere of low profit rate to one of high profit rate; secondly, by new capital seeking the sphere of high profit rates and neglecting those of low profit rates. The first mentioned movement of capital became increasingly difficult with the ever larger investment in fixed capital necessitated by technical progress. The other movement of competitive capital, that of the entry of new capital into the more profitable industries, must also have met with an obstacle. The first thought to present itself is that the existing trusts are already in control of elements of monopoly. This is true of many trusts, but even in the sphere of

those not protected by elements of monopoly we no longer see new capital entering the field. The fact is that new competition is prevented by the concentration of money capital, to which the next chapter will be devoted.

To the extent to which competition has been eliminated in a sphere of production, that sphere may be described as being more or less monopolized. If any single organization within a sphere controls such a proportion of the total production as is indispensable for the existing consumption and therefore of material influence on prices, that organization commands a more or less monopolistic position within its sphere.

. The maintenance of a higher than average profit rate clearly is the result of the elimination, more or less complete, of competition. This does not imply that monopolies have the power to determine their profit rate by fixing prices quite arbitrarily. Monopolies may control production and prices, but they cannot control consumption. All they can do is to contrive such a combination of maximum sales with maximum prices as will yield a maximum profit. Similarly in buying their material and labor power they cannot bear down too heavily on the sellers, as they would otherwise in the long run reduce the supplies required. To discover what maximum price consumers think they can afford to spend for such quantities as would prove most profitable to the monopolies, is for these a process of experimentation. For example, when the elevated railroads in New York started on a ten-cent fare it was soon found expedient to reduce it

to five cents. On the other hand, estimates for the Hudson Tunnel had been based on a five-cent fare. The tunnel proved itself popular beyond all expectation—a veritable bonanza. It was now easy to ascertain whether the public would stand a raise of forty per cent. The fare is now seven cents.

Certain so-called public utility or franchise trusts are naturally monopolies and control commodities which are indispensable and for which no substitutes exist. Such are privately owned water-works, gas and electric plants, street railways, telephones, etc. The presence of two telephone systems in cities, where they exist, is considered a nuisance. These trusts have been able to pocket enormous profits with the connivance of the politicians, although the latter have been obliged of late years, in order to appease popular dissatisfaction, to bring about reductions of prices or even to municipalize or nationalize some public services.

Much dissatisfaction is directed also against the trusts in the manufacturing, extractive, and transportation industries, and is mainly nursed by capitalists still in the competitive stage and by the middle class. By the latter we mean owners of means of production who perform productive labor, either alone or with the assistance of wage-workers, and are thus not advanced to mere commandship of labor. The great bulk of this middle class is composed of farmers. To these strata of society "monopoly" is a term of reproach, and if they know anything about themselves, it is that they are "anti-monopolists." They are always hopeful of

action against trusts by legislation and government suits, disappointed when these have remained without effect, and astonished when they have even resulted in further concentration, as when the dissolution of the Oil Trust resulted in a reduction of the number of the stockholders by 14,142 between June 30, 1912, and June 30, 1913. The impressions of these social strata are determined by the way monopoly affects them; a real understanding of the historical significance of industrial monopolization in our generation would interfere with their defense of their interests as they understand them. But the working class, having a historical mission, is eminently interested in acquiring that understanding.

Competition pre-supposes a fairly equal opportunity between economic rivals, a disadvantage in one respect being sometimes offset by an advantage in another respect. Such an equilibrium of forces is in constant danger of being upset. The advantages constantly sought and often gained by some of the competitors are apt to lead to the permanent discomfiture of others, because such advantages are of the nature of at least temporary monopoly. The whole capitalist system of production, built up on the foundation of free competition, is a process of elimination of competition and of attainment of monopoly. Every accumulation of capital from profit, every new process or new machine, before coming into general use, was a step in the direction of monopoly. Every partnership eliminated competition between two capitalists, and the advantage gained by them in the volume of their capital and in the blending of their

respective capacities interfered with the competition of others. The corporation was an extension of the principle of monopoly. The stage-coach and the freight-dray were tools open to competition; the railway is naturally a monopoly. The charters granted to corporations by the state are recognitions of economic facts already accomplished by society. The state itself, as Moody points out, is a monopoly which abolished physical competition with fists and clubs. The more perfect social monopoly of the future will stand in the same relation to present-day economic competition, as the present state stands to physical competition during savagery. The unconscious tendency of human evolution has been to weld the race into an organism, and a perfect organism is a perfect monopoly.

In the face of such a fundamental tendency it is clear that all anti-trust legislation and judicial prosecution of trusts must prove to be futile in the future, as they have been in the past. The class of individual capitalists, which now advocates such measures, had a great deal to say when the hand-loom weavers destroyed the first power-looms. These machines were economizers of labor, certainly, but so are the trusts with their large scale production by the most improved processes, in the most favorable localities; their control of the production of their materials; their industrial utilization of waste products; their annexation of accessory industries; their general elimination of waste. When the Match Trust was organized by a consolidation of thirty-one plants, eighteen of them were closed and the remaining

thirteen supplied the country. In June, 1914, the formation of an international Thermos Bottle Trust was reported; the glass parts were to be made in Germany, the metal parts in the United States. This evidently means that the English and Canadian factories are to be closed. To the anti-trust capitalists the difference between the introduction of the power-loom and of the trust resolves itself into the question: whose cow is gored? Let these gentlemen formulate a law which on the one hand does not interfere with the juridical property rights, to which they are wedded, and on the other hand permits the conduct of an enterprise to its best advantage,—a principle in which they likewise profess to believe.

Now, what are the economic relations between the monopolies, the competitive capitalists, and the workers?

The value added to the materials by labor in a given time, as a year, is a definite quantity.

Subtraction from the sum of this value of the sum of wages paid gives the sum of surplus-value.

Division of the sum of surplus-value by the sum of the capital gives the profit rate.

These arithmetical rules are the explanation why the general profit rate might be say 30 or 40% and is not 5% or 100%. The prevalent notion that competition regulates the profit rate is the result of ignorance of the theory of value. This matter has already been referred to in Chapter IX., where it is shown that competition only accounts for oscillations of prices from value, but not for value itself. Competition does not create the profit rate, but only

equalizes it first within a sphere and then between spheres of production. The essential point to comprehend is that profit is not just something tacked on to the price, but a definite quantity.

As the total new value created by labor regulates the total surplus-value, it follows that the law of value limits the total price at which the commodities are sold. This price is therefore the capitalistic production price which includes the unpaid labor. The proportion of the latter to the paid labor varies among the different industries, but the rate of surplus labor performed in each is left out of account in capitalist society which apportions profits not *pro rata* of labor performed, but *pro rata* of capital employed. Hence the deviations of prices of individual commodities from their values, as illustrated in Chapter IX. The plus and the minus of prices, relative to value, balance each other, and the total price equals the total value.

The total value added to materials forms the revenue of the people, one part, in the form of wages, going to the workers in payment of the value of their labor power; the other part, in the form of profit (including interest), being divided by the capitalists, who surrender a portion of the profit to the land-owners in ground rent.

Since the revenue of the capitalists collectively is thus a definite quantity, it follows that if some among them manage to appropriate more than the share due them according to the general profit rate, others must receive correspondingly less.

The single concerns differ from each other greatly

in size and efficiency. We have shown elsewhere (Chapter X.) from census figures and logical inference therefrom that about 1% of the number of manufacturing concerns produce 50% of the total value. But this 1% includes both the firm having a production of one million dollars and the Steel Trust with a production of 800 million dollars. That the numerical predominance of the smaller concerns in the 1% is enormous goes without saying, and the fact emphasizes the almost infinitesimal relative smallness numerically of the large trusts. Concerning the calibre of the other 99% of concerns, producing the other 50% of value, we need not lose any words.

The products of all of these concerns, large or small, may be ranged for the purpose of theoretic economics into two classes: one consisting of articles of productive consumption, the other consisting of articles of individual consumption.

Articles of the first mentioned class are sold by one capitalist to the other either to serve permanently as fixed capital or to be converted into articles of individual consumption.

The second class of articles is sold directly to the individual consumers.

As the productiveness of labor increases, the value of commodities decreases. The competing capitalists sell at the decreased value. But not so necessarily the monopolies. Not that these have it in their power to make a fool of the law of value. The totality of all commodities cannot be sold above their value by one cent. The monopoly's products are included therein, and, in order to be sold, cannot

appeal to anything else than the definite income of the people.

But what the law of value permits the monopolies to do is to enforce an unequal division of the social surplus value as between themselves and the competitive capitalists. This, of course, is a violation of the time-honored principle: for equal capital equal profit. But the monopolies proclaim a new principle: one average rate of profit for monopolies, another average rate of profit for competitive capital.

If a monopoly produces articles for productive consumption, it can fix its prices at such a high level as to leave to the converting industrialist only a scant margin between his cost of production and the value of his finished product. This proceeding would be impossible, if the view were not erroneous that the source of profit is in the simple addition of a percentage to the cost price. Commodities are sold at their value. In selling articles for productive consumption above their value, the monopoly realizes not only the surplus value produced by its own workers, but appropriates part of the surplus value which is to be produced by the workers of the converting capitalist.

Supposing, however, that a monopoly product constitutes so large an element of the cost of the finished article of individual consumption as to nullify in a given converting industry even the reduced average profit rate of competitive capital, then only two solutions of the questions are possible: Either it is the purpose of the monopoly to drive a particular division of converting capitalists out of

business entirely and to annex this branch of industry; or such a division of hard-pressed capitalists succeeds in its turn in selling its finished products above their value. This is only possible at the expense of the prices of other products into whose cost the monopoly price of the materials enters as a less important element. For example: both groups of competitive capitalists have an average cost of 80, an average profit of 20, selling at 100 each, or 200 for both. Now the cost for group A is raised by the monopoly to 90 and this group manages to sell at 105. But the social revenue available for both groups being only 200, group B is compelled to reduce its price to 95. The general profit rate for competitive capital still rules, but has been reduced from 20 to 15. One group of competitive capitalists has been able to shift part of its oppression on to the other group, so that all are in the end squeezed by the force of monopoly against the stone wall of the law of value.

Here it might occur to somebody that the capitalists of a particular country might find an escape from this law by giving only part of their products for the whole available revenue and exporting the balance. But it does not require much thinking to perceive that even if the capitalists of one country could thus circumvent the law of value, the whole international class of capitalists cannot. However, the mere *exchange* of values with a foreign country does not alter the situation for the single country in the least. And in such cases where products are exported, not as merchandise, but as capital for

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foreign investment, like steel rails and locomotives in lieu of money, the only difference is that the equivalent will return gradually as profit, instead of immediately. The foreign products, whether received in the exchange, or representing profit on the investment, are subject, as regards their prices and their economic effects on the different classes of consumers, to the same laws as the domestic products.

The competitive capitalists are unable to turn the tables on the monopoly in cases in which they are themselves the producers of primary materials and the monopoly is the converter, because of their disadvantageous position as competitors.

From the forgoing consideration of the trusts, in so far as they are producers of articles of *productive* consumption, it appears that their extra profits are entirely the result of a new adjustment within the capitalist class in relation to the division of the surplus-value, although they may be reflected for different consumers of different finished products in contrary price movements, balancing each other.

We shall now consider the effect of the maintenance of artificially high prices by trusts producing articles of *individual* consumption.

If a trust sells such articles through merchants, it can apply to them the same tactics as practiced toward the productive capitalists, even to the extent of prescribing to the merchants the exact prices at which they must sell the trust's products, practically reducing them to the position of commission salesmen. If a trust sells directly, eliminating the merchant, it

will first of all pocket the merchant's profit; in the second place it will be able in many instances to sell its products above their value, which is only possible, as we know, to the corresponding detriment of the prices of other products.

Such instances, may, nevertheless, produce certain important economic effects, depending on whether the overpriced products enter generally into the consumption of the capitalists or into that of the workers.

If consumed by the industrial capitalist, whose profit had already been cut by a trust, he finds himself mulcted again, when purchasing the kinds of goods consumed by his class. He must lower his standard of life or live on a scale not warranted by his income. That the latter takes place largely is shown by the alarming increase of loans by life insurance companies to their policyholders.¹

¹ The *New York Press*, December 16, 1913, contained the following:

"There is no more telling indication of the heavy spendings of Americans [which Americans?] than the showing that borrowing of money on life insurance policies is constantly increasing, till it has come to alarm insurance executives. In 1888 these loans aggregated only 3½ per cent. of the reserves of the companies; in 1912 this had advanced to 16.03 per cent. and 1913 will make a record of about 18 per cent.

"The convention of life insurance presidents has given serious attention to these conditions. The reserves of the companies aggregate nearly four billions of dollars, on which loans of 18 per cent. would be \$720,000,000. The insurance policy on which money is borrowed is invalidated in the proportion that loan bears to the amount which has been paid in on the policy. Therefore a vast share of the insurance nominally in force is in fact affording no protection at all. Moreover, it was stated that when once a policy-

In a similar situation are those capitalists whose revenue is not, or only very remotely, influenced by particular profit rates, but is a fixed quantity. The extra profit of the trust is a clear deduction from their share in the social surplus value. To this group belong capitalists whose money is invested at fixed rates of interest; a large element of other non-producers with otherwise fixed incomes; the landowners, and the owners of rented houses and other buildings. The "landlords" appear in the dual character of landowners, receiving ground rent, and capitalists, receiving interest on a commodity (houses) as the equivalent of money.

The case is different as regards any overpriced products which enter into the consumption of the workers.

In the first place such products may be inexpensive things, like pipe-tobacco, matches, etc., of not much importance in a worker's budget, although the total mass consumed affords spheres for the existence of important trusts. But presuming that trusts, commanding the necessaries of life, were generally or very extensively to raise prices artificially, would the workers be in the same helpless situation as the social groups enumerated in the previous paragraph?

holder takes out a loan, experience shows that in only one case in ten does he ever repay that loan.

"It is recognized by the life insurance men that if this tendency shall continue confidence in insurance will be lost. Very many men, it is explained, make loans on their policies without their families knowing of the thing. At death, therefore, the facts are recalled by those who expected to be the beneficiaries. That kind of experience is certain to injure the repute of insurance as a protection to the family."

The answer is: the necessities of life are so to say the raw material for the reproduction of labor power. The latter is a commodity selling, like every other, at its value or the cost of its reproduction. This cost depends on the price of those necessities of life which, as the result of history, climate, etc., have become second nature to the workers and are therefore considered indispensable by them. If the necessities of life advance, wages follow. Until wages have caught up with prices, the price of labor power is temporarily below its value, the same as it occasionally, under particularly favorable circumstances, rises temporarily above its value.

Given, however, a condition in which wages have advanced as much or even somewhat more than prices of industrial products, though much less than agricultural products and rent, then there has taken place a decline of the value of labor power, or in other words a lowering of the worker's standard of life.

That the huge profits of trusts and other large corporations are not made at the expense of the consumers, as a body, is not only a necessary theoretical conclusion, but is practically proven by the comparatively slight rise of the prices of manufactured articles,¹ which are precisely the products fashioned from materials largely controlled by trusts. Even this slight rise has been accounted for by other factors.²

But confronting these huge profits with the enormous *general rate of exploitation* of the workers,

¹ Refer to figures, p. 103.

² Refer to inquiry into rising prices p. 104.

the calculation of which we presented in Chapter VIII., and remembering that the trusts appropriate part of the *other capitalists' share* of the surplus value in addition to their own, we find that both sets of figures go far in confirming each other. They reveal the real source of the growing power of concentrated industrial capital.

From the forgoing analysis it appears that the sting of the trust movement is directed against the competitive capitalists, productive and mercantile. This movement for the further extension of the trusts tends to the final elimination of competition and to reducing the remaining capitalists to mere functionaries, though left nominally independent. When that consummation is reached, the maintenance of the average profit rate becomes an issue between the trusts themselves, as those among them producing indispensable necessities of life might extort a higher than average rate of profit. This, we now understand, they could only do at the expense of the capitalists of other trusts who likewise must realize their profit out of the same common revenue fund of the workers and capitalists, the strictly limited total of wages and surplus value. Such violation of the sacred principle of equality of everything that bears the countenance of capital capitalist society must find the means of preventing, as it has always endeavored to do. Indeed, the economic power that will ultimately enforce a uniform profit rate among the industries already exists—the centralized money-power which forms the subject of the next chapter.

So long as capitalist society has not passed the zenith of its expansibility and until the centralized economic power of the capitalist class rules absolutely the economic life of nations, the value of labor power remains unaffected by the process of monopolization. And as it is a historic necessity that capitalism shall largely work out its inherent tendency, the workers have no economic reason for supporting the anti-trust action of the small capitalists and the middle class. Monopolies being the outgrowth of competition, they had to become *private* monopolies managed for the benefit of private interests, as opposed to any outside interest. Why do not the anti-monopoly capitalists advocate advancing to the next step of evolution, social monopoly? Why rather "bust the trusts"? The reason is that these little capitalists are back numbers and hope to save themselves by turning back the hands on the dial of time.

Competition will continue, as in the past, to breed monopolies. For this it is not necessary that competition in an industry be carried to its logical end, the single survivor. Men are sensible beings and combine into a monopoly before great destruction of capital ensues from a final struggle between Titans. Before this desperate pass is reached monopolies are brought about by almost any available means. These have often been of worse than questionable nature, ranging from the morally reprehensible to the downright criminal. But all history is replete with just such facts, and it is only when the strife is over and men are able to look backwards after a

long time that history seems to justify the means by the end attained. So it is also with the unlovable personality of the pioneers of monopoly who are personally made the object of unfavorable criticism. They are, it is true, typical, at least in America, of the class of men described by James Bryce in these words¹: "In no country does one find so many men of eminent capacity for business, shrewd, forcible, and daring, who are so uninteresting, so intellectually barren, outside the sphere of their business knowledge." The purpose of these men is to work for their personal advantage, but in the end their activities will have had the effect of making possible the production of great wealth at a minimum of labor.

The corporation is the abolition of capital as private property within the limits of the capitalist system of production. The function of capital is divorced from its ownership, and profit presents itself as the plain appropriation of the surplus labor of others. Theoretically the highest development of the capitalist system of production would be reached with the universal holding company, or trust of trusts, and with it the end of anarchy and money. But inasmuch as the development of the monetary system proceeds at a much quicker rate than that of industrial concentration, the strain on the former will become acute before the culmination of the latter is reached. The present social system will thus become untenable before it can completely work out its logical ultimate consequences in

¹ *American Commonwealth*, part iv., chap. 81.

the realm of industrial organization. However, concentration in most industries is even now sufficiently advanced for their re-transfer to the producers.

These most concentrated industries are at the same time the fundamental industries on which all others depend for the means of production, such as coal, iron, petroleum, natural gas, copper, electric works, heavy machinery, chemicals, railroads, etc. The *direct* socialization of these industries would have the effect of *indirect* socialization of the scattered smaller industries, largely producing articles of individual consumption, as well as of agriculture.¹

¹ Little reference has been made to agriculture in these pages. Others have specialized in collecting data regarding economic tendencies in agriculture in the interest of economic science. We believe that their painstaking labors are largely wasted. They appear to be animated by the idea that the impending social transformation must wait until the technical and economic development of agriculture will have fairly caught up with the industries and that the social change will be one grand event. But the preponderance of reasons favors a gradual process of transformation, in so far as the latter depends on the further development and concentration of the means of production. Only the socialization of the large primary industries is immediately essential; the others, including agriculture, can be left to their development, profoundly influenced as they are bound to be by the new social atmosphere.

If, however, as is to be anticipated, the gradual transformation is crossed and brought to a sudden end by the breakdown of the financial mechanism, then it will be entirely immaterial in what stage of development agriculture and other backward industries may be found at that moment. To the extent that agriculture produces commodities (and not for consumption on the farm), the old individualistic system is inhibited by *force majeure* and must perforce be replaced by social control of the distribution of agricultural products as use-values.

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Already the contradiction between the social nature of production and the private power of a few magnates, who are masters thereof, is challenging the intervention of the state. Timidly the latter essays control by boards. But efficient control without ownership is impossible, and, whereas private ownership of railroads, for instance, was not questioned a very few years ago by anybody but the Socialists, voices are now heard even of capitalists of national reputation predicting the nationalization of the important transportation and communication industries. On the floor of the Senate a prominent Republican member, Senator Borah of Idaho, on July 3, 1914, said that "within ten years we will face the question of the public ownership of railroads because of the breakdown of regulation." The business of the Express Trust is being gradually taken over by the Post Office, transfer to which also of the telephone and telegraph is advocated by Postmaster General Burleson.

The steam railroads constitute the largest industrial concentration in the country. This consists of about 1040 companies,¹ now controlled by ten main railroads through a system of pyramiding of stock ownership, such as described above in relation to the Pennsylvania Railroad, and also through long leases. These ten companies are: Pennsylvania, New York Central, New Haven, Southern, Chicago & Northwestern, Chicago, Milwaukee & St. Paul, Great Northern, Northern Pacific, Union Pacific, and Atchi-

¹ *Truth about Trusts*, John Moody, p. 476.

son, Topeka & Santa Fé. Their combined share capital is \$2,451,737,000.

Now, if the government should shrink from applying the fundamental principle enunciated by Justice Brewer of the Supreme Court and quoted in the last chapter and deprive the railroads of their character as capital by simple legislative enactment, there still remains another alternative of the United States acquiring ownership of the railroads without the expenditure of a cent.

This sounds startling to those who believe that corporations have raised an effectual barrier against nationalization by their high capitalization. But we have seen above that the holders of the shares of ten companies control the entire railroad system of the country. These shares, whose market value in June, 1914, was about \$2,700,000,000, can be acquired by the government by condemnation proceedings authorized by Congress. The constitutionality of such condemnation has been expressly affirmed by the United States Supreme Court¹; moreover, we are used to condemnation of private property for public or quasi-public purposes, such as the condemnation of private lands by the railroads themselves, or that of the land of Irish landlords by the government for the purpose of creating peasant proprietorship.

The money to pay for the shares could be easily raised against the government's three per cent. bonds. The amount is less than the war debt when the country's population was one third and its wealth (real and fictitious) much less than a third of what it is

\ ¹ 203 United States, 372.

now. The small interest service and the amortization would for a time be a charge on the service; otherwise the railroads could be operated on the same principle as the Post Office, that is for the benefit of the people and not as a means of indirect taxation, as done by the military states of Europe.

The practical ownership of the railroads by the government carries with it the immediate practical ownership of the Anthracite Coal Trust owned by the coal-carrying roads, and would go far toward control of all large industries.

CHAPTER XII

THE CONCENTRATION OF MONEY CAPITAL

FIFTY years ago, as the reader will remember, the accumulation of money capital in the banks was in its infancy. The figures given in Chapter VI. of the total deposits of all banks in the United States in 1863 are to-day matched by the combined deposits of two banking establishments in New York; two direct instruments of the now centralized money power.

At that time the banks were all chartered by the States on insecure financial bases, doing generally a neighborhood commercial lending business, except that they issued paper money which had a habit of depreciating more or less. Besides the commercial banks there were savings banks, investing their funds in real estate mortgages, then the only safe investment, as the new-fangled railroad securities were still in the experimental stage.

Aside from the commercial and savings banks the only accumulations of consequence of loanable capital were in the life insurance companies, which, like the savings banks, invested mainly in real estate mortgages. From \$1,000,000 in 1843 their assets had grown to \$125,000,000 in 1867 (the year

in which the first volume of *Capital* was published), yet nobody could have foreseen that it would be particularly this kind of bank which, with billions of assets, would some day form one of the main supports of the centralized money power.

This great power, for which there does not yet even exist—so recent is its history and so little understood its scope—a generally accepted name, being variously designated as “Money Trust,” “Money Power,” “The System,” “Financial Capital,” etc., has its seat in “Wall Street,” an abbreviated appellation of the financial district of New York City. There are its great banks, with treasure which can be defended on the instant by an impenetrable wall of burning steam, like Brunhilde on her rock. And there is the other outfit, indispensable for the present, the stock exchange, with which is connected the only open money market in the United States.

This district has become what it is, because it had been previously the business section of the dry-goods importers, the wealthiest class of merchants in the most important seaport. They graduated as naturally into financiers under then existing conditions, as at one time the Italian goldsmiths in London, from being buyers of bullion, graduated into that city’s bankers.

About the middle of last century the textile industry was still, as it had been for a century, the most important industry of Europe and the importation of dry-goods was the most aristocratic business in this country. That was before the metal industry, which furnishes our machinery, railroads, telegraphs,

steamships, bridges, tubes, skyscrapers, assumed for modern nations greater importance than the mere providing of raiment.

At that time the money for building the numerous short lines of railroad had been gathered partly from local banks and private hoards, but mainly from subsidies by local communities—states, counties, and municipalities. Little of it was to be had abroad. The total foreign holdings, including State, railroad, and other bonds, were estimated to have amounted in 1854 to only 200 millions, and in 1857 to 400 millions, as against an estimate of six billions now. In the latter year a panic broke out in which every single bank in the United States stopped payment, and it became necessary to export gold instead of papers.

But then came the Civil War and during its course the government had to borrow heavily, the debt rising from 65 millions in 1860 to its maximum of 2845 millions in 1865. A great part of the money had to be raised abroad. The exportation of government bonds was of course effected from the principal port, New York, and the agency naturally fell to the dry-goods importers, the men with the most influential foreign connections and equipped with the best understanding of international finance. They were the more willing to undertake the commerce of bond exportation, as the defection of the prosperous South had crippled their dry-goods business. Prominent among these importers were the houses of Morgan and of Peabody, names now identified respectively with the leadership of the inner group of the money

power and one of its most direct and important allies. The dry-goods men, who meanwhile had also assumed the management of the life insurance companies, were now metamorphosed into "private bankers."

In 1863 the National Bank act was passed for the purpose of superseding the State bank circulation by a circulation based on ownership of United States bonds, thereby creating a market for the latter. The chief agency for the sale of its bonds to the new national banks had been entrusted by the government to the banking house of Jay Cooke & Co., who, however, heavily involved in railroads, failed in 1873. Associates of Cooke started business for themselves, organized formally as a national bank, but actually rather as a partnership with a few silent partners. This was the First National Bank of New York, to which went logically the domestic bond trade of the failed firm of Cooke. Its guiding spirit was then, as it is to-day, George F. Baker, one of the triumvirate now in active control of the nation's economic life.

The year 1879 is memorable in that it saw the cessation of government bond issues, the resumption of specie payment, and the consolidation of the Standard Oil Co. These events produced a change in the character of Wall Street. Hitherto mainly the national market for speculation in the value relation of gold and paper tokens, it now turned its attention to shares in industrial corporations. It was the beginning of the movement toward the control of industry from this center.

“Competition is the life of trade” was the motto of the industrial capitalist of yore. He said this with much glee when he, as the only buyer, met several sellers, but he said it with a sigh when, one among several sellers, he met one buyer. As we now look back, we can clearly see that the general formula of the process of concentration has been “From competition via threatening ruin or actual bankruptcy to combination,”—exactly as predicted by Marx nearly half a century ago.

The principle that “competition is impossible where combination is possible,” to use the words of Stephenson, the inventor of the locomotive, was worked out in practice mainly by two men, J. Pierpont Morgan and John D. Rockefeller, the former starting from the railroad business, the latter from the extraction and refining of petroleum.

“A double-track railroad costs not more than two thirds as much as two single-track roads. It will do four times as much work.”¹ Consequently in building competing single-track roads, instead of double tracking existing ones, five-sixths of the capital is wasted. Nevertheless the railroads were built preferably single-track, for in the United States, from historical reasons, the fetichism of free competition, and capitalistic anarchy generally, was more rampant than it ever was or could have been in any other country. Enlightened men knew that low prices can come only from efficiency, but the Interstate Commerce Act, passed in 1887, bade the roads compete to the utmost, the expectation having

¹ John Moody and G. K. Turner in *McClure's*, June, 1911, p. 188.

been that low prices would come from competition even between inefficient.

By the bankruptcy of the railroads in 1893, their control fell at once largely into the hands of two small sets of men grouped around Morgan and Rockefeller. Somebody had to pick up the wreckage. The people of the United States, who had always been convinced that the state is only good for the job of night watchman, would not have accepted the railroads as a gift. So the property was thrust at Morgan and the Rockefeller group.

The latter represented the first important American accumulation of money capital. Before the existence of the Standard Oil Co. the great sources of capital had been England, Germany, and Holland, mainly the first-mentioned country. With a clear vision of the advantages which would accrue to possessors of money from the progressive bankruptcy of competing refiners and railroads, Rockefeller always kept a large part of the company's profits in the shape of money. Poverty-stricken, competitive railroads, in need of cash, could be beaten into granting secret freight rates which put the competing refiners out of business. These were then bought out by the trust at bargain prices. When the time came, the trust, its large cash funds united with those of the National City Bank, its creation in association with James Stillman, then as now the largest bank in the country, and allied with Kuhn, Loeb & Co. by the initiative of Harriman, was ready, under the latter's leadership, to acquire control of a large part of the bankrupt railroads by purchases of

their stocks. This was not as difficult an undertaking as might be supposed. Of the capitalization of the railroads about one half, the bonds, represented nominally debt, the other half, the stock, nominally ownership. This stock could then generally be bought at from a quarter of its par value down to very little. For reasons already stated in the last chapter (mainly the supineness of the scattered stockholders) it was deemed sufficient for control to command fifteen to at most thirty per cent. of the stock. It follows that a sum of money equal to from two to three per cent. of the capitalization was sufficient for control.

As soon as those in control of the management were able to discern which systems had the best prospects, they could increase their holdings at very low prices.

Morgan, commissioned by his clients, the English bondholders, reorganized the bankrupt roads east of the Mississippi, leaving those west of the river, except the Northern Pacific, to the above-described group of great capitalists. In every case he required from the hopeless holders of almost worthless stock absolute dictatorship through the "voting trust," which meant the power of voting all the stock until the roads would be able to pay dividends. He combined the roads into large systems, which thus formed a monopoly in his hands.

The improvement in the efficiency of the roads under concentrated control and their increasing prosperity caused a flow of money to New York, where it was distributed by their masters among

already existing banks and trust companies which thus came under the control either of Morgan or the Standard Oil-City Bank-Kuhn Loeb group, or among new institutions founded by them, respectively. These railroad funds on deposit in New York in their turn furnished additional means for the further concentration of industry.

The turn of the century came to be another important milestone, as had been 1879, in the development of monopoly. Competition in the manufacturing industries had led to a state of affairs similar to that which had previously existed in the transportation industry. The time had come for a general movement toward their monopolization. The most conspicuous case was that of the steel industry which was threatened with ruinous competition and was consolidated by Morgan, himself retaining the supreme power in this trust, the same as he had done in the reorganized railroads. Without his approval no director in this great corporation can be named.¹

The manifest advantages of combination and high capitalization encouraged imitation even by industries which had not yet felt too severely the pinch of competition.

Heretofore the house of Morgan had not been a promoting concern, its chief business having been the sale of bonds to its European clients, whose interests it subsequently represented in the railroad bankruptcies. The reputation acquired by Morgan in this performance made him now the public institu-

¹ See Report Congressional Committee (Pujo Committee), p. 134.

tion for combining and financing trusts. Industries applied to him for consolidation in numbers increasing year by year. The issuing business of the house grew to such proportions that its own resources became insufficient for carrying the necessary mass of securities, no matter how excellent its facilities were for their speedy turn-over.

At this juncture Morgan effected an alliance, joint account, or general community of interest with Baker, whose First National Bank had continued to be the leading dealer in securities in the domestic market and possessed resources not much inferior to those of the City Bank. Its business had been exceedingly profitable. The average annual profits for twenty years have been about 1500% on the capital originally invested in 1864, viz., \$500,000, and a \$100 share of that original stock has now come to represent a market value of \$20,000. Another alliance was formed by Morgan with James J. Hill, a man of considerable banking influence in his empire in the Northwest, as well as in New York.

All the great banks and trust companies had now been brought into the fold of either one or the other of the two groups. Between these antagonism continued and burst forth in the attempt, in 1901, under the active leadership of Kuhn, Loeb & Co., to wrest control of Northern Pacific from the Morgan-Hill group. These had considered themselves safe in the control of 15% of the stock, but the enemy quietly bought 20% and then called on Morgan-Hill to surrender. But the real battle had only begun then for obtaining a majority of the stock,

which finally reached a price of \$1000 for each share,—a terrible sacrifice for each party, almost precipitating a financial panic. Peace was arranged, the costly experiment was never to be repeated, and as a guaranty of future harmony between the two groups, members of each entered the other's banks and trust companies as directors.

It was fortunate that the groups came to an understanding. The overcapitalization of the trusts founded in this period exercised before long a great strain on the money of account. The overrated shares declined tremendously, and the severe panic of 1907 was the result. For their protection the two groups stood together as one man, and the outcome of the panic was their complete cementing into a single power, controlling the industries of the country.

The evolution of scattered into concentrated capital must not, however, be understood as altogether a process forced by economic necessity or according to a rigid economic formula. History has its laws, but it finds no ready rut to move in. The fulfillment of its purposes has often been accelerated by crimes. To be sure this fact is not pleasant to contemplate, but our ethical sensibilities cannot change the stuff of which history is largely made.

Thus when bankruptcy of railroads and other industries did not come along readily enough for the desired concentration, other means were used to bring about this consummation. Hear what the Pujo Committee says¹:

¹ Report, part iii, chap. 3, sec. 11.

. . . within the past thirty years the bulk of our railways have gone through insolvency and receivership. The proceedings are sometimes instigated by the management through a friendly creditor (and are then generally collusive in their inception) or through the trustee for bondholders . . . one or more of the officers under whose administration insolvency was brought about, or their nominees, is made a receiver. . . . Neither creditors nor stockholders, who are the parties really interested, are notified or have an opportunity to be heard either on the question of insolvency or of the personnel of the receivers. The stage has been set in advance . . . a self-constituted committee is announced, frequently consisting of men well known in the financial world, . . . selected by a leading banking house. This committee in due course presents a plan for the reorganization of the property. If the security holders do not like it, their only alternative is to form another committee, if they can arrange to combine their scattered forces and find . . . the banking house . . . who can finance the cash requirements of these colossal transactions in hostility to the banking house that was first in the field. . . . It is well-nigh impossible to find rival banking houses to lead the opposition. The usual outcome has been that the defenseless security holders take whatever plan is offered, however unjust, as against the alternative of being entirely wiped out. There have been rare exceptions, before the power of these banking houses became irresistible, when the security holders have wrung concessions through revolt. . . . Generally, after years of delay, the property is put through the form of a sale, but there is no bid except that of the committee. . . . If a security holder has failed to deposit with the committee he gets nothing. . . . No constituted authority supervises the vast expenses he is required to pay.

The bankers and the committee are made the sole judges over that and on every other conceivable question, including their own commissions and charges. . . .

The report adds that Morgan & Co. and Kuhn, Loeb & Co. secured domination in that way of the following railroad systems: Baltimore & Ohio—Chesapeake & Ohio—Cincinnati, Hamilton & Dayton—Chicago & Great Western—Erie—Northern Pacific—Pere Marquette—Southern—Reading—Union Pacific—and that the same abuses exist in the so-called industrial corporations (as distinguished by the committee from railroads).

In the face of such facts the following extract from an address by John Skelton Williams, Controller of the Currency, at Raleigh, S. C., on May 13, 1914, scarcely merits the New York *Times*' characterization as a "fancy picture." Mr. Williams said:

New York has become the commercial capital of the country, the great citadel of the money power, the reservoir of money supply. It is the walled city from which the barons have levied tribute on a territory and population vaster than any Lord or King of the Middle Ages dreamed of, yet sometimes using methods ruthless and savage as those of the fiercest of the robber nobles—forays and levies devastating by scientific, artful methods, pillaging under form of law, smiting with swords which bite deep, although we cannot see them, consuming with fire which comes invisible and unsuspected. The simile seems strong, but is justified by facts.

No sudden swoop by a feudal magnate on his peaceful neighbors was a more cruel or shameless plundering expedition than some of the transactions which have

been brought to light by which the shareholders of the railways and other great enterprises, established to build up the country and to promote the public interests, were despoiled. Their property and money were taken from them by the might of masses of money working stealthily. The raids had none of the attractions of the picturesque or the merit of courage. They were cold-blooded, relentless seizure of other men's goods by plots, treachery, and betrayal of trusts which should have been held sacred.

If the Pujo Committee and Controller Williams have spoiled the halo of sanctity which the average citizen is made to believe encircles the heads of the munificent Morgan and of the benevolent Jacob H. Schiff (head of Kuhn, Loeb & Co.), the Interstate Commerce Commission has added its own estimate, not alone in this respect, but also in another. In its report to the United States Senate anent the financial breakdown of the New Haven Railroad system, the commission refers to "the indefensible standard of business ethics and the absence of financial acumen displayed by eminent financiers in directing the destinies of this railroad." The three most "eminent financiers" on the New Haven board were Morgan, Baker, and William Rockefeller. How their over-reaching themselves in capitalizations brought on the 1907 panic has already been referred to. This at first threatened to swamp them, although in the end it resulted in further concentration, as every crisis has done.

The now absolutely unified money power is organized along lines indicated in the Pujo Committee

report, which we here follow principally, as being the most authentic source:

First: The inner group, J. P. Morgan & Co., the recognized leaders and official capitalizers of monopolies, George F. Baker, and James Stillman. They control leading banks and trust companies with resources in excess of \$1,300,000,000, besides a number of smaller, but important, financial institutions, and of course their personal fortunes.

Second: The wholesalers of securities. Related to the primary group practically as partners in many of their large enterprises. They are principally "private bankers" who have not grown as great as Morgan, such as Kuhn, Loeb & Co., Lee, Higginson & Co., Kidder, Peabody & Co. In Chicago the inner group deals mainly with the First National Bank and the Illinois Trust & Savings Bank.

Third: The retailers of securities. Banks and bankers throughout the country, hundreds of them. They circularize or canvass by solicitors every possible investor. Some of them do a business of hundreds of millions of dollars a year.

This is the machinery for the distribution of fictitious capital. It employs many persons, but the control of the country's industries rests in the hands of the inner group who must necessarily consult with the Rockefellers, because of their great fortune which increases by scores of millions every year.

The issuing houses of the Money Trust, having stood sponsor at the organization of some great industrial combination and offered its securities to

the investing public, assume an important responsibility, not so much toward the latter as in relation to their own interests. The success or non-success of the corporation reflects on the prestige of the issuing house and affects its ability to place future flotations of other corporations. It is therefore necessary that it continue its sponsorial relationship to the corporation by being represented on its board of directors and by acting as its sole fiscal agent. This intimate and permanent relation is advantageous to both sides.

To the industrial corporation it assures the financial support and expert guidance of financial kings who hobnob with real kings and their prime ministers, who command the most authoritative information, and who are thus able to judge of the world's political, industrial, and financial condition, as no simple capitalist can. The connection further vouchsafes the corporation freedom from the possibility of competition, for the Money Trust, represented by the issuing house, can afford it such protection, being not only in possession of the great reservoirs of money, but sufficiently influential to prevent the financing of any enterprise not approved by it.

To the Money Trust the connection assures the deposit with one of its banking institutions of the cash funds of the corporation. These amount in some cases to tens and scores of millions and are thus strengthening very materially the system of centralized money capital. We have here an endless chain of cause and effect working in favor of the Money Trust. Through its power it gains a hold

on the industrial corporations; the latter's cash funds then become a very material element in the totality of the money which the trust controls, thereby again adding to its power. Nor are the depositaries of the industrial corporations subject to the surprises which come to the ordinary commercial banks in the sudden heavy drawings by a number of their large depositors; the fiscal agents will tell their corporations at the convenient time when the latter may draw heavily on their deposits or apply to the money market with new issues of securities.

The Money Trust as yet evinces no desire of being an absolute monopoly, any more than do the large industrial trusts. It permits independent financing of local or small enterprises, when these do not interfere with the interests of the existing industrial corporations which are under its guardianship. It is true that the Money Trust does not directly control all the scattered accumulations of money in the country, yet the banking institutions which hold the same would not risk to incur the displeasure of the magnates, lest they should cease to be invited by the latter to participate in future underwritings.

“The patronage . . . is of great value to these banks and bankers, who are thus tied by self-interest to the great issuing houses and may be regarded as part of this vast financial organization. Such patronage yields no inconsiderable part of the income of these banks and bankers and without much risk. . . . The underwriting commissions . . . are usually easily earned and do not ordinarily involve the underwriters in the purchase of the underwritten securities. Their interest in the

transaction is generally adjusted . . . by the payment to them of a commission. Bankers and brokers are so anxious to be permitted to participate . . . that as a rule they join when invited to do so, regardless of their approval of the particular business, lest by refusing they should thereafter cease to be invited."¹

The Pujo report, which argues for the restoration of the defunct competition, by legislation, refers to the men controlling this vast system as "this handful of self-constituted trustees of the national prosperity."² There must have been lingering in the recesses of the committee's memory Baer's letter already quoted. Also the committee came to the conclusion that these men should not be permitted, in relation to the money held by our banks, trust companies, and life insurance companies, "to control and utilize these funds as though they were their own."³ That this social development is so logical that the scientific mind of Marx could predict it nearly fifty years ago would have been news to the committee. Here is the passage in question: ". . . the whole enormous extent of the credit system, in fact the total credit, is exploited by them [the bankers] as their private capital."⁴

The three banking institutions with which the three members of the inner group are more directly connected, J. P. Morgan & Co., National City Bank,

¹ Pujo Committee Report, p. 132.

² *Id.*, p. 161.

³ *Id.*, p. 161.

⁴ "Indem die ganze ungeheure Ausdehnung des Kreditsystems, ueberhaupt der gesamte Kredit, von ihnen [Bankiers] als ihr Privatkapital exploitirt wird."—*Kapital*, vol. iv., p. 15, 3d edition.

and First National Bank, control by 341 directorships 112 corporations having aggregate resources or capitalization of \$22,245,000,000.¹ Control of additional corporations by directorships is exercised by members of the second group.

That the increasing concentration of economic power is not a peculiarly American development, but world-wide, most advanced of course in the most progressive countries, the United States and Germany, is shown by the official report of the Austrian Consul in Berlin made in 1906. He said:

“Never before was economic Germany so entirely under the absolute rule of a group of men, barely fifty in number; in no former period of industrial expansion was the old saying of the “free play of forces” abandoned to such an extent as in 1906, when the momentous decisions as to the extent of production, sales abroad, prices, the granting of credit, the raising of new capital, the fixing of wages, and the rates of interest lay in the hands of a few persons found at the head of the large banks, mammoth industrial undertakings, and great Kartells.”

The machine above described for making and distributing fictitious capital is in reality a monopoly-making monopoly, governing the people's most important concern, their work and their income. As one sphere of industry after the other becomes ripe for organization, it will not go for its purpose to Washington, to the seat of government of an economically unconscious state, but to New York, where

¹ Pujo Committee Report, Exhibit 134 B.

on the corner of Wall and Broad streets is the seat of the only power in the land that can help it.

This machine is, however, only adapted for the original distribution of *new* issues to the ultimate consumer. That the latter shall be able to preserve his character as a loan capitalist requires the existence of ready markets for the conversion of fictitious capital back into money, namely, stock exchanges.

These institutions are popularly thought of as places of iniquity. Mr. Thomas W. Lawson, a successful insider who ought to know, confirms the popular estimate of the stock exchanges and calls them the greatest gambling hells on earth. If their ethical status is so low, then it must be that the social system to which they are indispensable is of an equally low ethical status.

It is certainly an expensively conducted gambling hell. Mr. Lawson tells us of a brokerage firm which has 25,000 miles of private wires, costing over \$700,000 a year. He gives some details of expense of one gambling shop for a year, totaling \$800,000, as follows:

Expenses of main office on Broad Street: salaries, \$140,000; private wires, \$60,000; rent, \$25,000; \$150,000 for sundries, meaning the usual entertaining paraphernalia, such as would be found in any gambling hell.

Plaza Hotel office: salaries, \$12,500; rent, \$17,000; sundry expenses—rum, cigars, and small gambling outfits—\$14,000.

The Hughes New York Legislative Investigating Committee touched on some of these phases of brokers' offices as follows:

Complaint has been made of branch offices in the city of New York—often luxuriously furnished and sometimes equipped with lunch rooms, cards, and liquor. The tendency in many of them is to increase the lure of the ticker by the temptation of creature comforts.

Mr. Lawson says that not infrequently these houses, after paying all these enormous expenses, make from two to five million dollars a year. A Wall Street gambling house must deal in at least 4000 shares a day to pay merely expenses of \$500 a day. This is equivalent to a business in a year of \$120,000,000. But houses of this size may do from 300 to 500 millions a year. Larger houses may do 25 million dollars a day.

Of these transactions the Pujo Committee has this to say¹:

A small part of these transactions is of an investment character . . . a far greater part represents speculation . . . more hurtful than lotteries or gambling at the race track or the roulette table, because . . . withdrawing from productive industry vastly more capital; . . . quotations of securities are manipulated without regard to real values and false appearances of demand or supply are created; . . . the facilities of the New York Stock Exchange are employed largely for transactions producing moral and economic waste and corruption.

The manipulation referred to consists mainly in simultaneous matched orders to buy and sell, giving an appearance of activity and of price tendency. The committee also complains of the influence

¹ Report, p. 115.

which the Money Trust can exert on the prices of securities simply from its control of call loan rates from day to day, at least to the same extent as industrial trusts control commodity prices in their spheres.

We cannot join in the condemnation by the Pujo Committee of the "moral and economic waste" produced by the stock exchange, nor concur in its proposals for reformation. The latter are mostly unenforceable. In so far as they are enforceable, the objection to them is that they would interfere with—speculation (or gambling, to use Mr. Lawson's expression).

Speculation on the stock exchange is the selling and buying of titles to revenue. It differs from the selling and buying of commodities in that the latter is a life condition of the capitalist system of production, the process by which the profit, the sole purpose of production, is realized. The circulation of the titles is independent of the productive capital, a merely personal and private transfer of property, without effect on the production of profit or on its realization by the sale of the commodities. Therefore, while profit is value produced by the working class for which value it receives no equivalent, the gains or losses of one speculator are the losses or gains of another speculator, and do not affect the working class. The matter may also be stated this way, that inasmuch as the workers are paid normally the value of their labor power, profit is in the existing order nobody's loss, while speculative gain must always be another's loss. The political economists, who do not know the source of profit, are unable to

distinguish it from the speculator's gain. To them both are equally profits.

The *investor* is interested in increasing profit. To the *speculator* increase or decrease of profit are matters of indifference; what he is concerned in is price fluctuation. His gain consists in the price difference between what he can sell at, having bought previously, or what he can buy at, having sold previously. His estimate of the value of a revenue title has been the source of his gain or his loss. If all speculators were of one mind, all speculating in the same direction, at the same moment, and in the same volume, there would be no gains.

The uncertainty of speculation (except for the big insiders, the scientificos, the wise-ones) is the very life principle of the stock exchange. This uncertainty may bring about changing moods several times during a day. These produce changing relations of demand and supply, resulting in changed quotations; every change of quotation induces new speculation, and so on *ad infinitum*.

Thus it is the function of the speculators and the stock exchange to provide a market ready every minute to convert fictitious into money capital.

Put to the test, it is true, the stock market has often failed, as in 1907, when it was no more possible to get money for revenue titles than to get money out of banks. The conversion of fictitious into money capital is easy when there is no great need for it, and difficult when the need is pressing. But the argument against the stock exchange in this regard is no stronger than against the banks. Everybody can

convert fictitious money into real money, when there is no pressure, but not when there is.

Stock exchange speculation did not exist in the pre-corporation days of capitalism. It is conceivable that it will become obsolete in the perfect monopoly epoch of capitalism in the future. But in the present period of transition it is one of the many unavoidable wastes inherited from the period of competition now passing into history.

The mention in this recital of the names of half a dozen contemporaries has been necessary for a better understanding of the social changes in bringing about which these men had so conspicuous a part. Yet they were only the tools of a historic epoch in which, within a short span of time, matured what capitalist society had been long in preparing. The rapid increase in the private fortunes of a few thousand magnates is now assured and automatic and every census will show the effect in increased industrial concentration. These leaders will pass away, but the central money power organized by them will continue to exist and pursue its mission of clearing the way to a higher social order.

CHAPTER XIII

THE UNIFIED CAPITAL AND CONCLUSION

THE outcome of competition has been conditions of threatening or actual bankruptcy. The outcome of such conditions has been monopoly. The perfect monopoly is therefore the ending of the phenomenon of bankruptcy.

During the competitive stage of capitalism the planless production necessarily resulted from time to time in a market glutted with commodities which their producers were unable to buy. The outcome was the industrial crisis. Under monopoly there may be also fluctuations in the supply, due to natural causes, such as the varying supply of raw materials, but overproduction of commodities due to ignorance of conditions, secretiveness, or even positive misleading as to the state of production, will have ceased, and with it one of the causes of crises.

During competition there was no possibility of adjustment between the money turned into means of productive consumption (especially fixed capital) and that turned into means of individual consumption. The consequence was a deadlock between these two divisions of industrial capitalists, resulting in the industrial crisis. The industrial trust is a

notice to all the world that the constructions, machinery, etc., in its sphere are sufficient for all demands. The monopoly thereby removes this important cause of the industrial crisis.

During competition lenders and borrowers met as separate interest groups. This dualism often left the lender in a dubious frame of mind regarding the continued solvency of the borrower, especially when there were indications of economic or political disturbance in some part of the world. "Capital is timid" (when only a few per cent. per annum were at stake), was the stock phrase of its scribes, and they never tired in warning other people not to frighten capital. In refusing to lend, the money capitalists, acting as individual persons or concerns, precipitated the crisis.

Monopoly does away with the dualism of lenders and borrowers. The social money capital takes the form of revenue titles created by a central power which controls all industries in the interest of the owners of the titles. Industrial capital and money capital become one. Their dualism, as a cause of crises, disappears.

The credit system is an outgrowth of the function of money as means of deferred payment. Credit and instruments of credit, the whole credit system, disappear when the various industries are merely departments of the same concern. The relations of the departments with each other and with the main office are matters of bookkeeping.

So long as competition survives to any considerable extent, the striving for a higher than the average

profit rate is an economic necessity for the individual capitalist whose economic survival depends on the success of his striving. The tendency of this striving is to eliminate the individual functioning industrial capitalist, and to concentrate every industry.

This process completed, the central power has no reason for permitting the continuation of unequal profit rates. On the contrary, it is interested in a perfectly uniform profit rate for all capital in order to unite the class it represents and to avoid the breeding of a rebellious spirit in the working class in consequence of extortion by monopolies producing indispensable necessities of life.

The establishment of a uniform profit rate has the further effect of rendering meaningless the multiplicity of denominations of fictitious capital. All varieties of shares and bonds may as well be refunded in shares of the universal capitalist corporation, in principle merely the extension of the present idea of the holding company.

When uniform titles to income have supplanted shares and bonds, when fictitious capital has been modified into plain certificates of class privilege, the curtain falls over the portals of the stock exchanges.

Capitalist society is then one universal stock company in which the profit share of each capitalist is determined with exactness. Thus is realized what has been the aim of competition, but what competition was unable to accomplish even approximately:—for equal capital equal profit!

The industries are then socially organized and coördinated. It is the end of economic anarchy.

During the reign of this anarchy a thing of value, as the socially recognized equivalent of every product, had been a necessity. Only by money could the social worth of the individual's labor be attested. Now there is only one producer, the universal capitalist corporation, accountable only to itself. It does not produce commodities, it does not produce for a market, it does not exchange its products with other capitalists, it only produces use-values for direct consumption.

These use-values are delivered to the capitalists and workers against the surrender of consumption certificates which have supplanted money.

The prices of these use-values are not the economic expression of the relation of a thing to things, but an arithmetical result, regulating distribution by persons to persons. Money has fulfilled its aim—the establishment of a regulated society.

Society has evolved into an oligarchy—consisting of a very small minority of the people, the capitalists, enjoying class privileges based on ownership of the means of production, and an immense majority, the workers, whose labor power, however, ceases to be a commodity selling at the market price, inasmuch as there exists no market. The compensation for labor is no longer regulated by an economic law, but by arbitrary agreement depending on such factors as power and discretion.

Such would seem the outcome of a logical sequence of economic causes and effects. It is by no means a prophecy. Our concern is with the science of economics, the processes of the capitalist system of pro-

duction and its tendencies. Were we to indulge in prophecy, we should indeed be inclined to say that none of the logical developments above deduced will ever be reached. And for several reasons:

First, it is not the method of history to wait until conditions are rotten ripe before replacing outworn social systems by new ones.

Secondly, the progressive socialization of production develops social consciousness which finds expression through the state. The contradiction between the democratic state and the plutocratic power within the state calls for settlement. An antagonism of classes, so barefaced and extreme, cannot be envisaged, in spite of its logic, as coexisting with political equality.

Thirdly, the financial mechanism, already precarious and becoming more so with each year, is subject to the sudden vanishing of the social faith, on which alone it rests. Its breakdown would intercept the progress of capitalistic monopolization before reaching its final and logical goal.

If the social insolvency, which is covered in ordinary parlance by the word "credit," cannot be denied, then we shall be confronted sooner or later with the tremendous convulsion of social bankruptcy which is to give birth to a new society. Nothing will avail against this final outcome of a long process of evolution—no paper money "based on the credit of the nation," whatever hallucination this phrase of the American greenbackers may have covered; no bi-metallism at any ratio whatever; no federal reserve acts; no transfer of the banking business, with

all its assets and liabilities, to the state; no collection of all the gold of a country into a single reservoir, to be kept there, as in a fortress, out of danger of exportation; no decree threatening penalties for paying, or offering to pay, a premium on gold; no other scheme which might be broached by some imaginative mind—the will and purpose of no man, or set of men, or of all men, will avail to preserve the life of the passing form of society, the commodity-producing society. It cannot live without the free exchange of commodities, a single one among which must be in the equivalent form of value.

History can never overestimate the importance of the part played in human progression by the yellow, glittering metal. If we could attribute purpose to nature, we would now be in a position to say that gold had been placed by nature into the hands of man as a tool for the erection of an edifice in which was to dwell a race emancipated from physical care and thus free to devote its mental gifts to the highest aims. But in all animate nature the advance from lower to higher forms of existence is replete with tragedy. Cruel is its basic law—the struggle for existence. This struggle is about to be eliminated within the human species to survive solely as a struggle for its mastery over nature.

In conformity with nature's general method, human progression has led through a vale of tears and sorrows. The golden tool became the master of the workman, setting the pace for him, driving him pitilessly and relentlessly toward the completion of a task he understood not. The fateful gold ruled

giants and dwarfs, gods and men. Now the wave is rising which will sweep away the Ring of the Nibelung, stripped of power, cleansed of blood, its natural character restored—that of being a mere thing of beauty and guiltless delight, mere Rheingold.

THE END

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