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SILVIO GESELL

THE NATURAL ECONOMIC ORDER

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TABLE OF CONTENTS

PART III. MONEY AS IT IS

PART IV. FREE-MONEY, OR MONEY AS IT SHOULD BE

PART V. THE FREE-MONEY THEORY OF INTEREST

LIST OF ILLUSTRATIONS

PREFACE *

Magna quies in magna spe.

The economic order here discussed is a natural order only in the sense that it is adapted to the nature of man. It is not an order which arises spontaneously as a natural product. Such an order does not, indeed, exist, for the order which we impose upon ourselves is always an act, an act consciously willed.

The proof that an economic order is suited to the nature of man is furnished by observation of mankind's development. The economic order under which men thrive is the most natural economic order. Whether an economic order which stands this test is at the same time technically the most efficient order, whether it provides the bureau of trade statistics with record figures is a matter of secondary importance. At the present day it is easy to imagine an economic system of high technical efficiency coupled with gradual exhaustion of the human material. It may, however, be taken for granted that an economic order under which mankind thrives will also prove its technical superiority. For human work can, ultimately, only advance with the advance of the human race. " Man is the measure of all things " including the economic system under which he lives.

The prosperity of mankind, as of all living beings, depends in the main upon whether selection takes place under natural laws. But these laws demand competition. Only through competition, chiefly competition in the economic sphere, is right evolution, eugenesis, possible. Those who wish to ensure the full miraculous effects of the laws of natural selection must base their economic order upon competition under the conditions really decreed by nature, that is, with the weapons furnished by nature after the exclusion of all privileges. Success in competition must be exclusively determined by inborn characteristics, for only so are the causes of the success transmitted to the offspring and added to the common characteristics of mankind. Children must owe their success, not to money, not to paper privileges, but to the ability, strength, love and wisdom of their parents. Only then shall we be justified in hoping that humanity may in time shake off the burden of inferior individuals imposed upon it by thousands of years of

* Preface to the third edition, 1919.

unnatural selection—selection vitiated by money and privileges. And we may also hope that in this way supremacy may pass from the hands of the privileged, and that mankind, led by the noblest sons of men, may resume its long-interrupted ascent towards divine aims.

But the economic order which we are about to discuss has another claim to the title of a natural order.

Human beings, to prosper, must be able under all circumstances to give themselves out for what they are. A man must be something, not appear something; he must be able to stride through life with head erect—to speak the truth without incurring the risk of hardship or injury. Sincerity must not remain the privilege of heroes. The economic order must be so framed that a man may combine sincerity with the highest degree of economic success. The dependence inseparable from economic life should affect things only, not men.

If a man is to be free to act as his nature dictates, religion, custom and law must extend him their protection when, in his economic life, he is guided by justified egoism—when he obeys the impulse of self- preservation given him by nature. If a man's actions conflict with religious opinions, and if the man, nevertheless, is morally thriving, the religious opinions should be examined afresh on the presumption that a tree cannot be evil which bears good fruit. We must avoid the fate of a Christian reduced to beggary and disarmed in the economic trial of strength by the logical application of his creed—with the result that he and his brood go under in the process of natural selection. Humanity gains nothing if the finest individuals it produces are crucified. Eugenic selection requires the direct contrary. The best of mankind must be allowed to develop, for only then can we hope that the inexhaustible treasures latent in man will gradually be brought to light.

The Natural Economic Order must, therefore, be founded upon self-interest. Economic life makes painful demands upon the will, for great natural indolence must be overcome; it requires, therefore, strong impulses, and the only impulse of sufficient strength and constancy is egoism. The economist who calculates and builds upon egoism, calculates correctly and builds for all time. The religious precepts of Christianity must not, therefore, be transferred

to economic life, where their only effect is to produce hypocrisy. Spiritual needs arise only when bodily needs have been satisfied, and economic effort should satisfy the bodily needs. It would be preposterous to start work with a prayer or poem. "The mother of the useful arts is want; the mother of the fine arts is superfluity" says Schopenhauer. In other words, we beg when hungry and pray when fed.

An economic order thus founded upon egoism is in no way opposed to the higher impulses which preserve the species. On the contrary, it furnishes the opportunities for altruistic actions and the means for performing them. It strengthens the altruistic impulses by making their satisfaction possible. Under the opposite form of economic order everyone would send needy friends to an insurance company and sick relatives to a hospital; the State would make all personal assistance superfluous. With such an order it seems to me that many tender and valuable impulses must be lost.

In the Natural Economic Order founded upon egoism everyone must be assured the full proceeds of his own labour, and must be allowed to dispose of these proceeds as he thinks fit. Anyone who finds satisfaction in sharing his wages, his income, his harvest, with the poor may do so. Nobody requires, but nobody hinders such action. It has been said that the most cruel punishment imaginable is to bring a man among sufferers crying aloud for help which he is unable to give them. To this terrible situation we condemn each other if we build economic life on any other basis than egoism; if we do not allow everyone to dispose as he thinks fit of the proceeds of his labour. To reassure the humanitarian reader we may here remark that public spirit and self-sacrifice best thrive when the economic task is crowned with success. The spirit of sacrifice is one result of the feeling of personal security and power of those who know that they can trust to their own right hands. We may also remark that egoism should not be confused with selfishness. Selfishness is the vice of the short-sighted. Wise men soon recognise that their interest is best served by the prosperity of the whole.

By the Natural Economic Order we mean, therefore, an order in which men compete on equal terms with the equipment given them by nature, an order in which, consequently, the leadership falls to

the fittest, an order in which all privileges are abolished, in which the individual, obeying the impulse of egoism, goes straight for his aim, undisturbed by scruples alien to economic life—scruples which he will have opportunities enough of obeying outside economic life.

One of the conditions of this natural order is fulfilled in our present, much-abused, economic order. The present economic system is founded upon egoism, and its technical achievements, which nobody denies, are a guarantee of the efficiency of the new order. But the other, the most essential condition of any economic order that can be called natural—equal equipment for the economic struggle—remains to be achieved. Purposeful constructive reform must be directed towards suppressing all privileges which could falsify the result of competition. This is the aim of the two fundamental reforms here described: Free-Land and Free-Money.

The Natural Economic Order might also be called the "Manchester System," the economic order which has been the ideal of all true lovers of freedom—an order standing by itself without intervention from outside, an order in which the free play of economic forces would rectify the blunders of State-Socialism and short-sighted official meddling.

One can, it is true, now speak of the Manchester system only to those whose judgement is unaffected by the mistaken attempts at putting it in practice. Faults of execution are not proofs of the faultiness of the plan itself, yet an acquaintance with what is popularly known as the Manchester system is enough to make most people curse the whole theory from beginning to end.

The Manchester school of economists took the right road, and the subsequent Darwinian additions to their doctrine were also correct. But the first and most important condition of the system was not investigated. There was no inquiry about the field in which the free play of economic forces was to take place. It was assumed, sometimes from dishonest motives, that the conditions of competition in the existing order (including the privileges attached to the private ownership of land and to money) were already sufficiently free, provided that the State stood aside and interfered no further with the development of economic life.

These economists forgot, or did not wish to see, that for a natural development the proletariat must be given the right of

reconquering the land with the same weapons by which it was taken from them. Instead of this, the Manchester economists appealed to the State, which by its intervention had already disturbed the free play of economic forces, to prevent, by its power of coercion, the establishment of a really free play of forces. Such an application of the Manchester system was by no means in accordance with its theory. To protect certain privileges, dishonest politicians exploited a theory which rejected all privileges.

To form a just opinion of the original Manchester theory one must not begin by investigating its later applications. The Manchester economists expected from the free play of forces, first, that the rate of interest would gradually sink to zero. This expectation was founded on the fact that in England, where the market was relatively best provided with loan-money, the rate of interest was also lowest. The release of economic forces and their free play, with the resulting increase in the offer of loan-money would eliminate interest and thus cleanse the darkest plague-spot in our present economic system. The Manchester economists did not yet know that certain inherent defects in our monetary system (which they adopted without examination) were insuperable obstacles to the elimination, in this way, of the privileges of money.

Again the Manchester theory asserted that the division of inheritances and the natural economic inferiority of children bred in opulence would divide landed property and automatically bring rents into the possession of the people as a whole. This belief may seem to us to-day ill-grounded, but it was at least justified to this extent, that rents were bound to fall by the amount of the protective duties after the introduction of free-trade—which was also a tenet of the Manchester school. In addition to this, steamships and railways had just given the workers, for the first time, freedom of movement. This raised wages in England, at the expense of rents, to the level of the proceeds of labour earned by emigrants on rent- and mortgage-free American land (freeland farmers). At the same time the produce of these freeland farmers reduced the price of English farm produce—again at the expense of the English landlords. In Germany and France this natural development was intensified to such a degree by the adoption of the gold standard that a collapse would have occurred if the State had not countered the results of

its first intervention (gold standard) by a second intervention (wheat-duties).

It is easy to understand, therefore, why the Manchester economists living in the midst of this precipitate development, and over-estimating its importance, believed that the free play of economic forces might be expected to cleanse the second plague-spot in our economic system, namely private ownership of rent on land.

In the third place the Manchester economists held that since the application of their principle, the free play of economic forces had eliminated local outbreaks of famine, the same methods, namely improvement of the means of communication, trade organisation, extension of banking facilities and so forth, must eliminate the causes of commercial crises. It had been proved that famines are the result of defective local distribution of foodstuffs, so commercial crises were supposed to be the result of defective distribution of goods. And, indeed, if we are conscious of how greatly the short-sighted policy of protective duties disturbs the natural economic development of nations and of the world, we can readily pardon the mistake of a free-trader of the Manchester school who, ignorant of the mighty disturbances which can be caused by defects of the traditional monetary system, expected the elimination of economic crises simply from free-trade.

The Manchester school argued further: "If, by universal free-trade, we can keep economic life in full activity; if the result of such untrammelled, uninterrupted work is an over-production of capital which reduces and finally eliminates interest; if in addition, the effect of the free play of economic forces on rent is what we expect, the taxable capacity of the population must increase to such a degree that within a short time the whole of the national and local debts all over the world can be repaid. This will cleanse the fourth and last plague-spot in our economic life, the burden of public debt. The ideal of freedom upon which our system is based will then be justified before the whole world, and our envious, malevolent and often dishonest critics will be reduced to silence."

That these fair hopes of the Manchester school have in no single particular been fulfilled, that, on the contrary, the defects of the existing economic order are becoming greater as time goes on, is

due to the fact that the Manchester economists, through ignorance of monetary theory, adopted without criticism the traditional monetary system which simply breaks down when the development foretold by the Manchester economists sets in. They did not know that money makes interest the condition of its services, that commercial crises, the deficit in the budget of the earning classes and unemployment are simply effects of the traditional form of money. The Manchester ideals and the gold standard are incompatible.

In the Natural Economic Order, Free-Land and Free-Money will eliminate the unsightly, disturbing, dangerous concomitants of the Manchester system, and create the conditions necessary for a truly free play of economic forces. We shall then see whether such a social order is not superior to the creed at present in vogue which promises salvation from the assiduity, sense of duty, incorruptibility and humanitarian feelings of a horde of officials.

The choice lies between private control and State control of economic life; there is no third possibility. Those who refuse to make this choice may, to inspire confidence, invent for the order they propose attractive names such as co-operation or guild-socialism, or nationalisation, but the fact cannot be disguised that all these amount to the same thing, the same abominable rule of officials, the death of personal freedom, personal responsibility and independence.

The proposals made in this book bring us to the cross-roads. We are confronted with a new choice and must now make our decision. No people has hitherto had an opportunity of making this choice, but the facts now force us to take action, for economic life cannot continue to develop as it has hitherto developed. We must either repair the defects in the old economic structure or accept communism, community of property. There is no other possibility.

It is immensely important that the choice should be made with care. This is no question of detail such as, for example, whether autocratic government is preferable to government by the people, or whether the efficiency of labour is greater in a State enterprise than in a private enterprise. We are here on a higher plane. We are confronted with the problem, to whom is the further evolution of the human race to be entrusted ? Shall nature, with iron logic, carry out the process by natural selection, or shall the feeble reason of

man—of present-day, degenerate man — take over this function from nature ? That is what we have to decide.

In the Natural Economic Order, selection under free competition untrammelled by privileges will be determined by personal achievement, and will therefore result in the development of the qualities of the individual; for work is the only weapon of civilised man in the struggle for existence. Man seeks to hold his own in competition by constantly increasing and perfecting his achievements. These achievements determine whether and at what time he can found a family, in which manner he can rear his children and ensure the propagation of his qualities. Competition of this kind must not be pictured as a wrestling match or as a struggle such as takes place, for example, among the desert beasts of prey. Nor should it be imagined that the issue for the vanquished is death. Such a form of selection would be purposeless, for human strength is no longer brute force. We should have to go far back into human history to find a leader who owed his position to brute force. For the losers, therefore, competition has no longer the same cruel consequences as in those early days. They would merely, because of their inferiority, meet with greater obstacles when founding a family and bringing up their children, and as a result would have a smaller number of descendants. Even this result would not always follow in individual cases, for something would depend on chance. But beyond all doubt free competition would favour the efficient and lead to their increased propagation; and that alone would suffice to ensure the ascent of man.

Natural selection, thus restored, will be further intensified in the Natural Economic Order by the elimination of sex privileges. To secure this aim, rent upon land will be divided among the mothers in proportion to the number of their children, as compensation for the burden of rearing children (Swiss mothers, for example, will receive about 60 francs a month for each child). This should make women economically independent enough to prevent them from marrying out of economic necessity, or from prolonging a marriage repugnant to their feelings, or from being forced into the class of prostitutes after a first false step. In the Natural Economic Order women will have not alone freedom to choose their political representatives (an empty boon !) but freedom to choose their

mates; and upon this freedom is based the whole selective activity of nature.

Natural selection in its full, miraculous effectiveness is then restored. The greater the effect of medical science upon the conservation and propagation of congenitally inferior individuals, the more important it becomes to preserve in full activity nature's methods of natural selection. We can then without reproach yield to the humane and Christian feelings which urge the application of medical science. No matter how great the quantity of pathological material resulting from the propagation of defective individuals, natural selection can cope with it. Medical art can then delay, but it cannot arrest eugenesis.

If, on the other hand, we decide for State control of economic life, we exclude nature from the process of selection. Human propagation is not, indeed, formally handed over to the State, but virtually it passes under State control. The State determines whether and at what time a man can found a family, and what sort of upbringing he can provide for his children. By paying its officials different salaries the State at present intervenes decisively in the propagation of those in its service, and in the future this intervention would become general. The type of human being which pleased the State authorities would become the prevailing type. The individual would then no longer gain his position by personal capacity, by his relation to other men and to his surroundings; his success or failure would, on the contrary, depend upon his relation to the heads of the party in power. He would obtain his position by intrigue, and the cleverest intriguers would leave the largest number of descendants—endowed of course with the qualities of their parents. In this way State control of economic life would influence the breeding of men, as changes of fashion in clothing influence the breeding of sheep, and determine the numbers of white sheep and black sheep bred. The authority composed of the cleverest intriguers would appoint—promote or degrade—each individual. Those who refused to become intriguers would fall into the rear, their type would become less numerous and finally disappear. The State mould would form men. A development above the type it produced would be impossible.

I shall spare my readers a description of social life as it would develop under State control. But I should like to remind them

that the principle of the free play of economic forces, even the travesty of this principle known to us before the war allows very great freedom to large sections of society. Greater independence than that enjoyed by the possessors of money cannot well be imagined. They have complete freedom of choice of profession, work as they think fit, live as they wish, have perfect freedom of movement and never learn the meaning of State control. No one asks them from where they receive their money. They travel round the world with no other luggage than an "open Sesame" in the shape of a cheque-book—truly, for those concerned, an ideal state of things. This is indeed recognised as the Golden Age—except by those excluded from this freedom by defects of construction in our otherwise fundamentally sound economic system—except, that is, by the proletariat. But are the wrongs of the proletariat, the defects of construction in our economic system, any reason for rejecting the system itself and introducing, in its stead, a new system bound to deprive all men of their freedom, and to plunge the whole world into slavery? Would it not be more reasonable to repair the faults of construction, to liberate the discontented workers, and in this way to make all men sharers in the priceless freedom of the present system? For the aim, most certainly, is not to make all men unhappy; it is, on the contrary, to give all men access to the sources of the joy of life, which can be unsealed only by free play of the forces inherent in man.

From the point of view of economic technique, that is of the efficiency of labour, the question of whether private enterprise is preferable to State enterprise is equivalent to the question whether, in general, the impulse of self-preservation is more effective in overcoming the difficulties connected with each man's task in life than is the impulse of race-preservation.*

This question, because of its immediate practical importance, is perhaps more generally interesting than the process of natural selection which requires ages to take effect. We shall examine it briefly.

It is a curious phenomenon that a communist, an advocate of community of property, usually believes all other men—so far at

*The impulse, more or less developed in every man, to preserve the whole, the species, the community, the people, the race, humanity.

least as they are personally unknown to him—to be more unselfish than himself. Thus it often happens that the most short-sighted egoists, who think first of themselves and sometimes only of themselves, are in theory enthusiastic communists. Anyone who wishes to convince himself of this fact need only, in an assembly of communists, make the truly communistic proposal of pooling and redistributing in equal shares wages and salaries. The result is a general silence, even among those who, a moment before, were loudest in their praises of community of goods. All are silent because all are calculating whether they would gain by community of wages. The leaders flatly reject the proposal with the flimsiest arguments. Yet in fact there is no obstacle to this community of income but the egoism of communists. Nothing prevents the workers in a factory, community, or trade-union from pooling their wages and distributing the total amount according to the needs of the separate families. By this plan they could gain experience in a matter of difficulty; they could convince the whole world of their communistic principles, and completely refute the sceptics who deny that man is a communist. No one prevents such communistic experiments; neither the State, nor the Church, nor the capitalists. No capital is required, no paid officials, no complicated preparations. A start could be made any day on any desired scale. But the need among communists for real community of economic life is apparently so small that such an experiment has never been attempted. Pooling of wages within the capitalistic system only requires that the proceeds of labour should be divided according to the personal needs of each individual; but for a State built upon community of property it would be further necessary to prove that this system did not diminish the individual's joy of work. This also the communists could prove by pooling their wages. For if, after introduction of community of wages (that is after abolition of all special reward for special effort) effort (especially in piece-work) did not diminish; if the pooling of wages did not reduce the total earnings; if the most efficient communists put their larger earnings into the wage-fund as cheerfully as at present into their pockets, then the proof would be complete. The failure of the numerous communistic experiments in the sphere of production is by no means so conclusive a proof of the impossiblity of communism as the simple

fact that the proposal to pool wages always meets with point-blank rejection; for community in the production of goods requires special preparations, discipline, technical and commercial leadership and, as well, instruments of production. Failure can therefore be explained in many ways, and is not a conclusive proof that the principle itself is false, that the communistic spirit, the feeling of solidarity, is too weak. But the proposal to pool wages makes evasive arguments impossible. Its rejection is direct testimony against the communistic spirit against the assertion that the impulse of race-preservation is sufficiently strong to overcome the hardships attached the tasks of life.

It is no escape from the logic of these facts to point to the existence of communism among the early Christians. The early Christians who practised, it appears, community of earnings but not the more difficult community of production, acted upon religious principles; and the others who practised family or tribal communism were under the orders of a patriarch, a father of the community. Both acted under forced or fanatical obedience, not in obedience to impulse. They were driven by necessity; they had no choice. Again, the production of goods for exchange, the division of labour, which makes differences in the individual achievements measurable and visible to every eye, had not yet been established. Primitive men sowed and reaped, fished and hunted in company; they were all pulling on the same rope, so it was not noticeable whether an individual pulled a little more or less. No standards of measurement existed or were necessary, and life in common was tolerable. But with the production of goods for exchange, with the division of labour, a social order of this kind became impossible. The exact number of ells, pounds or bushels contributed by each member of the community was known to everyone and the peaceable division of the product of labour was a thing of the past. Everyone wished to dispose of the product of his own labour, above all the most efficient workers, those who could point to the greatest achievements and consequently enjoyed the respect of the community. The leaders must have endeavoured to dissolve the community, and they must have been supported by all whose achievements were above the average. When individual production became

possible, community of production necessarily disappeared. Community of economic life, communism, did not disappear because it was feared and attacked by outside enemies. It succumbed to " inner enemies " consisting always, in this case, of the most efficient members of the community. If communism were based upon an impulse stronger than egoism, upon an impulse common to all men, it would have prevailed. The adherents of communism, no matter how often driven asunder by outward events, would always have tended to come together again.

The driving force of communism, the impulse of race-preservation (the feeling of solidarity, altruism), is, indeed, but a diluted solution of the impulse of self-preservation which makes for individualism in economic life, and its efficacy is therefore in inverse proportion to the amount of dilution. The larger the society (commune), the greater is the dilution, the weaker is the impulse to work for preservation of the community. An individual who works with one companion is less industrious than an individual who enjoys the fruit of his labour alone. If there are 10, 100, or 1000 companions, the impulse to work must be divided by 10, 100, or 1000; and, if the whole human race is to share in the proceeds of labour, everyone will say to himself: " It does not matter how I work, for my work is but a drop in the ocean." Work is then no longer impulse-driven; impulse must be replaced by some form of compulsion.

For this reason the Neuchâtel savant, Ch. Secrétan, is right in saying: " Egoism should be, in the main, the stimulus of work. Everything, therefore, that can give this impulse more force and freedom of action must be encouraged; everything that weakens and limits this impulse must be condemned. This fundamental principle must be applied with inflexible resolution despite the opposition of short-sighted philanthropy and the condemnation of the Churches."

We are then justified in promising that even those who believe themselves indifferent to the higher aims of the Natural Economic Order will benefit from this reform. They may look forward to a better table, to better houses, to more beautiful gardens. The Natural Economic Order will be technically superior to the present, or to the communistic order.

II*

Thanks to active and widespread propaganda by the now numerous friends of the Natural Economic Order, this fourth edition follows, after a brief interval, the large third edition.

Of the contents of the book I can say that the war has shown me nothing new. I have not been obliged to revise even the smallest detail of my theory. The events of the war and of the German revolution are so many proofs of the correctness of what I wrote before the war; and that is true of both the theoretical contents and of the political application of these theories. The war has given capitalists, communists, Marxists, much food for reflection. Many, perhaps most, men admit that their programmes were faulty, or they are frankly perplexed and embarrassed. Most men indeed no longer even know to what party they belong. All this confirms the truth of the principles upon which the Natural Economic Order is based.

The political parties all lack an economic programme; they are held together by catchwords. Capitalism must be modified, that even capitalists admit. Bolshevism or communism may be possible in a primitive state of society, such as is still found in rural parts of Russia, but such prehistoric economic forms cannot be applied to a highly developed economic system founded on the division of labour. The European has outgrown the tutelage inseparable from communism. He must be free not alone from capitalistic exploitation, but also from meddling official intervention, which is an integral part of social life based on communism. For this reason we shall experience failure after failure in the present attempts at nationalising industry.

The communist, the advocate of the system of common property, stands at the extreme right wing, at the entrance-door of social development. Communism is therefore the most extreme form of reaction. The Natural Economic Order, on the contrary, is the programme of action, of progress, of the fugleman on the extreme left. Transitional stages, merely, lie between.

The transition from the half-developed human being of the horde to the independent, fully-developed individual, the "a-crat,"

* Preface to the fourth edition, 1920.

who rejects completely the control of others, begins with the division of labour. The transition would long ago have been completed if it had not again and again been interrupted by certain defects in our system of land tenure and in our form of money—defects which produced capitalism; and capitalism produced, for its own protection, the State as we know it—a hybrid between communism and the Natural Economic Order. We cannot stop at this stage of development; the difficulties created by the hybrid would in time ruin us as they ruined the peoples of antiquity. There is no question to-day of halting or retreating; the choice lies between progress or ruin; we must push on through the slough of capitalism to the firm ground beyond.

The Natural Economic Order is not a new order artificially put together. To allow the development of the order which starts from the division of labour, it was only necessary to remove the obstacles due to defects in our monetary system and our system of land tenure. More than this has not been attempted. The Natural Economic Order has nothing to do with Utopias and visionary enthusiasm. The Natural Economic Order stands by itself and requires no legal enactments; it makes officials, the State itself and all other tutelage superfluous, and it respects the laws of natural selection to which we owe our being; it gives every man the possibility of fully developing his ego. Its ideal is the ideal of the personality responsible for itself alone and liberated from the control of others — the ideal of Schiller, Stirner, Nietzsche and Landauer.

May 5th, 1920. Silvio Gesell

Part 1

DISTRIBUTION

INTRODUCTION

If employers of labour were offered money-capital at half the present rate of interest, the yield of every other class of capital would soon also fall to half. If, for example, interest on the money borrowed to build a house is less than the rent of a similar existing house, or if it is more profitable to bring a waste into cultivation than to rent similar farmland, competition must inevitably reduce house and farm rents to the level of the reduced interest on money. For the surest method of depreciating material capital (a house, a field) is obviously to create and operate additional material capital alongside it. But it is a law of economics that increased production increases the mass of available money-capital. This tends to raise wages and finally to reduce interest to zero.

Proudhon: What is Property?

The abolition of unearned income, of so-called surplus-value also termed interest and rent, is the immediate economic aim of every socialistic movement. The method generally proposed for the attainment of this aim is communism in the shape of nationalisation or socialisation of production. I know of only one socialist—Pierre Joseph Proudhon—whose investigations into the nature of capital point to the possibility of another solution of the problem. The demand for nationalisation of production is advocated on the plea that the nature of the means of production necessitates it. It is usually asserted off-hand, as a truism, that ownership of the means of production must necessarily in all circumstances give the capitalist the upper hand when bargaining with the workers about wages—an advantage represented, and destined eternally to be represented, by " surplus-value " or capital-interest. No one, except Proudhon, was able to conceive that the preponderance now manifestly on the side of property can be shifted to the side of the dispossessed (the workers), simply by the construction of a new house beside every existing house, of a new factory beside every factory already established.

Proudhon showed socialists over fifty years ago that uninterrupted hard work is the only method of successfully attacking capital. But this truth is even further from their comprehension to-day than it was in Proudhon's time.

Proudhon, indeed, has not been entirely forgotten, but he has never been properly understood. If his advice had been understood

and acted on, there would now be no such thing as capital. Because he was mistaken in his method (the exchange banks), his theory as a whole was discredited.

How was it that the Marxian theory of capital succeeded in ousting that of Proudhon and in giving sovereign sway to communistic socialism ? How is it that Marx and his theory are spoken of by every newspaper in the world ? Some have suggested as a reason the hopelessness, and the corresponding harmlessness, of the Marxian doctrine. " No capitalist is afraid of his theory, just as no capitalist is afraid of the Christian doctrine; it is therefore positively an advantage to capital to have Marx and Christ discussed as widely as possible, for Marx can never damage capital. But beware of Proudhon; better keep him out of sight and hearing ! He is a dangerous fellow since there is no denying the truth of his contention that if the workers were allowed to remain at work without hindrance, disturbance or interruption, capital would soon be choked by an over-supply of capital (not to be confused with an over-production of goods). Proudhon's suggestion for attacking capital is a dangerous one, since it can be put into practice forthwith. The Marxian programme speaks of the tremendous productive capacity of the present-day trained worker equipped with modern machinery and tools, but Marx cannot put this tremendous productive capacity to use, whereas in the hands of Proudhon it becomes a deadly weapon against capital. Therefore talk away, harp on Marx, so that Proudhon may be forgotten."

This explanation is plausible. And is not the same true of Henry George's land-reform movement ? The landowners soon discovered that this was a sheep in wolf's clothing; that the taxation of rent on land could not be carried out in an effective form and that the man and his reform were therefore harmless. The Press was allowed to advertise Henry George's Utopia, and land-reformers were everywhere received in the best society. Every German " agrarian " and speculator in corn-duties turned single-taxer. The lion was toothless, so it was safe to play with him, just as many persons of fashion are pleased to play with Christian principles.

Marx's examination of capital goes astray at the outset.

1. Marx succumbs to a popular fallacy and holds that capital consists of material goods. For Proudhon, on the contrary, interest is not the product of material goods, but of an economic situation, a condition of the market.

2. Marx regards surplus-value as spoil resulting from the abuse of a power conferred by ownership. For Proudhon surplus-value is subject to the law of demand and supply.

3. According to Marx, surplus-value must invariably be positive. For Proudhon the possibility of negative surplus-value must be taken into consideration. (Positive surplus-value is surplus-value on the side of supply, that is, of the capitalist, negative surplus-value is surplus-value on the side of labour).

4. Marx's remedy is the political supremacy of the dispossessed, to be achieved by means of organisation. Proudhon's remedy is the removal of the obstacles preventing us from the full development of our productive capacity.

5. For Marx, strikes and crises are welcome occurrences, and the final forcible expropriation of the expropriators is the means to the end. Proudhon, on the contrary, says: On no account allow yourselves to be deterred from work, for the most powerful allies of capital are strikes, crises and unemployment; whereas nothing is more fatal to it than hard work.

6. Marx says: Strikes and crises will sweep you along towards your goal; the great collapse will land you in paradise. — No, says Proudhon, that is humbug, methods of that kind carry you away from your goal. With such tactics you will never filch as much as one per cent from interest.

7. To Marx private ownership means power and supremacy. Proudhon, on the contrary, recognises that this supremacy is rooted in money, and that under altered conditions the power of private ownership may be transformed into weakness.

If, as Marx affirms, capital consists of material goods, possession of which gives the capitalist his supremacy, any addition to these goods would necessarily strengthen capital. If a load of hay or a barrowful of economic literature weighs 100 lbs., two loads, two barrowfuls must weigh exactly 200 lbs. Similarly if a house yields $1000 of surplus-value annually, ten houses added to it must always, and as a matter of course, yield ten times $1000—on the assumption that capital consists simply of material goods.

Now we all know that capital cannot be added up like material

goods, since additional capital not infrequently diminishes the value of capital already existing. The truth of this can be tested by daily observation. Under certain circumstances the price of a ton of fish may be greater than the price of 100 tons. What price would air fetch, if it were not so plentiful ? As it is, we get it gratis.

Not long before the outbreak of the war landlords in the suburbs of Berlin were in despair about the decline of house-rents, that is, surplus-value, and the capitalistic press was clamorous in denunciation of the

" building fury of the workers and contractors,"

of the

" building plague rife in the housing industry."

(Quoted from the German Press.)

Are not these expressions a revelation of the precarious nature of capital ? Capital, which Marxists hold in such awe, dies of the " building plague "; it decamps before the " building fury " of the workers ! What would Proudhon and Marx have advised in such a situation ? " Stop building," Marx would have cried; " lament, go a-begging, bemoan your unemployment, declare a strike ! For every house you build adds to the power of the capitalists as sure as two and two make four. The power of capital is measured by surplus-value, in this case house-rent; so the greater the number of houses the more powerful, surely, is capital. Therefore let me advise you, limit your output, agitate for an eight-hour or even a six-hour day, since every house you build adds to house-rent and house-rent is surplus-value. Restrain, therefore, your building fury, for the less you build, the more cheaply you'll be housed ! "

Probably Marx would have shrunk from uttering such nonsense. But the Marxian doctrine, which regards capital as a material commodity, misleads the workers into thinking and acting on these lines.

Now listen to Proudhon: " Full steam ahead ! Let's have the building fury, give us the building plague ! Workers and employers, on no account let the trowel be snatched from your hands. Down with all who attempt to interfere with your work; they are your deadly enemies ! Who are these that prate of a building plague, of over-production in the housing industry, while house-rents still show a trace of surplus-value, of capital-interest ? Let capital die of the building plague ! For some five years only have you been allowed

to indulge in your building fury, and already capitalists feel the pinch, already they are lamenting the decline of surplus-value; rents have already dropped from 4 to 3% — that is, by a quarter. Three times five years more of untrammelled labour, and you will be revelling in houses freed from surplus-value. Capital is dying, and it is you who are killing it by your labour."

Truth is as sluggish as a crocodile in the mud of the eternal Nile. It does not reck of time; time measured by the span of human life means nothing to it, since it is everlasting. But truth has an agent which, mortal like man, is always hurried. For this agent, time is money; it is ever busy and excited, and its name is error. Error cannot afford to lie low and let the ages pass. It is constantly giving and receiving hard knocks. It is in the way of everyone and everyone is in its way. It is the true stumbling block.

Therefore it does not matter if Proudhon is taboo. His adversary Marx, with his errors, takes good care that the truth shall come to light. And in this sense we may say that Marx has become the agent of Proudhon. Proudhon in his grave is at peace. His words have everlasting worth. But Marx must keep restlessly moving. Some day, however, the truth will prevail and Marx's doctrines will be relegated to the museum of human errors.

Even if Proudhon had really been suppressed and forgotten, the nature of capital would still remain unchanged. The truth would be discovered by another; of the discoverer's name truth takes no account.

The author of this book was led into the path pursued by Proudhon and came to the same conclusions. Perhaps it was fortunate that he was ignorant of Proudhon's theory of capital, for he was thus enabled to set about his work the more independently, and independence is the best preparation for scientific inquiry.

The present author has been more fortunate than Proudhon. He discovered what Proudhon had discovered fifty years earlier, namely the nature of capital, but as well he discovered a practicable road to Proudhon's goal. And that, after all, is what matters.

Proudhon asked: Why are we short of houses, machinery and ships ? And he also gave the correct answer: Because money limits the building of them. Or, to use his own words: " Because money is a sentinel posted at the entrance to the markets, with orders to

let no one pass. Money, you imagine, is the key that opens the gates of the market (by which term is meant the exchange of products); that is not true—money is the bolt that bars them."

Money simply will not suffer another house to be built in addition to every existing house. As soon as capital ceases to yield the traditional interest, money strikes and brings work to a standstill. Money, therefore, acts like a serum against the " building-plague " and the " working fury." It renders capital (houses, industrial plant, ships) immune from the menace of its own increase.

Having discovered the barring or blocking nature of money, Proudhon raised the slogan: Let us combat the privilege of money by raising goods and labour to the level of money. For two privileges, if opposed, neutralise one another. By attaching to goods the surplus weight now on the side of money, we make the two weights balance.

Such was Proudhon's idea, and to put it into practice he founded the exchange banks. As everyone knows, they failed.

And yet the solution of the problem which eluded Proudhon is simple enough. All that is needed is to abandon the customary standpoint, the standpoint of the possessor of money, and to look at the problem from the standpoint of labour and of the possessor of goods. This shifting of the standpoint will let us grasp the solution directly. Goods, not money, are the real foundation of economic life. Goods and their compounds make up 99% of our wealth, money only 1%. Therefore let us treat goods as we treat foundations; let us not tamper with them. We must accept goods as they appear in the market. We cannot alter them. If they rot, break, perish, let them do so; it is their nature. However efficiently we may organise Proudhon's exchange banks, we cannot save the newspaper in the hands of the newsvendor from being reduced, two hours later, to waste paper, if it fails to find a purchaser. Moreover we must remember that money is a universal medium of saving; all the money that serves commerce as a medium of exchange comes to the savings banks and lies there until it is enticed into circulation again by interest. And how can we ever raise goods to the level of ready money (gold) in the eyes of savers ? How can we induce them, instead of saving money, to fill their chests or store-rooms with straw, books, bacon, oil, hides, guano, dynamite, porcelain ?

And yet this is what Proudhon really aimed at in attempting to bring goods and money to a common level. Proudhon had overlooked the fact that money is not only a medium of exchange, but also a medium of saving, and that money and potatoes, money and lime, money and cloth can never in any circumstances be looked upon as things of equal worth in the chests of the savers. A youth saving against old age will prefer a single gold coin to the contents of the largest warehouse.

We cannot, therefore, tamper with goods; they are the primary factor to which everything else must be adapted. But let us look a little more closely at money, for here some alteration may prove feasible. Must money always remain what it is at present ? Must money, as a commodity, be superior to the commodities which, as medium of exchange, it is meant to serve ? In case of fire, flood, crisis, war, changes of fashion and so forth, is money alone to be immune from damage ? Why must money be superior to the goods which it is to serve ? And is not the superiority of money to goods the privilege which we found to be the cause of surplus-value, the privilege which Proudhon endeavoured to abolish ? Let us, then, make an end of the privileges of money. Nobody, not even savers, speculators, or capitalists, must find money, as a commodity, preferable to the contents of the markets, shops, and warehouses. If money is not to hold sway over goods, it must deteriorate, as they do. Let it be attacked by moth and rust, let it sicken, let it run away; and when it comes to die let its possessor pay to have the carcass flayed and buried. Then, and not till then, shall we be able to say that money and goods are on an equal footing and perfect equivalents—as Proudhon aimed at making them.

Let us put this demand in terms of a commercial formula. We say: The possessor of goods, during the period of storage, invariably incurs a loss in quantity and quality. Moreover he has to pay the cost of storage (rent, insurance, caretaking and so on). What does all this amount to annually ? Say 5%—which is more likely to be below than above the actual amount.

Now what depreciation has a banker, capitalist, or hoarder to debit to the money in his possession or on loan ? By how much was the war-chest in the Julius Tower at Spandau diminished in the course of the 44 years that it was stored there ? Not by one penny !

That being so, the answer to our question is clear, we must subject money to the loss to which goods are liable through the necessity of storage. Money is then no longer superior to goods; it makes no difference to anyone whether he possesses, or saves, money or goods. Money and goods are then perfect equivalents; Proudhon's problem is solved and the fetters that have prevented humanity from developing its full powers fall away.

My endeavour to give this investigation the form of a social and political programme has induced me to postpone the solution of the problem in question to Parts 3 – 5 of this book and to begin with sections on Distribution and Free-Land. This arrangement serves to bring out the general scheme and to reveal more clearly the aim: a Natural Economic Order. Readers eager to learn how Proudhon's problem has been solved may however begin with Parts 3 – 5 and turn to Parts 1 and 2 later.

1. AIM AND METHOD

As has been pointed out in the Introduction, the economic aim of every kind of socialism is to abolish unearned income, so-called surplus-value, sometimes termed rent and interest. To attain this end, nationalisation or socialisation of production with all its consequences is usually declared to be indispensable.

This claim of the dispossessed is supported by Karl Marx's scientific investigation into the nature of capital which attempts to prove that surplus-value is an inseparable concomitant of private enterprise and private ownership of the means of production.

The present writer proposes to demonstrate that this Marxian doctrine is based on untenable premises which we must abandon in order to arrive at the truth. My conclusions are to the effect that capital must not be looked upon as a material commodity, but as a condition of the market, determined solely by demand and supply. The French socialist Proudhon, the opponent of Marx, gave the workers the proof of this more than 50 years ago.

Guided by this corrected theory of capital we shall learn that the removal of certain artificial obstacles due to private ownership of land and our irrational monetary system, will enable our present economic order to realise fully its fundamentally sound principle. The removal of these obstacles will allow the workers by their own labour and in a short time (ten to twenty years) so to alter the market conditions for capital that surplus-value will disappear completely and the means of production will lose their capitalistic character. Private ownership of the means of production will then present no advantage beyond that which the owner of a savings-box derives from its possession: the savings-box does not yield him surplus-value or interest, but he can gradually use up its contents. The savings or other money then invested in means of production (house, ship, factory) will be returned to the owners in the shape of the sums annually written off their value in proportion to their natural wear and tear or consumption. Simply by means of untrammelled hard work fructified by the powerful modern instruments of production, the great admired and dreaded tryrant capital will be reduced to the harmless role of a child's porcelain savings-box. The savings-box yields no surplus-value, and to get at the contents its owner must break it.

The first and second parts of this book, dealing with land, show how agriculture and the building and mining industries can be carried on without surplus-value, yet without communism. The later parts of the book, dealing with the new theory of capital, show how, without nationalising the remaining means of production, we can entirely eliminate surplus-value from our economic order and establish the right to the whole proceeds of labour.

2. THE RIGHT TO THE WHOLE PROCEEDS OF LABOUR

A worker in this book means anyone living on the proceeds of his labour. By this definition farmers, employers, artisans, wage-earners, artists, priests, soldiers, officials, kings, are workers. The antithesis of a worker in our economic system is therefore the capitalist, the person in receipt of unearned income.

We distinguish between the product of labour, the yield of labour and the proceeds of labour. The product of labour is what is produced by labour. The yield of labour is the money received through the sale of the product of labour or as the result of the wage contract. The proceeds of labour mean what a worker, out of the yield of his labour, can buy and convey to the place of consumption.

The terms: wages, fee, salary are used instead of the term yield of labour when the product of labour is not a tangible object. Example: street-sweeping, writing poems, governing. If the product of labour is a tangible object, say a chair, and at the same time the property of the worker, the yield of labour is not called a wage or salary, but the price of the object sold. All these designations imply the same thing: the money-yield of the work done.

Manufacturers' and merchants' profits, after deduction of the capital interest or rent usually contained in them, are likewise to be classed as yield of labour. The manager of a mining company draws his salary exclusively for the work done by him. If the manager is also a shareholder, his income will be increased by the amount of the dividend received. He is then at once a worker and a capitalist. As a rule the income of farmers, merchants and employers is made up of the yield of their labour plus a certain quantity of rent or interest. A farmer working on rented land with borrowed capital

lives exclusively on the proceeds of his labour. What is left to him of the product of his labour after payment of rent and interest, is the result of his activity and is subject to the general laws determining wages.

Between the product of labour (or service rendered) and the proceeds of labour lie the various bargains which we strike daily in buying the commodities we consume. These bargains greatly affect the proceeds of labour. It very commonly happens that two persons offering the same product of labour for sale obtain unequal proceeds of labour. The reason for this is that though equal as workers, they are unequal as dealers. Some persons excel at disposing of their product for a good price, and at making judicious choice when purchasing the commodities they need. In the case of goods produced for the market, the commercial disposal of them and the knowledge necessary for successful bargaining contribute as much to the success of labour as does technical efficiency. The exchange of the product must be considered as the final act of production. In so far every worker is also a dealer.

If the objects composing the product of labour and those composing the proceeds of labour had a common property by which they could be compared and measured, commerce, that is, the conversion of the product of labour into the proceeds of labour, might be dispensed with. Provided the measuring, counting or weighing were accurate, the proceeds of labour would always be equal to the product of labour (less interest and rent), and the proof that no sort of cheating had taken place could be supplied by examination of the objects of the proceeds of labour, just as one may ascertain by one's own scales whether the druggist's scales weigh correctly or not. Commodities have however no such common property. The exchange is always effected by bargaining, never by the use of any kind of measure. Nor does the use of money exempt us from the necessity of bargaining to effect the exchange. The term "measure of value" sometimes applied to money in antiquated writings on economics, is misleading. No quality of a canary bird, a pill or an apple can be measured by a piece of money.

Hence a direct comparison between the product of labour and the proceeds of labour will not furnish any valid and legal proof

as to whether the labourer has received the whole proceeds of his labour. The right to the whole proceeds of labour, if by that phrase we mean the individual's right to the whole proceeds of his labour, must be relegated to the realm of imagination.

But it is very different with the common or collective right to the whole proceeds of labour. This only implies that the proceeds of labour should be divided exclusively among the workers. No proceeds of labour must be surrendered to the capitalist as interest or rent. This is the only condition imposed by the demand for the right to the common or collective whole proceeds of labour.

The right to the collective whole proceeds of labour does not imply that we should trouble about the proceeds of labour of the individual worker. For whatever one worker may fail to secure will be added to the remuneration of another worker. The apportioning of the workers' shares follows, as hitherto, the laws of competition, competition being keener, and the personal proceeds of labour being less, the easier and simpler the work. The workers who perform the most highly qualified work are most securely withdrawn from the competition of the masses, and are therefore able to obtain the highest price for the product of their labour. In certain cases some natural physical aptitude (such as singing, for example) may take the place of intelligence in eliminating the competition of the masses. Fortunate is he whose service liberates him from the dread of competition.

The realisation of the right to the whole proceeds of labour will benefit all individual workers in the form of an addition to the present proceeds of their labour, which may be doubled or trebled, but will not be levelled. Levelling the proceeds of labour is an aim of communism. Our aim, on the contrary, is the right to the whole proceeds of labour as apportioned by competition. As an accompanying effect of the reforms necessary to ensure the right to the whole common proceeds of labour, we may, indeed, expect the existing differences in the individual proceeds of labour which are sometimes, particularly in commerce, very great, to be reduced to more reasonable proportions; but that is only an accompanying effect. The right to the whole proceeds of labour, in our sense, does not imply any such levelling. Industrious, capable and efficient workers will, therefore, always secure larger proceeds of labour,

proportionate to their higher efficiency. To this will be added the general rise of wages in consequence of the disappearance of unearned income.

Summary

1. The product of labour, the yield of labour and the proceeds of labour are not immediately comparable. There is no common measure for these quantities. The conversion of one into the other is not done by measuring but by contract, by a bargain.

2. It is impossible to say whether the proceeds of labour of individual workers do or do not correspond to the whole proceeds of their labour.

3. The whole proceeds of labour can only be understood to mean the common or collective proceeds of labour.

4. The right to the whole collective proceeds of labour implies the total abolition of all unearned income, namely interest and rent.

5. When interest and rent are eliminated from economic life, proof is complete that the right to the whole proceeds of labour has been realised, and that the collective proceeds of labour are equal to the collective product of labour.

6. The suppression of unearned income raises the individual proceeds of labour—doubling or trebling them. There is no levelling to be expected, or only a partial one. Differences in the individual product of labour will be accurately translated into the individual proceeds of labour.

7. The general laws of competition determining the relative amounts of the individual proceeds of labour will remain in force. The most efficient worker will receive the highest proceeds of labour, to use as he pleases.

To-day the proceeds of labour are curtailed by rent and interest, which are not, of course, determined arbitrarily, but by the conditions of the market, everyone taking as much as the conditions of the market allow him.

We shall now examine the manner in which these market conditions are created, beginning with rent on land.

3. REDUCTION OF THE PROCEEDS OF LABOUR THROUGH RENT ON LAND

A landowner has the choice of cultivating his land or allowing it to lie fallow. His possession of the land is independent of its cultivation. Land does not suffer from lying fallow; on the contrary, it improves; indeed, under certain systems of cultivation, to let the soil lie fallow is the only method of restoring its fertility.

A landowner, therefore, has no inducement to allow others to use his property (farm, building-site, oil or coal field, water-power, forest and so forth) without compensation. If the landowner is offered no compensation, no rent, for its use, he simply lets his land lie fallow. He is absolute master of his property.

Anyone needing land and applying to a landowner will obviously, therefore, have to make a disbursement called rent. Even if we could multiply the surface of the earth and its fertility, it would never occur to a landowner to let others use his land free of charge. If the worst came to the worst he might turn his property into a hunting ground or use it as a park. Rent is an inevitable condition of every tenancy, because the pressure of competition in the supply of land for letting can never be great enough to make the use of land gratuitous.

How much, then, will the landowner be able to demand? If the whole surface of the earth were needed for the sustenance of mankind; if no more free land were obtainable far or near; if the whole surface of the earth were in private possession and under cultivation, and if the employment of more labour, the application of so-called intensive cultivation, resulted in no increase of produce; then the dependence of those without property on their landlords would be as absolute as it was at the time of serfdom, and accordingly the landlords would raise their claims to the utmost limit of the attainable; they would claim for themselves the entire produce of labour, the entire harvest, and grant to the labourer, as to a common slave, only what sufficed for his subsistence and propagation. Under such conditions the so-called "iron law of wages" would hold good. Cultivators of the soil would be at the mercy of landowners, and rent would be equal to the yield of the land, less the cost of feeding the cultivator and his draught animals, and less capital-interest.

The conditions which would result in an "iron wage" do not, however, exist; for the earth is much larger and more fertile than is necessary for the support of its present population. Even with present-day extensive cultivation, hardly one-third of its area is exploited, the remainder lying fallow or being unclaimed. If instead of extensive cultivation, intensive cultivation were generally introduced, one-tenth of the surface of the earth would perhaps suffice to provide mankind with the average amount of foodstuffs consumed by the workers at the present day. Nine-tenths of the earth's surface might, in this case, be left fallow. (Which, of course, does not mean that mankind would be satisfied with such a result. If everyone desired to eat his fill of something better than potatoes; if everyone wanted to have a saddle-horse, a court-yard with peacocks and pigeons, or a rose garden and a swimming-pool the earth might, even with intensive cultivation, be too small).

Intensive cultivation comprises: drainage of swamps, irrigation, mixture of soils, deep ploughing, blasting of rocks, marling, application of fertilisers; choice of plants for culture, improvements of plants and animals; destruction of pests in orchards and vineyards, destruction of locusts; saving of draught animals through railway, canal and motor transport; more economical use of foodstuffs and fodder through exchange; limitation of sheep-breeding through the cultivation of cotton; vegetarianism and so forth. Intensive cultivation requires much labour, extensive cultivation much land.

No one, then, is at present compelled, by complete lack of land, to appeal to the landowners, and because this compulsion does not exist (but solely for this reason) the dependence of those without land on the landowners is limited. But the landowners are in possession of the best land, and it would require a great deal of labour to bring into cultivation the only unclaimed land in settled neighbourhoods. Intensive cultivation, again, involves considerably more trouble, and not everyone is capable of emigrating and settling in the unclaimed lands of the wilderness; apart from the fact that emigration costs money, and that the produce of those lands can be brought to market only at great expense in transport-costs and import-duties.

The farmer knows all this, and the landowner likewise. So before the farmer makes up his mind to emigrate; before he sets about

draining the neighbouring swamp; before he turns to market gardening, he will ask the landowner what rent he demands for his field. And before answering the question the landowner will think the matter over and calculate the difference between the proceeds of labour on his field and the proceeds of labour* on waste land, garden land, or unclaimed land in Africa, America, Asia, or Australia. For the landowner is determined to obtain this difference for himself; this is what he can claim as rent for his field. As a general rule, however, there is not much calculation. In these matters both parties are guided by experience. Some hardy young fellow emigrates and, if he reports favourably, others follow. In this way the supply of labour at home is reduced, the consequence being a general rise of wages. If emigration continues, wages will rise to a point at which the would-be emigrant becomes doubtful whether he had not better stay at home. This indicates that the proceeds of labour at home and in the new country are again equal. Sometimes an emigrant makes an estimate beforehand, so it may be worth while examining such a calculation.

An Emigrant's Estimate

Travelling expenses for himself and family	$1000
Accident and life insurance during the voyage ...	200
Health insurance for acclimatisation, that is, the sum which an insurance company would charge for the special risk due to the change of climate	200
Prospecting and fencing	600
We may assume that the same amount of working capital is required as in Germany, so it is not included in the estimate	
Cost of emigrating and settling	$2000
These expenses, which the farmer in Germany does not incur, are added to the working capital, the interest on which is charged to working costs: 5% on $2000	$100

* We again call attention to the difference between the product of labour and the proceeds of labour. The product of labour of the emigrant may be ten times larger, yet the proceeds of his labour the same.

We assume that the settler, with the same amount of labour, produces the same amount as on his native soil, the competition of which is here to be considered. We remember that the farmer, like any other producer, is not interested in the products of his labour but only in the goods for consumption which he can obtain for them, that is, in the proceeds of his labour. The settler must send his products to market and convert the the money he obtains for them into the goods he needs for consumption. And he must pay for the conveyance of these goods to his new home.

The market for the exchange of his products is, as a rule, distant; if we suppose it to be Germany, a country which is forced to import large quantities of agricultural produce, the emigrant will have to pay:

Freight-charges for cart, railway, ship and lighter ...	200
Import-duty in Germany	400
Freight-charges for lighter, ship, railway and cart for the goods received in exchange	200
Import-duty in the new country	100
	$1000

In the above estimate the conversion of the product of labour into the proceeds of labour, usually effected by way of commerce, costs the emigrant for freight, customs-duties and commercial profit, the sum of $1000, an expense which the cultivator of German soil avoids. If, therefore, the latter pays $1000 in rent for a piece of land which yields the same product of labour as the emigrant's homestead, the proceeds of his labour are equal to those of the emigrant.

There is the same economic difference in favour of the above piece of land when compared with waste land brought under cultivation in Germany; but here instead of transport costs and customs-duties, we have to enter the interest on the capital employed for reclaiming the land (drainage of a swamp, mixture of the different layers of soil, liming and manuring). In the case of intensive cultivation the difference consists, not of interest and freight, but of the increased cost of cultivation.

Rent, then, tends to reduce the proceeds (not the produce) of labour to the same general level everywhere. Whatever agricultural advantages well-cultivated German farm land possesses over the Luneburg Heath or, through its proximity to the markets, over unappropriated land in Canada, are claimed by landlords as rent, or appear, if the land is sold, as its price, which is simply the rent capitalised. All differences in land as regards fertility, climate, access to the markets, customs-duties, freights and so forth are levelled by rent. (It should be noted that in this connection wages are not mentioned; the omission is intentional).

Economically speaking, rent on land reduces the globe for the farmer, manufacturer and capitalist (if he is not a landowner), to a perfectly uniform surface. As Flürscheim puts it: "Just as the inequalities of the ocean bed are transformed into a level surface by the water, so inequalities of land are levelled by rent." It is a remarkable fact that rent reduces the proceeds of labour of all cultivators of the soil to the yield which may be expected from unreclaimed land at home, or from unclaimed land in the far-off wilderness. The notions of fertile, barren, loamy, sandy, swampy, rich, poor, well or badly situated, are rendered, economically speaking, meaningless by rent on land. Rent makes it a matter of indifference to a man whether he cultivates moorland in the Eiffel, or a market-garden at Berlin, or a vineyard on the Rhine.

4. INFLUENCE OF TRANSPORT COSTS ON RENT AND WAGES

The proceeds of labour on freeland, waste-land, marsh and moor determine how much the landowner must pay as wages or how much he can claim as rent. The farm-labourer will obviously claim a wage equal to the proceeds of labour on freeland, since he is free to take possession of and cultivate freeland (which term we shall soon define more closely). Nor is it necessary for every farm-labourer to threaten to emigrate when negotiating about his wages. Married men with many children, for instance, would gain nothing by such a threat, since the landowner knows that it cannot be carried into effect. But it suffices if the emigration of the younger men causes a general shortage of labour. Even although many labourers are unable to emigrate, the shortage of labour caused

by the emigration of others supports them in their negotiations about wages as effectively as if they had already booked their passage.*

On the other hand the tenant farmer must be allowed to keep for himself an amount equal to the proceeds of labour of the free-land emigrant and the farm-labourer, after deduction of farm-rent and the interest on his working capital. Thus farm-rent also, is determined by the proceeds of labour on freeland. The landowner when calculating the rent of a farm need not leave the tenant a margin greater than the proceeds of labour on freeland, and the tenant is not compelled to accept less.

If the proceeds of labour on freeland fluctuate, the fluctuation is transferred to wages and to farm-rent.

Among the circumstances influencing the proceeds of labour on freeland we must consider, in the first place, the distance between the unappropriated land and the place where the products are consumed. We may suppose this to be the place where the commodities taken in exchange are made (manufacturing centre) or collected (trading centre). The importance of the distance from the market is best seen from the difference in the price of a field in the vicinity of the town and an equally fertile field farther from the market. The reason for the difference in price is simply the distance from the market.

* How greatly wages are influenced by emigrants and migrating labour is illustrated by the following passage from a speech by President Wilson on May 20th, 1918: "When the American Secretary of Defence was in Italy, a member of the Italian Government enumerated to him the various reasons why Italy felt intimately connected with the United States. The Italian Minister remarked:—

'If you wish to make an interesting experiment go into any troop-train and ask the soldiers in English which of them have been in America. The rest you will see for yourself.'

Our Secretary of Defence did board a troop-train and asked the men how many of them had been in America. It seems that more than half of them rose to their feet."

The Italian receivers of rent had driven these men to America, and the American receivers of rent had driven them home again. Because they fared as badly in America as they had fared at home, the poor devils kept restlessly wandering to and fro.

Wilson added: "There are American hearts in this Italian army!" But we know better; when these migrating workers left their country they cursed their fate, and they cursed their fate when they left America.

In the Canadian wheat district, for example, where to this day good land can be obtained free by everyone, the wheat has to be carried on wagons, along unbeaten tracks, to the far-distant railroad by which it is conveyed to Duluth to be shipped on lake steamers. These carry the wheat to Montreal, where it is transferred to ocean steamers. From there the voyage continues to Europe, say to Rotterdam, where another transfer to the Rhine vessels is necessary. These go as far as Mannheim, and to reach the markets of Strasbourg, Stuttgart or Zürich, the wheat must here be loaded on railway trucks, And its price in these markets, after payment of import-duties, must be the same as the price of wheat grown on the spot. It is a long journey costing a great deal of money; yet the balance of the market price that remains after deducting import-duties, freight, insurance, brokerage, stamp-duties, interest on money advanced, sacks, etc. is still only the sum obtained by the sale of the product of labour, and not what is required by the settler in the wilderness of Saskatchewan. This sum has to be transformed into articles for use — salt, sugar, cloth, fire-arms, tools, books, coffee, furniture, etc. and it is only when all these objects have arrived at the settler's homestead, and the freight on them has been paid, that he can say: "These are the proceeds of my labour plus interest on my capital." (Whether the settler has borrowed the money necessary for emigration or is working with his own capital, he is bound to deduct interest on his capital from the product of his labour).

It is obvious, therefore, that the proceeds of labour on such free-land must depend to a great extent on transport costs. These costs have been steadily sinking, as is shown by the following table: (Taken from Mulhall's Dictionary of Statistics).

Freight-rates for one ton of grain from Chicago to Liverpool:—

1873	$17
1880	10
1884	6

That is, from Chicago to Liverpool alone, a saving of $11 on freight for every ton of wheat; almost one sixth of the price in 1884, or one fourth of the present price (1911). But the distance from Chicago to Liverpool is only part of the distance from Saskatchewan to Mannheim; hence the $11 are only part of the actual saving on transport costs.

There is the same saving of freight on the goods consumed by the settler. The grain was the product of labour; the price, $63 in 1884, of a ton of wheat was the yield of labour; and the return shipment comprised the objects of the proceeds of labour, to obtain which the settler produced the wheat. For we must keep in mind that the industrial workers in Germany who eat Canadian wheat, must always pay for it with their own products which they send directly or indirectly to Canada and for which, therefore, freight has likewise to be paid. Thus the saving on cheaper freight is doubled, and the proceeds of labour on freeland, which determine the general wage in Germany, are augmented.

But it must not be supposed that the saving of a certain sum on freight is translated into an exactly corresponding increase in the proceeds of labour of the settler. In reality the proceeds of his labour will increase by only about half the saving on freight; and the reason for this is that the rising proceeds of labour of the settler on freeland raise the wages of the agricultural workers in Germany. The rising wages of farm labourers and of settlers on freeland cause industrial workers to pass over to these pursuits. The relation existing between the production of agricultural and of industrial goods is modified, and in consequence their exchange ratio is also modified. The settler has to pay higher prices for the objects of the proceeds of his labour (industrial products). The quantity of these industrial products does not, therefore, increase in proportion to the increased yield of labour of the settler on freeland resulting from lower transport costs. The difference, according to the laws of competition, falls to the industrial workers. What happens here is what happens when improved technical methods, such as steam-power, reduce the cost of production. The producer and the consumer share the gain.

Here again it may be worth while to illustrate by means of figures the influence of a change of transport costs on the proceeds of labour of the settler on freeland, and consequently on rent and wages.

I. The proceeds of labour of a settler on freeland in Canada with a freight-rate of $17 per ton in the year 1873.

Product of labour: 10 tons of wheat shipped to Mannheim and there sold at $63 per ton	$630
Less 10 times $17 for freight, etc.	170
Yield of labour	$460
This money-yield of labour is spent in Germany for the purchase of goods for use which, when shipped to Canada cause the same expense for packing, freight, import-duties, deterioration, etc. as the wheat on its voyage to Germany	170
The proceeds of labour of the settler therefore amount to	$290

II. The same calculation in the year 1884 with a freight-rate of $6 per ton.

Product of labour: 10 tons of wheat at $63 per ton	$630
Less 10 times $6 for freight	60
Yield of labour	$570
This yield of labour, which is $110 greater than in the first calculation, is now converted into the proceeds of labour, that is, into industrial products. For the reasons indicated above, the ratio of exchange between industrial and agricultural products has been modified in favour of industry. Let us suppose that this rise in the price of industrial commodities absorbs half the increased money-yield of labour, that is	55
	$515
From this we have to deduct the return freight which we must put a little higher, as the amount of the goods has increased by the amount economised on freight; instead of $60 freight amounts to	61
The proceeds of labour of the settler now therefore amount to	$454

Thus the decrease in freight has raised the proceeds of labour of the settler on freeland from $290 to $454, so the wages demanded by the German farm labourer will automatically increase by the same amount, and tenant farmers will claim a correspondingly

larger share of the product of labour for themselves. And rent on land will decrease in the same ratio.

If in Germany in 1873 the price of 10 tons of wheat was	$630
And the wages for producing it amounted to	$290
Then 10 tons of land* brought the landowner who worked or let them, rent amounting to	$340
But if in 1884 wages rise to $454, the rent must fall to (that is $340, less $164 increase of wages).	$176

What the settler on freeland has to pay in freight is therefore deducted from the proceeds of his labour; and the landowner in Germany may demand this amount as farm-rent if he lets his land, or deduct it as rent from the product of his farm-labourers if he works his land himself. In other words, what the freeland settler pays as freight is pocketed by the landowner as rent.

5. INFLUENCE OF SOCIAL CONDITIONS ON RENT AND WAGES

Rail and shipping costs are not of course the only factor influencing the proceeds of labour of the settler on freeland, and consequently the wages of the German farm-labourer. Man does not live by bread alone, so the proceeds of labour are not the sole cause of his decision for or against emigration. The national and social life of the country which the emigrant is to leave, and of the country he is going to, have often a strong and determining influence, and many a man is satisfied with smaller proceeds of labour at home, finding compensation for the loss in the possession of a laurel wreath for rabbit-breeding or in the song of the chaffinches, which in his opinion is nowhere so beautiful as in the home country. These attractive or repelling forces fluctuate, sometimes stimulating and sometimes restraining emigration. Many German farmers, for instance, are again emigrating from Russia, not in hope of higher proceeds of labour, but because conditions there are no longer quite to their taste. All these factors counteract to some extent the forces tending to level the purely material proceeds of labour of

*A ton of land: a Danish land-measure denoting the amount of land that produces one ton of grain. A ton of land therefore indicates an area of land which varies according to the quality of the soil.

the emigrant and of the farm-labourer left behind. Let us suppose, for example, that we resolve to render life pleasanter for German workers, the means to be derived from the prohibition of alcoholic drink. Prohibition itself would enrich the lives of the workers, and especially those of their wives; and the millions which alcohol directly and indirectly costs the people might be employed for an effective endowment of motherhood in the shape of a monthly State subsidy to cover the expense of bringing up each child. Or for better schools, for public reading-rooms, theatres or churches, or free treats at pastry shops, popular festivals, assembly-rooms etc. The question whether a man was going to emigrate would not then be settled solely by an estimate of the material proceeds of his labour; many wives would induce their husbands to stay, and many emigrants would return. The effect on wages and rent is obvious. The landowners would raise their demands until the restraining influence of prohibition on the would-be emigrant had been compensated. The cakes given gratis to the women in the national pastry shops would be abstracted from their husband's wages in the form of an increase of rent.

Thus every advantage which Germany offers for professional, intellectual and social life is confiscated by rent on land. Rent is poetry, science, art and religion capitalised. Rent converts everything into hard cash: Cologne Cathedral, the brooks of the Eiffel, the twitter of birds among the beech-leaves. Rent levies a toll on Thomas à Kempis, on the relics at Kevelaar, on Goethe and Schiller, on the incorruptibility of our officials, on our dreams for a happier future, in a word, on anything and everything; a toll which it forces up to the point at which the worker asks himself: Shall I remain and pay—or shall I emigrate and renounce it all? The workers are always at the gold-point. (In foreign trade the gold-point is that state in the balance of payments at which merchants are uncertain whether it is more profitable to pay in bills of exchange or in gold. The cost of transportating gold is the billbroker's " rent.") The more pleased a man is with his country and his fellow citizens, the higher the price charged by the landlord for this pleasure. The tears of the departing emigrant are pearls of great price for the landlord. For this reason city landlords often organise improvement societies and other institutions intended to render

town life attractive, in order to restrain departure and stimulate arrival and so to raise the rents on their building sites. Homesickness is the tap-root of rent on land.

But if the German farm labourer does not live by bread alone, neither does the settler on freeland. The material proceeds of labour are only part of what man needs to make life worth living. The emigrant had to struggle to overcome the emotional forces binding him to his native land, and similarly in his new home he finds many things to attract or to repel him. The attractions tend to make the proceeds of labour appear sufficient to him (just as everyone is prepared to do agreeable work for a smaller remuneration), whereas the repellant features diminish them. If the repellant circumstances preponderate (climate, insecurity of life and property, vermin and so forth) the proceeds of labour must be correspondingly larger, if the emigrant is to stay on and encourage those who remained at home to follow his example. Everything that influences the life and happiness of the settler on freeland has a direct influence on the contentment of the German worker and affects his wage demands. This influence begins with the account of the journey. If the voyage passed off without sea-sickness, if life on board and the food were tolerable, those left behind will be encouraged. If the settler tells of the liberty he is enjoying, of hunting and riding, of great hauls of salmon and herds of buffaloes, of his right of disposing freely of the riches of nature, of his being treated everywhere as a free citizen and not as a serf and beggar, the labourer at home will of course hold his head higher during the wage negotiations than if his brother writes of the inroads of Red Indians, of rattlesnakes, vermin and hard work.

All this is known to the landowners, so if a letter of lament arrives, the most is made of it; it is published in the Press which is given to understand that it must on the other hand carefully exclude any reports that might prove attractive and encouraging. The organisation which is set up to advertise the attractions of the home country is also entrusted with the task of reviling freeland. Every snake-bite, every scalp taken, every swarm of locusts, every shipwreck, by making the workers less likely to emigrate and more amenable, is converted into hard cash for the landowners.

6. MORE PRECISE DEFINITION OF FREELAND

When freeland is spoken of we first think of the vast tracts of uncultivated land in North and South America. This freeland is easily and comparatively cheaply reached. The climate is suitable for Europeans, the social conditions are to many people attractive; the security of life and property is fair. On his arrival the immigrant is accommodated for a week or two in a hostel for immigrants at the expense of the State, and in some countries he is given a free railway ticket to the farthest limit of settled land. Here he is free to settle immediately. He may pick out the site he likes best: pasture, ploughland or forest. The homestead that he has a right to claim is extensive enough to provide work for the largest family. As soon as the settler has driven in the boundary stakes and notified the land-office, he may start work. Nobody interferes with him or even inquires who allowed him to till the earth and reap the fruits of his industry. He is lord of the land between his four stakes.

Land of this kind we call freeland of the first class. Such freeland is not of course to be found in settled parts, but only where men are few and far between. Within the tracts already occupied there are, however, large areas that are not cultivated, but which by some abuse of State-power have become the private property of individuals living in some far-off place. A few thousand persons living in Europe own between them hundreds of millions of acres of such land situated in America, Africa, Australia and Asia. Anyone wishing to occupy a piece of this land has to come to terms with the proprietors, but as a rule he may buy or rent what he desires for a nominal sum. Whether he does or does not pay a few pence an acre annually for the land he intends to cultivate can make no appreciable difference in the proceeds of his labour. Such conditionally freeland we call freeland of the second class.

Freeland of the first and the second classes is still to be found in abundance in every part of the world outside Europe. It is not always land of the best quality. Much of it is densely overgrown with forests needing a great deal of labour to clear. Large areas suffer from lack of water and can be made fertile only by expensive irrigation schemes. Other land again, often of the best quality, has to be drained; or being situated in remote valleys lacks means of

communication without which exchange of the produce is impossible. Freeland of this kind can be taken up only by emigrants possessing capital or credit. For the theory of rent and of wages, however, it does not matter whether this freeland is brought under cultivation by a company of capitalists or by the emigrants directly. The distinction only affects capital and its interests. If the emigrant settles on land which has been opened up in this way, that is, with the help of capital, he has to pay the customary interest on the capital invested, and he must add this interest to his working expenses.

For individuals or companies themselves possessing the means necessary for land-reclamation on a larger scale half the world is still freeland. The best land in California and along the Rocky Mountains was until lately a desert; now it is a vast garden. The British have made Egypt habitable for millions of men by means of the Nile dams. The Zuider-Zee and many deserts such as Mesopotamia will also be brought into cultivation again by a similar expenditure of capital. Thus we may say that freeland of the second class will be at the disposal of mankind for an indefinite period to come.

7. FREELAND OF THE THIRD CLASS

The most important freeland, however, and that which is also of greatest significance for the theory of rent and wages is freeland of the third class, which is everywhere available close at hand. The conception of this freeland, however, is not so simple as that of the other two forms and calls for some reflection.

A few examples will serve to make the matter clear to everyone.

Example 1. In Berlin the building regulations do not allow houses to be built more than four storeys high. If the limit were two storeys the city would have to cover twice its present area to lodge the same population. Hence the land saved by the third and fourth storeys is to this day unoccupied building land. If the American manner of building were permitted in Berlin—that is, 40 storeys instead of four—one-tenth of the present building area of Berlin would suffice. The rest would form a surplus and would be offered to any builder at little more than the price of a potato patch. Freeland for building purposes is, therefore, available even in the

centre of any large German city, in an unlimited quantity—from the fourth storey upwards towards the clouds.

Example 2. In the republic of "Agraria" the use of chemical fertilisers is prohibited by law, nominally because it is alleged to be injurious to health, in reality in order to limit the output of grain and so to keep up its price. The landowners of Agraria believe that little and dear is better for them than much and cheap. In consequence of this prohibition and the resulting small crops and high prices, and because emigration, also, is prohibited, the people of Agraria have brought all wastes, swamps and moors under cultivation, and so contrived to make the crops meet the needs of the population. But in spite of this the people are discontented and clamour for repeal of the prohibition, it being generally expected that the use of chemical fertilisers would treble the produce of the soil, as it did in Germany.

What would be the result of repeal on rent and wages? Would not the same thing happen in Agraria that happens in the city when new building regulations allow the number of storeys to be trebled? With the use of chemical fertilisers the soil of the republic would suddenly yield trebled harvests, harvests three times larger than the present population requires. The consequence would be that of every three acres two would be allowed to lie fallow at the disposal of future generations. In a republic where every inch of soil, every swamp is cultivated, the import of chemical fertilisers would suddenly create vast areas of freeland. And this freeland would, for the time being, be used only for hunting and would be leased for this purpose, for a nominal amount.

These examples from the building industry and agriculture show how new land, freeland of the third class, may be created and is being daily created as the result of scientific discovery. The nomad requires 100 acres to provide for his family, the farmer 10, the gardener one or less.

The whole agricultural area of Europe is as yet cultivated so superficially, and population, even in Germany, is still so sparse, that if garden culture were generally adopted, half the area at present under cultivation would have to be left fallow, first because we should lack purchasers for such quantities of foodstuffs, and

secondly because we should lack the workers necessary for such an intensive cultivation of the soil.

We may therefore consider the whole of Germany as such freeland of the third class. With regard to the yield of the soil which the farmer working intensively reaps over and above the yield of the hunter, the nomad, and the farmer working extensively, all farm land may be considered as freeland, just as Americans may consider the space above the storeys already in existence, up to the clouds, as free building land.

Let us apply these examples to the theory of rent and wages. Germany, in the limited sense above described, is still freeland, and the farm-labourer may at any time take refuge on this freeland if dissatisfied with his wages. The wages of farm-labourers cannot fall permanently below the proceeds of labour on such freeland of the third class, any more than they can fall below the proceeds of labour on freeland of the first class. Here, then, is an unfailing support for the farm-labourer in his wage negotiations.

And now, how much can the labourer demand as wages? How much the landowner as rent?

8. INFLUENCE OF FREELAND OF THE THIRD CLASS ON RENT AND WAGES

Let us suppose that, with the usual *extensive* farming methods of the district, 12 men are needed to cultivate 100 acres of land, and that the harvest amounts to 600 tons, that is, 50 tons for every man and 6 tons per acre.

Let us further suppose that with *intensive* farming the same area requires 50 men to cultivate and yields 2000 tons, or 40 tons instead of 50 for each worker, and 20 instead of 6 tons per acre.

Thus the produce of intensive cultivation is augmented as compared to the area, but diminished as compared to the work.

With extensive cultivation:

Twelve men produce 50 tons each, that is 600 tons.

With intensive cultivation:

Twelve men produce 40 tons each, that is 480 tons.

So the difference of 120 tons is to be attributed to the larger area of 100 acres, which enabled these 12 men to adopt this extensive cultivation, that is, cultivation requiring less labour. They will of

course prefer this method as long as the land necessary for it is at their disposal. But if the land is not at their disposal they are forced to have recourse to intensive cultivation and to be satisfied with the smaller product of labour. The disadvantage is so great that if anybody places the area necessary for extensive cultivation at their disposal they will consent to pay for the advantage resulting for them; or, in other words, the owner of this area will be able to levy an additional rent corresponding to the difference between the product of labour in extensive and intensive cultivation, the former being larger, as is proved by experience. In our example, then, the rent of 100 acres of land will be 120 tons.

Agriculture tends to extensive cultivation to save labour, but to intensive cultivation to save land. Out of the tension thus arising rent is born, and the degree of this tension (a matter of experience) determines the distribution of the farm produce between rent and wages.

We need not stop here to explain why extensive cultivation yields more produce for a given amount of labour and less produce for a given amount of land. That is a question of agricultural technique. For us it suffices to know that such is the case in agriculture, that it is founded in the nature of things. If it were otherwise, if extensive cultivation yielded 40 tons while intensive cultivation yielded 50 tons a head, the whole of agriculture would tend towards intensive cultivation. All the land that could not be stocked with labour would be left fallow, simply because any workers still available would reap larger harvests by a still more intensive tillage of the land already under cultivation than by cultivating fallow land.

(The theory of population which asserts that population corresponds to the food supply, is not inconsistent with the above proposition. Population grows with the augmentation of the food supply; it follows in the wake of intensive cultivation, it does not precede it.)

By extensive cultivation we mean that form of agriculture in which all the labour offering itself must be employed in order to cultivate the whole of the area available, no matter what the method of cultivation may be, hunting, cattle grazing, three-field system, marsh culture, or present-day comparatively well-developed farming.

By intensive cultivation we mean that form of agriculture which, if carried on on a large scale, must result in a general shortage of labour.

Intensive and extensive cultivation are therefore relative terms. The herdsman is an intensive worker as compared to the huntsman. Hence pastoral tribes must generally pay rent for the use of their land (hunting-grounds), and are able to do so.

Extensive cultivation yields the larger product of labour (wages and rent), whereas intensive cultivation yields the larger crop. The landowner would like to combine the two, and of course endeavours to practice intensive cultivation. He cannot, however, do so without withdrawing labour from among the extensive cultivators and so causing land to be left fallow (freeland of the third class). Now it stands to reason that the owners of this land are unwilling to let it lie fallow. They therefore try to attract labour to it by raising wages; and in doing so they are prepared to go close to the limit of profitableness (absorption of rent in wages), since a landowner will prefer to receive a dollar an acre rent rather than to receive nothing at all.

Freeland of the third class has thus the function of levelling wages and rent. Freeland of the third class makes arbitrary fixation of wages impossible. The landowner does not fix wages as low as he pleases, neither does the labourer demand as much as he chooses; the amount that falls to each is determined by economic laws.

9. INFLUENCE OF TECHNICAL IMPROVEMENTS ON RENT AND WAGES

Technical improvements increase the product of labour, and if they increase it equally in intensive and in extensive cultivation, wages and rent will also increase equally. The ratio of distribution then remains unchanged, the landlord deriving the same advantage as the workers from improvement of the means of production.

Technical improvements are rarely, however, of equal benefit to the two modes of cultivation, extensive and intensive. What, for instance, can the intensive farmer do with a ten-share motor plough, or with a seed distributor? Such machines can be used only for large areas; for intensive cultivation they are useless, just as lions are useless for catching mice.

For freeland of the third class the motor plough is quite useless,

its realm being freeland of the first or second class, the vast plains of America, where a single motor plough* will plough the fields of 50 or more farmers, and plough them well and cheaply. The product of labour of these freeland-settlers is of course thereby increased enormously. But on the product of labour depend the proceeds of labour, and the proceeds of labour of the freeland-settler determine the wages of labour on rented land everywhere.

Now if all the circumstances connected with conversion of the product of labour into the proceeds of labour remained unchanged, wages in general would necessarily rise in the same proportion as the increase in the products of labour due to the motor plough. These circumstances do not, however, remain unchanged, and here again we see how necessary it was to distinguish from the outset, between the product of labour and the proceeds of labour. For it is the proceeds, and not the product of labour, that determine wages in general.

If the proceeds of labour of the freeland-settler increase, the immediate consequence is an increase of the proceeds of labour of industrial workers. If that were not so, industrial workers would return to agricultural labour on freeland of the first, second or third class. This rise of wages in industry is brought about by a modification of the exchange ratio between the products of the freeland-settler and of industry. Instead of 10 sacks of wheat the settler has to give 12 for a gramophone, a rifle, a medicine-chest. In this way the settler, when transforming the product of his labour into the proceeds of labour, has to surrender part of his surplus product to the industrial worker. Thus the motor plough forces up wages all round.

What the wage-earners gain by the motor plough is, however, more than the surplus of products created by the plough. The motor plough may produce a surplus of 100 million tons, but this, if distributed among all the workers, would be a trifling sum, out of proportion to the increase of the labour-proceeds of the freeland-settler. The reason why the wage-earners gain more is as follows:

If there is a rise in the labour-proceeds of the freeland-settler of

* The motor plough is sometimes the property of the agricultural co-operative society, but as a general rule it belongs to a contractor, the local blacksmith, who also keeps it in repair.

the first or second class, the wages of the workers on rented land in Europe rise likewise, even although there is no increase in the product of their labour. (The motor-plough not being employed, or being employed only to a limited extent.) The increase of wages here takes place at the expense of rent on land; the means for the rise of wages are derived only in a small part from the surplus produce of the freeland-settler.

We continue our examination of this situation, in which technical improvements benefit freeland farmers of the first and second classes, without benefiting intensive cultivation. We have seen that:

The product of labour of the freeland farmer of the first and second class increases by, say, 20% through introduction of more efficient agricultural machinery—after allowance for interest and for upkeep of the machines.

The proceeds of labour of the freeland farmer increase by only 10% since, as we have already shown, the industrial worker demands and obtains more for the product of his labour.

The exchange relation between industrial and agricultural products shifts 10% in favour of industry. Thus of the 20% increase of the product, only half, or 10%, is transferred to the general rate of wages.

German landowners must draw on their rents to meet the increased demands of their labourers, since the product of German land has not increased.

But the landowner's loss is not confined to the decrease of his rent expressed in tons of agricultural produce—which are of as little use to him as are tons of agricultural produce to the freeland settler. For with the exchange of his tons of rent-products for industrial products he again loses, because of the shift in the ratio of exchange—his total loss being considerably more than 10%.

The smaller the rent in proportion to labour costs, the harder the landowner is hit by the rise of wages. But since landowners cannot, obviously, engage labourers at a loss, and since landowners practising extensive cultivation cannot have a greater profit than their colleagues practising intensive cultivation, there is a recession from intensive to extensive cultivation. Less labour is required, labourers are thrown out of employment, and these unemployed

labourers depress wages below their true level, namely the labour-proceeds of freeland-farmers of the first and second classes (which have risen 10%). Emigration then increases until equilibrium between wages at home and the proceeds of labour overseas is re-established.

When technical progress benefits extensive cultivation in the home country, without benefiting intensive cultivation, the larger share of the increased product falls to rent. In spite of the increased product, wages may then even fall below their former level.

Thus technical improvements affect very unequally the distribution of the products of the soil, much depending upon where the benefit falls, whether on freeland of the first and second classes, or on freeland of the third class, or on extensive cultivation.

The workers, in former times, were not always wrong when, to safeguard their interests, they clamoured for the destruction of machinery. It may happen that rent not only absorbs the whole of the surplus production from technical improvements, but also takes away part of the former wages.

10. INFLUENCE OF SCIENTIFIC DISCOVERIES ON RENT AND WAGES

Scientific discoveries were an even more powerful factor than machinery in trebling the yield of German land within the last decades. I shall only mention briefly the use of potash salts, basic slag, and nitrogen-collecting plants as manure; the artificial production of nitrogenous fertilisers, (calcium cyanamide), the prevention and cure of contagious diseases in plants and animals.*

These discoveries have not, however, fertilised all soils equally. By far the greatest gain from them so far has accrued to the peaty, marshy and sandy soils previously considered barren. Here the development meant more than trebling the produce; it meant the creation of new soil, for the sand and moor had not been previously cultivated at all. In Germany a small fraction of these waste-lands was formerly cultivated as burnt moor and yielded a scanty crop every fifteen years to those who were willing to undertake this

* By electrifying the soil the physicist Lodge obtained an increase of produce of 30–40%.

arduous labour.* These lands now yield rich harvests every year. Land which was always naturally fertile cannot, of course, treble its already rich yield. Such land provides the manure necessary for its own perennial rejuvenation if, as is the general rule, tillage is combined with cattle-breeding. That is why artificial fertilisers are much less important in such cases than when applied to lands naturally barren. And the influence of artificial fertilisers on the produce of freeland of the first and second class is still slighter. These virgin lands as a rule require no manuring at all. The cost of transporting artificial fertilisers to such land is, moreover, prohibitive.

Thus the effect of scientific discoveries on wages and rent varies according to the nature of the land to which they are applied. As in the case of machinery, it is impossible to state generally whether they raise or depress rent or wages.

11. LEGISLATIVE INTERFERENCE WITH RENT AND WAGES

The influence of legislation on the distribution of the product of labour among rent-receivers and workers is manifold and far-reaching. It has often been said that politics consist, in the main, of attacks on wages and rent, and in the corresponding defensive measures. As a rule action is here dictated by instinct. The interplay of forces is not fully understood, or if it is understood it is politic to conceal the truth. The advocates of the measures proposed with so much passion are not greatly concerned about the scientific proof of their efficacy. Politics and science are uneasy bedfellows; very often indeed the aim of politics is to prevent, or at least retard, the recognition of some scientific discovery. What curious things have been said, for example, about wheat-duties! "They protect and encourage agriculture," say those who pocket the immediate advantages; "they are bread-usury and theft," say those who become aware of the duty in the smallness of the loaf. "The duties are paid by the foreigner," say some, to which others retort that the duties are all borne by the consumers. Thus the wrangle proceeds,

* As lately as 30 years ago, more than half the province of Hanover was covered with heather. Every 15 years the heather was cut, piled and burnt, the ashes being spread on the land which was then ploughed and yielded a scanty crop of rye or buckwheat. The smoke from these fires was often observed at 500 miles distance from Hanover.

as it has proceeded for fifty years, over a purely human transaction open to all to see; and still the disputants are none the wiser. It is therefore well worth investigating the influence of legislation, for example the taxation of land, on the distribution of the product of labour.

When a merchant orders a shipment of tobacco knowing that at the frontier he will have to pay a duty of $100 per bale, it will be admitted that the merchant must be assured of recouping this expenditure, plus the interest on the capital invested, and plus his own profit, in the price of the tobacco when sold. The import-duty is, for the merchant, an integral part of the merchandise, and is entered by him in his inventory on the credit side, just like any other item such as chests, sacks and bales:—

100 Tons Java tobacco	$50 000
Freight and import-duty	10 000
	60 000
10% expected profit	6 000
Capital	$66 000

That is how the merchant deals with import-duties. Why cannot our landowner deal similarly with the sum which the State collects from him in the form of a tax on land ? It is often asserted that he does so. Landowners themselves will tell you that they intend to charge every tax, with interest and profit added, to the tenant, so that in the long run the land-tax will be deducted from the scanty wages of the farm-labourers. If such is the case, these landowners will argue, is it not preferable to convert the land-tax at once into a poll-tax, a wage-tax or an income-tax ? The labourers would then at least save the interest and profit that the landlord adds to the taxes.

In order to examine this problem more closely it is indispensable to answer a question raised by Ernst Frankfurth in his illuminating little book on unearned income, namely: What becomes of the proceeds of the land-tax ? For it surely cannot be immaterial for the fate of the land-tax whether the State employs the revenue from it to construct new roads through the landlord's estate, and to reduce the education rate for the children of his tenants, or, say, to pay an

import premium on foreign grain. If we do not know this we cannot determine who, ultimately, pays the land-tax. So says Ernst Frankfurth.

There are landowners who do not wait for the State to tax them and with the proceeds to build the roads necessary for exploitation of their estates. They construct the roads themselves. The costs form a capital investment, like clearing, draining, and so forth. The landowners expect advantages from the roads which will balance the interest on the capital to be invested. If, nevertheless, it is, as a rule, the State that constructs the roads, while taxing the landlords for the expenditure, this is simply because the roads usually cross the land of many owners with conflicting interests and therefore necessitate powers of expropriation which are exclusively the domain of the State. But even if the State builds the roads, the land-tax levied for the purpose is a capital investment, the interest on which the landlord expects to recover to the last farthing. And this is the real nature of almost every tax. If the State levies a tax to protect the frontier from the inroads of barbarians, the landlord saves the amount of this tax from the insurance which would otherwise be necessary against the invasion of Cossacks and Yankees (Russian and American wheat !).

So if the State employs the revenue from the land-taxes for the benefit of the landlords, these taxes must be looked upon as capital investments. They are the remuneration of the State for services rendered. The landowner may enter these taxes where he enters the wages of his labourers. If he leases the land to tenants he will add the tax to the farm rent, recovering it if the State works cheaply and well, and even making a profit if the State displays the shrewdness of a clever contractor.

But what if the State taxes the landowners in order to relieve the tenant or the labourers, say from the education-rate ? Is it still possible for the landlord to consider the land-tax as a profitable investment ? Let us suppose that such is not the case, that the landlord cannot charge the tenant with the amount of the education-rate saved by the latter nor reduce the wages of the labourers. Tenant and labourers would then have their labour-proceeds increased by the amount of the education-rate remitted. But why should the landlord raise the labour-proceeds of the tenants and

labourers? Because he is himself taxed? That is no reason since the labour-proceeds of the tenant and labourer are determined by the labour-proceeds on freeland of the first, second and third classes. If the revenue from the land-tax is employed to benefit the freeland-farmer of the third class likewise, say also in the shape of a reduction of the education-rate, then, indeed, the equilibrium between the labour-proceeds of the wage-earners and tenants and those of the freeland-farmers is not disturbed, and it is impossible for the landowner to transfer the burden of the land-tax to his tenants and labourers. Otherwise he says to the tenant: "To the other advantages which my farm offers you, free education for your children is added. Rich loamy soil, a healthy climate, a fine view of the lake, a situation close to the market, free schools—sum total —you have got to pay me $10 an acre." And to his farm labourer the landowner says: "If you do not consent to a reduction of wages you may go. Calculate whether with the wages I offer you, together with free schools for your children, and other social institutions, you are not as well off as if you decide to cultivate freeland of the first, second or third class. Think it over before you go."

It is clear that the whole burden of the land-tax is transferable as long as its yield does not benefit freeland farmers, more particularly those of the third class. If, on the other hand, the revenue of the land-tax is made to benefit, in some form or other, intensive cultivation, the increase of the labour-proceeds of freeland-farmers of the third class is passed on to the farm labourers engaged in extensive cultivation, and the land-tax, in this case, far from being transferable, hits farm rents doubly, first by the full amount of the tax and secondly in the form of higher wages demanded by the farm-labourers.

This shows how right Frankfurth was to enquire first about what is done with the yield of the tax, and how futile it is to attempt to answer the question as to whether the burden of the land-tax can be shifted or not, without first establishing the necessary premises. It also leads us to suspect how often the measures proposed by social reformers must fail, or have the opposite to the desired effect. And it shows us how greatly the distribution of the labour-product is influenced by the power of the State.

12. PROTECTIVE-DUTIES, RENT AND WAGES

By the above reasoning we see that a land-tax levied for the benefit of freeland-farmers, say in the form of a premium on imported wheat, would hit rent doubly, first by the amount of the tax, and secondly by the increased wages of farm labourers. Many readers will now be inclined to suppose that a protective-duty, being the opposite to an import premium, must raise rents in a two-fold manner, in the first place directly, by the amount of the special rise, corresponding to the duty, of prices of farm produce, and in the second place through depression of wages resulting from reduction of the labour-proceeds of freeland-farmers of the first and second classes.

Let us see if that is true.

To begin with, let it be understood that a protective tariff differs fundamentally from other revenue duties and taxes in that the interest of the landowners in the tariff is much greater than that of the State which levies the duty. For every 100 millions which the State raises out of the import of wheat, the landowners will levy 1000 millions * from the consumers of bread in the form of higher prices. That is why the thing is called a protective-duty: it is designed to protect and augment the rents of the landowners, and to give better security to their mortgages. When import-duties are purely fiscal, as in the case of tobacco, the tax is imposed not only on the imported goods but also on those produced in the country. Anyone having more than one tobacco plant in his garden in Germany must inform the revenue authorities, and in Spain the culture of tobacco is, or was, prohibited for fiscal reasons. But if the import-duty on wheat is of secondary importance as revenue, Frankfurth's query as to the use made of the tax is likewise of secondary importance for what we have set out to demonstrate. We shall therefore leave out of account the wheat duties themselves, and concentrate our attention on the farm rents placed under their protection.

There is nothing arbitrary in the distribution of the product between landowner and farm worker; everything proceeds according to inherent laws. Any artificial interference with this distribu-

* The exact amount for any country can be calculated from the ratio of imports to home production.

tion must be in accordance with these laws, not in opposition to them, otherwise it will come to nothing. But even if the attempted interference does come to nothing, some time is usually required for the disturbed equilibrium to be restored, and meanwhile the play of forces may resemble the swing of a pendulum that has been set in motion by a push: distribution will oscillate for some time between rent and wages until the former state of matters is re-established.

So if protective-duties for the purpose of raising rents at the expense of wages are in conflict with the economic laws governing the distribution of the product between rent and wages, they must either fail entirely or succeed only temporarily, that is, until the equilibrium of forces disturbed by legislative interference has been restored.

It is not our purpose to investigate these matters further than to obtain a general picture of the economic processes resulting from import-duties. If we wished to arrive at conclusions applicable in all possible circumstances to individual cases, such as, for example the question as to how much an import-duty of 33% on wheat would raise the price of a certain estate, we should be obliged to carry the investigation far beyond the scope of this book.

Our first concern with regard to import-duties is their influence on the proceeds of labour of freeland-farmers of the first and second classes, on which farm wages on the tariff-protected land depend. Of the proceeds of labour of the freeland-farmers of the third class, whose product of labour is also protected by the tariff, we shall speak afterwards.

Freeland-farmers of the first and second class rightly consider import-duties as a burden, like any other charge which renders the conversion of the product of their labour into proceeds of labour more expensive. Whether this increased expense results from higher freights, from higher prices of sacks, from piracy, from fraud, or from import-duties, makes no difference to them. What the consumer pays for the product of his labour (wheat) the freeland-farmer considers as the yield of his labour, and this yield is diminished by import-duties and freight. The proceeds of his labour are therefore correspondingly smaller. If the loss caused by freight

hitherto amounted to 30% of the price of his product, this loss may be increased to 50 – 60% by the tariff.

The freight from the Argentine seaports to Hamburg is usually about $4 a ton. To this is added the cost of railway transport from the farm to the harbour, which is more than twice as much; in all, therefore, about $13. The duty in Germany is $14 a ton. The total is thus $27 in a price of about $60.

The immediate effect of the duties is, therefore, to reduce the proceeds of labour of the freeland-farmers of the first and second classes, and as these labour proceeds determine the wages of the workers on tariff-protected land, there is here, too, a reduction of wages, though at first perhaps only in the form of increased prices for foodstuffs, in connection with stationary money wages. The duty, then, allows the landowner to demand higher prices for his agricultural produce without having to pay out this surplus in the form of higher wages to his labourers, or in higher prices for industrial products for his own consumption. For a rise of industrial wages—which would mean a shifting of the burden of the import-duties from industrial workers—is impossible, since these wages are, as we have seen, also determined by the labour-proceeds of freeland-farmers of the first and second classes. Industrial workers are consequently no more able to shift the burden of the import duties than are farm-labourers and freeland-farmers of the first and second classes. So until the reactions to be described later begin to make themselves felt, the whole amount of the import-duty is a free gift to the landowner. And by import-duty we mean not only the sums received by the public treasury, but also the sums levied on the consumer in the form of higher prices paid for native products in the home markets in consequence of the tariff barrier. This means that every loaf of bread, every egg, every ham, every potato pays a tribute which goes into the pockets of the landlords. (If the land is let, the duty is immediately transferred to the rent; if it is sold, the duty is capitalised, that is, multiplied by 20 or 25, and added to the usual price.)

The duty, say the politicians, is paid by the foreigner. And that is perfectly true. For the relatively unimportant sum collected as State revenue at the frontier is, no doubt, paid by the freeland-

farmer settled abroad, from the proceeds of his labour. But can anyone seriously attempt to make wheat-duties palatable to the German workman by telling him that it is the freeland-farmer who pays the amount collected by the State at the frontier? This is cold comfort for the German worker whose wages are determined by the proceeds of labour of the freeland-farmer—cold comfort for the man who must pay out of his own pocket the higher price of food, increased by German landowners by the full amount of the tariff!

The belief, the hope, the bold assertion, that capital-interest will bear part of the wheat-duties is, as we shall show presently, erroneous. Interest, especially in the case of new capital seeking investment, cannot be taxed. It is free and independent of tariffs.

The import-duty will, however, produce certain counter-effects that will slowly but surely make themselves felt, somewhat as follows: The freeland-farmer in Manitoba, Manchuria, or Argentina writes to his friend in Berlin: "I lose in freight and import-duties more than half of what you pay for my wheat in Berlin, and you also lose in freight and import-duties half or more of what I pay here for your goods (tools, books, medicines and so forth). If we were neighbours we should save these costs and both you and I would find the proceeds of our labour doubled. I cannot convey my fields to where you are, but you can transfer your workshop, your factory here. Come, then, and I will supply you with whatever food you may require at half the price you have now to pay, while you will supply me with your products at half the price I have to pay at present."

This calculation is correct, though the obstacles to the execution of the proposal are many. Industry can, as a rule, prosper only in centres where there are many other industries, since almost all branches of industry are to some extent inter-dependent. The emigration of industries must therefore proceed gradually; it begins with the trades that are naturally most independent: brickyards, saw-mills, flour-mills, printing houses, furniture and glass factories, etc., and at first, of course, it affects only commodities upon which freight-charges and import-duties are especially high. Nevertheless, the emigration of individual industries depends on a calculation, and it is import-duty which, added to freight-charges, very frequently calls for a decision in favour of emigration. The higher

the duty on wheat, the more often will it pay to pack up tools and re-establish the workshop in the vicinity of the freeland-farmer. And with every new industry established in the neighbourhood of the freeland-farmer the proceeds of his labour increase, and this increase reacts, as we know, on wages in the protected country.

The advantages of the tariff to the landowner are therefore sooner or later absorbed in rising wages. Landowners who realise this will act accordingly: they will sell their land before the counter-effects make themselves felt, and leave their successors to go clamouring to Parliament for relief, when the inevitable reaction involves "agriculture" in difficulties.* (The reduction of rent in consequence of the rise of wages is inevitable, although it may not always be expressed in figures. For it may happen that the development here described may synchronise with one of those frequently occurring currency inflations caused by gold discoveries or over-issues of paper-money. Currency inflation such as occurred in the period of 1890 to 1914 restores to the landowner what he loses in rent. But this applies only to mortgaged landed property, and the landowner has also to reckon with the reverse possibility, namely a gradual fall of prices, as in the years 1873-1890.)

But the reactions set up by a protective tariff are not confined to the behaviour of freeland-farmers of the first and second classes. We must also find out what happens to the freeland-farmer of the third class. The effect on him is the exact reverse of the effect on freeland-farmers of the first and second classes, who pay the duty out of their pockets, whereas he is under the protection of the tariff as regards the products he brings to market after satisfying his own personal needs. So he participates in the blessings of the protective tariff, that is, in the looting of consumers. Instead of six marks he now gets 8 marks for a rabbit, and he sells his honey for 1.35 marks instead of 1.10 marks: in short, he obtains higher prices for everything he sells, without having to pay higher prices for what he has to buy. That is to say, the labour-proceeds of the freeland-farmer of the third class increase, whereas the wage workers complain of

* "Die Not der Landwirtschaft": "The plight of agriculture" was the political slogan of the Prussian protectionists. Here "agriculture" was a euphemism for rent. It would not be difficult to find an English or American parallel.

a decrease in the proceeds of their labour. Thus the labour-proceeds of the freeland-farmer of the third class increase in a twofold manner, absolutely on account of the rise of prices, and relatively in comparison with the decrease of wages. Nevertheless the labour proceeds of the freeland-farmer of the third class determine the general rate of wages. Evidently, therefore, the disproportion cannot long continue. Word goes round that a rabbit can be sold for eight marks, honey for 1.35 marks, potatoes for 5 marks, and goat's milk for 20 pfennigs, so the wage-earners are up in arms with demands for increased wages. Pointing to the increased labour-proceeds of the freeland-farmer of the third class they, too, claim higher wages, threatening to move to the heath, to the marsh, to the waste, if their demands are not granted.

Hence the wage-increase proceeds from freeland of the third class, as well as from freeland of the first and second classes, and it continues until it has completely compensated the effect of the wheat duties.

It must be remembered, further, that the special rise of prices of all farm produce, brought about by the import-duties, and the consequent increase of rents, must call for new efforts in the direction of intensive cultivation, and that if the duty raises the labour-proceeds of intensive farmers, wages, and through them rent, must be still further affected.

The effect of the tariff is to raise the gross proceeds of intensive farmers and, as the tariff does not at first affect the prices of industrial products, to increase also the net proceeds of their labour.

But if the labour-proceeds of intensive farmers increase, wages must also rise, for the labour-proceeds of intensive farmers determine wages in general.

The general conclusion of our examination is consequently that a protective tariff, through its influence on the proceeds of labour of the freeland-farmer, is bound sooner or later to counteract itself; so that the protection obtained can never be other than temporary.

For those who have to pay the tariff charges "temporarily," it may be a consolation, and for those who enjoy the advantages of the tariff it may be disquieting, to become aware of their transitory nature. But it is a very serious matter if the transitory rise of the

rent is accepted as permanent by the farmer when buying land or dividing an inheritance. For what does the farmer know of theories of rent and wages? He is guided simply by experience. He sees the harvest, he knows the prices of farm produce and the wages paid to farm-labourers — his calculation is finished and the bargain struck. The customary sum is paid in ready money, and the rest is covered by a mortgage. But this mortgage is not a temporary matter: it is sure to outlast the transient effect of the tariff upon wages, and it does not decrease when the labourers, regardless of the stationary selling prices of farm produce approach the farmer with demands for increased wages. The farmer then begins to complain, once more, about "the plight of agriculture."

13. THE ENTIRE WAGE-SCALE UP TO THE HIGHEST SALARIES IS BASED ON THE LABOUR-PROCEEDS OF CULTIVATORS OF FREELAND

If the landowner is able to squeeze $1000 rent out of his land, he will not be satisfied with less than this amount if he chooses to hire labourers and to farm the land himself. If the land, after deducting the cost of wages, did not yield at least $1000, the landowner would dismiss the labourers and let it for $1000.

In no circumstances, therefore, will a day-labourer earn higher proceeds of labour than the tenant or the settler on unclaimed land; for otherwise the tenant (or settler) would prefer to work as a day-labourer.

On the other hand the day-labourer will not consent to work for a wage which is less than what he might earn as a tenant or settler, for otherwise he would rent a piece of land or emigrate. It is true that he often lacks the money necessary to run a farm or to emigrate; but whether he has the money or is forced to borrow it, he must charge interest on it in his calculation, and deduct this interest from the product of his labour. For it is only what is left to the settler after paying the interest on his capital that belongs to him as a worker.

If the gross proceeds of the labour of the settler on freeland are $250 and the interest on his working capital is $50 then the net proceeds of his labour are $200 and the general rate of wages must oscillate about this point. The wages of the day-labourer cannot

rise higher, for otherwise settlers would turn day-labourers; and they cannot sink lower, for otherwise day-labourers would turn settlers.

The wages of industrial labourers are also, obviously, dominated by this general rate of wages. For if the proceeds of labour in industry were larger than the proceeds of labour on unclaimed land, agricultural labourers would turn to industry, with the result that agricultural produce would become scarce and rise in price, whereas industrial products, being super-abundant, would fall in price. The rise of prices in agriculture and the fall of prices in industry would bring about a re-arrangement of the wage scale, until wages had again been equitably adjusted. And this re-adjustment would certainly be rapid, considering the great number of migrating labourers who are indifferent whether they grow sugar-beet or shovel coal.

Thus it is incontestable that if the proceeds of labour on freeland determine the labour proceeds of the agricultural labourer they also determine labour proceeds in general.

Wages cannot rise above the proceeds of labour on freeland, since freeland is the only support of the farm-labourer in his wage-negotiations, or of the tenant in his rent-negotiations, with the landowner. If the farm-labourer or tenant is deprived of this support (say by suppression of his freedom of movement) he is at the mercy of the landowner. But since freeland is the only support, it is also true that no other circumstances can depress wages below these proceeds.

The proceeds of labour on freeland are, therefore, at once the maximum and the minimum of wages in general.

The existing great differences in the individual proceeds of labour are by no means inconsistent with this general rule. When the division of the product of labour between landowners and workers has once been determined, the share that falls to the workers is distributed automatically on a perfectly natural basis. The varying remuneration is not arbitrary, but is adjusted entirely by the laws of competition, of supply and demand. The more difficult or disagreeable the work, the higher is the wage. For how is a man to be induced to choose the more difficult or disagreeable of two tasks? Only by the prospect of higher labour-proceeds (which may, of course, consist of advantages and privileges other than money). Thus if the workers need a teacher, a pastor or a forester, their only course is to open their purses and grant salaries for these offices which may greatly exceed their own proceeds of labour. Only in this way can they induce someone to undertake the expense of having his sons educated for these professions. If the supply of teachers and pastors is still insufficient, the salaries must again be raised. If the workers have overshot the mark so that the supply exceeds the demand, salaries will be reduced. And it is the same with all trades requiring special training. The opposite happens when the workers need a shepherd, a goose-girl or a boy to scare crows. If they were to offer for such leisurely pursuits their own full proceeds of labour gained by hard work, every townsman, teacher, pastor and farmer would apply for these posts. So a minimum wage is offered for the herding of the geese, and this minimum is increased until someone is willing to accept the job. The workers also need a merchant to buy their products and to sell them whatever goods they want. This worker (merchant) must also be granted a wage, in the shape of commercial profit, sufficient to induce someone to devote himself to this harassing profession.

Thus the basis for the adjustment of all wages is always the proceeds of labour on freeland. Upon this basis is built the whole structure of fine gradations in the proceeds of labour up to the highest-paid occupations. Every change in the basis is therefore transmitted to the whole superstructure, just as an earthquake makes itself felt up to the weather-cock on the steeple.

Our proof that the doctrine of the "iron wage" is unsound is not yet, indeed, complete, for the "iron wage," though not caused by private ownership of land, might still be caused by capital. That capital does not possess this power is obvious, however, from the frequent fluctuations of wages (a really "iron" wage could not fluctuate). Why capital does not possess this power we shall demonstrate later (see Part V, The Free-Money Theory of Interest). If capital had power to reduce the proceeds of labour on freeland to a minimum corresponding to the "iron wage," the yield of capital, as expressed in the rate of interest, would necessarily share the fluctuations to which the product of labour on freeland is obviously subject. But this is not the case, for, as we shall show later, pure

interest, which is here in question, is a remarkably stable quantity, so remarkably stable, indeed, that we are fully justified in speaking of an "iron" return on capital. So if besides this fixed quantity of interest, wages were also a fixed quantity, where—if rent moves on independent lines—would be the reservoir to collect the fluctuations of the product of labour?

14. INFLUENCE OF CAPITAL-INTEREST ON RENT AND WAGES

In making up his accounts, the settler on freeland must enter a charge for interest on his working capital. Interest must be separated from the proceeds of his labour, no matter whether the capital is his own or borrowed. For interest has nothing in common with labour; it is governed by entirely different laws.

And the working landowner must also make this separation of capital-interest from the proceeds of his labour.

If both settlers on freeland and farmers on rented land have to pay the same rate of interest for the necessary capital, it might be imagined that the rate of interest had no effect on rent. But that is an error. With labour and means of production any amount of new land can be created, often in close proximity to cities. And the lower the rate of interest, the easier it is to reclaim waste tracts. The employer demands from the reclaimed land only an amount of interest equal to the rent of a field bought for the same capital outlay. With freeland of the first and second classes freight sometimes swallows up the larger part of the product of labour, but with reclaimed freeland it is capital-interest that absorbs the expected rent. Whatever the nature of the proposed reclamation, whether it is the drainage of the Zuider Zee, recently decided upon, or the cultivation of moorland, or the clearing of virgin forests, or the irrigation of deserts, or the blasting and removal of rocks, the first question is always the amount of interest on the capital required, which is then compared with the rent demanded for land of the same quality. If the rate of interest is high, the comparison will be discouraging, and the moor will be left uncultivated. If, on the other hand, the rate of interest is low, the undertaking will promise success. If the rate of interest fell from 4 to 1%, for example, many

land improvements which cannot be undertaken to-day would become profitable.

With interest at 1% it would pay to turn the water of the Nile into the Arabian desert, to dam off the Baltic and pump it dry, to put the Luneburg Heath under glass for the culture of cocoa and pepper. With interest at 1% the farmer could also plant orchards where to-day he cannot do so because of the interest he would have to pay for 5 or 10 years on the capital invested while waiting for the future harvests. In a word, at 1% it would be possible and profitable to bring all deserts, swamps and moors into cultivation.*

A fall of the rate of interest would not only enlarge the area under cultivation, it would also enable men to extract double or treble the amount of produce from the present area through extended use of machinery, construction of roads, replacing of hedges by fences, construction of pumping stations for irrigation, drainage of the soil, planting of orchards, provision of appliances to protect the fields from frost and a thousand similar improvements. This, again, would necessitate a reduction of the cultivated area, and make freeland, the great menace to rent, more accessible.

A reduction of the rate of interest would, further, allow transport-facilities for wheat from abroad, (seaports, canals, ocean steamers, railways, silos) to be run more cheaply, which would lower the freight charges on the produce of freeland. And every dollar saved here means a dollar less for rent. Now the interest on the money invested in means of transport constitutes a very considerable part of freight charges. For the European railways in 1888, with an average rate of interest of 3·8%, the ratio between working costs (upkeep of the permanent way, salaries and wages, coal, etc.) and interest was 135:115. Interest, therefore, very nearly equalled the running costs, so that a reduction of the rate of interest from 4 to 3% would have allowed a reduction of the freight charges of nearly one eighth.

Running costs	= 4,	interest on capital	= 4,	freight charges	= 8
,,	,,	= 4,	,,	,,	,,	= 3,	,,	,,	= 7
,,	,,	= 4,	,,	,,	,,	= 2,	,,	,,	= 6
,,	,,	= 4,	,,	,,	,,	= 1,	,,	,,	= 5
,,	,,	= 4,	,,	,,	,,	= 0,	,,	,,	= 4

*All the above proposals are not, of course, to be taken literally.

That is to say, with interest at 0% railway freights might be reduced by one half. With ocean freights the ratio of running costs to interest is not the same, although here, too, interest plays an important part: ships, working capital, harbours, canals (Panama, Suez), coaling stations, equipment of coal mines etc. — all this demands the regular rate of interest, and this interest is a component of freights, a charge on the labour-proceeds of freeland-settlers of the first and second classes, which are of such decisive importance for wages and rent.

Thus the reduction or elimination of interest would reduce freights by one half, and in this manner freeland would, economically speaking, be brought 50% nearer; the competition of foreign wheat becoming correspondingly keener.

But what would happen to rent if the arable area close at hand were multiplied in this manner beyond the need for it ? What would happen to rent if freeland, which determines wages, could be increased at pleasure, and that too, close at hand, so that the difference between the product of labour of the freeland-farmer and the proceeds of his labour became less and less ? Why emigrate to far-off Canada, to Manitoba, and from there ship wheat burdened with freight costs, to Holland, if we are able to grow the wheat on the soil of our own Zuider Zee? If the rate of interest falls to 3, 2, 1 or 0%, every country will be able to provide bread for its population. The limit to intensive cultivation is set by interest. The lower the rate of interest, the more intensive is the cultivation of the soil.

We can here observe the close alliance that exists between interest and rent. So long as there are wastes, marshes and deserts to reclaim, so long as land can be technically improved, a high rate of interest, the ideal of the capitalist, is at the same time the bulwark of the landowner. If the rate of interest fell to zero, rent would not, indeed, disappear completely, but it would be dealt a staggering blow.*

* The effect of a fall of interest on the rent of building land is complex. Interest on the building capital is a far larger component of house-rent than is the ground-rent (in the country and in small towns the ground-rent is often less than 5% of the rent of a house, whereas interest on the building capital in such cases forms 90% of the total rent). A fall of interest to 1% or 0% would therefore mean a great reduction of house-rent, and this of course would react on the amount of accommodation claimed by the individual families. The masses which to-day, because of high house-rents resulting from interest, must content themselves with very inadequate housing accommodation, would demand, and be able to pay for, roomier dwellings. But roomier dwellings mean larger building sites and therefore increased ground-rents. On the other hand a fall in the rate of interest would reduce railway and tram fares, and the consequent shifting of the population to the suburbs would tend to counteract the rise of ground-rents in the city.

15. SUMMARY OF RESULTS ATTAINED SO FAR

1. The wage of the average worker is equal to the proceeds of labour of the average cultivator of freeland and is entirely determined by these proceeds. Every modification in the proceeds of labour of the cultivator of freeland is transmitted to wages, no matter whether such modifications are brought about by technical improvements, by scientific discoveries, or by legislation.

2. The so-called " iron law " of wages is therefore an illusion. For the individual, the wage oscillates about the amount mentioned under 1. It may rise above this amount in the case of specially efficient work, but it may also fall short of it, just as it may even fall short of the minimum standard of existence.

3. The whole wage-scale for skilled work up to the highest levels is based on the labour-proceeds of the cultivator of freeland.

4. Rent on land is what remains of the produce of the land after deducting wages (and capital interest). As the amount of this deduction (wage) is determined by the proceeds of labour on freeland, rent is also determined by the proceeds of labour of the freeland-farmer.

5. Interest is the close ally of rent.

6. It cannot be asserted without qualification that technical progress always benefits rent. The contrary is often true. Progress and poverty are not necessarily coupled. Progress and growing general prosperity as often go hand in hand.

7. Nor can it be definitely stated whether the burden of a tax on land can, or cannot be shifted. The question can be definitely answered only when the destination of the revenue from the land-tax is indicated. The land-tax may hit rent twice (first, through the tax itself, secondly, through the increase of wages) or it may benefit rent by more than its amount.

8. If the yield of the tax on rent is employed for the benefit of the cultivators of freeland, for instance as a premium on imported

grain or as a subsidy for the cultivation of waste land, the State, if it wishes, can confiscate rent completely. The burden of a tax on rent, when the yield of the tax is so employed, cannot be shifted.

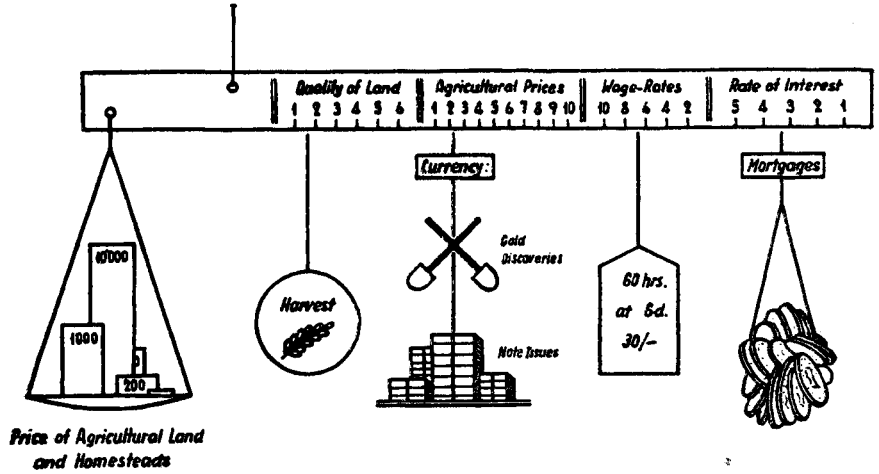

Figure 1. The price of Agricultural Land.

The price of land increases:

With *increase of* quality and agricultural prices.
With *decrease* of wage-rates and rate of interest.

16. RENT OF RAW MATERIALS AND BUILDING SITES, AND ITS RELATION TO THE GENERAL LAW OF WAGES

Whether wheat comes from Canada, from Argentina, from Siberia, or from a neighbouring farm, whether it be the duty-burdened wheat of a toiling German emigrant or duty-protected wheat of a wealthy Pommeranian squire, does not concern the miller. If the quality is the same, so also is the price.

This is true of all commodities. Nobody inquires about the cost of production of the goods offered for sale; everybody is indifferent about their origin. It makes no difference whether one man has been enriched by them and another ruined; if the quality is the same, so is the price. This is clearly seen in the case of coins. Nobody inquires where, when, or how the gold of the individual coins was obtained. One coin may have been bloodstained plunder, another

the product of a toil-worn gold digger, but they circulate indifferently side by side.

Whatever the difference in the costs of production of the individual competing commodities—the price remains the same. This is known to everyone who uses raw materials, and it is known also to the owner of the land on which the raw materials can be raised. If, for example, a city needs paving stones for a new street, the proprietor of the nearest quarry will at once estimate the distance from the street to the nearest free quarry of equally good paving stones. He will then calculate the cost of carrying the stones from there to the street where they are needed, and the price is made. This price the city will have to pay, because only from this price upwards can competition come into play, and competition determines price. (The wages in both quarries are assumed to be the same, and may therefore be here left out of account).

If, however, direct competition is entirely lacking, if there is no free quarry within reachable distance, and the proprietor in consequence demands excessive prices for his paving stones, competition will be sustained by substitutes, in this case, say, wood-pavement, macadam, gravel, asphalt, or a railway; or the construction of the street may be abandoned. In the latter case the advantage expected by the city from the construction of the street would be the only competition which the proprietor of the quarry need take into account.

The same is true of all other raw materials without exception. If someone requires lime for a cement factory, clay for a brickyard, bark for a tannery, coal, iron ore, wood, water, building stones, sand, oil, mineral water, wind for his windmill, sun for his sanatorium, shade for his summer-house, warmth for his grapes, frost for his skating rink, the landowner who happens to be in possession of these gifts of nature will exact payment for them, just as does the quarry-owner for his paving stones, and always on exactly the same principle. The circumstances may be different in each separate case; competition of substitutes may limit the greed of the landowner to a greater or less degree; but always the same law holds good: the landowner exploits the advantages which the products, the situation or the nature of his property offer, in such a manner as to leave the purchaser for his labour only what he would have

obtained if he had been forced to procure his raw material from waste land, from the desert, or from freeland.

From these considerations we deduce a proposition which is of great importance for the general law of wages:

The product of the poorest, remotest and therefore often ownerless sources of raw materials, loaded with freight charges and with the wages paid to work the more favoured sources of similar materials, forms the basis of the price of these materials. Whatever the owners of the favoured sources save in the cost of production, is rent.

The consumer has to pay for all the products of the earth, for all raw materials, as if they had been produced on waste land at great expense, or conveyed at great expense from ownerless land.

If the product of a man's work on the poorest soil were equal to the minimum of what man needs to subsist, the private ownership of land would make the "iron law of wages" a reality; but as we have seen, such is not the case. For this reason, but only for this reason, can wages rise above the minimum of existence.

The ground-rent of cities, which in our industrial age very nearly equals the total rent on agricultural land, is determined on exactly the same principle, though in somewhat different circumstances.

The value of the land upon which Berlin is built was estimated in 1901 at 2911 million marks which, with interest at 4% corresponds to a rent of 116 millions. This sum alone, distributed over the 4 million hectares of the province of Brandenburg, is equal to a rent of 30 marks a hectare. With the ground-rent of the other towns of the province added, the urban rent may amount to about 40 marks a hectare, a sum which, considering the poverty of the soil and the large areas of water, swamp and forest, possibly exceeds the rent on agricultural land. The position of the province of Brandenburg, a region with poor soil yet containing the capital of the German Empire is, indeed, exceptional; nevertheless these figures show the great importance of urban ground-rent at the present day.

These figures are likely to surprise many readers; but, as someone has justly remarked: it is becoming doubtful whether, measured by the rental, our great landed estates are not to be looked for in Berlin rather than, as hitherto, in Silesia.

How is this curious phenomenon to be accounted for; what determines the rent of building land, and what is its relation to the general law of wages?

In the first place we must explain why men congregate in cities in spite of the high ground-rent; why do they not spread all over the country? Calculated by the above figures the average ground-rent for every inhabitant of Berlin is 58 marks, that is, for families of 5 persons 290 marks yearly; an expense which is entirely avoided in the country, for the ground-rent of the average country cottage is so trifling that it could be paid with the contents of its earth-closet. And the hygienic advantages of life in the country contrast strikingly with the miserable housing conditions in towns. There must, therefore, be other weighty reasons to make people prefer the town.

If we assume that the social advantages of the town are cancelled by its disadvantages (bad air, dust, noise and numerous other offences to our senses), all that is left to balance the expense of urban life is the economic advantage of living in a town. The interdependence and co-operation of the city industries must afford advantages over isolated industry in the country which in the case of Berlin counterbalance the 116 millions of ground-rent. If it were not so, the growth of cities would be quite unaccountable.

No industry can be established in the country which, from its seasonal character, occupies many workers to-day, and few or none to-morrow; for the worker must work all the year round. In the city the varying demand for labour in the different industries is more or less levelled, so that workmen dismissed by one manufacturer are engaged by another. In this way a workman has greater security against unemployment in a town than in the country.

In the country the manufacturer lacks opportunity for the exchange of ideas, the stimulus given by intercourse with other businessmen. Workmen trained in different factories and acquainted with various methods are also a considerable asset to the city manufacturer as compared with his competitor in the country. Thrown entirely on his own resources, and compelled to employ workmen deprived of intercourse with workmen from other industries and other countries, the country manufacturer is apt to lag behind in the adoption of improvements. He also often lacks

the facilities afforded by the city for the sale of his products. Purchasers from all parts of the country and from other countries flock to the city where they find everything they need, collected in one place. The city manufacturer is visited by foreign customers who draw attention to the consumers' wishes, and moreover give him valuable information about market conditions, prices, and so forth. The country manufacturer is deprived of all this. Instead of being visited by his customers he must sacrifice time and money in travelling to visit them. He must collect his information about prices of raw materials, market conditions abroad and the solvency of his customers in round-about ways that are often anything but reliable.

Furthermore he is forced to lay in much larger stocks of raw material than his competitor in town who is able to procure everything immediately when needed; and if through some oversight the country manufacturer runs short of some article, perhaps only a screw, the whole factory is brought to a standstill until the missing part has been sent from " town." Or if a machine breaks down, a mechanic may have to be summoned from town, and until he arrives the factory is again idle.

In short, the disadvantages connected with the factory itself, with the workmen, the purchase of raw materials and the sale of finished goods, are so many that the country manufacturer forced to compete with a rival in town cannot possibly pay the same wages as the latter. Thus all that he and his workmen save in ground-rent is deducted from the proceeds of their labour.

Hence the only industries that can develop in the country are those which requuire so much space that all disadvantages are counter-balanced by the saving on ground-rent; or those which cannot be carried on in towns (saw-mills, brickyards, rolling mills) or are forbidden by the police for hygienic reasons (lime-kilns, powder-mills, tanneries, etc.); or those which, having a simple technical organisation, allow the manager to establish his commercial headquarters in town. In every other case the town is preferred.

We know therefore where the money to pay the 116 millions of marks ground-rent of the city of Berlin comes from, and we also know what sets the limit to the growth of cities. The advantages of

combined work have been calculated in money and pocketed as ground-rent by the landlords.

If the city grows, its economic advantages grow, and ground-rents grow also. And if ground-rents grow out of proportion to the advantages of the city, its growth is interrupted.

If you wish to enjoy the advantages afforded by the city for your trade, you must pay the landlords for these advantages; otherwise you are free to establish your factory, shop, or dancing hall in the woods and fields. Calculate what is more advantageous, and act accordingly. Nobody prevents you from settling outside the city gates. If you can induce your customers to tramp out to you through rain and snow, dust and mud, and there to pay the same price as in the centre of the city, so much the better for you. If you think it unlikely, then pay the ground-rent and establish yourself in town. You have indeed another possibility, you can try selling your goods cheaper outside the city. Some customers will be attracted by the cheaper prices; but where is the advantage? What you save on rent, you lose in the price of the goods sold.

Ground-rents are thus determined by precisely the same law that governs the rents of agricultural land and raw materials. All the advantages of the city (among which we should mention the division of labour), are reaped by the ground-landlord. Just as German wheat is sold for the price it would have fetched if it had been grown in Siberia and taxed at the frontier, so the goods produced in a city must be exchanged at the prices they would have fetched if loaded with all the disadvantages of goods produced far away from industrial centres.

Agricultural rent captures all the advantages of situation and nature, leaving waste-land and wildnerness for the cultivator; city ground-rent claims for itself all the advantages of society, of mutual aid, of organisation, of education, and reduces the proceeds of those engaged in city industry and commerce to the level of producers isolated in the country.

17. FIRST GENERAL OUTLINE OF THE LAW OF WAGES

The products that remain after deduction of rent and capital-interest, form the wage-fund to be shared among all workers (day-

labourers, clergymen, merchants, physicians, servants, kings, craftsmen, artists). When everyone is free to choose his trade, the division is made according to the personal capacity of each, by demand and supply. If choice of occupation were completely free (it is not, but might be) everyone would actually obtain the " largest " share in the distribution. For everyone tries to obtain the largest share, and the size of the share is determined by demand and supply or, ultimately, by the choice of occupation.

Thus the relative amount of the wage depends on the choice of occupation, that is, on the individual. The absolute amount of the wage on the contrary, is quite independent of the individual, and is determined by the amount of the wage-fund. The larger the contributions of the individual workers to the wage-fund, the larger will be the share for each. The number of workers is irrelevant; if there are more workers, the absolute size of the wage-fund grows, but the number of those entitled to a share grows likewise.

We now know the amount contributed by the different categories of workers to the wage-fund:

1. The contribution of agricultural workers is equal to the sum of products which an equal number of agricultural workers could grow on freeland—less freight, interest and import-duties, which we have to conceive as being reckoned in produce.

2. The contribution of other producers of raw materials is equal to the sum of products which they could bring to market from the poorest, remotest, and therefore ownerless sources—less interest.

3. The contribution of industrial workers, merchants, physicians, artists, is equal to the sum of products which they could produce without the advantages of mutuality and organisation, and isolated from populous centres—less interest.

If we pool all these products and distribute them according to the present-day wage-scale, everyone gets exactly the products which he can actually procure in the shops and markets with his present wages.

The difference between this amount and the total produce of the aggregate work performed goes to make up rent and capital-interest.

What, then, can the workers (always in the broadest sense of the

term) do to enlarge the wage-fund, to obtain a real all-round increase of wages, which cannot be neutralised by an increase in the cost of living ?

The answer is simple: they must keep closer watch on their wage-fund; they must protect it from parasites. The workers must defend their wage-fund as bees and marmots defend theirs. The whole product of labour, with no deduction for rent and interest, must go into the wage-fund and be distributed to the last crumb among its creators. And this can be achieved by two reforms which we have named " Free-Land " and " Free-Money."

Part 2

FREE-LAND

1. THE MEANING OF THE WORD FREE-LAND

1. Competition among men can be carried on equitably and in accordance with its high purpose only if all special private or public rights over land are abolished.

2. All men without exception have an equal right to the earth—without distinction of race, religion, culture or bodily constitution. So everyone must be allowed to move wherever his heart, his will, his health prompt him to go, and there to enjoy the same right to the land as the natives. No private individual, no State, no society may retain any kind of privileges over the land. For we are all natives of the earth.

3. The idea of Free-Land admits of no qualification. It is absolute. In relation to the earth there are no rights of nations, no prerogatives of sovereignty, no rights of self-determination of States. Sovereignty over the earth rests with men, not with nations. For this reason no nation has the right to erect boundaries and to levy import-duties. Free-Land means that the earth is to be conceived as a globe on which there is no import or export of goods. Hence Free-Land also implies universal free-trade and complete elimination of all tariff boundaries. National boundaries must become simply administrative boundaries, such as, for instance, the boundaries between the separate cantons of Switzerland.

4. From this description of Free-Land it follows that such expressions as " English coal," " German potash," " American oil " and so forth can be understood only in a geographical sense. For everyone, no matter to what race he may belong, has the same right to English coal, German potash and American oil.

5. The land is leased to the cultivators by way of public auction in which every inhabitant of the globe, without exception, can compete.

6. The rent so received goes to the public treasury and is distributed monthly in equal shares to mothers according to the number of their young children. No mother, no matter from where she comes, will be excluded from this distribution.

7. The parcelling of the land is governed entirely by the needs of the cultivators. That is, small lots for small families, large lots for large families. Also large tracts for communistic, anarchistic,

social-democratic colonies, for co-operative societies, or religious communities.

8. Any nation, State, race, language-community, religious body or economic organisation seeking to restrict Free-Land in any way is to be outlawed.

9. The present landowners will receive full compensation, in the form of government securities, for the loss of their rents.

2. FREE-LAND FINANCE

The State purchases all private property in land—agricultural land, forests, building sites, mines, gravel-pits, water-power. And the State pays for what it purchases, it compensates the landowners.

The purchase-price is based on the rent which each piece of land hitherto yielded or would have yielded. The rent thus calculated is then capitalised* at the mortgage rate of interest, and this amount is paid to the landowners in interest-bearing State securities; not one penny more or less.

But how can the State pay the interest on such tremendous sums? The answer is: with the rent of the land, which, of course, now flows into the public treasury. This revenue is equal to the amount of interest to be paid, not one penny more, not one penny less, since the debt is simply the rent of the land capitalised.

Suppose, for example, that the annual rent of the land is one billion dollars.† The compensation paid by the State, at a rate of interest of 4%, then amounts to 25 billion dollars, and the interest on this sum, at the same rate of interest, is also one billion dollars. The sum paid out and the sum received are the same.

The size of these figures need cause no alarm, for the size of the debit is measured by the size of the credit.‡ In itself nothing is either great or small. France though burdened with a national debt

* Capitalisation of rent means calculation of the sum of money which would yield interest equal to the rent.

†Billion: Throughout this book, in accordance with the convenient American (and French) notation, the word "billion" denotes "one thousand millions." The German word is "milliard."

‡At the present moment, indeed (November 1919) there is practically nothing left to redeem. The German debt for reparations, which is equivalent to a first mortgage, will claim the greater part of German rents. Already a large German estate can be bought for the price of a few acres of Swiss land.

of 35 billion francs and as much again for private mortgages is piling up billions upon billions in foreign State securities.* The capacity of the reservoir is great. It would be the same with the debt resulting from nationalisation of the land. The immense debit would be balanced by an immense credit. It would therefore be quite superfluous to calculate these sums in advance. If the amount is 100 billions, good; if it is 500 billions, good again. For the State finances the entry is transitory. These billions troop through the public treasury without leaving a trace. Is a banker alarmed when entrusted with a fortune? Is the President of the Reichsbank alarmed at the sums, however great, that pass through his ink pot? Not at all, he sleeps as soundly as the director of the Bank of Heligoland. Have the debts of the Prussian State become more oppressive since the railways were bought by the State and paid for with State securities?

It may indeed be objected that the State does incur a risk in connection with the nationalisation of the land, in so far as rents are determined by fluctuating economic factors (tariffs, freights, wages, currency-standards), whereas the rate of interest on the debt, like the debt itself, is fixed on paper.

Such a risk exists, and strangely enough its existence is exploited by the landowners as an argument against nationalisation. For how have the landowners protected themselves hitherto against the shrinkage of rent? Have they not always, in such cases, appealed to the State for help, shifting the whole burden of their loss to the State which they are now so anxious to protect from risk? And they omit of course to mention that where there is a risk there is usually also a chance of profit; they are wont to transfer the risk to the State, but to claim the whole of the profit for themselves. With regard to the private ownership of land the State has hitherto always played the part of a loser in a lottery. For the State the blanks—for the landowner the prizes. When rents increase, the beneficiaries never propose to restore to the State what they have received from it in times of need. In former times the landowners were able to help themselves. They aggravated the conditions of slavery or serfdom, and when slavery could no longer be maintained they forced

* Written before the war.

the State to help them by restricting freedom of movement, whereby wages were depressed below their natural level. And when such methods became too dangerous, the State was requested to come to their aid with the bimetallic swindle, that is, to sacrifice the currency-standard, and thus by a shameless inflation of prices, to liberate the indebted landowners from the burden of their debts, at the expense of the rest of the population. (This sentence will be more easily understood later on by readers who are as yet unfamiliar with the problems of currency.) When this attempt failed through the opposition of the other class of receivers of unearned income, namely the bondholders, and nothing more could be gained by force, the landowners changed their tactics and whined for sympathy. To justify their demand for protective-duties on agricultural produce they called attention to the "plight of agriculture." To protect and increase rents the mass of the people were to pay higher prices for bread. Thus it has always been the State, the people, that took upon itself the risk connected with landed property. A risk borne by so broad and powerful a class as the landowners is in practice equivalent to a risk borne by the public treasury. After nationalisation of the land the only change would be that, in return for the risk incurred, the State would have a chance of profit.

Moreover, from the point of view of economic life as a whole there is no risk whatever in the decline of rents; from this standpoint, indeed, even their disappearance would be no loss. The taxpayer, who has at present to deduct from his work not only taxes, but also rent, could easily bear a larger tax if relieved of the burden of rent. The tax-paying capacity of the people is always in inverse ratio to the power of the landlords.*

At first nobody gains or loses by the redemption of the land. The former landowner receives as interest from the State what he used to receive as rent from his landed property, while the State, through its ownership of the land, receives rent equal to the interest on the State securities.

The net gain to the State will begin only with the gradual amortisation of the debt through the currency reform which we shall discuss later.

* Rent on French land fell by 22¼% in the period 1908–1912, as compared with the period of 1879-1881; the price of land falling by 32·6%. In 1879-1881 a hectare cost 1830 francs, in 1908-1912 only 1244 francs.

With this reform the rate of interest (both on money-capital and on real capital) will within a short space of time sink to the lowest point permitted by international market conditions, while the international application of the reform would reduce pure interest to zero.

It will therefore be prudent to grant the holders of the land-nationalisation bonds only as much interest as is necessary to maintain the parity of these securities. For the price of securities bearing a fixed rate of interest must respond to all the fluctuations of the market rate of interest. If, therefore, the price of the State-securities is to remain stable, the rate of interest must be adjustable. It must rise and fall with the market rate of capital-interest, this being the only way in which these State securities can be protected against speculation. And it will certainly be in the public interest to protect a capital of from 50 to 75 billion dollars against the raids of speculators, especially as these securities will in many cases be held by persons without financial experience.

We propose to introduce the money reform simultaneously with the nationalisation of the land. Its effect will be to reduce the market rate of interest, so the rate of interest on the nationalisation securities will also be automatically reduced, from 5 to 4, 3, 2, 1, —and finally 0%.

The finances of land-nationalisation will then present this aspect:

The rents of a country amount annually to, say,	10 billions
With interest at 5%, the State pays the landowners an indemnity of - - - -	200 billions
Or, with interest at 4%, an indemnity of -	250 billions
The interest to be paid on 200 billions at 5% is	10 billions
If the market rate of interest now falls to 4%, the interest on the 200 billions must be reduced to - - - - - - - -	8 billions
Whereas the rents at first remain stationary at	10 billions
Thus the finances of the land-nationalisation show an annual credit balance of - -	2 billions

This balance will be used to cancel part of the debt, and the sum on which interest is to be paid will be reduced by this amount, whereas the rents continue to flow, undiminished, into the public treasury. This annual surplus will increase in proportion to the

decline of the general rate of interest, and will finally, when interest has fallen to 0%, equal the full amount of the rents—which will also, it is true, decline with the fall of interest, though not to the same extent. (See Part I, Chapter 14.)

With such a development, the whole of the great debt arising from nationalisation of the land is completely cancelled in less than 20 years.

It may be mentioned that the present exceptionally high rate of interest on the war loans, which would be adopted as the capitalisation rate, would be particularly favourable for nationalisation of the land, for the higher the rate of interest, the smaller is the capital sum to be paid as indemnity to the landowners. For every $1000 of rent the indemnity to be paid to the landowners is:

at 5% = $20,000 capital
at 4% = $25,000 capital
at 3% = $33,333 capital

Whether it is desirable to shorten still further the period of transition and adjustment granted by the above scheme to the beneficiaries of rent, I shall leave it for others to decide. The means to do so will not be lacking. The effects of the monetary reform proposed in Part IV of this book are far-reaching. The money reform allows economic life to develop freely, giving full scope to modern means of production which, in the hands of modern highly-skilled workers, are capable of greatly increased output, and it also puts an end to economic crises and stoppages of work. The tax-paying capacity of the people will increase enormously. If, therefore, it is desired to make use of these forces for a more rapid cancellation of the State debts, the term indicated above can be greatly reduced.

3. FREE-LAND IN PRACTICE

After the land has been nationalised it will be divided according to requirements of agriculture, housing and industry, and leased by public auction, for terms of 1, 5, 10 years, or for life, to the highest bidders. The leaseholders will be given certain securities for the stability of the economic factors upon which they base their offer, so that they cannot be crushed by their contract. This object could be achieved by the guarantee of minimum prices for agricultural

products, the currency being adapted to these prices; or by reduction of the rent in case of a general rise of wages. In short, as the purpose of the reform is not to harass the farmer, but, on the contrary, to create and maintain a flourishing state of agriculture and a healthy farming class, everything possible will be done to bring the yield of the soil and farm-rent into permanent agreement.

The possibility of nationalising agricultural land has been repeatedly demonstrated by experience. Land nationalisation converts the whole land of the country into leasehold farms held from the State, and leasehold farms, both private and national, already exist in every part of Germany. Through nationalisation we simply make an existing institution universal.

Leasehold tenure has been objected to on the ground that the tenants will be more inclined to impoverish the soil than the present owners who are personally interested in keeping the soil in good condition. The leaseholder, it is said, squeezes everything out of the soil and then moves on.

This is about the only objection that can be made against leasehold tenure; in no other respect is there any difference between tenants and owners, in so far, at least, as the welfare of agriculture is concerned. For both pursue the same object, namely, to obtain the highest yield with the minimum of labour.

That farming methods tending to exhaust the soil are by no means a peculiarity of leaseholders may be seen in America, where some wheat farmers squeeze their soil to the point of complete exhaustion. Wheat farms that have been so exhausted may be had by the hundred for small sums. In Prussia, on the other hand, the State farms are said to be farmed on model lines. And these farms are worked by leaseholders.

But in any case exhaustion of the soil by the tenants can easily be prevented.

1. The tenant can be given a lease of his farm for life.

2. Clauses can be introduced into the contract rendering exhaustion of the soil impossible.

If a leasehold farmer exhausts the soil, the fault invariably lies with the proprietor, who allows the farmer to adopt such methods simply to obtain a higher rent for himself, for a few years. In this

case it is not the tenant but the landowner who is guilty of exhausting the soil. Sometimes the proprietor consents to short-term leases only because he does not wish, through granting a longer lease, to lose the chance of a favourable sale. Under such conditions he will not of course find tenants willing to improve the soil, but the evil in this case is not the system of leasehold tenure, but the system of private ownership of the land.

If the landlord wishes to make exhaustion of the soil impossible he can draw up the contract accordingly. If the farmer is bound by contract to keep enough cattle to consume the fodder grown on the farm, and is forbidden to sell hay or straw or farmyard manure, this clause alone is sufficient to protect the soil.

If, in addition to this, the farmer is given full security that the farm will be his for life if he so desires, with a prior right of tenancy for his widow or children, there is no fear of his exhausting the soil, unless indeed his rent is too high, so that he has no interest in prolonging his contract. In this case, however, the above mentioned clause would suffice to prevent exhaustion of the soil, and a similar clause could be devised to meet other conditions. There are soils unsuitable for cattle-breeding but very suitable, say, for wheat-growing. In such cases the farmer could be bound by contract to return to the fields, in the form of artificial fertilisers, what he abstracts from them through the sale of the wheat.

It may also be mentioned that since the discovery of artificial fertilisers, exhaustion of the soil is no longer such a grave problem as it was when the only method of restoring fertility to exhausted soil was to let it lie fallow. Formerly it took a whole lifetime to restore an exhausted field, now fertility is restored promptly by the use of artificial manure.

The condition of Ireland is pointed to as a warning against careless farming by tenants, but we must here remind our readers of the most important feature of nationalisation of the land, namely that rents will no longer enrich private individuals but flow into the public treasury whence they will be restored to the people in the form of reduced taxes, endowment of motherhood, widows' pensions and so forth. If the rents which the absentee landlords, year in, year out, for 300 years, have abstracted from Ireland to spend

in idleness elsewhere, had been left to the Irish people, the condition of that country would be very different.

Other examples, such as the Russian "Mir" and the German commonages have been mentioned as warnings against leasehold farming. But here again, as in the case of Ireland, the comparison with nationalisation is inadmissible. In the "Mir" a new distribution of the land takes place regularly every few years, when by deaths and births the number of members of the commune has changed; so that no one ever remains in possession of the same piece of land for any length of time. If a member of the Mir improves the soil, he has to share the benefit with the whole Mir, so his personal gain is small. This system inevitably leads to negligent cultivation, to exhaustion of the soil and impoverishment of the whole community. The Mir is neither communism nor individualism; it has the disadvantages of both and the advantages of neither. If the Russian peasants farmed their land jointly after the fashion of the Mennonites, the common interest would teach them to do what the landowner does for the improvement of the soil. And if they reject communism they must accept the consequences and adopt a system of thorough-going individualism.

It is the same with many of the German commons which are generally reputed to be in a wretched condition. The mistake is here the short tenures which encourage rapacious methods of farming. It almost looks as if the village councils were bent on discrediting the common property in order to pave the way for dividing it up; a plan which has been successfully practised in the past. If this suspicion is well founded the poor condition of the common lands should be attributed to the system of private ownership, for it is the hope of converting the commonages into private property that causes their neglect. If the proposal to divide up the commons were made punishable, and the land were declared the inalienable property of the communes, this deplorable state of matters would be quickly remedied.

What the farmer really needs is the assurance that whatever money and labour he expends on improving the soil will benefit him directly and personally, and the rent-contract must be devised to give him this assurance—as it easily can be.

The most important land improvements cannot however be

undertaken without infringing the principle of private ownership of the land. How, for instance, is a private individual to construct a road to his fields across the property of his neighbour who may be his enemy ? How do we construct a railway line or a canal through the property of 1000 private individuals ? Here the principle of division of property and of private ownership of land must always give place to legal expropriation. No private individual can construct dykes as a protection against floods along coasts and rivers. The same is true of the drainage of swampy land, where the plan must ignore boundary lines and be adapted solely to the lie of the land. In Switzerland 75,000 acres of land were drained by turning the Aar into the Lake of Biel, an enterprise which required the co-operation of four cantons. In this case the private proprietors could have done nothing whatever, and cantonal ownership had also to be disregarded. In the correction of the course of the Upper Rhine even the principle of Swiss national ownership was not enough; for the undertaking could be carried through only by an arrangement with Austria. How is the private owner on the Nile to get his water for irrigation ? Is the principle of private ownership to be extended to afforestation, on which the climate, the condition of the water courses, navigation, and the health of the whole people depend ? Even the food supply of the population cannot safely be left to the private proprietor. In Scotland, for instance, a few landlords, protected by the laws of private property, depopulated a whole area, burning down the villages with their churches, simply to turn it into a game preserve. The same thing is done by the great landed proprietors in Germany who, under pretext of anxiety about the food-supply of the people, demand protective duties which increase the price of the people's bread. The principle of private ownership of land is incompatible with the interest of hunting and fishing, or the protection of wild birds. And the incapability of private property to fight pests, such as cockchafers and locusts, has been seen in Argentina, where each proprietor confined his efforts to driving the locusts off his fields into those of his neighbour—with the result that these insects multiplied and for three years in succession completely destroyed the wheat crop. Only when the State disregarded private property and had the locusts destroyed wherever they were found, did they disappear. It is much the same

in Germany with regard to the fighting of pests. What for instance can the individual vineyard proprietor do against phylloxera ?

Private ownership fails wherever the motive of selfishness of the individual fails, and that usually happens when there is a question of the improvement or protection of the land. If we were to believe the German agrarian party, the principle of private property in land would have to be completely abandoned, since " the plight of agriculture " (meaning the plight of the receivers of rent) of which they complain, can only, according to them, be removed by the forcible interference of the State, acting through protective-duties. So the private owner, according to the landowners, can do nothing for the plight of agriculture.

Private ownership, through the right of succession, necessarily leads to the division of land or to mortgaging. Exceptions are rare, being limited to the case of an only child.

The division of land leads to those dwarf farms which produce general poverty, and mortgaging makes the landowners so dependent on currency policy, interest, wages, freight-rates and protective-duties that in practice scarcely anything remains of private property in land. What we have to-day is not private ownership of land, but the politics of private ownership of land.

Let us suppose, for example, that agricultural prices fall heavily in consequence of one of the frequent blunders in currency policy, such as the introduction of the gold standard. How is the farmer to raise the interest for his mortgage ? And if he does not pay the interest, where is his property ? How is he to protect himself except by his influence on legislation, which allows him to regulate the currency, and consequently the burden of his mortgage, according to his desire ? And if the rate of interest rises, how is he to escape the hammer of the auctioneer ?

The landowner is forced to cling to legislation. Unless he takes an active part in politics, and controls currency, import-duties and railway rates, he is lost. What would become of landowners if it were not for the army ? If the yellow peril becomes a reality and a man without property finds Mongolian rule still more irksome than Prussian discipline, he can throw down his tools and emigrate with his wife and children and a bundle of clothes. So can the landowner —if he is prepared to abandon his landed property.

Thus private ownership of land can be maintained only with the aid of politics, being in itself a product of politics. It may be said that private ownership of land is the embodiment of politics. Without politics there can be no private ownership of land, and without private ownership of land there can be no politics. After nationalisation of the land, politics would become a thing of the past.

After nationalisation of the land, agriculture loses all connection with politics. Just as even to-day leasehold farmers as such have no immediate interest in the currency, import-duties, wages interest, freight-rates, construction of canals, extermination of pests; that is, in the "great" — and sordid — problems of contemporary politics, simply because in the terms of their leases the influence of all these factors is already allowed for; so, after nationalisation, all farmers will watch the proceedings of Parliament without excitement. They will know that every political measure affecting the rent of their land will be reflected in the terms of the lease. If import-duties are introduced to protect agriculture, the farmer knows that he will have to pay, in the form of a higher farm-rent, for this protection; hence he is indifferent to the proposed duties.

When the land is nationalised the prices of farm products may, without injury to the public interest, be forced so high that it will pay to cultivate sand dunes and boulder-strewn mountain slopes; even wheat growing in flower pots could be made profitable without allowing the cultivators of fertile soil to derive any private advantage from the high prices, since the amount paid on their leases would keep pace with the rise of rent. Patriots who are anxious about the provisioning of their country in war-time should study this remarkable aspect of land nationalisation. With a tenth of the money thrown to the receivers of rent through the wheat-duties, Germany might have converted all her moors, heaths and wastes into fertile soil.

The amount of railway and canal freights, and the politics connected therewith, will not concern the leaseholder any more directly than the ordinary citizen. For if changes in freights were to benefit him, the increase in his rent would annul the advantage.

With nationalisation of the land, politics will, in short, cease to interest the farmer personally, he will be concerned only with legislation for the common weal, with objective politics. Objective politics are, however, no longer politics, but applied science.

It may here be objected that if farmers are able to secure long-term or lifelong leases, they will still be affected by legislation and tempted to seek their private advantage at the expense of the common weal. The objection is valid, but does it not apply with still greater force to the existing private ownership of land, which allows the benefits of legislation to be converted into hard cash in the selling price of the land, as may be seen from the present high price of land resulting from protective-duties? After nationalisation of the land, however, the taint of politics may be altogether removed by reserving to the State, in the case of lifetime contracts, the right of having rents officially re-adjusted from time to time, just as is now done with the rates on land. (In the case of short-term contracts the rent is adjusted by the farmer himself through the public auction of the lease.) For if the farmer knows that all the advantages to be expected from politics will be converted into rent for the revenue department, he will give up the attempt to influence rent by legislation.

Allowing for all these circumstances, we may sketch a lease contract after nationalisation of the land somewhat as follows:

NOTICE

The lease of the farmstead known as "The Chalk Farm" is advertised for public auction. The auction will take place on St. Martin's Day, and the lease will be granted to the highest bidder.

The farm is estimated to occupy one man in full work. The house and stables are in good repair. Rent hitherto $100. The soil is of the fifth quality, the climate suitable for strong constitutions only.

Terms:

The farmer undertakes by contract to fulfil the following conditions:

1. To sell no fodder. He must keep sufficient cattle to consume the entire crop of hay and straw. The selling of stable manure is forbidden.

2. To restore to the soil, in the form of chemical fertilisers, the minerals abstracted from it by the sale of grain; for every ton of grain 200 lbs. of basic slag or its equivalent.

3. To keep the farm buildings in good repair.

4. To pay the rent in advance or give security for its payment.

The State Land-Department undertakes:

1. Not to give the tenant notice to quit as long as he fulfils his engagements.

2. To grant a prior right of tenancy to the widow and direct heirs of the tenant in the form of 10% rebate on the highest bid obtained at the auction.

3. To cancel the contract at any time at the request of the tenant, on payment by him of a fine equal to one-third of the annual rent.

4. Not to alter the freight-rates for grain within the duration of the contract.

5. To establish accurate wage statistics and, in the case of leases for life, to reduce the rent if wages rise, and to raise it if wages fall.

6. To construct any new buildings that may prove to be necessary, in return for an increase of the rent equal to the interest on the capital outlay, plus depreciation, etc.

7. To insure the tenant free of charge against accident, sickness, hail, floods, cattle-diseases, fire, phylloxera and other pests.

The crucial question for the practicability of land nationalisation is this: Will tenants be forthcoming on the above conditions? Let us suppose that there are but few, so that competition at the auctions is slight. What would be the result? The amount bid would be low; it would be less than the real rent, and farmers would make correspondingly higher profits. But must not these higher profits act as a stimulus to the farmers who had held back because they were unable to appreciate the new conditions, and had consequently decided to await the verdict of experience?

It is therefore certain that after a short experimental period competition at the lease auctions would raise farm-rents to the level of the highest rent the land could bear; especially as the risk of the tenure under the new conditions would almost disappear, since the net proceeds of the farm could not possibly fall below the average rate of wages. The farmer would always be assured the average wage for his personal labour, and over and above that he would have the advantage of liberty, independence and freedom of movement.

Let is be further remarked that after nationalisation a farmer would have to be appointed in every locality to supervise the

execution of the rent contracts. In every province and district an illustrated list of the farms to be let would be published annually, containing everything that farmers require to know as to the size and the situation of the farms, the crops grown, the prices of farm produce, the farm buildings, previous rent, schools, climate, game and hunting, social conditions and so forth. Since the purpose of nationalisation is not to exploit farmers, great care would be taken to inform tenants about both the advantages and the disadvantages of the farmsteads—whereas at present the landowner never mentions the disadvantages. Many of them, such as damp farmhouses, night frosts, etc. are concealed and can be discovered by the tenant only by indirect enquiry.

The following is a summary of the effects of nationalisation of agricultural land: Abolition of private profit from rent, and consequent elimination of what is called "agricultural distress," of protective-duties and politics as we know them. Abolition of private ownership of land, hence elimination of mortgages, of subdivision of the land and of family quarrels after inheritance. No landlords, no landslaves, but instead general equality. No landed property, and therefore complete freedom of movement and settlement, with all its beneficient consequences for the health, character, religion, culture, happiness and joy of life of mankind.

In mining, nationalisation of the land is even simpler to carry out than in agriculture. Instead of leasing the mines, the State could invite employers and co-operative societies to tender for working the mine and accept the lowest tender per ton of output. The State could then sell the output to the highest bidder. The difference between the two prices is rent, and goes into the public treasury.

This simple method can be applied where machinery of a permanent kind is unnecessary; as for example in the case of peat moors, brown-coal deposits, gravel, clay and sand pits, quarries, certain oilfields, etc. It is the system at present generally adopted in State forests, where it has long been found satisfactory. The administration of the forest agrees with the workers in public contract on the wage to be paid for a cubic meter of timber, the lowest bidder obtaining the contract. The timber is felled and trimmed into piles

of certain standard dimensions and then sold by public auction. Fraud is almost impossible, because the buyers at once complain if given short measure. It would be the same in surface mining. The buyers would supervise the work at the pits. The workers could, if they wished, co-operate, and so dispense with the services of an employer (a system which, by the way, they have yet to learn), because no capital worth mentioning is required. The pit belongs to the State; and the workers need only their implements.

In coal pits, as in deep mining generally, the matter is more complicated, as plant is required. There are, however, several solutions, all workable.

1. The State provides the plant; insures the workers against accidents, and for the rest proceeds as above; that is, the raising of the mineral is given by contract to the individual workers. This method is in general use in private and State-owned mines.

2. The State provides the plant, as above, and gives a contract for the working of the mine to co-operative societies. This system is not, as far as I know, at present in use. Its introduction would be advantageous for communistic workers, for they would thereby learn to govern themselves.

3. The State leaves both the working of the mine and the provision of the plant to the co-operative societies and pays the society a contract price, to be fixed by competition, for the output, which it sells to the highest bidder as in the first and second systems.

A fourth system leaving the sale of the output also to the workers cannot be recommended, because the selling price is dependent on too many factors.

For large mines with thousands of workers the first system would probably be the best, for medium-sized mines the second system, and for the smallest mines the third system.

The difference between the selling price and the running costs would be paid into the public treasury as rent.

For the sale of the produce of the mines two systems could be applied:

1. A fixed price year in year out. This system could be applied wherever production can be indefinitely increased, so that the

demand resulting from the fixed price can at all times be satisfied. Uniform quality of the products is an essential condition for this system.

2. Public auction. This system could be adopted where the products are of unequal quality and the output cannot be adapted to meet any possible increase of demand.

If the products were sold at fixed prices and an increased demand at these prices could not always be satisfied, speculation would come into play. Where the quality is not uniform, sale by public auction is the only way of avoiding complaints.

Water-power is a peculiar kind of product of the land, which in some regions is already of great importance and is destined to become still more important with the progress of technical science. For the larger power stations which supply towns with light and with energy for tramways, municipal enterprise would be simplest, especially as the running of such power stations offers few difficulties. In the case of lesser water power used directly for industries such as flour-mills and saw-mills, the sale of power at a uniform price, to be adjusted to the price of coal, would be more practical.

Somewhat greater are the difficulties of nationalising the land on which towns are built, if it is desired to exclude arbitrary management and nevertheless secure for the State the full rent. If we are satisfied with a moderately efficient solution, the leasehold system existing in the greater part of London could be adopted. By this system the land is secured to the tenant for whatever use he likes for a term of 50 to 70 years (in London 99 years), the annual rent being fixed in advance for the whole term of the tenure. The rights of the tenant are negotiable and inheritable, so the houses erected on the land are saleable. Thus if in the course of time (and in 100 years many things may change) ground-rents rise, the tenant is the gainer; and the gains—in London for example—may be very large; if, on the other hand ground-rents fall, the tenant has to bear the loss, which may also be very large. As the houses erected on the land serve as pledges for the payment of the rent, the tenant cannot

escape the loss. The full rent of the house serves as security for the landlord.

But cities, as the history of Babylon, Rome and Venice teaches us, are subject to vicissitudes, for little is needed to sap their vitality. The discovery of the sea-route to India brought Venice, Genoa and Nurnberg low, deflecting the traffic to Lisbon; and with the opening of the Suez Canal Genoa was resuscitated. The same is likely to happen with Constantinople after the opening of the Bagdad railway.

Furthermore we must here recall that our present currency laws offer no guarantee whatever that currency policy may not any day be directed, at the bidding of the creditor class, towards a general fall of prices such as occurred in 1873 when silver was demonetised. The possibility always exists that gold, in its turn, may also be demonetised, and the supply of money then reduced so as to cause a general fall of prices of say 50%, by which the fortunes of private and public creditors would be doubled, at the expense of the debtor class. In Austria this was done with paper money, in India with silver, so why should not the same trick be played with gold?

Thus there is not the slightest guarantee that ground-rents will be maintained during the whole term of the contract at the level on which the lease was based. The influence of politics and a thousand economic circumstances—to which must be added the probability that after nationalisation of the land the present tendency of the population to concentrate in towns will be reversed—make long-term leases exceedingly risky, and for the risk the lease-giver, in the present case the State, must pay in the form of a reduced rent.

Another question is, what becomes of the buildings after the expiration of the tenure? If the buildings fall to the State without compensation the leasee will take care, in building his house, not to make it last longer than the term of his lease, so in the majority of cases the buildings will have to be pulled down when they lapse to the State. To a certain extent it is an advantage if houses are not built for eternity, since every time they are rebuilt new technical improvements can be incorporated; but the disadvantages are far weightier, as may be seen in the case of the French railways. The land occupied by these railways was leased to private railway companies for 99 years with the condition that at the expiration of

the lease the whole should lapse to the State without compensation. The result is that construction and maintenance have been adapted to this clause. The State is not to succeed to more than can be helped; it is to come into possession of railways *in articulo mortis*, of scrap-iron and debris. It is in consequence of this short-sighted contract that the French railways give such an impression of neglect —even now, long before the expiration of the contracts. The same thing would happen if building sites were let with the condition that on expiration of the lease the buildings should lapse to the State.

A somewhat better plan would be to have the buildings valued and paid for by the State. But on what principle is the valuation to be made? There are two possibilities:

1. Valuation according to usefulness (building plan, layout).
2. Valuation according to building costs.

If compensation were determined simply by building costs and state of repair, the State would have to pay dear for many a useless, bungled building only fit to be pulled down. The builders would make short-sighted, ill-considered plans, knowing that, whatever the result, the State must pay the cost. On the other hand if we leave building costs out of account and base the valuation on other considerations, the building plans would have to be submitted for approval to the State, which would mean bureaucracy, tutelage and red tape.

Hence the best method seems to me to be the following: to lease the building sites for an indefinite period; not, however, at a rent fixed in advance for ever, but at a rent adjusted in accordance with a re-valuation of ground-rents, to be undertaken by the State at regular intervals of 3, 5, or 10 years. In this way the builder's risk in connection with the ground-rent would be reduced almost to nil, while the State would collect the full rent without having to trouble about the buildings. The whole responsibiltiy for the best use of the building-site would rest with those whom it concerns, namely the builders. Perfect accuracy in calculating ground-rent and consequently the amounts to be paid for the leases, cannot, of course, be expected, but it would at any rate be possible to adjust the amount payable on the leases so as neither to kill enterprise nor to defraud the State.

In order to calculate the ground-rent for the different parts of a

city the State could itself build a tenement house in every quarter of the city. The building plan would be devised with a view to securing the highest possible rent. From the yield of the building, interest on the building capital (as long as interest exists), repairs, depreciation, fire-insurance etc. would be deducted, and what remained would be the ground-rent for all other buildings situated in the same street or in an equally good locality.

Even by this method ground-rent could not be calculated with perfect accuracy, since a great deal would depend on the building plan of the normal tenement house. It would be necessary, therefore, to devise this normal plan with special care. But in any case the builders would never have any reason to complain, since shortcomings in the normal tenement would result in a reduced yield of rent, and this deficit would affect the calculation of ground-rent and result in a lowering of the ground-rent for all building sites.

With this plan builders would have a direct personal interest in keeping their houses in good repair and in devising well thought-out building plans; for every advantage of their houses over the normal house would be to their profit.

Finally we should mention that as the principal factor in the calculation of the amount of ground-rent in the rent of houses is the rate of interest on the building capital, it will be necessary to determine in advance, that is, before the contracts are signed, by what method the rate of interest is to be computed. In the calculation of the ground-rent it makes a vast difference whether the interest paid on the building capital is reckoned at 4, 3½, or 3%.

Suppose for example, that the capital for a building scheme is $100,000, the house-rent $10,000, and the rate of interest 4%. The interest on the building capital is then $4000, so the ground-rent, that is, the rent to be paid on the lease is $6000. But if the rate of interest is 3%, only $3,000 would be deducted from the rent of the house, so the ground-rent would be raised to $7,000 a difference which, if not founded on an incontestable, contractual basis, would cause a chorus of complaint. A fall in the rate of interest from 4% to 3% would make a difference of at least 20 million marks in the calculation of the ground-rent for the city of Berlin. It is therefore clear that the rate of interest upon which the calculation is based must not be subject to arbitrary manipulation.

In the following part of this book, treating of the money reform, there is a full discussion of the computation of pure capital-interest, to which the reader is referred. I here suggest, quite independently of the other discussion, that the average dividend of all home industrial shares quoted on the Stock-Exchange should be taken as the rate of interest for building capital. In this way building capital would be assured the average yield of industrial capital; the building industry would in consequence be freed from all risk and would attract a large bulk of capital, to the benefit of the tenants. For everyone desiring a safe investment would invest his money in houses, which would always yield the average dividend.

This rate of interest would, of course, be used only for calculating the ground-rent of the normal tenement house.

The normal tenement house on an area of 500 square yards yields	$10,000
The building capital, less the usual amount written off for depreciation is	$100,000
The average dividend on industrial shares is 3½%.	
The capital interest to be deducted from the rent therefore amounts to	$3,500
Leaving for ground-rent	$6,500
or $13 per square yard.	

Without taking into account modifications which can be finally determined only by experience, we therefore obtain the following broad outline of a lease contract between the State and the builder.

1. The State grants the builder a hereditary lease of the building site No. 12 Claudius Street.

2. The ground-rent is calculated on the basis of the estimated ground-rent of the normal rented house situated in the same street.

3. The ground-rent of this normal rented house is the rent obtained by public auction of the lease of the house, less so much per cent for depreciation, repairs and insurance, and less interest on the building capital.

4. For the calculation of ground-rent, the rate of interest on the building capital will be considered equal to the average annual dividend of the industrial shares quoted on the Berlin Stock-Exchange.

4. EFFECTS OF NATIONALISATION OF THE LAND

We shall not have to wait for the effects of land nationalisation until the last certificate of the nationalisation loan is redeemed and burnt, for they will appear on the day on which expropriation is decreed by law. And the effect of nationalisation will be first manifested in Parliament and politics.

Like the builders of the tower of Babel, Parliamentary representatives will suddenly no longer recognise each other. They will return to their homes transformed men, with new and higher aims. The thing they stood for hitherto, the thing they upheld or attacked, for which they collected a thousand weighty or frivolous arguments, no longer exists. By a stroke of magic the reeking battle-field of political strife has been converted into a peaceful graveyard. No advantage can now be derived by private individuals from rent, and what was Parliament but a Stock-Exchange where bears and bulls growled and bellowed over the rise and fall of rent on land? "A betting-den for higher tariffs," so it was termed by one who took part in its debates. It is a fact that latterly the proceedings of Parliament have turned almost exclusively on matters either directly or indirectly affecting rent on land.

Rent on land is the starting point for all legislation initiated by the Government; it is the axis on which the thoughts of the party in power consciously or unconsciously turn, in Germany and everywhere else. If rent on land is safe, all is well.

The long and sordid debates on the wheat-duties turned upon rent on land. All the difficulties in connection with the German commercial treaties were created by landed interests. During the protracted deliberations about the German Midland Canal it was the opposition of the landowners that had to be overcome. All the small natural liberties that we enjoy to-day, such as freedom of movement and settlement, the abolition of slavery and serfdom, had to be won from the landlords by force of arms, for the landlords used powder and shot to defend their interests. The long and murderous civil war in the United States was simply a struggle against landlords. The opposition to every kind of progress proceeds from the landlords; if it depended on them, freedom of movement and settlement and universal suffrage would long since have been sacrificed for the benefit of rent on land. Schools, universities and

the Church were from the outset subordinated to the landowners' interests.

With nationalisation of the land all these troubles instantaneously disappear. Agrarian politics will melt like snow in the sun of liberation of the soil. With the abolition of private property in land every private pecuniary interest in politics vanishes into thin air. No one will be able to fill his pockets in Parliament. And politics that are no longer inspired by private interests, but by solicitude for the common weal, are not politics but, as we said, applied science. The representatives of the people will go deeply into the affairs of the State; they will be obliged to adopt methods of work which rule out passion and to examine sober matters soberly with the help of expert knowledge and statistics.

But as well as the politics of the landlords, the politics of their opponents will also become superfluous. Why were the Socialists, the Liberals, the Democrats delegated to the Reichstag? Simply to protect the interests of the people against the predatory instincts of the landlords. But defenders become superfluous when aggressors disappear. The whole liberal party programme will be realised as a matter of course with liberation of the land. Nobody will think of questioning or criticising this programme, or even of examining it for everybody is at heart a liberal. What was reaction, what was the conservative party programme? It was rent on land and nothing else.

With the nationalisation of the land even the reactionary landowners of yesterday will think liberally and progressively. They were men like the rest of us, neither better nor worse; they were keen on their interests, as is every normal individual. They were not a race apart. They were united merely by their common material interest which is, however, a bond of great strength. With nationalisation of the land the land-owning class will become merged in the great mass. Even the junkers of yesterday will become democrats, for what is a junker without land? Landed property and aristocracy are one and the same thing. You can read in the face of an aristocrat how many acres of land he owns, and the amount of his rental.

So what function remains for party politicians? Everything will become so simple and natural when rent on land no longer stands

in the way of every innovation. "Open the road to progress" was the slogan of liberalism, and now the road is really open. Legislation will nowhere clash with private interests. Liquid capital will indeed continue to exist, it will even be increased by many billions through the conversion of landed capital into liquid capital (State securities). But liquid capital being transferable from one country to another, is international and subject to laws quite different from those of landed capital. Politics can render no service to liquid capital. (This proposition will be more fully explained and substantiated when we come to study the theory of interest). Liquid capital, moreover, being subject to the competition of foreign countries, must be on the alert for progress in every direction, and is therefore inevitably forced into the path of liberty.

With the abolition of private property in land the political antagonism of town and country will cease, and both will join in striving for the same aims. If, for instance, agriculture were for any reason placed in a privileged position, workers would desert industry for agriculture, and by competition at the public auctions of leases force up farm-rents, until the special privilege of agriculture again disappeared, and the equilibrium between the proceeds of labour in industry and agriculture was restored. Special privileges attaching to industrial work would disappear in the same manner. For the land would be at the disposal of everybody on equal terms. After nationalisation of the land agriculture and industry can never find their interests in conflict. Agriculture and industry will for the first time be fused into a homogeneous economic and political entity, an overwhelming majority, with which everything, and against which nothing, can be attained.

It would lead us too far afield to discuss in detail all the effects of land nationalisation in the sphere of politics, but the foregoing general discussion suffices to show that with nationalisation of the land, party politics or, indeed, politics of any kind in the present sense of the word will disappear; for politics as we know them and rent on land are identical. Parliament will not indeed become superfluous, but it will be called upon to solve very different problems—problems from which the private interests of individuals will be wholly excluded. Scientific sessions will be held, and instead of sending to Parliament representatives who have to decide a great

number of heterogeneous questions and in the end come to assume competence in everything, we shall elect experts for each special question. In this way each question will be settled by expert and scientific methods. What is demanded of a member of Parliament to-day? He must pronounce on army and navy, on school and religion, arts and sciences, medicine (compulsory vaccination), commerce, railways, post-office, game laws, agriculture, and what not. Our omniscient representatives must even decide matters of currency policy (for example the introduction of the gold standard), although 99% of them have not the faintest notion what money is, or what it ought to be. Is it fair to blame these harried persons for not possessing expert knowledge about anything* ? These jacks-of-all-trades will vanish with the nationalisation of the land, and the people will choose as their representatives experts whose legislative powers will be confined to one special question. And with the settlement of this question their power will come to an end.

Nationalisation of the land will affect social conditions no less profoundly than politics, and here again from the moment that expropriation is decreed.

The consciousness that all men and women have now an equal right to their native soil will inspire them with pride and be expressed in their looks. Everyone will hold up his head and even State employees will lose their attitude of tame submission. They will all know that they have a safe refuge in the soil, a faithful mother offering her protection to those in adversity. For the land will be at the disposal of all, on equal terms for everyone, rich or poor, man or woman, capable of cultivating the soil.

Here it will probably be objected that even at present there is no lack of opportunity of renting and cultivating the soil. It must not, however, be forgotten that rent on land at present goes into the pockets of private persons, and that consequently everyone has to work cruelly hard to earn his living. With nationalisation of the land, rent on land will go into the public treasury and so benefit everyone directly in the form of State services. In this way the work

* The State could and should be completely relieved of the burden of State schools, State Church, State universities and many other such institutions which have been forced upon it by the landlords for the purpose of diverting the attention of the people from the real subject of contention.

necessary to earn a living will be reduced; it will suffice to cultivate six or seven acres instead of ten, so many an official whose health has suffered in the city air will be able to earn his bread as a farmer. This development will of course be still more marked when, in consequence of the money reform to be described later, capital-interest disappears. Four acres will then suffice where to-day ten have to be cultivated.

This economic strength and economic independence will of course change the whole relationship of man to man; manners, customs, speech and character will become freer and nobler.

After abolition of private ownership of rent, and still more after abolition of capital-interest, every healthy woman will be able to earn her living and that of her children in agriculture. If three acres instead of ten suffice for this purpose, a woman's strength will suffice where to-day a man's full strength is required. And would not the return of woman to agriculture be the happiest solution of the problem of " feminism " ?

A proposal has been made to pay mothers a national rent for their services in rearing their children, a rent equivalent to the use of the soil by primitive woman. It is proposed to pay these mothers' rents from rent on land, in opposition to the proposal of Henry George by which rent on land would be used for the remission of taxation.

There is much to recommend this proposal. In the first place rent is ultimately the creation of the mothers, since it is they who create the population which gives rise to rent. On the principle of " suum cuique " mothers have undoubtedly the strongest claim to rent on land. And we are led to the same conclusion if we compare primitive woman who commands, like a queen, all the gifts of nature about her, with the poverty-stricken women of our proletariat. The comparison shows that with us rent on land is stolen from the mothers. Among the primitive peoples of Asia, Africa and America there is no mother so utterly destitute of all natural resources as the proletariat women of Europe. The primitive woman owns her whole surroundings. She takes wood for her fire where she finds it, and builds herself a hut where she chooses. Her hens, geese, goats, kine, feed around the hut. Her dog guards the cradle.

One boy takes trout from the brook; in the garden the older children sow and reap, others come back from the forest with firewood and berries; the eldest son brings in the deer he has killed on the mountain. And in the place of all these natural gifts we have enthroned the obese, inert, ignoble figure of the rentier. To imagine the situation of a pregnant proletarian woman, who has nothing in all nature around her on which she can lay her child, is to realise that if with our present economic system we cannot do without boundaries and rents, these rents belong by right to the mothers.

According to calculations, the data for which, it is true, are at present incomplete, about $12 a month could be distributed out of rent on land for every child below the age of fifteen. With this support and the relief from the present interest-tribute, every woman would be able to bring up her children in the country without being forced to depend on the financial support of man. Economic considerations would no longer be able to crush the spirit out of women. In sexual matters her inclinations, wishes and instincts would decide. A woman would then be free to consider the mental, physical and race-improving qualities, and not merely the money-bags of her mate. Women would thus recover the right to choose their mates, the great right of natural selection, which is something vastly more important for them than the illusory right of choosing their political representatives.

With nationalisation of the land everyone will have at his disposal the whole soil of his country, and when nationalisation becomes universal, the soil of the whole world. Compared to that the kings of to-day are beggars. Every newborn babe, legitimate or illegitimate, will have 195,550,000 square-miles, 125,792 million acres of land at his disposal. And everyone will have the right to move freely and settle anywhere; no one will be bound to the soil like a plant. Those whose native air does not agree with them, who dislike the society in which they are placed, or who for any other reason desire a change of abode, may cancel their lease-contract and move on. In this way the German peasants who, as in the times of serfdom, cling to the soil and have never seen further than their church-towers, will be set in motion and made acquainted with new customs, new methods of work, new thoughts. The different peoples will learn to know each other and to see that no people is any better

than any other people, that the social life hitherto created by all of them is vicious and discreditable. And since men as a rule are more ashamed of their vices among strangers than at home among friends and relations, it may be expected that intercourse with strangers will purify and ennoble morals.

Nationalisation of the land penetrates into the depths of human nature to transmute and remould it. A slavish spirit still exists among men since the period of serfdom (among masters no less than among serfs) simply because private property in land, the foundation of slavery, still exists. This slavish spirit will disappear finally with the disappearance of landed property. Man will again stand erect just as a young fir-tree, relieved from the weight of snow, swings back vigorously to its natural poise. "Man is free even though born in fetters," says Schiller. Man adapts himself to every influence, and every gain during the process of adaptation is transmitted to the coming generations. But servility cannot be inherited, so the disappearance of private property in land will leave no scar in the moral tissue of the slaves.

From the economically-founded and therefore genuine, deep-rooted liberty resulting from nationalisation of the land we are justified in expecting the fruits of civilisation that we had formerly looked for in vain. Political peace within our frontiers will be reflected abroad, as inner peace of the soul is reflected in the face of man. The brutal and vulgar tone, inevitable when social relations have been perverted by rent on land, is transferred to political life and poisons our relations with foreign countries. The never-ending conflict of interests resulting from private ownership of land has accustomed us to see an enemy in every neighbour and in every neighbouring nation—enemies we must prepare to oppose by arms. For nations do not at present face one another as men and brothers, but as landlords. If private ownership of land is abolished in two countries the only possible cause of strife between them disappears. Instead of envious landgrabbers we shall then be men with nothing to lose from mutual intercourse and everything to gain, namely enrichment of our professional activity, our religion, our art, our manner of thinking, our morality and legislation. When the land is nationalised, no private individual will derive any profit from higher rents, and if such is the case in the neighbouring countries also,

there will be no one to derive any advantage from import-duties which at present embitter international relations, create dissension, instigate defensive measures and cause such confusion that the nations are driven to war to preserve their status. With nationalisation of the land, and still more with the money reform to be described later, free trade will be a matter of course. And if free trade is allowed to expand and gather force for a few decades, men will come to understand how intimately the welfare of the nations is bound up with it. The whole people will then take anxious care to cultivate friendly relations with neighbouring countries; families will begin to have ties of kinship across the border, friendship between artists, scholars, scientists, workmen, merchants and religious leaders will form the peoples of the world into a league of nations which time and common interests will consolidate. Without private property in rent, there can be no war, because there will be no customs-barriers. Nationalisation of the land means universal free trade and universal peace.

The effect of such a land reform on war and peace has so far been only superficially studied. This is as yet an unexplored domain which the German land reformers have never penetrated. There is here rich material for a comprehensive work. Who will assume the task? Gustav Simons, Ernst Frankfurth and Paulus Klüpfel, who had prepared themselves thoroughly for this labour, and were the right men to undertake it, have been carried off by death in the midst of their activity.

In "Free-Land, the Fundamental Condition of Peace," I have traced the bare outline of this great problem.*

With regard to the general law of wages it only remains to be said that after nationalisation of the land and cancellation of the debt contracted for that purpose

all rent on land will flow into the wage fund

and the total proceeds of labour will then be equal to the total product of labour, less capital-interest.

*"Freiland, die eherne Forderung des Friedens" (spoken at Zürich, 1917) and Gesell's other address on peace: "Gold und Frieden?" (spoken at Bern, 1916) have been reprinted in all subsequent German editions and in the French edition of The Natural Economic Order.

5. THE CASE FOR NATIONALISATION OF THE LAND

Normal man claims the whole earth as his own. He considers the whole earth, not merely part of it, as a member, a vital organ of man. And the problem is, how every man can attain the full use of this vital organ.

Division of the earth is out of the question since by division every man gets a part only, whereas he needs the whole. We cannot satisfy the claims of the members of a hungry family to the soup by smashing the soup-tureen and tossing a fragment to each. Moreover at every birth and burial the partition would have to be made afresh, quite apart from the fact that the shares for distribution all differ in situation, quality, climate, etc., so that everyone must choose for himself. One man would like to have his share on a sunny mountain height; another makes for the neighbourhood of a pub. Partition, at present usually by inheritance, takes no account of such wishes, so the beer-drinker must descend daily from his mountain height to quench his thirst, while the other longs for the sunny heights, and languishes mentally and physically in the air of the valley.

No one is satisfied by partition which chains men to their birthplace, especially if, as is usually the case, an exchange of shares is hampered by transfer taxes. Many a man would like to move off for his health's sake; many another has incurred the enmity of his neighbourhood and had better shift his quarters. But their landed property holds them fast.

The transfer tax in many parts of Germany amounts to 1—2—3%, and in Alsace to as much as 5%. If we consider that landed property is in most cases mortgaged up to three-quarters of its value, we can understand the seriousness of this obstacle; the transfer tax claims one-fifth of the sum received by the seller, one-fifth of the buyer's capital. So if a man changes his abode five times—which is not too often for his proper development—his whole fortune is absorbed in taxes. And the unearned increment tax advocated by the land reformers, which is collected only on transfer, makes matters still worse.

Young farmers thrive in the north; but when a man gets on in years and his blood circulates less vigorously, a temperate climate

is often preferable, while old people feel happiest in the south. How are we to meet all these and a thousand other wishes by means of partition? A man cannot carry his land about like his luggage. Is he to sell his share to buy another? Ask those who, without being able to keep a constant lookout on the market, have been forced by circumstances to sell their property repeatedly. They fare like the peasant who took a cow to market and after a series of exchanges brought home a canary bird. The owner of land is forced to wait for a chance of selling and a chance of buying, but when he is waiting time flies, and in the end he often prefers to renounce the advantages which he might have obtained from a change of abode. Many farmers would like to move to the neighbourhood of the city to enable their gifted children to attend the schools; many others would like to escape from the neighbourhood of the town to bring up their children amidst virgin nature. Many a good Catholic, forced by an inheritance to settle among Protestants, longs to get back to a Catholic neighbourhood. Landed property cuts off all these satisfactions, and converts all men into chained cattle, serfs,slaves of the soil.

On the other hand, many a farmer whose only desire is to cultivate to his dying day the field his forefathers have ploughed from time immemorial is evicted by a creditor or a usurer, or by the tax-gatherer. The laws of property drive him out of his property.

Or again, a farmer inherits a share of his father's land but to work it is forced to mortgage his "property" up to 90% of its value to pay the shares of his brothers and sisters, and is crushed by the burden of the mortgage. A slight rise of wages, a slight decline in rent (which may be brought about simply by a reduction of shipping rates) suffices to make it impossible for him to pay the interest on his mortgage, and brings the whole farm under the hammer. The so-called "agricultural distress" which afflicted German landowners was a consequence of the debts inevitably contracted by the heir to land, and is an inseparable concomitant of private ownership of land. The "happy heir" of landed property drudges and calculates, seeks relief through pot-house politics, but his property gradually drags him down.

Still more disastrous are the consequences when the earth is divided up in the form of collective or communal property, as

advocated by the co-operative movement. The sale of a share is then impossible, so if a man leaves the community he loses his share. The transfer tax is here replaced by a removal tax of 100%. There are parishes that not only levy no taxes but actually distribute ready money. Not to forego this income many stay in the parish although climatic, political, religious or social conditions, or the beer or wages do not satisfy them. Nowhere is there more litigation, quarrelling, manslaughter, nowhere more wasted lives, than in these wealthy communes. Wages must also be lower in such communes than elsewhere, since liberty to choose a profession according to one's personal inclination, so necessary for success in any calling, is greatly restricted by lack of freedom of movement. Everyone is thrown back upon local industries, and a man who might have made his fortune as an astronomer or a dancing master keeps body and soul together as a woodman — simply because he cannot make up his mind to forego his share of the common property.

The same disadvantages, magnified and more dangerous, result from the division of the earth between the different nations. No one nation is or can be satisfied with the share allotted to it, since every nation, just as every individual, needs for its proper development the whole earth. And if the share is insufficient, what is more natural than the desire for conquest ? But conquest requires military power, and history teaches us that military power decreases with the growth of the territory over which it is distributed; so there is not the slightest possibility of uniting all nations by conquest. Conquest, therefore, is usually limited to certain shreds and patches of the earth which change from hand to hand. For what one nation gains by conquest another nation is bound to lose; and as this other nation has the same desire for expansion, it prepares for reconquest and awaits a chance of falling on its neighbour.

In this way almost every nation has attempted to obtain possession of the globe by conquest, and always with the same negative result. The sword, like any other tool, becomes blunted with use. And what sacrifices are called for in these futile attempts ! Blood and sweat in streams; piled-up corpses; vast treasures squandered—and all in vain ! To-day the political map of the world looks as patched and ragged as a tinker's coat. New barriers are daily

erected, and each nation guards more jealously than ever the beggar's mess it has inherited.

Is there any reasonable hope that some day a conqueror will arise who will unite us ? Let us not indulge in such pernicious fancies. Partition leads to war, and war results in patchwork. But man needs the whole earth, and not merely a patchwork of hostile nations. As long as this fundamental need of every individual and every people remains unsatisfied, there will be war; man against man, people against people, continent against continent. And it should be noted that wars arising from such causes must necessarily have an effect contrary to that intended by the belligerents; for war produces separation not union, diminution not enlargement, chasms not bridges.

It is true that there are people who feel at home in a smoky taproom, and uncomfortable on a mountain top. Prussians of the old school, for example, shrank from affiliation with the German Empire, frightened by the new splendour. For the partition of the earth has produced a poor-spirited race.

Away then with this foolish puppet-show of armaments, frontiers, tariff-barriers and registers of landed property ! Mankind requires something better than broken fragments of the globe. Suum cuique, that is, to each the whole.

But how can this ideal be realised without communism, without affiliating all nations into one great World-State, without abolishing the national independence of the separate peoples ?

Our answer is: By the Free-Land reform.

With the introduction of Free-Land all the land situated within the national boundaries is made accessible to each inhabitant of the country and is proclaimed his property. Does not this proceeding grant everyone the kind of land he longs for, and consequently satisfy every desire, indeed every caprice ? In this way the impedimenta of removal are reduced by the whole weight of the landed property and freedom of movement and settlement becomes an economic as well as a legal reality.

Let us go into the matter more closely. A peasant is working a large farm with his sons on the north German plain. But the sons do not care for farming and go to the city to take up some trade. The farm becomes too large for the peasant whose strength is

decreasing through age and failing health. He would prefer to take a smaller farm and at the same time realise the dream of his youth: to live in the mountains. He would also like to settle somewhere in the vicinity of Frankfort, because his sons are established there. Such a change would at present be difficult, for a peasant almost impossible to carry out.

With Free-Land the case is different. The peasant has no landed property, so he is free to move, like a bird of passage. He has not even to wait for the expiration of his lease, since he may cancel the contract any day by paying a fine. So he sends for the illustrated list, regularly issued by each province, of the farms to let, and marks the farms which seem most likely to suit his requirements. There will be no lack of choice. If the average duration of a lease is assumed to be 20 years, one farm out of every twenty would become vacant every year, that is, some 150,000 farms of an average area of 25 acres: large farms and small farms, to suit all requirements—in the mountains, on the plain, on the Rhine, on the Elbe, on the Vistula, in Catholic and in Protestant localities, in Conservative, Liberal, Socialist constituencies, in marshy land, in sandy land, on the sea-coast, for cattle-breeding, for beet-root growing, in the forest, in foggy regions, on clear streams, in the smoky "Black Country," in the neighbourhood of the city, the brewery, the garrison, the bishop, the schools, in French or Polish speaking territory, for consumptives, for weak hearts, for strong men and for weak ones, for old and young—in short, 150,000 different farms annually to pick and choose from, waiting for him to come and try his luck. Cannot every man then say that he owns the whole of his country? In any case he cannot possess more than one piece of land at a time, for to possess something means to sit on it. Even if he were alone on the earth, he would have to decide for one piece of land.

He must, indeed, pay a farm-rent, but in so doing he is merely giving back the rent of the land which is not the product of the soil, but of society (the word means what is given back). And man has a claim on the earth, but not on men. If, therefore, he restores to society, as rent for his farm, the rent that he collects from society in the prices of his farm products, he simply acts as an accountant or tax gatherer; his right to the soil remains intact. He gives back

to society what it has paid him in advance in the price of the products of the soil, over and above his labour. But since the farmer himself is a member of society, he, also, receives his share of the farm rent. So in reality he pays no rent at all; he merely hands over the rent collected by him, in order that his account with society may be settled more accurately.

Free-Land realises completely the right of every individual to the whole land of his country. But the whole land of his country is not enough to satisfy a man conscious of his own worth. He demands the whole world as his property, as an integral part of his personality.

This difficulty, also, is overcome by Free-Land. For let us suppose that Free-Land is extended to all countries; a supposition by no means unreasonable when we consider how easily national institutions cross frontiers and are adopted by the whole world. Suppose, then, that Free-Land is universally adopted by international agreement, and that immigrants are given equal rights with citizens, as they are at present with regard to most laws. In that case has not every individual realised his right to possess the whole globe? The whole world from now on forms his absolute property wherein he may settle wherever he pleases (just as he can to-day, if he has money), and without expense, since the rent paid for the farm is, as we have seen, not a levy on the soil, but a return for the rent which he levies on society in the prices of his products, and which is given back to him in the services of the State.

Free-Land, then, puts every man in possession of the whole world which henceforward belongs to him and is, like his head, his absolute property. The world which he inhabits will have grown part of him and cannot be taken from him because of a dishonoured bill, a mortgage, or a security for a bankrupt friend. He can do as he pleases: drink, gamble, speculate, but his property is safe. The amount of his landed property is the same whether he has to share his heritage with twelve brothers and sisters, or whether he is an only child. Quite independently of his character and actions, the earth remains his property. If he does not deliver to society the rent collected in the prices of his field products, he will be placed under guardianship, but none the less the earth remains his property.

Through nationalisation of the land every child is born a landowner and more, for every child, legitimate or illegitimate, holds the globe in his hand, like the Christ-Child at Prague. No matter what the colour of a man's skin, black, brown, white or yellow, the undivided earth belongs to him.

Dust thou art and to dust returnest. It seems little, but beware of under-estimating the economic significance of this dust. For this dust is a part of the earth which belongs to the landowners. In order to come into being and to grow you need parts of the earth; even a small deficiency of iron in your blood will undermine your health. Without the earth and, if it belongs to the landowners, without their permission, no one is permitted to be born. This is no exaggeration. The analysis of your ashes shows a certain percentage of earthy matter which no one can draw out of the air. This earthy matter was at one time in the earth and it has either been bought from a landowner or stolen; there is no other possibility.

In Bavaria permission to marry was made dependent on a certain income. Permission to be born is denied by law to all those who cannot pay for the dust needed to construct a frame of bone.

But neither is anybody allowed to die without permission of the landowners. For to dust thou shalt return, and this dust takes up space upon the earth which the landowner may be unwilling to grant. If a man dies somewhere without permission of the landowner he robs the landowner, so those who are unable to pay for their burial-place go straight to hell. Hence the Spanish saying: He has no place whereon to drop down dead. And the Bible: The Son of Man has not where to lay His head.

But between the cradle and the coffin lies the whole of life, and life, we know, is a process of combustion. The body is a furnace in which a constant heat must be maintained, if the spark of life is not to be extinguished. This warmth we maintain inwardly by nutrition, outwardly by clothes and shelter. Food and clothing and building material are, however, products of the earth, and what happens if the owners of the earth refuse us these materials ?

Without permission of the owners of the earth, then, nobody may eat, or be clothed, or live at all.

This, also, is no exaggeration. The Americans deny the Chinese the right of immigration; the Australians keep all men whose skin

is not pure white away from their coasts. Even shipwrecked Malayans seeking shelter on the Australian coast have been pitilessly turned away* And how do our own police deal with those who do not possess the means to buy the products of the earth ? You have got nothing, yet you live, therefore you steal. The warmth of your body, a fire maintained with the products of the soil, is evidence of your misdeeds and reason enough for locking you up ! That is why travelling journeymen always carry a sum of money which they never touch.

We frequently hear the phrase: Man has a natural right to the earth. But that is absurd, for it would be just as correct to say that man has a right to his limbs. If we talk of rights in this connection we must also say that a pine-tree has the right to sink its roots in the earth. Can man spend his life in a balloon ? The earth belongs to, and is an organic part of man. We cannot conceive man without the earth any more than without a head or a stomach. The earth is just as much a part, an organ, of man as his head. Where do the digestive organs of man begin and end ? They have no beginning and no end, but form a closed system without beginning or end. The substances which man requires to maintain life are indigestible in their raw state and must go through a preparatory digestive process. And this preparatory work is not done by the mouth, but by the plant. It is the plant which collects and transmutes the substances so that they may become nutriment in their further progress through the digestive canal. Plants and the space they occupy are just as much a part of man as his mouth, his teeth or his stomach.

But man, unlike the plant, cannot remain satisfied with part of the earth; he needs the whole; every individual needs the whole undivided earth. Nations living in valleys or islands, or shut off by tariff-barriers, languish and become extinct. Trading nations, on the other hand, that spice their blood with all the products of the earth, remain vigorous and populate the world. The bodily and spiritual needs of men put out roots in every square foot of the earth's surface, embracing the globe as with the arms of an octopus. Man needs the fruits of the tropics, of the temperate zones and of the north; and for his health he needs the air of the mountains, the sea and desert. To stimulate his mind and enrich his experience he

* Land Values 1905 p. 138.

needs intercourse with all the nations of the earth. He even needs the gods of other nations as objects with which to compare his own religion. The whole globe in splendid flight around the sun is a part, an organ, of every individual man.

How, then, can we suffer individual men to confiscate for themselves parts of the earth as their exclusive property, to erect barriers and with the help of watchdogs and trained slaves to keep us away from parts of the earth, from parts of ourselves—to tear, as it were, whole limbs from our bodies ? Is not such a proceeding equivalent to self-mutilation ?

The reader may be unable to accept this comparison on the ground that amputation of a piece of land causes no loss of blood. But would that it caused no more than ordinary loss of blood ! An ordinary wound heals. You lose an ear or a hand; the flow of blood is staunched and the wound closes. But the wound left in our body by the amputation of a piece of land festers for ever, and never closes. At every term for the payment of rent, on every Quarter Day, the wound opens and the golden blood gushes out. Man is bled white and goes staggering forward. The amputation of a piece of land from our body is the bloodiest of all operations; it leaves a gaping, festering wound which cannot heal unless the stolen limb is grafted on again.

But how ? Is not the earth already torn into fragments, cut up and parcelled out ? And have not title-deeds been drafted that record this parcelling and must be respected ?

But this is nonsense. For who was it that drew up and signed these title-deeds ? I myself have never consented to the partition of the earth, to the amputation of my limbs. And what others have done without my consent cannot bind me. For me these documents are scraps of paper. I have never consented to the amputation that makes me a cripple. Therefore I demand back my stolen property and declare war on whoever withholds part of the earth from me.

" But there, on these faded parchments, stands the signature of your ancestors ! " It is true that my name occurs there, but whether the signature was forged or genuine, who knows ? And even if the signature on the parchment is genuine, I can read between the lines that it was extorted by force, since no one will sacrifice his limbs unless in immediate danger of his life. Only a trapped fox

bites off its own leg. Again, is anybody in duty bound to recognise the debts of his forbears ? Are children to be held responsible for the sins of their forefathers? Are parents to be allowed to mutilate their children ? May a father sell his daughter ?

One suspects that our ancestors tippled away the earth, like the old Germans who, in their cups, staked their wives and children. For only drunken fools sell themselves or their limbs; only drunken fools could have voluntarily signed the documents that gave away the land. If an inhabitant of Mars came among us for the purpose of buying land here to take with him, is is conceivable that he would be allowed to carry off parts of the earth, great or small ? Yet it makes no difference whatever to the bulk of the population whether the riches of the earth are carried off to Mars, or whether a landowner takes possession of them. For when the landowner has collected his rent he leaves nothing behind but waste and desert. If our landowners were to roll up the whole of the arable surface of Germany and carry it off to Mars—it would make no difference to the rest of the population. During a period of famine Russian landlords living in luxury in Paris exported great quantities of wheat from Russia, until even the Cossacks felt the pinch, and exports had to be prohibited to maintain order.

The signatures in the land register were extorted by the dagger, or procured through fraud or through the brandy bottle. The land register is the criminal record of Sodom and Gomorrah and if landowners, in their turn, were to declare themselves willing to assume responsibility for the actions of their ancestors, they would have to be clapped into prison for fraud and extortion.

Jacob defrauded Esau of his pastures by means of a mess of pottage, when the latter returned famished from the wolf hunt. Are we to give our moral sanction to this transaction by keeping the descendants of Esau from the use of these pastures with the help of the police ?

We need not however go back to Esau to discover the origin of such title-deeds. " The settlement of most countries originally took place by way of conquest, and even in modern times the existing division of the land was often enough again changed by the sword."*

*Anton Menger: The Right to the Full Proceeds of Labour.

And how is the occupation of a country carried out to-day, before our eyes ? For a bottle of brandy for himself and some finery for his consort, the Herero king sold the land which he had taken from the Hottentots. Millions of acres which his people used as pasture for their herds ! Did he know what he was doing when, bemuddled with the fumes of alcohol, he put the treacherous cross at the foot of the document ? Did he know that this document would be kept as a precious relic in a steel safe and guarded day and night by sentinels ? Did he know that his whole people would be nailed to that cross; that henceforward he would have to pay a rent for each head of cattle— he, his children, his grandchildren, to-day, to-morrow, for ever ? He did not know this when he drew on the document the sign of the cross, taught him by the missionaries, for how can a man be cheated and defrauded by the sign of Christ ? If he had signed the document knowingly he would have been a traitor deserving to be hanged on the nearest tree. But he did not know, for when practice taught him what the document meant, he took up arms to drive away " the treacherous savages " (in the German press the unhappy natives, who were carrying on their " war of independence " with the only weapons at their disposal, were usually styled incendiaries, thieves, treacherous savages and so forth). Of course it availed the Hereros nothing. They were hunted down, and the few that escaped were driven into the desert where they will starve. (See General Trotha's proclamation).

The land occupied in this manner was then distributed as follows, according to an official report:*

	Square Miles
1. German Colonial Company for South West Africa	51,300
2. German Settlement Company	7,600
3. Hanseatic Land, Mining and Commercial Company	3,800
4. Kaoko Land and Mining Company	39,900
5. Southwest Africa Company Ltd.	4,940
6. South Africa Territories Ltd.	4,560
Total	112,100

That is 70 million acres.

What have the six proprietors given for these 70 million acres of land ? A brandy bottle, a mess of pottage. This is what is being done in Africa, in Asia, in Australia.

* Deutsche Volksstimme. 20 December 1904.

In South America matters were still further simplified; the document with the sign of the cross for a signature was dispensed with. General Roca, afterwards President, was sent out with a horde of soldiers to drive the Indians off the fertile grazing grounds of the Pampas. The majority of the Indians were shot down, the women and children were dragged to the capital as cheap labour, and the remainder were hunted across the Rio Negro. The land was then distributed among the soldiers, most of whom hastened to sell their claims for brandy or trinkets.*

This is how the sacred, inviolable rights of the present owners to what is probably the most fertile soil in the world were acquired. The pasture of millions of sheep, horses, cattle, the land for a great nation which is coming into existence, is to-day the private property of a handful of men who obtained it for a few quarts of brandy.

In North America territories quite recently settled were largely uninhabited. Everyone could take as much as he pleased. Every adult, man or woman had a claim to 160 acres of land, so that families with six grown-up children were able to claim 1000 acres. Anyone who agreed to plant a few trees was allowed to claim double the amount, 320 acres. After six years the occupiers were given title-deeds, and the land was then saleable. Through the purchase of such homesteads for trifling sums (much could not be asked for something that could be claimed elsewhere for nothing) latifundia of many thousands of acres were formed. Price: A quart of brandy,

* " The Argentine consul general reports that recent sales of large estates in Argentina show clearly how greatly the values of landed property have risen in that country. In the Pampa territory Antonio Devoto bought an area of 116 leguas with 12,000 head of horned cattle, 300,000 sheep etc. from the British South American Land Company for 6½ million dollars, or about 50,000 dollars a legua of 2,500 hectares.—José Guazzone known as the wheat king, bought 5 leguas at 200,000 dollars a legua in the district of Navaria in the province of Buenos Aires.—The Jewish Colonisation Company bought 40 leguas, partly in Piqué, partly in the Pampa Central, for 80,000 dollars a legua, which the seller, Federico Leloir had bought in 1879 for 400 dollars a legua.—All this land in the Pampa was liberated from the Indians in 1878 and sold publicly by the Government in 1879—80 for 400 dollars a legua. It is specially suitable for cattle-breeding and its value has meanwhile increased 150 to 200-fold, which is a good index of the prosperity of the country." Hamburger Fremdenblatt, Dec. 22, 1904.

To this we may add that the increase in the price of the land is in reality far greater. The 400 dollars a legua were payable in " moneda corriente," which was only worth one thirtieth of the present-day peso (dollar). So the increase was 30 times 200, that is, 6,000-fold. It is said that many of the soldiers sold their shares for boxes of matches (Cajas de fosforos.).

a dishonoured bill, a mess of pottage. In California two Luxemburg farmers, Muller and Lux, to-day own an estate so large that Prussia could easily be fitted into it. Price: A quart of brandy, a mess of pottage.

The Northern Pacific Railway obtained gratis from the Canadian Government permission to construct the railway, and in addition to this privilege it received as a gift a strip of land 40 miles wide on each side of the railway. Consider what that means: 40 miles right and left of a line 2000 miles long ! Price: Nothing at all !

With the Canadian Pacific it was much the same. In a pamphlet issued by this company it is stated that " The company took over the construction of the 1920 miles, for which it obtained from the Government valuable privileges and liberties and, further, 25 million dollars in money, 25 million acres of land, and 638 miles of railroad already constructed."

Let it not be imagined that the projected railway was to be considered the return for these gifts. The above pamphlet states that the railway is to remain the property of the company. But where, then, it will be asked, is the return for the 25 million acres of land, the 25 million dollars, the 638 miles of railroad already constructed and the valuable privileges ? The answer is, a mere bagatelle, namely, the risk in connection with the interest to be paid on the capital.

Thus by a stroke of the pen 25 million acres of arable soil in one of the most fertile, most beautiful and healthiest of countries passed into private ownership. No one even took the trouble of looking at the land that was to be given away as a gift. Only during the construction of the railway was the extraordinary fertility of the soil, its wealth in minerals, and the beauty of the landscape " discovered." And this happened not in Africa, but in Canada, which is renowned for its excellent administration.

Such is the origin of private ownership of land at the present day in countries upon which Europe is as dependent as upon its own fields.

Knowing therefore how private ownership of land is established to-day, need we investigate how it originated yesterday ? " Peor es menearlo," says the Spaniard: The more you move it about, the worse it becomes. Are we to inquire of the Church in what colours hell was painted when the dying dame bequeathed her landed

property to the Church ? Are we to inquire of the counts, the dukes, the barons by what treasonable means they obtained from a weak emperor the transformation into their absolute property of the land which they only held as wages for military service ? Or how they availed themselves of the incursions of marauding neighbours as a welcome opportunity for extorting privileges and landed property from the emperor ? " Peor es menearlo." The more you stir it up, the worse it stinks. Are we to ask the English landlords how they came by their landed property in Ireland ? Pillage, rapine, murder, high treason and legacy hunting: these would be the answers to our queries. Anyone not satisfied with these answers can collect full information about the origin of landed property in the old ballads and drinking songs, and from observation of the pitiful physical and moral decay of the race. He will be convinced that our ancestors were a band of drunkards who tippled away the heritage of their descendants, careless of the fate of the coming generations. After us the Deluge, was their motto.

Are we, then, to maintain this " venerable " institution bequeathed to us by these drunken Falstaffs, out of pious veneration of the bottles that were emptied at its origin, or out of gratitude for the degenerate blood and crippled limbs which they have bequeathed ?

The deeds of the dead are not the measure of our actions. Every age has its own tasks to accomplish, which demand its whole strength. Dead leaves are swept from the trees by autumn gales; the dead mole on the field track, the droppings of the grazing herds are carried underground by Nature's scavengers. Nature, in short, takes care that dead matter shall be removed from sight, so that the earth may remain eternally fresh and young. Nature hates mementoes of death. The pallid skeleton of a pine tree never serves as support and ladder for new vegetation; before seeds can germinate, the dead tree must be felled by the storm. In the shadow of old trees young vegetation cannot prosper; but no sooner are they gone than everything begins to grow and flourish.

Let us bury with the dead their title-deeds and laws. Let us pile up the registers of landed property as a pyre for the dead. A coffin is too narrow for a bed, and what are our land-laws and land

registers but coffins in which the corpses of our ancestors lie buried?

Burn, then, such mouldering rubbish! It is from the ashes, not from the corpse, that the Phoenix arises.

6. WHAT FREE-LAND CANNOT DO

Such are the far-reaching consequences of nationalisation of the land; but nevertheless the importance of this reform—great though it is—must not be exaggerated. Free-Land is not, as many are inclined to imagine, a panacea. Henry George was of opinion that Free-Land would eliminate:

Interest, Economic Crises, Unemployment.

He did not, indeed, support this belief with the same confidence and wealth of ideas as his main contention, and this lukewarmness proves that he was aware of his lack of clear insight and had doubts about this part of his theory. But these doubts are not shared by his disciples.

What with Henry George was not much more than an opinion held without deep conviction became with his disciples an unquestioned dogma. The only exception is Michael Flürscheim; and it was for this reason that he was unpopular with the other land reformers, although it was he who succeeded in reviving the idea of land reform in Germany.

Free-Land influences the distribution of the product; unemployment and economic crises however are not problems of distribution, but problems of exchange or commerce; even interest, although it influences the distribution of the product for more powerfully than does rent on land, is merely a problem of exchange, for the action that determines the amount of interest, namely the ratio in which existing stocks of products are offered in exchange for products of the future, is an exchange, and nothing but an exchange. With rent, on the other hand, no exchange takes place; the receiver simply pockets the rent without giving anything in return. Rent is a part of the harvest, not an exchange, and that is why the study of the problem of rent can offer no basis for the solution of the problem of interest.

The problems of unemployment, economic crises and capital-interest cannot be answered unless we examine the conditions under

which exchange takes place. Henry George did not undertake this examination, nor have the German land reformers made the attempt; and for this reason they are utterly unable to explain the existence of capital-interest, economic crises and unemployment. Henry George's theory of capital-interest, still held, to their confusion, by the German land reformers, is an incredibly crude "theory of fructification," which utterly fails to account for any phenomenon connected with capital-interest or unemployment. And his theory of economic crises (disproportion between the consumption and the incomes of the rich) is equally superficial.

This has been the weak spot of the land reform movement hitherto. It was asserted that land reform would in itself solve the social problem, but no satifactory scientific explanation of the most serious drawbacks of our economic system was forthcoming. And the land reformers, besides failing to produce a theoretic explanation, were also unable to suggest practical remedies for the drawbacks of our economic system. The wage-earners, to whom, also, the land reformers promise salvation, cannot be rescued from their desperate plight solely by nationalisation of the land. They demand the full proceeds of labour, that is, the abolition of both rent on land and captital-interest; and they also demand an economic system excluding crises and unemployment.

This exaggeration of the effect of land nationalisation has caused incalculable damage to the whole movement.

We shall now examine the condition under which capital-interest, crises and unemployment are produced, and we shall discuss the measures necessary for the removal of these evils. We are thus about to approach what is notoriously the most intricate of all economic problems. The reader need not, however, be alarmed, for the problem has been rendered perplexing only by pseudo-scientific methods of investigation; in reality the facts are rigorously co-ordinated; and we have only to begin at the right place to discover the co-ordination.

Part 3

MONEY AS IT IS

INTRODUCTION

Metal money of the present day is in all essentials identical with the money that exchanged the products of antiquity. Gold money unearthed from the ruins of Athens, Rome or Carthage is universally acceptable and circulates freely with the money of modern Europe or America. Apart from possible differences in the fineness of the gold, a kilogram of coins with the stamp of a Roman emperor is equal to a kilogram of coins with the stamp of the German mint. Our money has all the characteristics of the money that Lycurgus banished from Sparta. Money is perhaps the only State-institution that we have adopted unchanged from antiquity.

But our knowledge of the nature of money is by no means proportionate to its great antiquity. Lycurgus recognised that money made of precious metal disrupts the State by dividing the people into rich and poor. We will not here discuss whether he did well in banishing money, in casting out the good with the bad. But even to-day we are as far from understanding the recognised evils of money as was Lycurgus. We can applaud Pythagoras for saying "Honour Lycurgus who banished gold and silver, the root of all evil," or sigh with Goethe "Nach Golde drängt, am Golde hängt doch alles. Ach wir Armen!"—but we can go no further. The question, What is wrong with money? Why is money a curse to mankind? meets with silence. Even our economists are so perplexed by this problem that instead of investigating it they prefer simply to contradict Lycurgus and Pythagoras and to ascribe the alleged shortcomings of money to defective observation. The Spartan Moses is thus classed among tamperers with the monetary standard, and the great mathematician among moral fanatics.

This failure of science is less due to defects of the human understanding than to certain external circumstances unfavourable to the scientific consideration of monetary theory.

The subject itself repels investigators. Lofty idealists can easily find subjects of investigation more attractive than money. Religion, biology, astronomy, for example, are infinitely more edifying than an investigation of the nature of money. Only the prosaic man of figures feels attracted by this step-child of science. It is comprehensible, it does honour to human nature, that the investigators

who have penetrated into the dark continent of monetary science can still be counted on the fingers.

Again, the unfortunate methods hitherto employed, and the connection of the investigation with the now happily moribund doctrine of value, have increased the natural aversion to this branch of science. The pedantic obscurity with which monetary theory has been treated by scientists has caused the public to despise a subject which is nevertheless of vast importance to human development. (The forgotten literature of bimetallism is a praiseworthy exception). Even at the present day the monetary standard seems to the great majority of the public to be simply a certain weight of fine gold, and gold is for most men a substance of small importance. Since the object of monetary theory is held in low estimation, no one buys monetary literature, and the risk of publishing works on monetary theory is too great for most publishers. Much good writing about money has probably remained unpublished—another circumstance that keeps investigators away from monetary problems. Only authors who can afford to publish at their own expense can occupy themselves with the problem of money.

To the latter statement there are exceptions. The works of our university professors are at least bought by students and State libraries, and find publishers. But the exclusion of criticism of the existing order from university teaching prevents university professors from penetrating far into the nature of money. The probe of official science does not go deep, it recoils from the hard underlying layer of controversy. What is true of money is true also of the theories of rent, interest and wages. A university professor who ventured to investigate the controversial basis of these problems would convert his lecture-hall into a field of battle. Controversial matters, politics, theories of wages, rent, interest and money, are out of place in the university, and for this reason economic science must languish in the hands of our professors. A professor has scarcely gone a spade's depth into his subject when the menace: "Thus far but no further!" rings in his ears.

Added to these external difficulties is the fact that the theory of this thorny subject requires knowledge which can only be obtained in practical commerce, and that commerce usually attracts natures incapable of theoretical investigation. Commerce requires men of

action, not theorists and ideologists. Commercial pursuits were also, until quite lately, considered dishonourable; Mercury, the God of Merchants, was also the God of Thieves. Commerce was a profession for those who had failed in the schools. Intelligent sons were sent to the university, the rest to the counting-house.

Such is the explanation of the startling fact that although in every other sphere science passes from triumph to triumph, we have as yet no sound definition or theory of metal money. Metal money has been in existence for 4000 years, has during a hundred generations passed through thousands of millions of hands, yet in the management of money every country in the world is guided, not by science but simply by routine.

The lack of a sound theory of money is the reason why the phenomenon of interest has never been satisfactorily explained. For 4000 years we have paid and received countless thousands of millions in interest, yet science is at the present day incapable of answering the question "Whence and why does the capitalist receive interest?"*

Attempts to solve the problem of interest have not, indeed, been wanting. As an obvious disturber of the peace, interest has received a far larger share of public and scientific attention than money. All economists of note have dealt with this problem, especially the socialists whose whole effort is fundamentally directed against interest.

But in spite of all these attempts the problem of interest remained unsolved.

The failure is not due to the difficulty of the subject, but to the fact that capital-interest (interest on loans as well as interest on real capital) is the child or by-product of our traditional form of money and can therefore be scientifically explained only with the help of a theory of money. Money and interest, to superficial observers inseparable friends, have also a close inner connection, a connection in theory. A theory of interest can only be deduced from a theory of money.

But theorists upon interest have always, for the reasons given above, neglected the study of money. Marx, for example, can never have given the theory of money five minutes attention—witness his

*Boehm - Bawerk, History and Criticism of Theories of Interest.

three large volumes upon interest (capital). Proudhon under-rated money less and came nearest to solving the problem of interest.

In the following investigation, begun by chance and helped by favourable outer circumstances, I now offer science, commerce and politics the long sought-for theory of money and interest.

What I investigated was controversial matter. Am I to blame that what I discovered must stimulate sweeping changes in the social order?

Summer 1911 Silvio Gesell

1. HOW THE NATURE OF MONEY IS REVEALED

If the inscriptions on coins are supposed to furnish information about the nature of money, it must be admitted that the information is scanty. The inscriptions run " 10 Marks," " 10 Francs " or " 10 Roubles," and if we fail to deduce the nature of money from these words, the marginal comment " Mit Gott " or " Liberté, Egalité, Fraternité " will hardly bring us enlightenment.

If we compare the present German coins with the old Prussian thalers it is noticeable that the inscription no longer states the quantity of fine metal contained in the coins. As the indication of weight was often a convenience,* its omission must have been intentional. Why was it omitted? Perhaps because the indication of weight as inscribed on the Prussian thalers, suggested problems that could not be solved by the monetary theories then prevalent—theories that still hold the field to-day. By suppressing the indication of weight on the new coins, the monetary authorities at least avoided the danger of becoming involved in contradictions.

If " XXX Thalers are a pound of fine silver "† then a pound of fine silver is XXX thalers, and the conception " thaler " becomes, by this inscription, simply a unit of weight reserved for silver, just as in England special units of weight are used for certain commodities. (Diamonds, for instance, are weighed by carats. In Neuchâtel a " mesure " of apples or potatoes contains 20 litres and a " mesure " of grain 16 litres).

But if a pound of fine silver is thirty thalers, if, as the inscription and the theory of the thalers assert, the coin is identical with a certain weight of silver, how can silver be demonetised? How can the thirtieth part of a pound of silver be separated from a thaler? Is it possible from one conception to make two, namely " silver " and " thaler "? Before the year 1872 XXX were one pound of fine silver, but after that date no longer so. If the latter statement is possible (and it is a fact), the first statement can never have been true, and the inscription on the coins represented to us as one conception what had always been two conceptions—the thaler, and

* The coin became a legally certified weight with which anyone could check a shopkeeper's weights. The number of coins in a sum of money could be determined by weighing, and conversely the weight of a given number of coins in a sum of money could be determined by counting.

† " XXX ein Pfund Fein " the inscription on the old Prussian thaler.

the material of which the thaler was made. Only the weight of the thaler was equal to the thirtieth part of a pound of fine silver, one pound of silver was necessary to make thirty thalers, just as one pound of iron is necessary to make a horseshoe. A thaler was no more a certain quantity of silver than a house is a pile of bricks, or a pair of shoes is a yard of leather. The thaler was a product manufactured by the German mint and quite distinct from silver. And, in spite of its inscription, it was that as much before as after the demonetisation of silver.

The inscription made the thaler and its material one and the same conception; the demonetisation of silver proved the existence of two conceptions in the thaler. The withdrawal of the right of free coinage of silver made the thaler transparent, so that through the silver we saw its inner nature. We had believed that a thaler was merely silver, but now we were forced to recognise that it had also been money. We had denied the thaler a soul until, at its death, a soul left its body before our eyes. Up to the withdrawal of the right of free coinage the subjects of Prussia had seen only silver; now for the first time was revealed to them, in the conjunction of silver and a law of the State, the existence of a peculiar manufactured product, namely money.

Before the closure of the mints to silver, the explanation of money given by theorists, both monometallists and bimetallists, passed without contradiction; but the demonetisation of silver showed that although coins are struck from metal bars, metal bars are not for that reason coins.

> " Coins are bars of metal the weight and fineness of which are attested by the stamp." Chevalier, La Monnaie, p. 39.

> " Our German mark is simply the name for 1/1395 of a pound of gold." Otto Arendt.

No one saw that the free coinage of silver, which in practice, of course, converted coins into bars of metal and bars of metal into coins, was a law, a law made by the State and dependent upon the will of legislators. No one saw that the thaler was a manufactured article, a product of legislation, the silver being but the arbitrarily chosen raw material of the thaler. The law made the thaler; the law unmade it; and what is here stated of the thaler applies, of

course, also to its successor, the German mark. The right of free coinage of gold, which to-day in practice identifies coins with gold, is the work of our legislators. The means which called this right into existence may withdraw it. The right may be challenged at any time if the opinion prevails that much which was taken for granted at the adoption of the gold standard cannot stand the test of criticism.

But if this happens, if the mints are closed to gold—and the recognition of the notes of the Reichsbank as legal tender is a first step in this direction—what is then the relation of gold to our money? Merely that, like copper, silver, nickel and paper, it is used as a material in the manufacture of money; that is to say, the relation that obtains between stone and house, leather and boots, iron and plough. All trace of identity between money and the material of money would disappear, and the distinction between gold and the mark would be as apparent as the distinction between silver and the thaler, or between hats and straw.*

We must therefore make a sharp distinction between money and its raw material, between the German mark and gold. Money and its material can never be considered one, for between them lies the law which to-day unites, but to-morrow may separate them.

This distinction between money and its raw material has always existed. It existed in a concealed form during the free coinage of

* The theory of the gold standard is at present in such confusion that it would be difficult to formulate it in words. During the discussions which preceded the adoption of the gold standard in Germany, the bullion theory in its crudest form still held the field. " The value of money is the value it gives itself." said Bamberger; " and gold forces itself forward as money by virtue of its properties as metal."

How can we reconcile with this assertion the fact that a few years later there appeared in Germany "A Society for the Protection of the German Gold Standard"? Did gold no longer force itself forward as money by virtue of its properties as metal? And how did they come to speak of a " German " gold standard? If, as the theory proclaims, the German mark is simply a certain weight of gold, it is no more German than French, Russian or Japanese. Or does the mine or melting-pot produce German gold, and how is this gold distinguished chemically from other gold? The title of this society, like the leaflets it publishes, contains almost as many contradictions as words.

As an example of the state of monetary theory in Germany as lately as ten years ago, it may be mentioned that the appeal for membership of this society was signed by persons absolutely without professional experience in monetary matters. Mommsen and Virchow gave their names as indifferently as they would have given them for the foundation of a society of goat-keepers. To them the monetary standard was a trifle, a minor controversy to be decided offhand.

silver, and it exists in a concealed form with the gold standard. But the distinction was revealed to everyone by the withdrawal, the legal arbitrary withdrawal, of the right of free coinage of silver. The distinction is equally apparent at the present day to those who have learnt from the history of silver that the privileges of money are not inherent in any metal, but can be transferred by law from one material to another.

But what do our legislators now think when the currency question arises, when, for example, they take up a German mark and ask themselves what it is? Are they conscious that the German mark has never been legally defined, that none of the current monetary theories is compatible with the German monetary standard; that the promotion of the German banknote to legal tender deprives the orthodox theory of the gold standard of its last support; that the inscription upon our banknotes has become nonsense?

"The Reichsbank promises to pay bearer at sight 100 Marks German Standard"—so runs the inscription, and monetary theory declared that the banknotes can circulate only because of this promise to pay. But the inscription has been implicitly cancelled by the declaration that the notes themselves are legal tender. Yet the notes continue to circulate. How is this possible? The German peasant, for example, consented formerly to sell his cow for 1000 silver marks which, if melted, would yield only 400 marks worth of silver, and he is now willing to give his best horse in exchange for a banknote which, both from a material and a theoretical point of view, he must regard as a scrap of paper!

The inscription on the notes should be brought into harmony with facts. Upon the notes as upon the gold and silver coins should be written simply 10—20—100 marks. The rest of the inscription, especially the word "pay," should be cancelled. This word is used in promises to pay (promissory notes, bills of exchange and so forth); and banknotes are not promises to pay. With promises to pay, especially those of the State, the holder receives interest; but with banknotes the opposite is true, the drawer, that is, the State, receives interest.*

*With the present note-issue of 10 billion marks, the State draws 500 million marks interest annually.

The drawer or issuer of banknotes, the State, is really the creditor, and the holder of the banknote is the debtor. "The Reichsbank promises to pay the holder . . ." should be changed to "This is 100 Marks." Banknotes, in spite of their inscriptions, can never be promises to pay. Credit paper without interest is, under present conditions, inconceivable. But where, except in the inscriptions on banknotes, do we find credit paper which costs the holder (creditor) interest and brings in interest to the issuer (debtor), and at the same time stands at par with real interest-bearing paper? The German Imperial Loans, which bring the holders 3% interest annually, stand to-day (1911) at 84½; the German banknote, which costs the holder annually 4, 5, 6, 8½% interest, stands at par.* The law and present-day monetary theory treat both kinds of paper alike, regarding each of them as promises to pay, promises to pay made by the same debtor!

Legislation and pseudo-scientific theory so full of contradiction must be swept away.

The cellulose of the banknotes, like copper, nickel, silver or gold, is raw material for the manufacture of money. All these different forms of money have an equal share in the privileges of money and are interchangeable. They are all subject to the same effective control of the State. Nobody buys paper-money with metal money of the same State; one is simply changed for the other. The promise of payment on banknotes should therefore be cancelled and the new inscription should run: "This is ten, one hundred, one thousand marks German standard."

A banknote circulates at par with metal money not because of, but in spite of, its inscription.†

What forces, we now ask, make the issuer of a banknote an interest-receiving creditor, and the holder an interest-paying debtor? Undoubtedly the miracle is due to the fact that the note has the privilege of being money. We must therefore examine more closely the nature of this privilege.

* The Reichsbank discounts commercial paper indifferently with its notes or with gold. It receives the same interest for both. Yet it counts the gold as part of its capital and the notes as part of its debts!

† When paper falls below par, the metal money, in accordance with Gresham's law, flows out of the country. The paper-money then circulates alone.

2. THE INDISPENSABILITY OF MONEY AND THE INDIFFERENCE OF THE PUBLIC TO THE MONEY-MATERIAL

We owe it to the division of labour that we produce more than we consume. Liberated thus from the compulsion of immediate needs, we can devote time, provisions and work to the perfection and multiplication of our means of production. Without the division of labour we could never have accumulated our present wealth of means of production, and without these means of production our labour could not have attained the hundredth part of its present fertility. The greater part of the population therefore owes its existence directly to the division of labour. Sixty millions of the sixty-five millions in Germany exist solely through the division of labour.

The products of divided labour are not goods for immediate consumption by the producer, but wares, things useful to the producer only as means of exchange. A cobbler, a carpenter, a general, a teacher or a day-labourer cannot consume the immediate product of his own labour. Even a farmer can do so only to a very limited degree. They must all sell what they produce. The cobbler and carpenter sell their products to their customers; the teacher and general sell their services to the State; the day-labourer sells his services to his employer.

For most products the compulsion to sell is absolute; for industrial products this is a rule without exceptions. For this reason work is at once interrupted if a disturbance occurs in the sale of the products. Will a tailor continue to make clothes for which he cannot find customers ?

But sales, mutual exchanges of products, are effected through the medium of money. Without the intervention of money no wares can reach the consumer.

It is indeed not altogether impossible to dispose of the products of the division of labour by barter, but barter is so cumbersome and requires so many complicated preparatory arrangements, that producers generally cease work rather than have recourse to it.

Proudhon's banks for the products of labour were an attempt to re-introduce barter. Modern department-stores would serve the same purpose as these banks, for to establish barter I need only find

someone who will buy what I produce and pay with what I need in return. A department-store which provides everything must of course buy everything. The only necessary preliminary condition of barter would be here fulfilled, and within the walls of a department-store price-tickets might easily replace money, on condition that all customers of the store were its purveyors and vice-versa.*

Wares must therefore be sold for money; that is, there exists a compulsory demand for money equal in amount to the stock of wares. The use of money is therefore as indispensable to all as the division of labour is advantageous to all. The more advantageous the division of labour, the more indispensable is money. With the exception of the small farmers who consume almost all they produce, the whole population is unconditionally under an economic

* Much confusion has been caused in economic literature by the old fallacy that since price-tickets can be substituted for money within the walls of a department-store, money is therefore equivalent to these tickets.

Money is an independent commodity and its price must be determined afresh, by the sale itself, every time it changes hands. When selling his products, the receiver of money never knows what, in his turn, he will receive for the money. That is something only to be determined by another sale, generally at another time, in another place and with other persons. When price-tickets are used instead of money, the amount and quality of the return service must be exactly determined beforehand. This is true barter, and the price-ticket has the function of a unit for calculation, not of a medium of exchange. To the cabinet-maker, for example, who offers his chairs for sale in the department-store, it is a matter of indifference whether the hat he intends to buy is marked 5 or 10 on the price-ticket, for he will of course calculate the price of his chairs in accordance with these figures. He reduces all the prices in the store to terms of chairs.

In a socialistic State, with all prices fixed by the Government, price-tickets could replace money. Committees of appeal and written complaints would take the place of bargaining between individuals. The individual would receive for his product a price-ticket and a book for complaints. With an economic system based on money, bargaining about the price takes the place of the committees and the book of complaints. Differences of opinion are settled on the spot by the parties concerned, without the intervention of the law. Either the transaction does not take place, or the price is legally valid beyond the possibility of appeal.

Herein lies the distinction between price-tickets and money.

The frequent confusion of price-tickets and money in economic literature is, no doubt, mainly due to the fact that both money and price-tickets can be made of any material, and that in neither case has the material any influence upon prices, unless the material of which money is made influences the quantity of money in circulation. Of late years many economists have been caught in this pitfall—Bendixen, Liefmann and many pupils of Knapp. Indeed the only investigators to escape it were those who perceived the true nature of money (as revealed, for example, by the demonetisation of silver described in the previous chapter).

compulsion to sell its produce for money. Money is the essential condition of the division of labour as soon as the scope of the latter exceeds the possibilities of barter.

But what is the nature of this compulsion? Must all who wish to participate in the division of labour sell their produce for gold (silver etc.), or must they sell it for money? Money was formerly made of silver, so all wares had to be sold for thalers. Money was then divorced from silver, yet the division of labour remained, the exchange of products proceeded. It was not, therefore, silver on which the division of labour depended. The demand for a medium of exchange caused by the wares was not a demand for the material of the medium of exchange. The money need not necessarily be made of silver. This is now proved, once and for all, by experience.

But must the medium of exchange be made of gold? Does a peasant who has grown cabbages and wishes to sell them to pay a dentist, need gold? Is it not, on the contrary, a matter of complete indifference to him, for the short time during which, as a rule, he retains the money, of what substance the money consists? Has he, as a rule, even time to look at the money? And can one not use this circumstance to make money out of paper? Would not the necessity of offering the products of the division of labour, namely the wares, in exchange for money still exist, if we substituted cellulose for gold in the manufacture of money? Would such a transition cause the abandonment of the division of labour, would the population prefer to starve rather than recognise cellulose-money as the instrument of exchange?

The theory of the gold standard asserts that money, to serve as the medium of exchange, must have an "intrinsic value," since money can exchange only as much "value" as it contains, somewhat as weights can be raised only by weights. But as cellulose-money has no intrinsic value, it cannot exchange the wares, which have value. Nought cannot be compared with one. Cellulose-money has no relation to the wares because it lacks "value" and is therefore an impossibility.

The advocates of the gold standard still hold to these arguments but in the meantime paper-money is quietly taking possession of the world. It is true that the fact is still denied, the theorists now speaking of "transferred" forces. Paper-money, they say, is in use in every country, but it passes current only because it is rooted in gold. If there were no metal money in existence, paper-money would go to pieces like a sparrow's nest in a falling tower. The holder of paper-money is promised gold, and this promise gives paper life. The "value" of the gold is transferred to the paper by the fact or promise of conversion into gold. Paper-money is like a bill of lading which can indeed be sold, but loses its value if the goods it represents disappear.

If the gold or the promise of redemption is removed, all paper-money is reduced to waste-paper. Hence what supports paper-money is merely a "transferred value."

This is about all that is said against the possibility of paper-money, and the argument seems so conclusive that almost everyone who trusts his own power of judgment denies, without further consideration, the possibility of paper-money.

(The practical question whether paper-money has advantages or disadvantages in comparison with metal money will be considered later. We shall first answer the question whether cellulose can serve as raw material for money, whether paper can be transformed into money which, without depending on any particular commodity, especially gold or silver, can circulate and perform the functions of a medium of exchange.)

Money, it is stated, can only redeem or exchange a value equal to its intrinsic value. But what is this so-called value which bars the road to our understanding of paper-money—which declares paper-money to be a hallucination? For paper-money does exist and circulate in many countries, and in some countries it circulates unconnected with metal money. Where it exists, moreover, it demonstrates its existence in the form of the millions that it brings to the monopolists of its manufacture. If paper-money, judged by the theory of value, is a hallucination, these millions, judged by the same theory, should also be regarded as a hallucination. The millions which the German Government gains by the issue of paper-money, the 7% dividend of the Reichsbank, are, according to the theory of value, a hallucination. Or should the roles be reversed? Is it the theory of value which is a hallucination?

3. SO-CALLED "VALUE"

"German gold money has full value, that is, its value as money is fully covered by its value as a substance. Fine silver has only half the value of the coined thaler, and it is the same with our silver money; it is undervalued, that is, its value as a substance is less than its value as money."

"Healthy States have always aimed at money with an intrinsic value and a constancy of value which no one could doubt."

Helfferich, The Currency Question, p. 11 and 46.

"Gold and silver have always had a universally recognised value. These metals were collected as a means of providing purchasing power and served therefore as a store of value. Coins soon became more than instruments of exchange; it became customary to measure the values of all products by the value of money. Money became a measure of value. We estimate all values by money. We become aware of all changes of value as changes in the relation to the value of money. The value of money seems to be the measuring-rod by which everything else is measured."

Otto Arendt, Leading Principles of the Currency Question.

In these controversial works by two upholders of the metallic standard, one of the gold standard and the other of bimetallism, the same fundamental importance is attached to "value." There is no discussion of the question "What is value?" or of Gottl's critical inquiry "Does the term 'value' denote an object, a force or a material?" The two opponents agree in accepting without question the existence of a reality called value; in this fundamental matter they are completely at one. Both use the word "value" in its various connections without constraint, as if they had never heard of a "problem of value," an "investigation of value" or a "doctrine of value." Both consider the expressions "substance containing value" (Wertstoff), "value as a substance" (Stoffwert), "intrinsic value," "constancy of value," "measure of value" "preserver of value" (Wertbewahrer), "conserver of value" (Wertkonserve), "concrete value" (Wertpetrefakt), "store of value" (Wertspeicher), "medium for transfer of value" (Werttransportmittel), as unambiguous.* Both authors tacitly assume that their readers will understand these expressions as accurately as would appear to be necessary for the comprehension of their books.

* "We must admit that gold is of great importance as a measure of value but of less importance as a store of value (Wertspeicher)." I. A. F. Engel in the Hamburger Fremdenblatt, February 1916.

Now what does science say of this expression "value?"

Those who wish to know should read Gottl's work: "The Idea of 'Value,' a Veiled Dogma of Political Economy." Out of deference to his colleagues the professor does not openly express what his book so clearly proves, that "value" is a hallucination, a mere product of the imagination.

Marx, whose economic system is founded upon a theory of value, uses almost the same words: "Value is a phantom"—which does not, however, prevent him from attempting to conjure up this phantom in three bulky volumes. Abstract from the worked-up substances* all material properties, says Marx, and only one property remains, namely value.

Anyone who has let these words, which occur at the very beginning of "Capital," pass without finding anything suspicious in them, may safely read on. He cannot be further perverted. But he who raises the above question: "What is a property separated from its substance?—he who endeavours to grasp this fundamental statement in Marx's "Capital" and to clothe it in material terms, will either be perplexed, or pronounce it to be nonsense and its point of departure an illusion.

How can the human brain, which is substance, grasp, record, classify and develop such a complete abstraction? What relations and transitions could we depend on in forming this idea? To comprehend something means to hold fast somewhere to its substance (comprehend—prehendere), to have found already present in our mind objects (notions) of comparison with which the new idea may come into relation. But an abstraction divorced from every kind of substance and energy eludes the grasp of the understanding as the cup eluded the grasp of Tantalus.

Marx's abstraction cannot be demonstrated in any crucible. It disconnects itself from everything that is material just as completely as from our understanding. But, strangely enough, this complete abstraction has one "property" and this property is its origin, its origin in human work.† It is indeed a peculiar property calculated

* "Products of labour" in Marx's words, but the expression is misleading. What remains after this abstraction is not a property but simply the history of the object—the knowledge that a human being has worked upon it.

† "Sieht man vom Gebrauchswert der Warenkörper ab, so bleibt ihnen nur noch eine Eigenschaft, die von Arbeitsprodukten." Marx, Kapital, Vol. 1, p.4.

to convert language into jargon! By this theory German money would have different properties according to whether its material was treasure buried by the Huns, or the gains of an honest gold miner, or the bloodstained millions wrung from France. The origin of a product is part of its history, not one of its properties; otherwise the assertion (not infrequently heard) that rareness is one of the properties of gold, would also be correct. Yet this assertion is sheer nonsense.

But if things are as here explained, if Marx mistook the origin and history of products for their properties, it is not surprising that in the sequel he saw strange visions and began to fear the "phantom" he had raised.

I have quoted Marx, but the other investigators of value are no whit better. None of them has succeeded in separating out the "material of value," or in connecting the "property of value" with any substance and so bringing it before our eyes. "Value" soars above substance, intangible, unapproachable, like Erlkönig in Schubert's song.

These investigators are unanimously of Knies' opinion that "the theory of value is of fundamental importance in economic science." But a theory so important in economic science should be still more important in economic practice. How, then, can it be explained that, in the economic life of the community or of the individual, the theory of value is unknown? If this theory were really of such fundamental importance, one would expect to find on the first page of every German ledger, after the words "Mit Gott," the theory of value recognised by the firm and intended to guide its business policy.

Should it not further be assumed that every business failure is due to a defective foundation, that is, to an incomplete or erroneous theory of value?

If the theory of value is of "fundamental importance" in economic science is it not an astonishing fact that this so-called value is unknown in business life? In every other sphere of human activity science and life go hand in hand; in commerce alone nothing is known of the principal theory of the science with which it is connected. In commerce we find only prices, prices determined by demand and supply. A business man speaking of the value of a

thing means the price that its owner would probably obtain under the given circumstances of time and place. Value is therefore an estimate which upon completion of a transaction is converted into a measured quantity of exchange products, that is, a price. Price can be measured to a nicety, value can only be estimated, that is the sole difference. A theory of price must therefore apply equally to price and to value. A separate theory of value is superfluous.

The expressions employed without definition by the two writers upon monetary standard whom we quoted at the beginning of the chapter have, in the current use of language, somewhat the following meaning: Gold has a "property," its so-called value. This "property," like the weight of gold, is inherent in its substance: "value as a substance" (Stoffwert). This "property" is, like the weight and chemical affinities of gold, inseparable from gold: "intrinsic value," unchangeable, indestructible: "constancy of value." Just as gold cannot be conceived without weight, neither can it be conceived without value; weight and value are simply marks of substance. One kilogram of gold is one kilogram of value: the value of the substance equals the substance containing the value. The presence of value can be demonstrated on the weighing-machine: "fully-valued." Whether there are any other processes for detecting value has not yet been established. Litmus paper seems to be insensitive to value; the magnetic needle is not deflected by it; it withstands the highest known temperatures. Indeed our whole knowledge of value is still somewhat meagre, we only know that it exists. This is unfortunate, considering the "fundamental importance" of value in science and in life. New possibilities are, however, opened up by Dr. Helfferich's discovery that with some "substances containing value" (Wertstoffe) the value is not always proportionate to the substance. The substance containing the value is greater or smaller than the value of the substance. He has discovered that the value of silver money is twice the value of the silver used in its manufacture. Silver money thus contains value in double concentration, and we have therefore an extract of value. This important discovery gives a quite new insight into the nature of value. It shows that value can be extracted, concentrated and, as it were, separated from its substance. We may therefore hope that science will at some future date be able to produce chemically

pure value. But here again we have a contradiction. In a roundabout way we have reached the theory of a paper-money standard. But this theory is based solely on price and leaves the theory of value severely alone.

Value is, then, a fantasy*, and this explains the pronouncement of Zuckerkandl: "In the theory of value almost everything is still in the stage of controversy, beginning with the terminology employed"†. And of Boehm-Bawerk: "In spite of numberless efforts, the theory of value was and is one of the darkest, most confused and controversial parts of our science."

Fantasies are cheap. Examined by themselves they may form a closed system and so appear acceptable to our understanding. Like miracles they are above nature; they grow and thrive in the brains of men. Translated into reality, however, they at once come into collision with facts. Fantasies have no place in the world of reality; they vanish into thin air. And nothing is more real than economic life, whether of the community or of the individual. Matter and energy—anything unconnected with these can be nothing more than a cheap product of the imagination. Such is value. A science sprung from the illusion of value can only engender illusion and is doomed to sterility. Elsewhere science fructifies practice, elsewhere science is the pole-star of practice; but practical economic life is even to-day left to its own devices. Science is here inarticulate, since "beginning with the terminology employed, almost everything is still in the stage of controversy." The science based upon doctrines of value possesses as yet no theory of interest, no theory of wages, no theory of economic rent, no theory of crises and no theory of money, although attempts to construct them have not been lacking. It is incapable of giving the scientific explanation of the simplest daily occurrences, it can foresee no economic event, nor can it predict the economic effect of any legal measure (such as for

* In trade the word value means an estimate of the price that can be obtained for a product. The value of a product is its probable price, allowing for the state of the market. Stocktaking is dependent on "value" in this sense. Whether the estimate was correct appears later in the selling price.

† Since the matter is of "fundamental importance," it would have been well if Zuckerkandl had informed us what the word "almost" is meant to exclude. Is the only non-controversial matter in the theory of value the alphabet used to write it down?

instance, the possibility of shifting the burden of the wheat-duty or land-tax).

Neither merchant, nor speculator, nor banker, nor employer, nor journalist, nor deputy, nor statesman, can avail himself of this science as weapon or shield; no single German commercial undertaking, not even the Reichsbank, is guided by theoretical considerations. In parliament the science that has taken value as its foundation is passed by unnoticed, not even one of its theories can boast of having influenced legislation. The characteristic of this science is its complete sterility.

Only among those whom fate has excluded from commercial life so that they know of commerce, speculation, profit, merely by hearsay—only amongst wage-earners has the theory of value found disciples. The wage-earners allow themselves to be guided in practical affairs, particularly in their political activities and their wage-policy, by a theory of value. This phantom haunts the brains of our socialists. In the rayless depths of the coal-mine, in the roar and dust of the factory, in the smoke and vapour of the furnaces, the naïve belief that something called value really exists and is of practical importance has gained a hold on men's minds.

If this sterility were the only drawback of the matter, we might put up with it. Thousands of our best intellects have wasted their time in futile theological speculation, so if their number is swollen by a few dozen men who cannot extricate themselves from speculation upon the idea of value we may lament the waste, but the loss, in a nation of many millions, hardly amounts to much. The belief in value costs us, however, more than the profitable co-operation of these men. For though the doctrine of value is completely sterile, something is still hoped from it by many who but for this hope would themselves devote their labours to more fruitful endeavours in this sphere. The doctrine is thus pernicious by its mere existence.

There are in Germany many business men of judgment and intelligence, men alert for theoretical knowledge in every branch of human activity. But these men anxiously avoid theoretical explanations of questions connected with their calling (for such are economic questions in relation to the business man). Business men are the first to feel the effects of mistaken legislation; they have to pay for its consequences, or at least temporarily advance the money

to meet the costs; they are buffers between legislation and the economic life of the community, and always in danger of being crushed in some crisis; yet they anxiously shrink from taking part in discussion of the theoretical problems of their pursuit. For what reasons? For two: first, these men, educated in the approved German mental discipline, cannot shake off their belief in authority; they think that science is well cared-for in the hands of our professors*. Secondly, with their clear and sober understanding they cannot comprehend the theory of value expounded by the professors, or even gasp the subject-matter of this theory, and they are ashamed to confess in public this intellectual incapacity.

These sceptical observers, among them many Jewish stockbrokers with the keen intellects of their race, are not to be put off with empty phrases of almost manifest absurdity. Only the fear of making themselves ridiculous prevents them from declaring publicly that the subject-matter of the theory of value is invisible to them, like the king's shirt to the child in the fairy-tale.

Incalculable mischief has been done to both the practice and the science of economics by this flimsy product of illusion. A science sprung from a phantom of the brain has caused the whole nation to mistrust its own power of understanding and prevented the investigation of the laws of the people's well-being from becoming the people's science.

* Whether this opinion is well-founded may be judged from the following quotation (Bund der Landwirte, 7-8-1915): " Ruhland, from the start, entertained the idea of furnishing the scientific theories necessary for putting agriculture, industry and commerce permanently upon a sound practical basis. He therefore rejected from the beginning the interpretation of the task of economic science laid down by Roscher and Schmoller: ' Economic science is concerned with what exists or has existed, but not with what should exist ' (Roscher). ' Science is not concerned with influencing directly the settlement of the questions of the day. That is the task of the statesman ' (Schmoller)."

Schmoller and Roscher had quite rightly recognised that we have as yet no true economic science but only the economics of a class-State and that the study of the anatomy of this State is no task for a university. But unfortunately they refused to draw the final conclusion from this recognition; that the study of the economics of a class-State is no business for a university either. What a mischievous germ of corruption such a science is for the universities is expressed by Professor Brentano (Der Unternehmer, p. 6): " In the teaching of economics a truth is recognised only as long as it coincides with the interests of a powerful party, and then only as long as this party remains powerful; if another party becomes more powerful, the most erroneous doctrines are rehabilitated if they appear to serve its interests."

A currency administration guided by a theory—any theory—of value is doomed to sterility and inactivity. For what can be administered in the " intrinsic value " of gold? The illusion of value precludes progress in matters of monetary administration. No other explanation is needed of why the monetary system of to-day is the monetary system of 4000 years ago. It is the same, at least in theory; in practice we have gone over to a paper-standard, noiselessly and stealthily, it is true, since the fact must be concealed. For if our professors hear about it, their cries of alarm might cause immense damage—paper-money, money without " intrinsic value," being, in their opinion, fundamentaly impossible and therefore certain to collapse.

4. WHY MONEY CAN BE MADE OF PAPER.

The Fact

Paper-money, such is the contention, is impossible, since money can exchange only its own " intrinsic value," its " value as a substance," and paper-money has no " value as a substance."

In striking contradiction to this contention stands the plain fact that the enormous present-day exchange of products is effected throughout the world almost exclusively with paper-money or with banknotes only partly covered by gold. One can travel around the world in any degree of latitude and spend or receive nothing but paper-money. Germany, England and Turkey are, as far as I know, the only civilised countries today with a preponderatingly metallic circulation; elsewhere gold coins are met with only exceptionally.*

In Norway, Sweden, Denmark, Austria, Holland, Belgium, Switzerland, Russia, Italy, France, Spain, Greece, the United States, Canada, Mexico, Brazil, Argentina, Paraguay, Chile, Australia, New Zealand, British India, Japan, the Dutch Indies, that is, over almost the whole world, commerce is conducted with paper-money or banknotes and so-called subsidiary or token coins. Those who want gold must travel to the capital and ask for it at the counters of the Bank of Issue. Even then they often receive the gold only in bars and upon payment of a premium. In ordinary business transactions nobody demands payment in gold in any of these countries;

* Since this was written in 1907, the last gold coins have disappeared from circulation.

indeed, in many of them, such as Argentina, Uruguay, Mexico and India, there are no gold coins in the national monetary units.

If we buy in Germany, with gold coins, drafts on any of these countries, the drafts are always paid in paper-money or, if we raise no objection, with a bag of silver coins, that is, in coins which, to use Helfferich's terminology, would lose half the "substance of their value" (Wertstoff) if struck with a hammer.

These banknotes do indeed promise the holder, according to their inscription, a certain quantity of gold, hence the general opinion that they are not paper-money. But this circumstance is not a sufficient explanation of the fact that for one rouble, rupee or dollar in gold, there exist three or more roubles, rupees or dollars in paper-money. Two-thirds of the banknotes in circulation are not covered by gold, two-thirds of the banknotes must therefore owe their existence and properties to causes other than the promise of convertibility. Somewhere or other, in commerce, on the stock-exchange or elsewhere, forces must exist which prevent the holders of banknotes from taking advantage of the promise of convertibility. Otherwise the fact would be inexplicable that for 10 — 20 — 100 years the creditors of the Bank of Issue (the holders of the notes) make no use of their rights. Forces must also exist which for generations keep the coins out of the melting-pot.

I shall soon trace these forces to their origin. For the moment I only wish to establish their existence, to prepare the reader for the assertion that in all these countries, in spite of the inscriptions on the banknotes, the currency is paper, not metal money.

If the State prints on a piece of paper:

"This is 100 grammes of gold,"

all the world believes the assertion, and such a scrap of paper may circulate for years at par with massive gold. Sometimes it may even bear a premium in relation to gold.*

But if the same State, on a similar piece of paper, promised a milch cow, all the holders of such papers would arrive next day with a halter for the cow.

Now if a piece of paper can for generations, for an interminable

* In Sweden in 1916, 105 kronen in gold were paid for 100 kronen in paper-money. The substitute products of the war were dear and bitter. Only the substitute for gold, paper-money, failed to make us sigh for peace.

series of people in the most varied economic situations, represent completely a certain quantity of gold, whereas the same piece of paper could not represent for twenty-four hours a cow or any other article of use, this proves that, for all the essential properties coming into consideration, paper and gold coin are for all men interchangeable, that is, indifferent. Gold discs or paper in the form of money perform for all men the same services. Further, if the promise of conversion were the covering of the banknotes which keeps them in circulation, if banknotes should be regarded simply as promises to pay, if the issuer were debtor and the holder creditor as with bills of exchange, then the Banks of Issue would have to pay their creditors, that is, the noteholders, interest. Interest is paid by the debtor upon every other kind of promise to pay, without exception. But with banknotes the relation is inverted. Here the debtor, the bank, receives interest, and the creditor, the holder, pays interest. Banks of Issue can consider their debts (banknotes, right of issue) as their most valuable capital. To produce this miracle, to reverse so completely the relation between debtor and creditor, extraordinary forces must be at work in banknotes removing them from the category of promises to pay.

Furthermore, if banknotes are to be considered as promises to pay by the State, the fact remains inexplicable that these promises to pay, only one-third covered, without a sinking-fund and bringing the holder no interest, are usually at a premium in comparison with the ordinary loans of the State which bear interest and are covered by the power of the State to levy taxes. A German 100-mark note, for example, upon which interest is paid by the holder, is equal to 117 marks of the German Imperial Loan which brings in 3% interest to the holder.

Relying on these facts, therefore, we deny that it is the promise of conversion that gives life to banknotes and ordinary paper-money. We assert that forces must exist elsewhere in commerce which play the part at present erroneously assigned to the metal reserve (so-called covering), or to the promise of conversion. These forces, hidden for the moment, which turn a promise to pay (banknote) into capital, and force the creditor to pay interest to the debtor, are, we maintain, strong enough by themselves to assure the functioning of money in the market. Relying on these facts we assert

that money can be made out of paper which, without any kind of promise of conversion, without resting on any particular commodity (gold, for example), bears only the following inscription:

" One Dollar " (or " Mark," " Shilling," " Franc," etc.)
or " This Piece of Paper is in itself one Dollar."
or " This Piece of Paper is in commerce, in State-Treasuries and in Courts of Justice legal tender for 100 Dollars."
or, to express my meaning, if not more clearly, at least more drastically:

" He who presents this Piece of Paper for redemption at the Bank of Issue will receive

100 Lashes (negative promise of payment).

In the markets and shops of the country, however, the holder will receive in goods as much as demand and supply allow him; that is, as much as, by bargaining, he can make his own."

I think that I have here expressed myself with sufficient clearness and that there can be no further doubt about what I mean by the expression paper-money.

Let us now investigate the forces which make it possible that men will scramble for papers with any of the above inscriptions, that men will work in the sweat of their brow to earn such papers, that men will give their produce, goods with " intrinsic value," in exchange for such papers, that men will accept bills of exchange and mortgage deeds payable in such scraps of paper and hoard them as so-called " stores of value," that men will " eat their bread in sorrow and weep their nights away " brooding upon how they can obtain these scraps of paper to meet an expiring draft—the forces which expose to bankruptcy, sequestration and loss of honour, men who fail to meet their liability to deliver, at a given time and place, papers with any of the above inscriptions—the forces, finally, which allow men to live grandly, year in, year out, without work or loss of property, because they have " placed " these papers somewhere as capital.

What is the hidden source from which such a scrap of paper—paper-money, the money of John Law and other paper-money swindlers, the abhorrence of orthodox economists and little minds—draws its force ?

Explanation of the Fact

If a person needs and wishes to obtain something, and if the desired object happens to be in the possession of another and cannot otherwise be obtained, he will usually be forced to offer some of his possessions to induce the possessor of the desired object to surrender it. That is, he will bring the object into his possession by giving something in return. This he must do even if the object he desires is useless to the other. It suffices for the possessor of the object to know that someone needs it or, still more, is compelled to obtain it, for him to refuse to give it for nothing; indeed, a man will often keep or gain possession of an object solely because he knows that behind him comes another person who can employ the object usefully. And the more urgent is the latter's need of the object, the higher will the owner screw up his demands.

What we have here said seems at the present day so natural and so obvious that many persons will consider its expression superfluous; indeed, so far as I know, this is the first time the statement occurs in a piece of economic writing. Yet this is the fundamental law of present-day economic life, of commerce, of the economic relations between the individuals composing a State and between these individuals and the State.

This " epoch-making discovery " is not more stupid and obvious than Newton's discovery of the law of gravitation, and it has the same fundamental importance for economic science as Newton's law for physics.

In gaining possession of an object which is useless to us, but which we assume or know will be sought after by others, we can have only one purpose in mind, namely to embarrass others and then to exploit their embarrassment. Our purpose is usury, for to bring someone into embarrassment in order to exploit his embarrassment, is to practice usury.

The fact that the exploitation is mutual may possibly extenuate the offence, but it is nevertheless true that exploitation of our neighbour's need,* mutual plundering conducted with all the wiles

* One must not always picture shivering beggars in this connection. Rockefeller is in " embarrassment " when fuel-substitutes interfere with the sales of petroleum. Krupp is in embarrassment when the expansion of his factories requires the purchase of a peasant's field.

of salesmanship, is the foundation of our economic life. Upon this foundation is built the whole fabric of exchange; it is the fundamental economic law which automatically regulates the relations in exchange, that is, the prices of all commodities. Remove this foundation and our economic life would collapse. The only remaining method of exchanging commodities would be the Christian, socialistic, communistic, fraternal method of mutual giving.

Are examples necessary in explanation?

Why does the post-office charge two cents for a letter and but one cent for a printed packet, although the service rendered is the same? Simply because the letter-writer is likely to have urgent reasons for sending the letter, whereas the dispatch of the printed packet would often be omitted if postage were higher. The letter-writer is under compulsion, the sender of printed-matter is not, and solely for this reason the letter-writer must pay double the postage.

Or why are chemists' shops in Germany with a stock of 10,000 marks sold for half a million? Because the privileges granted to the chemist by the State allow him to charge higher prices for medicines than would be possible with unrestricted trading. (This explanation holds good even if we admit that, in return for the privileges, the State requires scientific training).

Or why does the price of wheat often rise in Germany in spite of plentiful harvests? Because the import-duty excludes competition and the German farmer knows that his countrymen must buy his product.

It is indeed said that prices are raised or lowered by "the state of the market." We try to ignore the personal motive, the action, and to find a scapegoat to bear the odium of usury, by saying that prices are determined by demand and supply; but how could demand and supply and "the state of the market" exist without the living agents who make the separate transactions? It is these living agents who cause the fluctuations of price, and the condition of the market is their tool. And who are these agents but ourselves —the whole population? Everyone who brings something to market is animated by the same spirit, namely, to obtain the highest

price that the state of the market allows him to obtain. And everyone seeks to exculpate himself by speaking of something impersonal, the state of the market, whereas in reality everyone is exculpated by the fact that the exploitation is mutual.

Anyone, it is true, who asserts with Karl Marx that commodities exchange themselves (in proportion, be it noted, to their "intrinsic value") is spared the necessity of practising usury; he need have no scruples in pressing his debtors or in letting his workmen go hungry. For the usury is caused, not by him but by his property. It is not he who exchanges; his shoe-polish exchanges itself for silk, wheat or leather.* The product makes the deal and makes it by reason of its "intrinsic value."

But those of us who are unable to grasp this ghostly property of commodities called value, and who therefore regard the exchange of commodities as an action, and the commodities and state of the market as accessories of this action, will be able to discover no other motive for such action than the desire common to all owners of commodities, to give as little as possible and to receive as much as possible. In every exchange, from wage-negotiations to dealings in stocks, we observe that both parties seek information about the state of the market. Sellers try to find out whether buyers urgently require their commodities, and they are especially anxious to conceal the fact that they are compelled to sell immediately. In short, we soon convince ourselves that the principles of usury are the principles of commerce in general, that the difference between commerce and usury is a difference in degree, not a difference in kind. The merchant, the workman, the stock-broker have the same aim, namely to exploit the state of the market, that is, the public at large. Perhaps the sole difference between usury and commerce is that the professional usurer directs his exploitation more against specific persons.

Therefore I repeat: the effort to call out the largest possible return service for the smallest possible service is the force that directs and controls the exchange of commodities.

It is necessary to state this with absolute clarity, since nothing but the recognition of this fact can enable us fully to understand the possibility of paper-money.

* Marx, Capital, Vol. 1, p. 3.

Let us now assume that Jones has somehow obtained possession of a piece of paper-money with which he can satisfy none of his physical or spiritual needs, and that Robinson, to whom, for some reason, it is useful, asks Jones to let him have it. The knowledge we have just gained makes it clear that Jones will not hand over the piece of paper for nothing.

But the mere fact that it cannot be had for nothing would in itself transform the paper into paper-money, since all that we expect of paper-money, for the moment, is that it should cost more than the paper of which it is made. It must not be possible to obtain paper-money gratis. Money fulfils its function because there is always someone looking for it and forced to give something in exchange.*

To account for the possibility that paper may become paper-money, it only remains to be proved that Robinson may actually find himself compelled to obtain the piece of paper-money in the possession of Jones. The proof is not difficult.

The products of the division of labour,† wares, are from the outset destined for exchange, that is to say, they have for their producers the same characteristic that money has for all of us—they are useful only as objects of exchange. It is only the prospect of exchanging his products, his wares, for other wares that causes the producer to abandon the primitive form of production and to adopt the division of labour.

* Orthodox and socialistic economic theory deny the possibility of this return service, and must continue to do so, for the return service would stamp the surrender of the paper as an exchange, and an exchange would, to use the terminology of these theories, presuppose " intrinsic " or " exchange " value. But we have assumed that the piece of paper was in itself without " intrinsic " or " exchange " value. (It is immaterial, for the moment, whether we can connect these terms with reality). The orthodox and socialistic doctrines of value assert that a commodity can exchange only for the amount of value it contains (exchange value) and if the pieces of paper-money in the hypothesis have no exchange value, the exchange, the price given, is an impossibility. For such an exchange there is, according to the doctrine of value, no " measure of value " to " measure " the return service. Paper-money and commodities are incommensurable quantities.

† By division of labour we mean here work which results in objects of exchange, that is, wares, in contrast to primitive economic production which aims at the immediate satisfaction of needs. The industrial division of labour, the multiplication of the processes by which single products are manufactured, is technical division of labour and should not be confused with the economic division of labour.

But if wares are to be exchanged for wares, a medium of exchange, what we call money, is a necessity. The only alternative to a medium of exchange is barter, and barter, we already know, becomes impracticable after the division of labour has developed to a certain degree. It is easy to see that barter in possible only under quite primitive economic conditions.

Money, a medium of exchange, is the essential condition of a highly developed division of labour, of the production of wares. For the division of labour a medium of exchange is indispensable.

But the nature of a medium of exchange is such that the free production of the medium chosen must by some means be excluded. If everyone were free to manufacture money according to his own system, the variety of the money produced would disqualify it for the purpose it has to fulfil. Everyone would declare his own particular product to be money, and we should be back again to barter.

The necessity for unity in the money system appears from the fact that not even a double standard was considered workable. Or suppose that agreement had been reached to adopt gold as the standard, but that the manufacture of the coins had been left free. Coins of every shape, weight and degree of fineness would then be in circulation together — an impossible situation. (Such " agreement " is in itself a State action, for everything upon which we can reach agreement is the material out of which the State is built).

By whatever method the unrestricted manufacture of money is excluded; whether the result has been obtained by legal enactment or by difficulties in the production of the money-material (gold, cowry-shells, etc.), whether the regulation of money has been conscious or unconscious, whether the people willed it in solemn assembly or simply yielded to the thrust of advancing economic forces—in any case we have here an action of the people, and what is such a unanimous action of the people other than a law, an action of the State? Thus the medium of exchange has always the character of a State institution and this is equally true of coined metal, cowry-shell or banknote. The moment a people has come —no matter how—to recognise a certain object as money, this object bears the stamp of a State institution.

The choice is, therefore, either State money or no money. Freedom of enterprise in the manufacture of money is an impossibility. This is too obvious to require further explanation.*

It is true that at present the production of the money-material is unrestricted, and that the right of free coinage in practice converts the money-material into money. But this is not an argument against the above theory of money; for, in spite of the right of free coinage, the money-material is not in itself money, as is strikingly shown by the history of the Prussian thalers.

As the right of free coinage of gold is granted by law, it is not a property of gold, and it can at any moment be withdrawn by law (closure of the mints to silver).

But in any case the production of the money-material is at present only nominally unrestricted. The natural difficulty of gold production makes this freedom illusory.

Nor is this theory of money incompatible with the fact that in many undeveloped countries (in the United States, for instance, during the colonial period) powder, salt, tea, hides, etc., were used as media of exchange. Here we have barter, not money. The salt, tea, powder, etc. received in exchange for the pioneer's produce were used in his household. These wares did not circulate, they never returned to their starting-point, the port at which they were unloaded: they were bought because of their material properties, and consumed. They had to be continually replaced by new wares. But it is characteristic of money that it is bought, not because of its material, but because of its function as a medium of exchange; it is not consumed, but merely used as a medium of exchange. Money describes a circle around which it continually moves; it returns repeatedly to its starting point. If a package of Chinese tea is to be considered as money, it must have returned to China after circulating for years through the American colonies, just as a silver dollar of the United States may, in the course of trade, reach China, circulate for years there and, again by way of trade, return to Colorado to be paid out as wages to a miner and to descend once more into the mine from which it came. Furthermore, the price of the package

* Where natural products serve as money, unrestricted production is eliminated by the choice of a money-material (cowry, gold) which at that time and in that place cannot be produced in unlimited quantities or cannot be produced at all.

of tea continually increased in proportion to the distance separating it from the port of entry, all charges for transport, interest and middleman's profit being added to its price, whereas the silver dollar could travel ten times around the world and be given back to the miner for the price for which he originally supplied it. In most countries coins 100 years old, or more, are in circulation. Such a coin may have changed hands 100,000 times, yet no one in this long chain of holders has ever thought of consuming, that is, melting it on account of its content of gold or silver. For 100 years such a coin has been used as a medium of exchange; for 100,000 holders it has been not gold but money; not one of the holders has had any use for the money-material.

This, then, is the criterion of money, that the holder should be indifferent to the money-material. Solely for this reason, solely because of this complete indifference, can poisonous, verdigris-coated copper coins, worn silver coins, handsome gold coins and gaily printed slips of paper circulate side by side at parity.

The cowry-shells used as a medium of exchange in the interior of Africa have a somewhat greater resemblance to money. The cowry-shells are not consumed, the purchasers are much more indifferent to them than are the purchasers of tea and powder. They circulate and so do not need to be continuously replaced. Occasionally they may even reach their point of departure, the coast. Here and there they may, indeed, be diverted from their function as money and used as ornaments by the women, but their economic importance is independent of this use. Cowry-shells—if not expelled by some other medium of exchange—would certainly continue to be used as money, even if they went out of fashion as ornaments. They would then be a true medium of exchange like our copper, nickel and silver coins, or our banknotes, which can be used only as media of exchange; they would be true money. And they could, like our money, be called social or State money, the word "State" being applied in a restricted sense to such undeveloped countries. The State monopoly of the manufacture of money would be here preserved by the impossibility of producing in Central Africa a kind of shell found on the coast, thousands of miles away. (The shells can be obtained, like gold in Europe, only by way of trade, by exchange.)

But if a medium of exchange is the necessary condition for the division of labour, and if such a medium of exchange is conceivable only as State money, as money produced or controlled by the State, by means of special currency laws, what choice has the producer who brings his wares to market and finds no other money than pieces of paper—the State having decided to produce no other form of money than paper-money?

If the producer rejects this money (say because it is not in harmony with the orthodox or socialistic theory of value), he must also give up hope of exchanging his produce and return home with his unsold potatoes, newspapers, brooms or whatnot. He must give up his trade and the division of labour, for he can buy nothing if he sells nothing, that is, if he refuses to accept the money circulated by the State. The producer's strike would came to an end in 24 hours; for 24 hours only could he persist in his theory of value and his arguments about the fraudulency of paper-money. For hunger, thirst and cold would then have done their work and forced him to offer his wares in exchange for paper-money inscribed by the State, let us say, with the following inscription:

"Anyone presenting this at the Bank of Issue will receive
100 Lashes,
But in the markets he will receive as much merchandise as demand and supply permit him to obtain."

Hunger, thirst and cold (to which we may add the tax-gatherer) force all those who cannot return to primitive production, all those who desire to preserve for their work the advantages of the division of labour (and that, in a modern State, means almost everyone), to offer their products for the paper issued as money by the State. That is, all these persons are forced to create, with their wares, a demand for paper-money, and because of this demand the possessors of such paper will not surrender it for nothing. They will ask as much for it as the market conditions allow them to obtain.

Paper has therefore been transformed into paper-money:

1. Because the division of labour has great advantages.
2. Because the division of labour creates wares, that is, commodities useful to their producers only as objects of exchange.

3. Because, at a certain stage in the development of the division of labour, the exchange of wares becomes impossible without a medium of exchange.
4. Because a medium of exchange, from its very nature, is only possible as State money, or at least social money.
5. Because the State, according to our hypothesis, has provided no other money than paper-money.
6. Because all possessors of wares are faced with the alternative either of accepting the paper-money provided by the State or else of abandoning the division of labour. And finally:
7. Because the holders of this paper-money do not surrender it for nothing when they see that the producers are in difficulties and must offer their wares for this paper.

The proof that money can be made of cellulose is now complete, and I could at once proceed to the next question, "How much produce will, or should, the piece of paper-money obtain for its holder?" But the importance of the subject induces me to take account of the prejudices opposed to the idea of paper-money and to expose the fallaciousness of the more prominent among them. By this course I hope to gain the confidence of those judicious or cautious readers who are ready to admit that the proof given above is logically deduced, but who fear that the premises may be incomplete and the proof invalidated by some fact not yet considered.*

Like others who have wrestled with the problem of paper-money, I could have cut a long story short by saying that the State could demand the payment of taxes, fines, etc. in paper-money.

If the State, for example, sold postage-stamps, tickets on the State railway, timber from the State forests, salt from the State mines only for paper-money manufactured by it, if import-duties, tithes, education-rates, could be paid only in such paper, everyone would of course consider this paper something highly valuable and would refuse to part with it for nothing. The State would thus

* I again take the precaution of mentioning that up till now I have discussed only the possibility of making money out of paper. The question whether such money can have any advantages over metal money remains quite untouched and will be treated later.

promise the holders State services instead of gold, that is, many services instead of one service. It would then be these services that give life to paper-money.

But this explanation, as will appear later, would soon confront us, like all other paper-money reformers and paper-money manufacturers, with insoluble problems. He who is unaware of the real foundation of paper-money, as given in the seven points above, can trace back no single economic phenomenon to its final cause.

Among the most conspicuous "proofs" of the impossibility of paper-money is the assertion—we may call it the chef-d'oeuvre of the bullionists—that wares can be exchanged only for wares, since no one would give a useful object for a useless one, a scrap of paper.

This argument seems so conclusive that, as far as I know, all paper-money theorists have prudently avoided dealing with it, probably because they were unable to see through the fallacy involved. With its aid the advocates of a metal standard have always succeeded in proving a priori the impossibility of paper-money and in repelling scientific inquiry from this field.

"Wares can be exchanged only for wares." That is undoubtedly true, but what is a ware? A ware is the product of the division of labour, and to their producers the products of the division of labour are useful only as media of exchange. They are of no immediate use, as we have already shown. What could a farmer who had grown 100 tons of potatoes, or a cotton spinner employing a million spindles, do with their products but sell them, that is, use them as objects of exchange?

After this definition of terms the assertion that wares can be exchanged only for wares requires a very different interpretation. All it implies is, first (by the use of the term "ware") that the possessor or producer of the thing to be exchanged should have no use for it. Secondly it implies that the thing for which the ware is exchanged should also be useless to its possessor—and is not this true of the piece of paper-money? Is not this slip of paper, apart from its property as money, an absolutely useless object?

The assertion that "wares can be exchanged only for wares" becomes therefore a proof that paper-money is possible, not a proof that it is impossible. It is evidence against, not for, the orthodox theory of metallic money.

If we turn now to the reason given for the assertion: "For no one would give a useful object for a useless one" we at once discover a fallacy. The assertion itself refers to wares, and wares are always useless to their possessors: but the explanation refers not to wares, but to useful objects, to goods for use.

Applied to our example, the above argument runs as follows: "Potatoes can be exchanged for thread, since potatoes are useful to the farmer and thread to the cotton spinner by virtue of their intrinsic value." This is obviously untrue. What possible immediate use, we repeat, can the cotton spinner find for the enormous quantity of thread?

But if the explanation given is untrue, that does not impair the truth of the assertion itself that "wares can be exchanged only for wares." In order to make paper-money conform to this contention, we must prove that it is just as much a ware as the wares which it helps to exchange. We wish to leave no room for misunderstanding; we claim for the piece of paper, for the gaily printed leaflet with the absurd inscription:

"100 Lashes

will be paid at sight by the National Currency Office to the bearer of this paper, but in the markets he will receive for it as much produce as by bargaining he can make his own,"

all the properties of a ware, a ware obviously of enormous importance. We admit for paper-money no borrowed, stolen or transferred properties. Above all we must not recognise the piece of paper-money as a ware simply because the State promises its holder some service unconnected with its function as money. On the contrary, we wish to persuade the reader to endorse the apparent paradox:

"Paper-money is purely a ware, and it is the only object which, even as a ware, is of use to us."

To be regarded as a ware, an object must possess the following two characteristics:

1. It must be in demand, that is, someone must want the object, or be forced to obtain it, and for this reason be prepared to give another ware in exchange for it.

2. To create this demand the object must of course be of use to the buyer, otherwise it is not sought for and purchased.

Fleas, weeds and stenches are for this reason not wares, nor are objects without an owner. But if an object is useful (useful to the buyer, not to the seller), and if it cannot be obtained gratis, all the conditions are fulfilled that make it a ware.

That paper-money satisfies the first condition we proved when we demonstrated that money, State money, is an absolute necessity for the division of labour, and that all possessors of wares, are, by the nature of their possessions, compelled to offer their wares for paper-money, that is, to create a demand for paper-money, if the State provides no other form of money. If Germany demonetised gold as it demonetised silver, and substituted paper for gold, the owners and producers of wares would be compelled to accept this paper-money. One and all would have to create with their produce a demand for the paper-money. Nay more, the demand for this paper-money would be exactly as large as the supply of wares awaiting sale, which in turn would depend upon the production of wares.

Paper-money therefore plainly fulfils the first condition. Petroleum, wheat, cotton, iron have also, most certainly, the characteristics of wares; they are among the most important staple articles on the market. Yet the demand for these articles is not so unconditional as the demand for paper-money. Everyone to-day who carries on a trade and produces wares, that is, everyone who has given up primitive production and takes part in the division of labour, creates with his products a demand for a medium of exchange. All wares without exception are the embodied demand for money—for paper-money if the State provides no other form of money. But not all owners of wares buy iron, petroleum, wheat with the money obtained for their products. For iron, petroleum and wheat there are many substitutes, whereas for money the only substitutes are primitive production and barter, and these substitutes would only come into consideration if 90% of the present population, all those, namely, who owe their existence to the division of labour, had starved to death.

The demand for paper-money is called into existence therefore, by the fact that the products of the division of labour are wares. The division of labour, which gives birth to wares, is the

inexhaustible source of the demand for money, whereas the demand for other wares is far less urgent.

The origin of the demand for an object can of course be explained only by the fact that the object demanded, in our case paper-money, performs some service for the buyer (not for the present possessor) or, in other words, is of use to him.

But this oblong piece of gaily-printed paper raised to the dignity of money, the medium of exchange recognised by the State and consequently the only medium of exchange—is it not a useful thing? Is this scrap of paper of no use which permits the workman, the doctor, the dancing-master, the king, the clergyman to convert products or services, utterly useless to them personally, into goods for consumption?

Plainly we must here keep in mind, not, as usually happens, the material aspect of the paper-money, the scrap of paper itself, but the whole—the paper, that is to say, plus its public status as medium of exchange, or money. We must think of money as a manufactured product, as a manufactured product, moreover, which is protected by law and monopolised by the State.

It is indeed true that if we deprive paper-money of its distinctive characteristic as the only legally recognised and practically universal medium of exchange, what remains is but waste paper. But is not the same true of almost any other object when considered simply as a material, apart from its use? Scrape together the colours of an oil-painting, strike with a hammer a token coin, an inkpot, a soup-tureen, and what remains but rubbish? If we regarded a house as a pile of bricks, a king's crown as metal, a book as paper, if we saw in everything merely its raw material, the great majority of objects would have few advantages over waste-paper.

A piano is not used as firewood, a locomotive as cast-iron, or paper-money for papering walls. So why, in the case of paper-money, do we speak only of the material, the cellulose? Why do we not speak of the medium of exchange? All other objects are considered in connection with their intended use; and paper-money thus treated, that is, regarded as the medium of exchange, is not a mere scrap of paper, but a highly important, indeed indispensable, manufactured product, the most important and useful of commodities.

That the cost of producing this article is practically nil, subtracts nothing from its importance. We do not seek in other products the sweat and blood of the producer. The building sites of Berlin, with a total value of thousands of millions, have not cost a penny to produce.

To understand paper-money, therefore, we must pay no attention to the paper of which it is made; we must accustom ourselves to think of it as an indispensable manufactured article, one, in addition, protected by the State. We shall then have no difficulty in recognising paper-money as something with all the characteristics of a ware. We shall then find it a proof, not a refutation, of the proposition that wares can be paid for only with wares.

Those who take the trouble to search the literature of monetary theory will find money constantly treated, not as a manufactured product with an exactly determined purpose (medium of exchange), but as a raw material for industrial purposes (jewellery), its function as money being regarded as merely subsidiary and transitory. Yet in many countries coins struck 100 or 200 years ago are in circulation (such coins circulated until quite recently in Germany), whereas wares a year old are, as a rule, more or less unsaleable, and are written down at a merchant's stocktaking.

If money were but a raw material for industrial purposes it would be purchased only as other wares are purchased, namely on condition that it could be passed on with the addition of interest and profit. But if the dollar already mentioned which, mined in Colorado, had circulated 10 or 20 years in China before being used to pay wages in the original mine, had on its travels been again and again loaded with interest, transport-charges and profit, what would it have cost the miner who finally received it? Yet this loading would have been necessary if the dollar had always been bought for the silver it contained, if no one had found that it performed another service—namely the exchange of his products for consumable goods.

Money is indeed the most characteristic of wares, for money, especially paper-money, is used only as a ware, a commodity for exchange. It is not, like other wares, bought to be consumed in the factory or kitchen, that is, away from the market. Money is and remains a ware, its usefulness lies entirely in its services as a ware

of exchange. All other wares are bought for consumption (except by merchants, for whom both wares and money always remain wares). A person produces wares for sale, but buys them for consumption; he sells wares, he buys consumable goods. Money alone remains a ware, for it performs the service of exchange. Money, and above all paper-money, is thus

the only useful ware.

The protagonists of a metallic standard commonly think of metal money merely as raw material for the goldsmith. A mark, says the bimetallist Arendt, is the 1392nd part of a pound of gold, and the advocates of the gold standard had naturally no reason to attack an opinion which deprived their opponent of all weapons for defence of his cause.*

The champions of paper-money, who should have begun by demolishing this fallacy, one and all evade the issue. Obviously they have not recognised with sufficient clearness that money itself, without regard to its material, is a useful, indeed an indispensable object: and so, in devising the inscription on paper-money, they all felt themselves constrained to promise the holder something independent of the function of money, gold, interest, wheat, work, land and so forth. The exchange of wares, made possible by money alone, evidently does not seem to them a service sufficient to ensure a ready market for paper-money.

The only exception known to me is the inscription on the paper-money issued in 1869 by the Province of Buenos-Aires. Here, for the first time, the paper itself is declared money, and the holder is not promised conversion. The inscription runs:

La Provincia de Buenos-Aires
reconoce este Billete por
un peso
moneda corriente, 10 Enera de 1869.

Translation: The province of Buenos-Aires recognises this piece of paper as a peso (dollar) of national money.

I have never been able to discover whether this inscription was the result of insight, or of embarrassment, like the wording of the present Argentine paper-money, which promises to pay the bearer

* Chevalier, La Monnaie, Paris, 1866, p.36. "I must hold to this fundamental opinion that coins are simply bars of metal, the weight and fineness of which are guaranteed by the State."

at sight so many pesos—in paper-money! "La Nacion pagará al portador y á la vista y por medio del Banco de la Nacion 100 Pesos moneda nacional." Clearly nonsense, since a peso mon. nac. is nothing else than the same paper peso. The bank promises to hand back the piece of paper handed in for conversion.

The following proposal has been made repeatedly and even in quite recent times: The State prints enough paper-money to buy up the whole land of the nation and thus at once solves the greatest of all social problems, the problem of how to return rents to the people. The land is then security for the paper-money, but in accordance with the aim of the proposal, is not given in exchange for the notes. The holder of the paper-money has to be satisfied with the security of the land, just as the holder of a banknote is supposed to be satisfied with the security of the gold in the cellars of the bank (which is certainly not the case, for the holder of the banknotes satisfies himself with the services performed by them as the medium of exchange. If it were otherwise, he would, like the goldsmith in need of raw material, go and fetch away the gold at once). From the standpoint of monetary technique this is a crazy proposal. Here again it is overlooked that to mediate the exchange of wares is a sufficient service for paper-money, and that if this service is guaranteed (for which it is only necessary that no other form of money should be issued), every other kind of service is superfluous.

The difficulty of grasping the notion of money lies in the fact that the service we expect from it is so completely independent of the money-material. The material is necessary only in order that money may be visible and palpable, so that we can assure ourselves of its existence and transfer it; by no means because we expect something of its material part as such. Otherwise it would be impossible for a coin to remain 1, 10 or 100 years in circulation, or for a banknote to remain 24 hours outstanding. The quantity of money alone is of importance, for upon it, partly, depends the magnitude of the supply of money and the amount of commodities that we cay buy for it. Money considered as a material has no properties, or at least no active, working properties, no properties that would be missed even if entirely absent. Why, the Germans chose gold instead of silver for

their money simply because they had to yield sixteen times more commodities for one kilogram of gold than for one kilogram of silver! They got sixteen times less money-material—that it why they preferred gold to silver!

Of every kind of goods for use, without exception, the buyer says "the more the better," but of the money-material, on the contrary, "the less the better." Money only needs to be countable: the rest is mere ballast.

We buy honey because it tastes sweet, beer because it intoxicates, lead because it is heavy, a foot-rule because it measures a certain length, a quart measure because it has a certain cubic capacity. But with money we do not ask for taste, weight, cubic capacity, or any material characteristic, or anything for the direct satisfaction of our personal wants. We buy money as a ware in order to pass in on again as a ware.

A proof of the general indifference to the physical characteristics of money is the fact that not one person in a thousand is able to state how much fine gold he is legally entitled to demand for a dollar, a mark, a franc, or a five-pound note. The incredulous can easily test the truth of this statement.

For this reason we ask of money only that it should possess the fewest possible physical properties; for this reason mankind has gradually and unconsciously adopted as money-material a natural substance, gold, which of all substances has been most niggardly endowed with properties. How poor in properties is gold in comparison with any other product say a hammer, a book or a canary-bird! Not for its colour, weight, bulk, ring, smell, taste or chemical affinities has gold been chosen as money. Gold neither rusts nor rots, neither grows nor decays, neither scratches, nor burns, nor cuts. Gold is without life, it is the archetype of death.

In the substance of money we seek negative, not positive, properties. The minimum of material properties is what all men demand of the material part of money. Everyone feels for the substance of money what the merchant feels for his wares, namely icy indifference. If the shadow of gold suffices, the shadow of gold is preferred, witness the existence and popularity of banknotes. The more negative the properties of a substance, the more positive its

advantages as a money-material. That is the whole secret of a paper-money standard.

It is said that a universal predilection for precious metals led to their adoption as money. I believe, on the contrary, that the universal indifference of producers to gold and silver was the reason why mankind could agree to recognise these metals as money. It is easier to agree upon something indifferent, upon something neutral, than upon something possessing positive properties that vary in effect for each man according to his temperament. Of all natural products gold has the fewest properties, the fewest uses in industry and agriculture. To no substance are we so indifferent as to gold, hence the facility with which it could be adopted as money.

Gold has an industrial use in the manufacture of jewellery. But those who use money as a medium of exchange, producers, workmen, farmers, artisans, merchants, the State, the courts of justice, as a rule need no articles of jewellery. Young girls may covet gold (often only because it is money); but young girls who are not producers need no medium of exchange, they create no mercantile demand for money. The desires of young girls can hardly be allowed to determine the material chosen for money. Money, by far the most important means of economic intercourse, the essential condition of the division of labour, must have some basis other than the desires of the economically weakest members of the community—young girls with a taste for self-adornment.

The material part of money has for economic life about the same importance that the leather of a football has for the players. The players do not concern themselves with the material of the ball, or with its ownership. Whether it is battered or dirty, new or old, matters little; so long as it can be seen, kicked or handled the game can proceed. It is the same with money. Our aim in life is an unceasing, restless struggle to possess it, not because we need the ball itself, the money-material, but because we know that others will strive to regain possession of it, and to do so must make sacrifices. In football the sacrifices are hard knocks, in economic life they are wares, that is the only difference. Lovers of epigram may find pleasure in the following: Money is the football of economic life.

5. THE SAFETY AND COVERING OF PAPER-MONEY

The tender new idea which sprang into being in the last chapter, germinating amongst the clods of prejudice, must now be protected from the cold wind of doubt until it grows into a vigorous thorn-protected shrub. The idea of paper-money must give the common man a feeling of security instead of making his flesh creep. The German peasant who still often prefers to keep his savings in silver rather than in gold, must come to prefer paper-money to silver because his hard head can no longer reject the truth that, when all is well considered, the paper offers him more security than gold or silver.

It is a question, therefore, of showing not only that paper-money is possible, but also that it is "covered" and secure. I wish to prove that whereas metallic money can, without breach of law, be destroyed by the State that coined it, paper-money can only fall with the State itself.

Otto Arendt's statement "our German mark is but the name for the 1392nd part of a pound of gold" cannot be refuted by the authority of the German currency laws. No law protects the holder of specie or bullion from such a legal interpretation of the conception of money. Indeed, the inscription on the former German coins, "XXX One Pound Fine," and the present inscription on banknotes and treasury notes, "The Bank (or the State as the case may be) promises to pay the holder . . . etc." show that the composers of the inscriptions shared Arendt's views on the nature of metal money. We can therefore easily imagine the following situation: The State, for some reason, deprives gold of its monopoly as money, just as, in the past, it deprived silver of its monopoly as money. But instead of exchanging the coins for new money, it defaces the inscription on them by a stroke of the hammer and returns the metal to its possessor with the words, "You have now, on your own admission, all that you are legally entitled to, a bar of gold of a certain weight. But this gold is henceforward not money. The State has adopted another form of money and no longer recognises gold as money, nor will it exchange the new money for gold. Gold coins were, in your words and according to your explanation of the nature of money, protected by their content in gold. You are

now in possession of this metal content; do what you like with it, the State has no further interest in the matter. You brought gold bars to the State which coined them without expense to you, but at considerable expense to itself. The State now returns to everyone what it received, a gold bar. You can demand nothing more, for you have supplied nothing more."

There is no law to protect us from such a monetary policy. On the contrary it is in complete harmony with current theory, with public opinion and with the inscriptions on the coins.

Yet this policy would be pure swindling, it would be confiscation directed against the holders of ready money, mortgages, bills of exchange, government securities, promissory notes, annuities, bonds, who would thereby lose a large part of their property. For mortgages, municipal or government loans, promissory notes, annuities and bills of exchange are simply promises to deliver so many grains of gold*, and if gold were suddenly deprived of its principal use, as money-material, gold would obviously become cheap. The coins flattened by the hammer, now simply bars of metal, would pour into the goldsmith's shops, and such an increase of supply would, of course, lower the price of gold.

When silver was demonetised, its ratio of exchange to gold fell from 16 to 30 or 35. One ton of gold had for centuries bought 16 tons of silver, but after the demonetisation it bought 30 tons or more, and if the demonetisation of silver had been undertaken simultaneously by all countries, the slump in the price of silver would have been much greater.† After the adoption of nickel as money, the price of nickel, until then trivial, rose hundreds per cent.

The supposition here discussed, the withdrawal of the right of free coinage of gold, almost, indeed, became a reality in the year 1856. Creditors of that date found that the general rise of prices caused by the Californian gold discoveries injured them in favour

* It is clear that no one can be compelled to pay debts in coined gold if the State ceases coining gold, and private coining is prohibited. No one can be compelled to deliver something which is the object of a monopoly.

† It is probable that if one of the great commercial nations demonetised gold, the other nations would immediately follow its example. They would seek to protect themselves from the stream of gold from the first nation, and to avoid losses such as the Latin Union suffered by hesitating too long with the sale of its silver.

of their debtors, so they pressed for the withdrawal of the right of free coinage of gold. Holland did, in fact, adopt this policy. Had not the exhaustion of the Californian gold mines been as sudden as their expansion, beyond all doubt the fate of the gold standard would have been sealed.*

But if gold lost its privileges as money, if everyone who had abandoned primitive economic conditions and gone over to the division of labour, everyone, in short, who produced or possessed wares, ceased to create with these wares a demand for gold, what would be its present importance? What would be the importance of gold if it were no longer money? Gold would have as little economic importance as silver since the demonetisation of silver. It would be raw material for an insignificant industry, an industry which is the least important branch of the thousand-branched tree of commerce. Who ever speaks now of silver? Who would now think of buying silver bars to hoard as a medium of saving? Does anyone care whether the price of silver rises to 200 or falls to 50? Does anyone gain or lose, does anyone become insolvent, because the price of silver, the ratio of exchange between silver and other products, has changed? The change hits at most a few dealers in precious metals; the ordinary business man is as indifferent to the price of silver as a marble statue to toothache. Formerly it was otherwise, a rise of a few per cent in the ratio of exchange between silver and other products sufficed to stop the wheels of industry, to bring about an economic crisis, to spread death and destruction, to cause suspension of payment, unemployment, starvation and social unrest.

For the price of silver, the ratio of exchange between silver and other products, determined how much money men received for their products and whether their products could be sold at all. Formerly to ask the price of a product meant to ask, at the same time, the price of silver. Anyone asking: How much does this or that cost? was simply informing himself about the price of silver.†

* I again draw attention to the fact that this is a new edition of a book which appeared in 1911, that is, before the war. The war has furnished many new proofs of this theory of money, but I have no wish to gain anything from the war, not even material for proving a theory.

† In French and Spanish "silver" means "money." (l'argent, plata.).

This is now no longer true since the State, by a stroke of the pen, divorced silver from money. Let no one imagine that a great popular movement was necessary to deprive silver of the privileges it had for thousands of years enjoyed as money. The "great monetary reform" was introduced in Germany by a few phrase-mongers, and without risk or trouble defended by them against another half-dozen phrase-mongers. Read, if you have patience, these wordy duels throughout which monetary reform is treated as it would have been treated by the Huns. Empty phrases, undigested theories, cheap assertions, special pleading—such was the great conflict of those days over monetary reform; and in every succeeding one, up to the present time, the arguments have been quite as superficial. Nothing has ever been heard of a medium of exchange, of the needs of the wares awaiting exchange, of the division of labour. It really seemed as if the German mark were nothing more than the 1392nd part of a pound of gold.

Assertions in favour of the gold standard were taken for granted; nothing was tested; there was no trace of scientific inquiry into the subject. Even to-day, after many bitter experiences, we have no legal definition of the word "money" to which recourse could be had in cases of doubt in the application of monetary laws.

It is also a fact that at the present moment cultured men and women, to say nothing of peasants and labourers, have childish ideas about the nature of money; that "many persons, even economists of repute, have no thought-out theory of money." (Knut Wicksell, Interest and Prices).*

In these circumstances we are justified in asking: Where are the security and covering of German money, of the German mark? They certainly do not lie in the metal. That is apparent from the fact that silver, which was more closely united to German money than gold, was in a day, without fuss or trouble, legally separated from it.

* The post-war experiences of inflation, deflation and stabilisation have convinced most people that the monetary standard is the very foundation of national life. Nevertheless the new constitution of the German Republic makes no mention of the monetary standard. After the German Government had caused the greatest inflation the world has ever known, our legislators, with German thoroughness (deutsche Gründlichkeit), determined in lengthy debates the colour of the nation's flag—and completely forgot to determine the standard of the nation's money.

Nor is the security of money guaranteed by the law, for a legal definition of the German mark is wanting—so completely wanting, that the question: What, according to law, is a German mark? invariably receives the same intelligent answer: "A mark is 100 pfennigs"—no matter to whom one may apply.

The only real security would be the monetary education of a sufficient number of men who, in the event of legislation affecting monetary standard, would form a bodyguard, so to speak, to protect the mark from bunglers and swindlers. But at present this security does not exist, for the indifference of the general public, of science, of the press, of business men, to monetary theory is so great that it would be difficult to collect among the millions of the German population a dozen persons for a serious discussion of the subject.

Where, then, is the security of the German mark? Who or what protects it from bunglers and manipulators? The leaflets of the Society for Protecting the German Gold Standard? Are not these defenders also bunglers? If the leaflets are examined attentively it is apparent that the writers have no idea of what function money has to fulfil. The fact is never mentioned that money should secure, accelerate and cheapen the exchange of products; that the market, not the metal content, nor the weight, is the criterion of the excellence of money. Money is here viewed from the lowest possible standpoint, the standpoint of the goldsmith or banker. Yet at present the victory rests with this Society!

That the metal content provides no security or "covering" for the German mark we have proved from the history of silver. The conclusion to be drawn from silver is so obvious that it should suffice alone to brand as a falsehood the assertion that a mark is the 1392nd part of a pound of gold, and that it is sufficiently secured by its metal content.

In addition it is well established that through the play of forces known as Gresham's law,* gold can be driven out of a country

* Gresham's law: When in any country the stock of money exceeds the needs of the exchange of products, the result is a rise of prices. This rise of prices impedes export and facilitates import. The balance of foreign trade consequently shows a defict of export in relation to import which is most easily met by the export of gold.

Thus during the years 1872-1874, when Germany was flooded with the

by the issue of paper or silver money whenever the party in power so determines. The State need only coin more silver, or the Bank of Issue print more notes, and before long gold coins will begin to cross the frontier. But if the law determines whether gold is driven out by some other form of money, where is the security and covering of gold money? Silver and gold were in circulation in France when John Law began to experiment with paper-money. The security of this French money was so perfect that in a short time it disappeared, leaving paper-money only in circulation. The experiment was repeated with the assignats during the French Revolution, with the same result. Later still, when the war idemnity was being delivered to Germany, the market was again cleared of gold by paper-money. Three times this experiment has been repeated in France, and always with the same result. Three times the security supposed to be given by metal has proved illusory. In Scotland, England, Austria, Russia, Spain, Italy, the United States, South America, metallic money has countless times, as often as the ruling power (autocrats or people's representatives) desired, been expelled by paper. The metal has never been able to protect the money of these countries from bunglers and swindlers, just as the silver content of the thalers failed to protect German money.

French war indemnity, German imports exceeded exports by 3646 million marks, or almost the whole amount of the indemnity. Yet before the war German exports had exceeded imports.

This export of gold which means a decrease in the stock of money in the country, reduces prices and therefore automatically re-establishes equilibrium between export and import. But if the State takes no heed of the warning given by the export of gold and continues to increase the stock of money by the issue of paper-money, gold continues to leave the country until importers begin to meet with difficulties in obtaining gold (or foreign bills of exchange) to pay for their imports. These difficulties are at once translated into a premium, or agio, upon gold, and this premium then acts as regulator of foreign trade by putting difficulties in the way of import and facilitating export. But at the same time the premium renders the circulation of gold within the country difficult, since government offices and courts of justice accept only paper-money, and the varying premium is soon considered a vexatious concomitant of gold by the public which becomes unwilling to accept this form of money. Gold cannot circulate, it becomes superfluous and collects in the banks where it lies fallow until sent abroad by its possessors to seek interest. It thus happens that if within a country gold and paper are in conflict, paper always wins. Paper-money, or base currency, drives its rival, gold, over the frontier, and this "law" is called Gresham's law in honour of the Elizabethan statesman who discovered, or rediscovered, it.

The belief that the mark is protected from bunglers and swindlers by its gold content, shows complete ignorance of monetary history.

But quite apart from Gresham's law — whom did the metal content of money protect? Obviously only the chance holders of the coins, the holders of the four or five billions of coined money circulating in Germany. But what importance has this comparatively quite insignificant quantity of gold in comparison with the 500 billions of State debts, mortgages, bills of exchange, leases and other rent agreements? Are these 500 billions also covered by the metal content of the five billions of gold? The only security for these 500 billions is the law; the law, not the metal content of the coins, determines the meaning of the German mark in mortgages, government securities, etc. Forty years ago all German mortgages, securities and bills of exchange were payable in silver, yet the law forced debtors to pay their debts in gold.

From this standpoint also, the security given to the German mark by its metal content proves illusory.

The coined money of a country is a drop in the ocean of uncoined money * (that is, all agreements to pay money). Consequently the security given by the metal content of the coined money is a negligible quantity. And at any time the play of forces known as Gresham's law can remove even this infinitesimal security.

In the above-named countries when gold and silver money was expelled by paper-money and copper coins, when in many cases this paper-money became as worthless as the paper upon which it was printed, all agreements between debtor and creditor—government securities, mortgages, bills of exchange—sank simultaneously to the level of the paper-money!

And so, once again, I put the question: where was then the security of metal money?

Money requires the State; without a State money is not possible; indeed the foundation of the State may be said to date from the introduction of money. Money is the most natural and the most powerful cement of nations. The Roman Empire was held together more by the Roman currency than by the Roman legions. When the

* With a circulation of five billion marks in gold in Germany, the circulation of bills of exchange was 40 billions, the amount of mortgages 143 billions, etc.

gold and silver mines became exhausted, and coins could no longer be struck, the Roman Empire fell asunder.

The fact that money is indispensable, and that State control of money is also indispensable, gives the State unlimited power over money. Exposed to this unlimited power the metal covering of money is as chaff before the wind.

Money is as little protected by the money-material from abuse of State power as the constitution of the State is protected from arbitrary usurpation of power by the parchment upon which it is written.

Only the State itself, the will of those in power (autocrats or representatives) can protect money from bunglers, swindlers and speculators — on condition that those in power are capable of purposeful use of their power. Up to the present they have never, unfortunately, possessed this capability.

What has here been said of metal money applies, of course, also to paper-money. The material of paper-money offers no security either to the holders of the money itself or to the holders of promises to pay money (bills of exchange, government securities, titles to pensions, leases and other rent agreements, insurance policies, mortgages, bonds).

Paper-money is in this respect somewhat more insecure than metal-money; but, to compensate for this, it is more completely protected by the State.

We have seen that the State, without infringement of the law, and in complete harmony with current monetary theories, can convert coins by a stroke of the hammer into the raw material of which they were made, that the State can deprive gold coins of the privileges of money; that the loss of the privileges of money would depress the price of gold; that the State is bound by no law to compensate the holders for this loss and that, if it decides to compensate them, it acts not in accordance with the law but merely in accordance with fair play. And fair play is an elastic term, much depends upon the class of society by which it is invoked.*

The legal position of paper-money is much stronger. The State

* The German landowners asked the State to increase the cost of the nation's food by erecting tariff-barriers, and their request was granted. The German working class asked the State to reduce the cost of food by abolishing the tariff-barriers—and met with a stern refusal.

cannot deprive paper-money of the privileges of money without compensating the holders. By issuing paper-money the State has received something for which it is in the holder's debt. This something must be given back; from whatever standpoint the matter is considered, this cannot be denied. The best proof of the duty of compensation is its obviousness.

The State deprived thalers of their privileges as money and compensated the holders by exchanging thalers for new money * There was no legal right of compensation, but sufficient grounds were discovered for this action apart from the law. The State had, for example, by levying taxes, compelled its citizens to purchase thalers. To pay his taxes, a peasant had first to purchase thalers by selling his cow. Because the State demanded silver, the peasant had to buy silver, even if he had no personal need for it. The State therefore undertook the duty of assuring the sale of these thalers—from which may be deduced the duty of compensation.

Such a plea for the duty of compensation deserves a hearing, but whether it would always obtain one is another matter. It is useless pleading to deaf ears, and " none are so deaf as those who will not hear." To plead for a right is, indeed, to acknowledge a weakness.

If the German landowners had known, when the gold-standard was being adopted in Germany, that the demonetisation of silver would cause a slump in its price sufficient to have freed them from 50% of their mortgage-debts contracted in silver thalers, their attitude to the question of compensation might have been very different. Their later conduct when they learnt, too late, how the matter really stood, justifies the belief that they would have adopted the monetary theory whereby a thaler was declared to be the thirtieth part of a pound of fine silver, and that they would then have insisted on paying their debts, contracted in terms of silver, in uncoined silver at the ratio of 1/30th of a pound of silver for every thaler. This would have been an equally profitable and a more honourable line of conduct than the one actually adopted, namely the raising of their rents through protective duties.

* That the holders of the thalers could suffer any loss through the withdrawal of the privileges of money from silver was, and remains in contradiction with the theory of metal money.

With paper-money there are no such uncertainties. There are no laws and no interpretations of law, no arguments to support the State's duty of compensation; the duty being obvious. For this reason the security of paper-money is greater than that of metal money. Paper-money is secured by all the interests and ideals which weld a people into a State. The paper-money of a State can only go down with the State itself.

Besides the imaginary security of money in relation to the absolute power of the State, a " covering " or economic security is claimed for money. Granted that the State makes the best possible use of its powers, granted that there is no abuse of power, there is still no guarantee, say the advocates of a metal standard, that the holder of money will be recouped for the outlay he has made in obtaining it. Metal money contains in itself the material for meeting this outlay, it has " intrinsic value " (for the moment it does not matter what meaning is attached to this term), whereas paper-money has no content and must seek its covering elsewhere, apart from its material.

This objection is void and shows confusion of thought, as we have already learnt in the chapter " So-called Value " and in the above discussion of the security of money. The mere fact that all the holders of the demonetised silver coins, without exception, made use of the right of exchange, shows clearly that metal money is not a full " covering " for the holder for his outlay in obtaining it. If it had been a full covering, the holders would simply have kept the silver.

To what has already been said in reply to the above objection, all that may be reasonably, though perhaps superfluously, added is this:

A ware is covered as long as someone is prepared to give the usual quantity of other wares or money in exchange for it, in other words, as long as the demand for it does not fail. But no ware is covering for itself. The division of labour and the word " ware " imply that the product of the producer's labour is useless to him. What, we repeat, can tailors, shoemakers or chemists do with their produce, or farmers with the gold of the coins, if no one offers to purchase it from them ?

By the covering of money is meant utility such as the possessor

of goods for use (provisions, tools, etc.) derives from their use. It is sought to provide the possessor of money with the same kind of utility through the material of money. Money is to be simultaneously a ware and a material for the satisfaction of personal needs. Money is to be a hybrid, an impossibility.* The moment the money-material became useful to all its possessors, money would cease to exist. The utility of the money-material would force the coins into the melting pot. But money is indispensable; therefore it must not be consumed.

As long as the division of labour exists, as long as we produce wares, products useless to us personally—so long shall we need a medium of exchange, that is, money. The demand for money is therefore permanent and continuous; it is based upon the division of labour, the foundation of our existence. Why should anyone have the power of using up and destroying money ? Would not the possibility of consuming the medium of exchange endanger the exchange of wares and the continuation of the division of labour ?

A covering of money such as the above objection implies, does not, and cannot exist.

It is not the money-material, but the function of money as the medium of exchange, that covers money and ensures the economic demand for it. In the last analysis money is covered by the inexhaustible treasures brought within reach of humanity by the division of labour.

Except the division of labour, there is no covering for money. The division of labour produces a never-ending stream of wares and a never-ending demand for a medium of exchange, for money, regardless of what material the money is made. Whether the money is made of gold, silver or paper has no influence upon the supply of wares, that is, upon the covering of money; for whatever the form of money, the products of the division of labour must be offered in exchange for it. Whether a farmer receives gold or paper for his potatoes has no influence upon the quantity of potatoes he brings to market, for in either case he brings all he can spare. Whether the Reichsbank has 10 or 100 tons of gold in its cellars has no influence upon the supply of wares, upon the demand for the medium of exchange. And since this demand for it is the real

* " Usually when a German wants anything he also wants the opposite."
Bismarck

covering of money (as of wares in general), therefore the covering of money is independent of the money-material.

Wares, demand for money, and covering of money are three different expressions for the same thing. Where is the covering of a railway share ? Does it consist of rails and embankments ? Everyone knows that the covering of a railway share is the mass of goods daily offered for transport. The division of labour is the covering of the railway share.

The same is true of shares in the privileges of money, that is to say, of the possession of money itself. If freight and passengers fail, the railway share is rubbish; if the division of labour and the stream of wares ceases, money is the most useless of objects; paper-money then becomes waste-paper, and metal money raw material for the least important of industries.

To recapitulate what has been said in this section:

1. The money-material is no security against misuse of State power in monetary matters.
2. Even if we disregard the working of Gresham's law, the money-material can only to a small extent cover coined money (silver covered but 40% of the thalers). The thousand-fold greater volume of contracts payable in money (mortgages, government securities) remains quite uncovered.
3. If a certain form of money is deprived of its privileges as money, the duty of compensation by the State is obvious only in the case of paper-money. With metal money this duty must be defended against the opposition of large sections of the community whose interests are at stake. For this reason the security of paper-money is greater than that of metal money.
4. The money-material cannot influence the demand for money and cannot, therefore, serve as covering for money. The money-material can neither cause, nor influence, nor control the demand for money.
5. Money is, independently of its material, at all times covered solely by the division of labour.
6. The security of money can be attained only by a sound conception of currency policy shared by the people and their rulers.

6. WHAT SHOULD THE PRICE OF MONEY BE ?

We have now shown, with all the detail demanded by the importance of the subject that money can be made of paper, or, in other words, that a higher price can be obtained for paper-money than for the same amount of paper without the privileges of money.

Next comes the question: How much higher should the price of paper-money be than the price of the paper of which it is made ? What should be the ratio of exchange between money and wares ?

This is a question of importance, a question of burning interest to the producer. Producers are indifferent to the substance of money, which is for them merely unnecessary ballast; but their attention is always aroused by the question: How much money do you ask for your cow? or: What do you offer for my tools? For upon the answer depends the success or failure of the whole process of production.

If there is a change in the ratio of exchange between wares and money, everyone in selling his wares receives more or less in money, and when selling his money receives correspondingly less or more in wares. From this point of view, therefore, a change in the price of money would be pretty much a matter of indifference.

But everyone does not immediately buy wares with the money he has received; and for such persons it is certainly not a matter of indifference whether prices have changed during the interval between selling and buying. Still less are the prices a matter of indifference to debtors and creditors. To them the question: How much of my produce must I sell to meet the interest upon my debt and to provide for repayment? (or: How much produce shall I receive for the money coming in as interest and repayment for my loan?) is of vital importance. We shall also see that the question of prices, considered simply from the technical standpoint of commerce, determines the continuation or non-continuation of the exchange of wares, that is, of the division of labour, the foundation of economic life.

To illustrate the importance of prices, we shall at present consider only the relations between creditor and debtor.

The assets of a debtor (mortgager, issuer of bonds, acceptor of bills, tenant, holder of life-insurance policies, taxpayer) usually consist of wares, machinery, land, cattle, whereas his liabilities

always consist of a definite sum of money. And the debtor can obtain money to meet his liabilities only by selling for money part of his assets, usually his produce.

If the ratio of exchange of wares to money changes, the ratio of the debtor's assets to his liabilities evidently changes in the same proportion. Suppose, for example, that the price of wheat is $62 a ton (the price in Germany after the introduction of the import-duty on wheat) and that a farmer needs one quarter of his harvest to provide for taxes, insurance and interest, including redemption charges on mortgages (or for rent, in the case of a tenant-farmer). If, now, the duty on wheat is removed, the farmer may have to sacrifice one-third of his harvest to make the same payments. This increase may mean the disappearance of the debtor's profits, and his ruin.

The position is reversed if prices rise, and it is also, of course, reversed if looked at from the standpoint of the creditor, who gains exactly what his debtor loses, and loses exactly what his debtor gains, through a change in the level of prices.

Credit has expanded enormously in modern times. German debtors owe German creditors something like three or four hundred billion marks.* The interest and amortization for this sum can be raised only by the sale of the products of labour. A small change of prices is sufficient to throw a burden of many billions of marks upon one of these two great classes, to the benefit of the other.

An average fall of prices of 1%, the commonest of events with our much-praised gold standard, throws a greater burden upon the German debtor than the five billions of the war-indemnity of 1871 threw upon the French nation.

Or suppose a tax-payer pays $100 annually in direct and indirect taxes to meet his share of the interest and sinking-funds on local and government loans. The ratio of exchange between money and the product of his labour determines whether he must devote ten, twenty or fifty days to earning the money.

Should our monetary policy aim at raising prices in order to exploit the creditor for the benefit of the debtor, or should we lower prices in order to enrich the stock-holding class? Are we

* Throughout this book, in accordance with American notation, a billion means 1,000 millions. The German word is "milliard."

to leave the determination of the question to creditors or to debtors; are we to allow the monetary standard to be determined by egoistic motives of individuals? The answer is that private interests must never be considered in the management of money. Money must be managed in the interests of economic life as a whole, not in the interests of individuals.

Independently of time and place money should always obtain the price it obtains to-day. What the holder of money has paid for it in commodities he should be able to demand in commodities to-morrow, or ten years hence. In this way the debtor pays back what he has received, and the creditor receives what he has given, no more, no less.

That is self-evident and requires no proof.

7. HOW THE PRICE OF MONEY CAN BE MEASURED WITH PRECISION *

If the price of money is to remain constant, proof must be given that it actually has remained constant. If this proof is not forthcoming, either debtors or creditors will be dissatisfied and demand the lowering or raising of the price of money. The only way of silencing the complaints of creditors and debtors is to prove in black and white that the price of money has remained unchanged.

The conflict between the advocates of the gold standard and the bimetallists turned upon the question whether the price of money had changed. The question was debated on both sides under the influence of an illusion, that of so-called "value" ("intrinsic value," "store of value" etc.), and therefore could not be settled. The finest scientific proofs of the bimetallists were again and again reduced to absurdity by this fiction. If the bimetallists, by the help of laboriously compiled statistics, showed that prices had fallen 10, 20 or 50% since the introduction of the gold standard, the champions of the gold standard replied that this objection was meaningless, since the question was not the price of money but its "value"—as indeed the bimetallists admitted. The general fall in the price of commodities was ascribed to the decrease of costs of production and transport, caused by technical progress. Only a

* By "price of money" is meant the amount of commodities that must be given in exchange for a certain amount of money.

few convinced opponents of the theory of value could succeed in proving that the introduction of the gold standard was a blunder through which debtors (among them the State) were plundered to the profit of their creditors. The bimetallists would have won, and won with ease, if they had confined the issue to the price of money, but they disarmed themselves by their docile acceptance of the illusion of "value."

The price of money can be expressed only in commodities. If barter is excluded, the price of commodities can be expressed only in one way, namely by a sum of money, but the price of money can be expressed in as many ways as there are kinds and qualities of commodities, terms for the delivery of commodities, markets for commodities. If we read every current market report, price-list and catalogue in a country, we know what, at that moment, its money is worth.

But if we need to find out whether the price of money has changed, it is not sufficient simply to compare the prices of commodities to-day with their prices of yesterday. For it is probable that a large number has increased, and that another large number has decreased in price.

At the same time a change in the price of steam-coal, wheat and iron is, of course vastly more important than a change in the price of needles, canaries or buttons.

An example will show what we mean:—

		1906	1907
A person paid for	1 tobacco-pipe ...	$1.00	$1.10+
	1 tin of boot-polish ...	0.50	0.60+
	1 doz. steel pens ...	0.50	0.80+
	1 hat	3.00	2.50—
	1 pair of boots ...	4.00	3.00—
	1 pair of trousers ...	11.00	10.00—
		$20.00	$18.00—

Thus although one half of these six articles increased in price and the other half diminished, yet the "average price" fell $2 or 10%. Judging by the above commodities the buyer will observe an increase in the price of money of approximately 11%. The buyer receives 11% more commodities for his money than formerly.

To establish equilibrium with the time of the first measurement it is not necessary that the former exchange-relation of the commodities to one another should be re-established. It is sufficient if the price of money is lowered. All commodities must simply rise 11% in price. Money has no influence upon the exchange-relation of the commodities among themselves. If, simultaneously, boot-polish rises in price, and a pair of trousers falls in price, that is the result of changed conditions in the production and sale of these commodities. Only when, "on the average," more or less commodities of the same quality are received for the same amount of money, can we say that the ratio of exchange of commodities and money has altered. And so, to re-establish the former equilibrium, an increase of 11% (11·1%) must be made upon each of the above six articles, no matter what their former prices were. We should then have:—

1 tobacco-pipe ...	$1.10			$1.22
1 tin of boot-polish ...	0.60			0.67
1 doz. steel pens ...	0.80	+11.1% =		0.89
1 hat	2.50			2.78
1 pair of boots ...	3.00			3.33
1 pair of trousers ...	10.00			11.11
	$18.00			$20.00

The total is now $20, as before.

This uniform proportionate increase can only come from a cause acting uniformly upon all commodities, not from changes in the various costs of production, and money alone * can act uniformly upon the prices of all commodities. To re-establish equilibrium we need only bring more money into circulation until prices have risen 11%.

To measure variations in the price of money we must therefore determine the average price of commodities and compare it with the average price of some former time.

Thousands of millions are here at stake, since the price of money

* General changes of price affect the relation between debtor and creditor, between the earning class and the stockholding class. This affects the demand for, and consequently the price of, the (very different) commodities bought by these two classes. This reaction is not treated here, as it is immaterial to the understanding of this part of the subject.

determines the prosperity or ruin of creditors and debtors. Careful work is therefore necessary; the method employed must be proof against interested outside manipulation and give an exact scientific result; otherwise there will be no end to the complaints of debtors and creditors.

Unfortunately this exact, unimpeachable result is not attained by the methods hitherto proposed. Dismayed by the difficulty of determining officially the prices of millions of commodities of different qualities, at different places, and of classifying them according to their relative importance, statisticians have proposed to choose a limited number of commodities from among the staple articles bought and sold at the exchanges, and to estimate the relative importance of these commodities by the amount of capital sunk in their production and marketing.

In this manner the "Index numbers" of Jevons, Sauerbeck, Soetbeer and others have been compiled.

To facilitate the understanding of a matter of vital importance to economic life, I shall here print such a table—with the prefatory remark that all the figures in it are drawn from imagination and are used simply as illustrations.

Table for the Calculation of the Average Price of Staple Commodities

	1860			1880			1900		
	a Price	b Quant.	c Total	a Price	b Quant.	c Total	a Price	b Quant.	c Total
1. Wool	1.00	100	100	0.80	90	72	0.70	40	28
2. Sugar	1.00	20	20	0.90	90	81	0.80	110	88
1. Flax	1.00	70	70	1.10	40	44	1.20	10	12
2. Cotton	1.00	20	20	0.90	40	36	0.80	60	48
1. Wood	1.00	150	150	1.20	100	120	1.30	80	104
2. Iron	1.00	50	50	0.80	100	80	0.70	130	91
1. Wheat	1.00	400	400	0.80	300	240	0.75	260	195
2. Meat	1.00	150	150	1.20	200	240	1.40	260	364
1. Indigo	1.00	30	30	0.80	5	4	0.75	1	(1)
2. Petroleum	1.00	10	10	1.10	35	38	1.20	49	58
		1000	1000		1000	955		1000	989

Explanation: According to this table the average price of these ten commodities changed from 1000 in the year 1860 to 955 in the year 1880 and 989 in the year 1900.

The quantities in the three columns (b) must of course always be brought to the same total amount (here 1000) if the result is to hold good. The figure chosen is unimportant, it is only necessary that the ratios of the separate quantities among themselves in each column (b) should be correct. If for instance, we reduced the sum of these quantities in our table to 500 or 100, the final result would be the same; the relation of the numbers 1000—955—955 would remain unchanged.

Each price in the first column (a) is for the quantity of the commodity obtainable in the year 1860 for one dollar, for example, 7½ ounces of wool, 51 ounces of sugar, 6 ounces of flax, etc. For this reason all the prices appear as one dollar in the first column. The prices in the second and third columns (a), for 1880 and 1900, are for the same amounts, the amounts of the commodities which were obtainable for one dollar in 1860; that is, again 7½ ounces of wool, 51 ounces of sugar, etc.

To illustrate the chief difficulties to be overcome with this method of determining the general level of prices, I have chosen the commodities in such a way that a commodity of decreasing importance in the economic life of the country is followed by a commodity of increasing importance. Wool and sugar are an example. German sheep-breeding has steadily declined during the last decades and wool has by no means the same importance in German economic life as it had 40 years ago. At that time the price of wool reacted upon the price of an enormous flock of sheep and upon the rent of a large tract of country which was used for sheep-grazing. To-day German agriculture is hardly concerned in the price of wool. If the price of wool fell from 100 to 50, scarcely one German farmer in a hundred would be aware of the fact; wool-merchants, weavers and cloth-merchants alone would suffer.

Only by "weighting" the price of wool with its quantity can we reduce the price in the above table to its real importance. For this quantity, therefore, we have chosen the numbers 100—90—40.

Of sugar the reverse is true. The German beet-sugar industry has expanded greatly since 1860, not alone absolutely, but also in comparison with other industries. Many sheep-pastures have been converted into beet-fields; large numbers of German farmers and considerable amounts of capital in land, factories and stores are

affected by the price of sugar. Sugar is therefore given a place of increasing importance in our table.

It is the same with the other pairs of commodities, flax and cotton, wood and iron, wheat and meat, indigo and petroleum.

If we can make sure:—

1. that the data are complete,
2. that the separate prices are correctly ascertained,
3. that the estimates of the comparative importance of the separate commodities are correct,

the result, doubtlessly, will be unobjectionable.

But this is a large assumption. There are millions of separate commodities, and each commodity has numerous differences of quality, as one can observe by turning over the pages of the catalogues of the separate factories. Take, for example, a catalogue of photographic articles, of drugs or hardware. A thousand different articles strike the eye. And how are the prices to be officially ascertained? Factories have for their different customers blue, red, green and white quotation-lists with different rates of discount. Is the official price-collector to be given a white or a green discount quotation?

But if there were no other, simpler, method of reaching a sufficient degree of accuracy, we might be content with an approximate result, a determination, not of the average price of all commodities but of 100, 200 or 500 of the most important staple articles.

If the work of collecting the prices were left to the Chambers of Commerce, and the average were taken of the prices collected by them, no great objection could be made from the standpoint of impartiality towards debtors and creditors.

Absolute precision could not be obtained since:—

1. The prices of commodities cannot be exactly ascertained by third persons, especially if these persons are government officials.
2. The estimation of the relative importance of the different commodities is exceedingly intricate.

But is this any reason why we should make no attempt to measure the price of money? The tailor measuring cloth does not use the standard metre of Paris; his customers are satisfied with the use of the wooden yard-stick. The rough result obtained by

the above method of ascertaining the price of money would be preferable to the wordy assertions of the President of the Reichsbank. What do we know to-day of the price of money in Germany? Nothing but what our own observation tells us, or what interested persons, without proofs or facts, choose to assert.

Compared with this blind ignorance an approximate measurement of the movements of the price of money would be practically and theoretically an immense advantage. Such a measurement would perhaps bring surprises and embarrass the worshippers of the gold standard, but is this any reason for renouncing it? Does the judge when framing his questions for the jury take into consideration the embarrassment of the thief? Is not a tallow-candle better than inky darkness, the doubt that science suggests preferable to blind superstition?

For 40 years we have been put off with the assertion that the German monetary standard is an excellent standard, and for 40 years we have waited in vain for the proof.

Statistics of prices collected by the above method would give us a basis for examining the correctness of this assertion. The reason why such statistics have not been compiled up to the present is fear of the unwelcome light they would throw upon our present currency administration. Routine hates science.

It is curious to observe how the same persons who are blind to the acrobatics of the gold standard suddenly become meticulous pedants and raise the claims of accuracy beyond all practical requirements when considering a paper-money standard and the possibility of its measurement. The complaint that within short periods of time, prices, under the gold standard, rise or fall 10—20—30% is met with the counter-complaint that the proposed method of measurement is not absolutely reliable, that it is not free from errors, though possibly the existence of these errors cannot be proved.*

But even such malevolent pedantry can be silenced, provided

* To prove the errors complained of in this method of measurement critics would have to provide a method of measurement of their own. But this they refuse to do, as the method would be applied to the gold standard, which could not stand the test. They prefer therefore to speak of "unprovable" errors and to arouse the suspicion in lay minds that anything which is "unprovable" is, for that reason, particularly dangerous.

that we are prepared to take a certain amount of trouble. For what is the problem at bottom? It is merely to discover whether the interests of creditors and debtors have been affected by changes of prices; whether and to what extent the budget of the business classes has been influenced by a rise or fall of prices; whether wage-earners, officials, stock-holders and pensioners can buy more or less commodities with their money income.

To ascertain this beyond the possibility of error it would only be necessary to pass the following law: That all producers (farmers, manufacturers) be required to furnish the amount of the commodities produced by them, and the prices obtained, to authorities designated for this purpose, perhaps the Chambers of Commerce. The separate figures would be collected by these authorities and the result communicated to the central bureau of statistics. The communication would be somewhat as follows:—

5,000	tons wheat, per ton	$140	$700,000
1,000	tons potatoes, per ton	30	30,000
5,000	gallons milk, per gallon ...	0.60	3,000
600	cubic yards boards, per cubic yard	9	5,400
5	million bricks, per thousand ...	8	40,000
200	sheep	20	4,000
500	doz. straw hats, per doz. ...	10	5,000
	Annual production of the District X.		$787,400

At the central bureau of statistics the amounts returned by all the districts would be added together. The total would give the point of comparison for the determination, from time to time, of later variations. For these new measurements new prices, ascertained by the local collecting agencies, would be incorporated in a calculation similar to the one sketched above. The new total would give the average change of prices for the whole production of the country. The prices would therefore have to be collected as often as measurements were desired, but the amounts produced would only be taken annually. For foreign commodities statistics of imports would be used.

Since the volume of production varies as much as prices, the new statistics of production would not be immediately available for the new measurement. To obtain comparable quantities the new

amounts of production must be used first with the old prices, and then with the new prices. The comparison of these two figures gives the index numbers of the movement of the price of money.

Merchants' stocks are left out of this calculation. They are included in production, and we may assume that changes revealed by statistics of the prices of production would apply in the same proportion to the wares held by merchants. It would therefore be a useless complication to include the merchants' stocks in the statistics of prices. The same is true of wages, which are already included in the price of wares. It may also be assumed that if factory prices in general are constant, the cost of living must also be constant; that workmen, officials, stockholders and pensioners will be able to buy the same quantity of goods for their money. (The workmen's house-rent, which consists chiefly of interest, cannot be taken into consideration in this connection).

Means of production (land, houses, machinery, etc.) must not be included in these statistics. The means of production are no longer wares for exchange, but goods useful to their owners through the employment to which they put them. And the price of things which are not for sale is a matter of indifference.

That part of the instruments of production which is consumed by "wear and tear," and written off, is transformed into wares and reappears regularly in the market. It is thus sufficiently represented in the prices of wares.

The State, by this plan, neither ascertains the prices nor estimates the importance of the separate commodities. The whole work is carried out by the people themselves. The price of money is thus ascertained impartially, outside the sphere of politics. The nation is directly responsible for its monetary standard.

The duty of supplying the figures to be placed at the disposal of the State would hardly be a noticeable burden upon the business world, and the records required would be extremely useful to the producer, showing him to what extent his balance was affected by the management of the monetary standard. He would learn how much depended upon his activity and how much upon the activity of the Bank of Issue.

The most important objection to this method is that individuals interested in the rise or fall of prices (debtors or creditors) would

falsify their reports; that farmers with debts, for example, would endeavour to prove that prices had fallen, in order to cause the State to raise prices by the issue of money—a rise of prices being equivalent to a general relief of debtors. But this danger is not great, since everyone would know how infinitely little his declaration would affect the total result. If an indebted farmer wrongly declared a loss of 1000 marks on a turn-over of 10,000 marks, this would be a negligible quantity in comparison with fifty billion marks, the turn-over of Germany as a whole. False declarations could be made punishable, and individuals would ask themselves whether the risk was not out of all proportion to the expected gain.

Each declaration would also be checked by the others. If the majority of farmers reported a rise of prices, an exception would be noticeable, and the falsifier would have to be prepared to face an inquiry.

Obviously this procedure takes no account of the illusion of " value."

Wares are paid for with wares, and money can be measured only by wares, by the material characteristics of wares. There is no other measure of money. I have given wares for money and I shall receive wares for it. Not work, not sweat. Someone in exchange for my money gives me an article. How he came into possession of it, how long he worked upon it, is his concern, not mine. I am interested solely in the product. Labour must be sharply distinguished from the product of labour, and wages must therefore be rejected as a measure of the price of money. Wages do indeed depend upon the product of labour and not, as Marx asserts, upon the factory clock. But wages are not identical with the product of labour, inasmuch as a deduction must be made from the latter in the shape of rent and interest. But wages, plus rent, plus interest, are equivalent to the product of labour which, in the form of wares, is, as we have seen, the measure* of the price of money.

* I use the word " measure " reluctantly. A measure is always a part or multiple of the object to be measured; the length of a bale of cloth is measured by the length of the yardstick. But what part of a horse can be found in the dollars for which it is sold ? For 100 years economists have called money " a measure of value " and none of them has as yet felt the necessity of finding a substitute for this manifestly erroneous expression.

That money and commodities are exchanged does not prove that they have something in common; on the contrary, it is because money and commodities have little or nothing in common, it is because they are incommensurable, that they are exchanged to the advantage of both parties. But how can we " measure " two things that lack a common property ?

This criticism also applies to the expression " purchasing power of money " which causes the same illusions and must be rejected. For price is the result of bargaining and in influenced by thousands of factors.

A real measure, again, the standard platinum metre at Paris, is kept in a special compartment constructed deep in the earth in order to remove it from the influence of variations of temperature. Apply such a measure to the action (bargaining) on which price is based and you will at once recognise the illusory character of the expressions " value," " purchasing power," " measure of value," as applied to money.

And perhaps, if you are a bad mathematician but a good philosopher, you will then discover the term that economists can henceforward without reluctance employ.

8. WHAT DETERMINES THE PRICE OF PAPER-MONEY ?

The theory that the ratio in which commodities are exchanged is determined by the amount of work necessary for their production cannot be applied to paper-money. Paper-money has indeed a price but it has no " value," since it has cost no work. Paper-money has no " intrinsic " or " extrinsic " value, no " value as a substance "; it cannot serve as a " store of value," a " conserver of value " or a " means of transport of value "; it is never " undervalued " or " fully-valued." The price of paper-money cannot " oscillate about its value as centre of gravity." (Terminology of the theory of value †).

Paper-money must therefore go its own way; it is completely subject to the forces which determine price, and serves but one master.

The forces that determine price are summed up by the words demand and supply. To answer the question at the head of the chapter we must therefore understand clearly what these words mean.

If we ask to-day: What is demand for money ? Who creates a demand for money ? Where do we find a demand for money ? We receive contradictory answers. Probably the answer most frequently given would be: " In the banks, where employers and merchants discount bills. If the demand for money increases, the rate of interest

† We might here ask why price must " oscillate " about " value," why the forces that are strong enough to separate price from value are not also strong enough to make the separation lasting.

rises, so the rate of interest can be used as a measure of the demand for money. States that, unable to balance their budgets, float loans create a demand for money; so do beggars."

But this is not a demand compatible with the conception of a medium of exchange; and money is above all things a medium of exchange. We must learn to regard money simply as a medium of exchange. That the above answers are nonsense becomes apparent if we substitute for the word " money " the expression " medium of exchange."

The merchant who asks the bank for money exchanges nothing; he gives nothing but his promise to repay the money; he borrows, he does not exchange. He gives money for money; there is no question of commerce and prices, but one of interest. Nor does the State create with its loans a demand for the medium of exchange; it offers nothing in exchange either. A sum of money in the present is changed for a sum of money in the future.

This is not demand for the medium of exchange; it is not a demand for money compatible with the purpose of money. To demand money as a medium of exchange, something different from money must be offered for it.

Where, then, is the demand for money ?

Evidently wherever there is need of a medium of exchange; wherever the division of labour throws upon the market wares which, for their exchange, require a medium of exchange, that is, money.

And who demands money ? Evidently the farmer bringing his produce to market, the merchant selling his wares across the counter, the workman offering his services and asking money for the product of his labour. Where the supply of wares is largest, the demand for the medium of exchange is largest; where the supply of wares increases, the demand for money, for the medium of exchange, increases. If there are no wares to be exchanged, the demand for money disappears. Primitive production and barter mean absence of demand for money.

We must therefore distinguish sharply between the merchant offering a farmer calico in his shop and the same merchant an hour later visiting the bank to discount a bill. With his calico in his shop the merchant creates demand for the medium of exchange; with the

bill of exchange at his bank he creates no demand for money, since a bill of exchange is not a ware. We speak here of rate of interest. This is simply desire for money, not demand.

Demand for money has nothing in common with desire for money. The beggar, the farmer in the grasp of the usurer, the State, the employer, or merchant discounting a bill desire money; but demand for money is only created by those who have wares for sale. Desire for money is complicated, demand for money is simple. Desire for money comes from a person, demand for money comes from a thing, from a commodity awaiting sale. The beggar desires alms; the merchant desires to enlarge his business; the speculator desires to keep loan-money out of reach of his competitors, so as to monopolise the market; the farmer has fallen into the trap laid by the usurer. All of them have an intense desire for money and none of them is able to create a demand for money, since demand depends, not upon the cares of men, but upon the stock of wares awaiting exchange. In this sense it would be false to say that desire for a thing and the supply of it determine price. There is the greatest possible difference between the desire for money, measured by the rate of interest, and the demand for money, measured by prices. The two things have nothing in common.

Persons who hear the word " demand for money " and do not at once think of wares, or the words " a great demand for money " and do not at once think of a pile of wares, a market, a goods train, an overladen ship or perhaps of " over-production " and unemployment, have not grasped the meaning of the expressions: " Demand for the medium of exchange," " Demand for money." They have failed to understand that the division of labour produces wares for the exchange of which money is as necessary as railway wagons for the sale of coal.

If we hear someone speaking of an increasing demand for money because the rate of interest has risen, we may be sure that this person is unable to give clear expression to his ideas. And if we find a professional economist confusing demand and desire, it is our duty to remark that scientific questions should not be handled in loose language.

We thus separate the demand for money from human desires, from the state of the market, from business projects, dealings,

speculations and so forth; we rescue it from the enveloping fog of "value" and enthrone it upon the mountain of wares which the division of labour throws upon the market—visible to all, palpable, measurable.

We distinguish this demand for money from desire for money. Upon another mountain, not of wares but of bills of exchange, deeds of mortgage, bonds, government securities, insurance-policies and so forth we place the inscription: "Desire for money." Upon the first mountain we write "Prices" and upon the second "Rates of interest." Anyone who, in the course of the following inquiry, thinks of desire for money when I write demand for money had better lay aside this book. It was not written for him.

Demand and supply determine price, the ratio in which money and wares are exchanged. What demand for money is, we now know. It is material; it is the stream of wares continuously flowing from the division of labour.

But what is the supply of money? We must give this conception a form and content; we must remove it also from its enveloping fog.

The farmer who harvests potatoes, the tailor who sews a coat, must offer the product of his labour for money—but what does he do with the money? What have the 100,000 farmers and artisans done with the thaler which for 100 years has passed from hand to hand? Each of them offered the thaler for wares which, once in their possession, became goods for use and disappeared from the market. But the thaler returned again and again to the market; it remained on the market for one year, 10 years, 100 years; and perhaps, supposing it to be re-coined, for 1000, 2000, 3000 years. To all through whose hands it passed the thaler was useful only as a ware; of all those 100,000 persons there was not one who could use it otherwise. The uselessness of the thaler for consumption compelled everyone to get rid of it again, to sell it, that is, to offer it in exchange for commodities.

Those who had much money were forced to offer much money in exchange, those who had little money were forced to offer the little they had. The offer of money was, and is, quite correctly called the demand for commodities. Where the stock of commodities is large, the demand for money is large. Similarly it can

be said that where the quantity of money is large there is necessarily more demand for commodities than where the quantity of money is small. (The limitations of this statement will soon appear).

Is there any demand for commodities other than that which the supply of money represents?

Here again, as with money, we must distinguish between the desire for, the need of, commodities, and the demand for commodities. The "needy" need or desire commodities, but only those persons demand commodities who offer money for them. The need or desire for wares is expressed by requests or begging letters, the demand for wares by the ring of hard cash upon the counter. Merchants shun desire for their wares, but demand for their wares attracts them like a magnet. In short, the demand for wares consists of the offer of money; those who have money must create a demand (We shall see later when they must do so.)

Demand for commodities, usually known simply as demand, is therefore always represented by money. A mountain of money means a great demand for commodities, though not indeed always, as is proved clearly by the 180 millions in the war-chest at Spandau. During 40 years this mountain of money has not bought a pfennig's worth of commodities. Such exceptions will be treated later. The discovery of a new gold mine means an increasing demand for commodities, and if a country with a paper-money standard sets in motion additiontal printing-presses for paper-money, everyone knows that demand, and consequently prices, will increase. If everyone were given the right to cut banknotes, treasury notes and coins in two, and to use each half as a whole, demand, and prices would be doubled.

But can we now go further; can we do with the supply of money what we did with the supply of wares, can we say: "To measure the stock of money is to measure the demand for wares?" In other words, is the supply of money to such a degree identical with the stock of money that it is completely independent of the wishes of the possessor of money? Or is the offer of money, partly at least, subject to the whims of the market, to the greed of speculators? In short, is the supply of money something material, namely money itself, or does it include an action?

The answer to this question is obviously of extreme importance for the solution of our problem.

The division of labour causes a never-ending stream of wares called "supply." The stock of money causes the offer of money called "demand." The stock of money is a definite quantity. If, therefore, the offer of money were continuous, price, the ratio of exchange between money and wares, would be independent of human action. Money would be the embodiment, sharply defined, of demand, just as the wares are the calculable, measurable embodiment of supply. We should then only need to ascertain the ratio of the stock of money to the stock of wares in order to know whether prices were about to rise or fall. This would actually be true of Free-Money as described in the next section of this book. Free-Money embodies demand, it eliminates from demand the wishes of the possessor of money in respect to the time, place and amount of demand. Free-Money dictates to its possessor orders for commodities and makes these orders an imperative necessity. With Free-Money the amount of demand can be measured directly by the amount of Free-Money issued by the State, just as the supply of potatoes or of a morning newspaper can be measured by the size of the harvest or of the edition printed.

But this is not true of the present form of money, as we shall see later, and we cannot therefore at once answer the question at the head of this chapter. We must undertake further investigation before we can say what determines the price of the present form of paper-money.

9. INFLUENCES TO WHICH DEMAND AND SUPPLY ARE SUBJECT

Wares are produced for the market and are useful to their producers only as objects of exchange. For this reason supply is equal to the stock of wares; it is something material, or at least an involuntary action carried out by means of wares. Without wares the action which lies in supply cannot be carried out, and with wares it must be carried out. To offer wares for exchange is the only thing which can be usefully done with them. In general therefore, the action which lies in supply is so closely identified with the substance

necessary for the action that substance and action are bound into one.

Supply, that is, demand for money, is therefore identical with the stock of wares.

The stock of wares, again, depends upon:

1. The stream of wares flowing into the market, due to the division of labour.
2. The stream of consumers' goods leaving the market after completion of exchange.

If the stream of commodities into and out of the market never varied, supply, that is demand for money, would be constant. But this, we know, is far from the truth. The stream of wares into the market is continually increasing because of the continual increase of population. One hundred workers throw more wares upon the market than ninety. The stream of wares into the market also increases because of the steady expansion of the division of labour. If a farmer organises his farm for cattle-breeding, instead of wasting his energy in producing articles for his own consumption, he must make more frequent journeys to market. Formerly he bought and sold little, now he sells his whole produce; he has therefore increased the supply of wares, that is, the demand for money, by almost the whole amount of his production.

In the country and in small towns many artisans used to follow their trades intermittently; they had subsidiary occupations such as farming or gardening; they made their own tools, clothes, furniture, they taught their children. No artisan can now spare time for such occupations. His trade occupies him completely and pays him better. The whole product of his labour takes the form of wares and comes to market, where it creates demand for money. In this way demand for the medium of exchange has been greatly increased during the last decades.

Still more is the offer of wares, the demand for money, increased by improvements in the means of production. If a weaver with a hand-loom wove 10 ells of cloth he marketed only 10 ells of cloth; his demand for money was only 10 ells of cloth. With modern machinery the same weaver weaves 500 ells. He therefore sends 50 times more wares to market; his demand for money has increased

fifty-fold.* It is the same with all other arts and crafts. To copy the books produced annually by a single modern printing press, the whole population of the Chinese Empire would have to spend its time from morning till night, year in, year out, in copying. The same is true of colour printing.

Thirty men in Argentina with steam-ploughs and threshing machines produce as much wheat as 3,000 German smallholders with the same effort. These Argentine farmers consequently produce one hundred times the supply of wares and cause one hundred times the demand for the medium of exchange.

The amount of supply should not, however, be measured solely by the amount produced, but also by its quality. A ton of first-class wheat represents a greater demand for money than a ton of wheat of the second quality.

Modern products are constantly advancing in quality. Breeding stock and seeds are being steadily improved; the finish given by machinery is becoming finer and finer; purer and more useful chemicals reach the market. With electric chisels and the splendid models furnished by our exploited proletariat, sculptors produce miracles, and the demand for money increases by the full advance of the art of the present beyond the art of the past.

The stream of products into the market is also increased by the discovery of uses for formerly useless products. The German blast furnaces supply over a million trucks of basic slag for use as a fertiliser. Slag, at one time a troublesome waste product, now creates a demand for many hundred million marks of the medium of exchange. (This does not, however, mean that the circulation need be increased by so many millions). The same is true of potash salts and of many other substances. Less money, less of the medium of exchange would be required in Germany if the usefulness of basic slag and potash salts had not been discovered.

* Value theorists, who have succeeded in enveloping economic phenomena in an impenetrable fog, will here object that the improved means of production have reduced the "value" of 500 ells to the value of the former 10 ells, with the result that 500 ells now only cause the same demand as 10 ells formerly. In reply we may ask why improvements in the means of production should halt before money. We should be justified in replying as follows: "The improved processes of production have reduced the 'value' of 500 ells of paper-money to the 'value' of 10 ells. With the fall in the value of wares, the 'value' of money has also fallen, and has thereby remained on the same level as that of the wares."

But the demand for money is also influenced by factors independent of production. The division of property makes many things wares which were formerly goods for use. Land, for instance, can now be bought and sold; formerly it was the property of the community and inalienable. Year after year large sums of money are required for the transfer of real estate. The demand for money had increased since the land of the country has been degraded to the level of a ware. Interest upon mortgages and rent require much currency. Less currency would suffice if farmers had not to put by part of the money received for their produce to pay the rent and interest due at Martinmas; less money would be required if the land had remained common property.

The same is true of house-rent. Formerly most men lived in their own huts or houses, and rent was something exceptional. At present the houses in which men dwell are seldom their property, and part of the weekly or monthly wage must be set apart to pay the rent on quarter-day. Many millions are thus locked up for days, weeks or months.*

The provision of water, light, power, etc., by the community, converts a number of important things into wares which were formerly produced for direct consumption. This also increases the demand for money.

Again, nothing can become a ware unless it can be brought to the purchaser. How many things are to-day lying useless because, for want of railways, roads, canals, they cannot be transported! Mountains of ore and timber, herds of cattle are brought into the market by a new railway line, a tunnel, a bridge, a voyage of discovery, and the demand for money is increased by the whole amount of these products.

In general, therefore, the supply of wares, the demand for money, is constantly increasing. But sometimes the demand for money decreases, for example through a general reduction of the hours of

* Whether rent on land and houses or other regular payments are made every quarter, every month, or every week also affects the demand for money. If a workman puts by the part of his wages destined for rent in the first weeks of the quarter, the money lies fallow for three months. If, as in England, he pays his rent weekly, the money at once comes into circulation again, through his landlord. This is one of the reasons why England manages with a much smaller quantity of currency than any other country.

work. War, failure of the crops, and epidemics can cause important reductions in demand for the medium of exchange, as does the whole present wage-policy of the workers.

These examples suffice to illustrate some of the many factors which determine the flow of wares into the market. But the offer of wares depends also, as we have already stated, upon the stream of wares out of the market. Until a commodity has reached the consumer it is offered for sale and creates demand for money. Every commodity carried away from the market means a reduction in the demand for money.

Thus the supply of wares, the demand for money, depends also upon how quickly wares find purchasers and cease to be wares. A comparison with the means of transport will again serve to make this clear. Suppose a certain quantity of bricks, say a thousand tons, must be brought daily from the brick fields to the city. The road is bad, bridges are wanting, and the bricks have to be unloaded to pass a morass. The carts therefore proceed slowly, their load is small, and many carters must be engaged to cope with the work. Suppose now that the road is improved, the morass filled in, and bridges built. The carters can now take larger loads and can make two journeys instead of one. Only half the carters are required; the thousand tons of bricks now represent only half the former demand for carters. Or a narrow-gauge railway is built, and the thousand tons of bricks represent but a hundredth part, or less, of the former demand for carters. This is how we must think of the demand for the medium of exchange caused by the stock of wares.

To bring the wares from producer to consumer by way of exchange, a series of commercial organisations is necessary. Upon the existence and efficiency of these organisations depends the speed with which wares leave the market.

Suppose a bag of Brazilian coffee had to be exchanged by way of barter for prints from Aix-la-Chapelle. It would have to be exchanged countless times; it would drift about the market endlessly as a ware. To-day, with the help of money, a bag of Brazilian coffee often reaches the German consumer after three or four changes of possession.

The technique of commerce has reached a comparatively high

degree of perfection*, and each improvement accelerates the conversion of wares into goods for use. We need mention only the improvements in modern banking and in the laws relating to bills and cheques; co-operative societies and department stores; the postal, telegraphic and consular services; advertising and printing; commercial schools for the training of young business men; uniform weights and measures; telephones, typewriters and copying presses.

A modern commercial undertaking can do 10, 20, 100 times the amount of business that was formerly possible; the "salesmanship"† of a modern merchant is, from the merely technical standpoint, 100 times greater than that of his grandfather.

The division of labour continuously throws masses of wares into the market, and merchants, with the help of commercial organisation, continuously direct these masses of wares out of the market, into the hands of the consumers.

If merchants had not this commercial organisation at their disposal, the stores, shops and markets to receive the slowly flowing stream of wares would have to be many times larger. A mountain stream broadens as it enters the plain, as the fall decreases; and it would be the same with wares. Without modern commercial organisation the stock of wares would be larger, the demand for money incomparably greater. Even at the present day we often experience the breakdown of some form of commercial organisation, for instance the organisation of credit, and we can then observe how the flow of wares from the market is retarded, how the stock of wares increases until it threatens to flood the market (so-called over-production). Under the pressure of this growing demand for the medium of exchange prices then weaken and there is a crisis.

Suppose that a road is incapable of dealing with the traffic because of its many turnings and bad surface. The road is straightened and its surface adapted to rapid traffic when, in spite of the increased volume of traffic, it will appear half deserted. If, now, the old conditions are suddenly restored, the traffic will perhaps be completely blocked by the congestion of vehicles. It is the

* Only the power of money to exchange wares is steadily decreasing—as we shall prove later.

† Salesmanship: Capability of bringing wares from the place of production to the consumer.

same with commercial organisation which straightens and mends the roads for the rapid exchange of wares. If part of the organisation breaks down, the stock of wares immediately becomes greater, that is to say, the demand for the medium of exchange increases.

As credit transactions have in this way a powerful influence upon the demand for money, we must consider them somewhat more closely.

We said that wares represent a demand for the medium of exchange exactly corresponding to their amount and quality. So, if there were any method of exchanging wares without employing money, the demand for money would be reduced by the amount of the wares so exchanged. This is self-evident when examined with the aid of our conception of the demand for money. Here again we may use a railway-line as an illustration. The demand for rolling stock is exactly equal to the amount of goods awaiting transport. But if a canal is built along the railway, the demand for rolling stock decreases by the amount of the goods transported by canal.

Credit transactions substituted for money in the exchange of goods have the same effect as such a canal. If A. in Königsberg sends B. in Aix-la-Chapelle a consignment of butter, and B. pays the bill with a consignment of wine, the transaction is completed without a pfennig of money. If B. had no credit with A. or A. had no credit with B. the butter would have been handed over only for money, and the wine could only have been exchanged in the same way. The demand which the wine and butter would have created for money is here eliminated by credit.

The demand for money is therefore reduced by the exact amount of the wares exchanged by way of credit. If the sum of credit transactions increases, the demand for money decreases; if credit decreases, the demand for money increases proportionately. The influence of the credit transactions upon the demand for money is unchanged if the price of the butter and wine is calculated in money and this money is represented by cheques, bills of exchange, or other credit instruments. Credit is always an evasion of the demand for money. Credit instruments, although drawn in money, render money superfluous for the transactions they negotiate. But they are only credit instruments, they rise and fall with credit. They are substitutes for money only as long as credit is flourishing.

We may again use as illustration the railway from which the traffic was diverted by a canal. If the water in the canal freezes over in winter, or evaporates in the summer drought, the goods which would have been transported by canal return to the railway. If the ice melted, the demand for rolling-stock would again decrease. An unreliable canal, sometimes silted up and sometimes frozen over, would disturb rather than relieve the traffic on the railway. Credit transactions have a similar effect upon the demand for money.

Let us now recapitulate what has been said of the demand for money in this section.

Demand for money is represented by the wares which the division of labour continuously throws upon the market. Demand for money therefore increases, and also decreases, with the quantity of wares produced by the division of labour. Demand for money is not merely proportional to the stock of wares, it is the stock of wares. There is no demand for money except the stock of wares. And when we speak here of wares we include all their material properties. When we use the word "wares" we have casks of beer, hams, ships laden with tobacco, before our eyes. We mean a palpable, not an abstract ham, a ham which we have visualised so clearly that we could swear it was the product of Westphalia. When we speak of demand for money, when we speak of wares, we do not mean crystallised or mummified labour, or a quintessence of labour, or a social substance, or sweat and blood and working hours. We do not think of a ham from which have been abstracted all material properties, the lean, the fat and the bone. Demand for money, demand for a medium of exchange, emanates from the visible, palpable things that we purchase in the market by the pound or yard, to feed and clothe ourselves. And in the demand for money is included not only the quantity, but also the quality of the wares.

Demand for money depends upon the stream of wares produced by the division of labour and the division of property. The size of this stream depends again upon the number, industry, skill and wisdom of the workers, and upon the quality of their instruments of production. An English weaver throws five times as much calico upon the market as an Indian weaver. He creates, therefore, five times the demand for money.

Demand for money depends upon the speed with which commerce brings the wares to the consumer, and this speed increases with every improvement in the technique of commerce. If the salesmanship of a young man trained in a school of commerce is greater than that of an ordinary retailer, the demand for money has decreased with the foundation of the school of commerce. (If the salesmanship of the student is not greater, these schools have no right to existence).

Demand for money is in inverse ratio to the speed with which the products of the division of labour and property lose the quality of a ware.

Demand for money also depends upon the growth or limitation of credit, that is, upon the constantly varying quantity of wares withdrawn from the market, and from the demand for money, by the constant expansion and contraction of credit.

The daily demand for money therefore equals the quantity of wares daily brought to market, less the wares exchanged by way of credit (or barter).

In short: The supply of wares, supply simply, supply as we mean it in the statement, " demand and supply determine prices "—this supply is the demand for money. The demand for money is comprised in the supply of wares and vice-versa. And supply is equal to the stock of wares.

10. THE SUPPLY OF MONEY

(The Demand for Wares or, simply, Demand)

The characteristic of the products of the division of labour and property is that they must be sold. Wares are produced to sell, and no product is more characteristically a ware than money. This we have already shown.

All other wares sooner or later leave the market as goods for consumption, but money is bought only to be sold again.

Wares can be sold only for money, and in the same way money can be sold only for wares. Just as wares represent the embodied demand for money, so money represents the demand for wares. An increase in the stock of money means an increase in the demand for wares. He who has no money can create no demand for wares.

The money in the cellars of a bank could at any moment be poured upon the market and would create a powerful demand for wares, whereas a thousand starving unemployed casting longing glances at the riches of the market can create no demand for them.

The demand for wares depends therefore chiefly upon the stock of money. The demand for wares will not always coincide with the stock of money (we shall very soon come to this crucial point), but money is a ware and therefore sooner or later compels its possessor to offer it in exchange.

A person can offer less money than he possesses, but he cannot offer more than he possesses. Our stock of money is the upper limit of our offer of money. Again, since money is a ware, more money will be offered in exchange, on the average, over a period of years, where the stock of money is larger than where it is smaller.

The 180 millions stored for 40 years in the German war chest at Spandau prove, no doubt, that money and the supply of money are not, like potatoes and the supply of potatoes, almost identical. Nevertheless the function of money is, to be offered, under certain circumstances, in exchange.

As a vehicle becomes useful to its owner only through a change of place, so money becomes useful only when it changes possession, when it serves as a medium of exchange and circulates. Inherent in money is the characteristic which sets it in circulation. To a certain degree the present form of money is under a material compulsion to circulate. (With Free-Money this compulsion becomes absolute).

We said that the stock of wares is in inverse proportion to the speed with which commerce dispatches wares from the market to the consumer. But since money is used and not consumed, since it preserves its characteristic of being a ware, since it is bought only to be sold (the use of gold in the arts can here be disregarded) an acceleration, by improved commercial organisation, of the rate at which money changes possession has the opposite effect to an acceleration of the sale of wares. The more rapidly money passes from hand to hand, the sooner it appears at its point of departure, the market, to begin its circuit again. With each change of possession

of money, a ware is brought a stage further in its progress towards the cellar of the consumer. Just as the number of ton-miles completed by a railway wagon in a given time is proportionate to the rapidity at which the wheels rotate, so the quantity of wares that a piece of money clears from its path is proportionate to the rapidity with which it completes its circuit. A brand-new, obviously genuine thaler perhaps changes possession only ten times in the week, since some persons into whose possession it comes will think twice before parting with it. With a worn thaler this obstacle to circulation is smaller, and with a doubtful one it is non-existent. So to complete the same circuit a new thaler may require a month, a worn thaler a fortnight, and a doubtful thaler a week. Four new thalers, two worn thalers or one doubtful thaler perform the same amount of work. The power of money to effect exchanges, its technical quality from the mercantile standpoint, is in inverse proportion to its technical quality from the banking standpoint. From the mercantile standpoint a doubtful thaler may be four times as efficient as one fresh from the mint. This little detail should be carefully noted.

Supply is a stream which rises in the division of labour and flows into the houses of the consumers. Demand is not a stream but an object which moves in a circle and when rotating quickly resembles a solid ring. Supply is always composed of fresh wares which make one journey and disappear for ever. Demand is composed of a mass of coins which have completed the same journey a thousand times and are destined to complete it as many times again.

This comparison is used to show that demand is subject to laws other than those of supply. The mere fact that a ware on its journey to the consumer becomes larger, heavier, that is, dearer, whereas the price of money may remain the same after it has changed hands a thousand times, shows clearly that we cannot always compare money with wares. (But nothing in this sentence should be taken to mean that at present money performs the exchange of wares free of cost).

None of the conditions determining the amount of the supply of wares, noted in the last chapter, apply in fact to demand (supply of money). Indeed one condition, the improvement of commercial

technique, has an effect upon money opposite to that upon wares. Improved commercial technique accelerates the progress of wares to the consumer, and this reduces the stock and supply of wares. A technical improvement in money, on the contrary, a reduction of its period of circulation, causes the same coin to reappear sooner at its starting point to begin its work again. Every improvement in money therefore increases the supply of money. For this reason, after the introduction of Free-Money about one-third of the stock of money will probably suffice to create the same amount of demand.

The amount of the supply of wares is in the first place determined by the conditions of production—the fruitfulness of nature, the skill of the workers and the efficiency of their tools. For demand all this is immaterial. Gold is not produced but found; and the stock of gold which affects the present generation has been inherited from its forbears. Similarly the stock of paper-money has been arbitrarily " issued." The wares produced a year ago have almost ceased to influence supply, but the gold which Solomon brought from Ophir doubtless forms part of the currency of to-day and influences demand. Supply is each year created afresh; demand is an inheritance which includes the treasures of Solomon, the Spanish plunder from Mexico and Peru and, in recent times, the abundant gold discoveries from Klondyke and the Transvaal. The magnitude of demand is determined by men whose bones are long since dust. A thousand million human beings are engaged in feeding supply; demand, on the other hand, is kept up by a handful of adventurers in the gold-mines of Alaska and South Africa.

But demand is also affected by the velocity of the monetary circulation, and many may find it difficult to set any limit to this velocity. They will therefore be inclined to think that demand is something quite indeterminate. Yet demand, in conjunction with supply, has the supremely important function of determining price.

It is a fact that we can hardly imagine a velocity of circulation which could not be increased by some improvement in commercial organisation.

Suppose, for instance, that we have worked out carefully the

highest imaginable limit for the velocity of paper-money. Someone then proposes to impregnate the notes with some nauseous chemical such as sulphuretted hydrogen. Everyone would try to get rid of such money still more quickly, so the limit set to the velocity was obviously too low.

But in practice it is immaterial to the demand of to-day whether the velocity of circulation of money can be increased to-morrow. "To-day" is what matters in the market; "to-morrow" is important only if it can be clearly foreseen. We cannot imagine a limit to the speed of a railway train which could not be exceeded by some technical improvement; but for the present the limit is prescribed by the existing locomotives, bridges, curves and embankments. It is a matter of course for all of us that we cannot travel at any speed we please. After a little consideration we should be able to familiarise ourselves with the thought that the existing commercial organisation prescribes a maximum velocity for money which, for the present, cannot be exceeded.

But this does not mean that commercial organisation cannot be improved. As a matter of fact it is being improved almost daily. The reform of the German currency, for example, which replaced the former medley of coins by a unified coinage passing from hand to hand without examination, certainly made a faster circulation possible.*

Exchanges, clearing-houses, cheques and bills of exchange increase the velocity of circulation of money.†

Above all, the change in the form of saving has influenced the velocity of circulation. Savings were formerly hidden in a mattress, a buried jar, etc.; in modern times they are brought into circulation again through the medium of the savings banks. In this manner large sums go to increase demand.

* Arguments could be found for the opposite conclusion. The greater security against a fall in the rate of exchange and the greater security from false coinage must make the coins more attractive to savers than the worn groschen, thalers and gulden. But to save the actual currency means to interrupt the circulation of money. We have here without doubt, to some extent, a restraining influence.

† Merchants formerly, like cattle-dealers to-day, carried, when travelling, ready money for their purchases. The ocean bed on the sea route to India is said to be covered with a layer of silver lost through shipwreck.

The circulation of money is even accelerated by modern department stores, since a purchaser can spend in such a store in one day a sum which would have required two days to spend in separate shops scattered through the town. In short, the possibility of a continual acceleration of the velocity of circulation of money cannot be denied, but this possibility does not obscure in any way the picture of demand which we have drawn in the preceding pages.

Demand, then, is determined by the amount of the stock of money and the velocity of circulation of money. Demand increases in exact proportion to the increase of the stock of money and of the velocity of its circulation.

That is what we must first know of demand, to form a general picture of the determination of price through demand and supply. It must be admitted that what we have learnt is as yet very little. But at least a content has been given to these words. We can weigh and handle demand and supply; they are no longer abstractions. When we speak of supply we no longer think of business transactions, speculation and so forth. We see passing before us a goods train loaded with timber, straw, lime, vegetables, wool, minerals. With our eyes and other senses we have become aware of the nature of supply.

And if we speak of demand we do not see beggars, deficits, interest on loans. We see money, paper-money or metallic money, which we can handle and count. We know that money is brought into motion in a circuit by a force inherent in it, and that this motion can be accelerated by improvements in commercial organisation. We observe that each time money completes its circuit it seizes a certain quantity of wares and throws them from the market into the consumers' houses. We can follow with our own eyes how demand depends in part upon the rate at which money, after each ejection, returns to the market to seize another ware. We speak no longer as parrots, but with the consciousness that we are uttering the fundamental truth of economic science when we say: Prices are determined by demand and supply.

A numerical representation of the elements of price discussed so far would be somewhat as follows:

Supply	Tons	*Demand*	Tons
When commercial organisation is working smoothly, the division of labour and property throws on the market daily a quantity of wares equal to - - - -	1000	The metal or paper-money of the State creates, with its present velocity of circulation and yesterday's prices, a demand which also equals - - -	1000
This supply increases:		Demand increases:	
1. Because production increases through a 10% increase of population	100	1. Because the stock of money increases through the discovery of new gold mines or the issue of paper-money 10% - -	100
2. Because division of labour replaces primitive production, expanding 5% - -	50	2. Because the velocity of circulation of money increases through improvements in commercial organisation, 20% - - -	200
3. Because the means of production improve 20% - - - -	200	3. Because the savings banks bring the money of small savers more rapidly into circulation. 10% - - -	100
4. Because workmen, becoming more efficient, produce wares of superior quality. 30%	300		1400
	1650		
On the other hand supply decreases:		But this demand is not constant, it does not appear regularly in the market, as we shall see in the following chapters.	
1. Because better commercial organisation and the elimination of middlemen cause wares to flow more rapidly from the market to the places of consumption - - - 100			
2. Because simplification of the law relating to bills of exchange and other circumstances cause wares to be exchanged by way of credit instead of for money - - 300	400		
	1250		

Explanation: A ton can of course be a ton of any kind of ware, for example peat. We then calculate the quantity of potatoes, milk, cranberries, buckwheat, etc. that can be exchanged, at present prices, for a ton of peat. 100 lbs. of potatoes, first quality, or 20 gallons of unskimmed milk, or two bushels of buckwheat are then equal to one ton of supply.

In the case of demand we calculate from the actual stock of money and its actual velocity of circulation how much money can to-day be offered for wares, and how many tons of wares can be bought at present prices by this amount. The answer is 1000 tons. Since demand and supply determine the prices upon which these 1000 tons are based, demand expressed in tons by means of the money offered, must necessarily correspond to supply expressed in tons. If this is not the case, as for instance in the above example, where a supply of 1250 tons is confronted with a demand of 1400 tons, the discrepancy is sooner or later removed by a change of prices. In our example equilibrium would be established by a rise of prices of 12 per cent.

11. THE LAWS OF CIRCULATION OF THE PRESENT FORM OF MONEY

If we recognise demand and supply as the sovereign regulators of prices, if we are convinced that the subject-matter of the theory of value is an illusion, and further, that production oscillates about price as centre of gravity and not vice-versa, it is clear that price and the factors influencing price will absorb our interest, and that certain facts which until now seemed trivial will assume an immense new importance.

One of these apparently trivial facts, which has, up to the present, been totally overlooked, is that the nature of our traditional money allows demand (the offer of money) to be delayed from one day, one week, one month, one year to another, whereas supply (the offer of wares) cannot be postponed a day without causing its possessor losses of every kind. The French war-indemnity of 180 million marks of gold stored in the fortress of Spandau has not entered the market once in 40 years, yet any expense caused the German government by this so-called war-chest has come from without, not from within the Julius tower. The amount and quality of the gold has remained the same. Not a pfennig has been lost through loss of material. The soldier on guard protects the gold, not from moth and rust, but from thieves. He knows that as long as

the locks remain intact no harm can come to the treasure piled within.

In contrast to this, a real war-chest, the so-called "wheat of the Swiss Confederation" stored at Berne, suffers annually a loss of 10% of its material, apart from the cost of guarding and storage. (Without counting interest, which the owners of the Spandau treasure also lose).

The wares which compose supply decay, lose weight and quality, decrease continually in price in comparison with fresh wares.

Rust, damp, decay, heat, cold, breakage, mice, moths, flies, spiders, dust, wind, lightning, hail and earthquakes, epidemics, accidents, floods and thieves wage war continuously and successfully upon the quantity and quality of wares. Few wares fail to exhibit the results of this warfare a few days or months after their production. And it is precisely the most essential wares, food and clothing, that are least able to withstand these enemies.

Like all things earthly, wares are in constant state of flux. Rust is converted into pure iron by fire, and iron is converted back into rust by the slow fire of the atmosphere. Costly furs fly out of the window in the form of a thousand moths. Dry-rot converts the woodwork of a house into dust. Even glass, which might seem better able than other products to withstand the assault of time, sooner or later undergoes something of the same transformation—it breaks.

Each product is threatened by a particular enemy—iron by rust, furs by moths, glass by breakage, live-stock by disease; and with these particular enemies are allied common enemies, water, fire, thieves and the oxygen of the air, which slowly but surely burns everything away.

Who could pay the premium for insurance against all these risks? How much does the shopkeeper pay for the place of storage, only, of his wares?

Wares, again, not alone deteriorate, they also become antiquated. Who would to-day buy a muzzle-loader or a spinning-wheel? Who would even pay the cost of the raw material of such wares? Production is constantly bringing newer and better models into the market; the Zeppelin had no sooner proved its dirigibility than it was outflown by the aeroplane.

The only way in which an owner of wares can protect himself against such losses is to sell them. He is compelled by the nature of his property to offer it for sale. If he resists this compulsion he is punished, and the punishment is carried out by his property, by the wares in his possession.

It must also be remembered that new wares are continually flowing into the market. A cow must be milked daily, a man without possessions is daily compelled by hunger to work. The offer of wares must therefore become larger and more urgent if sale is delayed. As a rule the most favourable time for the sale of a product is the moment it leaves the factory. The longer sale is delayed, the less favourable the market conditions.

Newsboys shout and run because their wares are unsaleable a few hours after production. The milkman's cart is provided with bells because he must make his sales to the hour and minute. The vegetable woman is the earliest riser of God's creatures; she awakens the sleeping cocks. The butcher cannot afford to oversleep himself or to close his shop during the Whitsun holidays, for in twenty-four hours his wares would be on the verge of putrefaction. Bakers can sell their wares at the regular price only as long as the loaves are warm. They are throughout their lives as hurried as the good Zürchers who once a year appear with their millet broth in Strasbourg. The farmer who has ploughed out his potatoes and fears an early frost hurriedly collects them and as hurriedly brings them to market to take advantage of the fine weather and to save, as far as possible, the laborious loading and unloading of his cheap and heavy product.

Or take wage-earners, the ten thousand battalions of workmen. Are they not as hurried as the newsboy, the vegetable-seller, the farmer? If they do not work, part of their assets, their capability to work, is lost with every beat of the pendulum.

Thus the nature of wares, their transitoriness, arouses the majority of us every morning from sleep, spurs us to haste and forces us to appear at a given hour in the market. The possessor of wares is commanded by them, under threat of punishment, to seek the market, and the punishment is carried out by the wares themselves. The offer of a ware for sale depends, therefore, not upon the will of its possessor, but upon the ware itself. Wares

seldom leave their possessors free-will, and then only within narrow limits. A farmer, for instance, can, after threshing his wheat, store it in his barn to await a better opportunity of sale. The nature of wheat allows its possessor more time for reflexion than the nature of salad, eggs, milk, meat or labour. But the time for reflexion is not unlimited; for the wheat loses weight and quality, is eaten by mice and mites, and must be protected from fire and other dangers. If the farmer brings his wheat to a granary, storage, even if interest is neglected, costs him in six months a considerable part of the wheat. In any case the wheat must be sold before the next harvest, and the harvest, owing to import from the southern hemisphere, now occurs once every six months.

> Mlle. Zélie, of the Théatre Lyrique, Paris (1860), receives for a concert on the island of Makea in the Pacific, as entrance money for the 860 tickets sold: 3 pigs, 23 turkeys, 44 chickens, 500 coconuts, 1200 pineapples, 120 measures of bananas, 120 gourds, 1500 oranges. She estimates the receipts, at Paris market prices, at 4000 francs and asks; "How can I convert all this into money? I hear that a speculator from the neighbouring island of Manyca is prepared to make an offer in hard coin. Meanwhile, to keep my pigs alive, I give them the gourds, and I feed the chickens and turkeys with bananas and oranges, so that, to preserve the animal part of my capital, the vegetable part must be sacrificed." *

It can therefore be said without fear of contradiction that supply is subject to a mighty compelling force inherent in the objects of which it is composed, and that this force increases from day to day and breaks down the barriers separating supply from the market. Supply cannot be postponed. Quite independently of the will of the possessors of wares, a supply of them must daily appear in the market. Whether the sun shines or the rain falls, whether political rumours alarm the exchanges, supply is always equal to the stock of wares. Supply remains equal to the stock of wares even if the price of wares is unsatisfactory. Whether the price brings the producer gain or loss, the wares must be offered for sale—usually at once.

We may therefore regard the supply of wares, that is, the demand for money, as identical with the wares themselves. Supply is independent of deals on the market. Supply is a thing, a material, not a business transaction. Supply always equals the stock of wares.

* Wirth, Das Geld, p. 7.

Demand, on the contrary, as we have already shown, is not subject to this compulsion. It is composed of gold, a precious metal which, as the expression implies, occupies an exceptional position among the products of the earth. Gold may be regarded almost as foreign matter intruded upon the earth and successfully withstanding all the destructive forces of nature.

Gold neither rusts nor decays, neither breaks nor dies. Neither frost, heat, sun, rain nor fire can harm it. The holder of money made of gold need fear no loss arising from the material of his possession. Nor does its quality change. Gold which has lain buried for a thousand years remains unconsumed.

Again the production of gold is trivial in comparison with the masses of gold accumulated since the earliest times. The production of gold in three, six, twelve months hardly equals the thousandth part of the stock of gold.

Nor is gold money affected by changes of fashion. The only change of fashion in money in 4000 years was the change from bimetallism to a simple gold standard.

Gold has only one possible danger to fear—the invention of an efficient form of paper-money. But even here the holder of gold is safe enough, for such paper-money would have to be introduced by the will of the whole people—a slow-moving force which gives him time to save himself.

The possessor of gold is protected from loss of his material by the unique characteristics of this foreign body. Time passes gold unnoticed by, for gold is charmed against his ravages.

The possessor of gold is not forced to sell by the nature of his property. It is true that while he is waiting he loses interest. But does he not also, perhaps, gain interest simply because he can wait? The owner of wares also loses interest if he delays his sale. But he must be prepared as well for the loss of part of his product and for the expense of storage and care-taking, whereas the possessor of money suffers only the loss of a profit.

The possessor of money can therefore postpone his demand for wares; he can use his will. He must indeed sooner or later offer his gold for sale, for in itself it is useless to him. But he is free to choose the time at which he does so.

Supply can always be measured by the stock of wares in existence; it is exactly equivalent to those wares. Wares command and brook no contradiction; the will of the possessor of wares is so powerless that it may be disregarded. With demand, on the other hand, the will of the possessor of money comes into play; for gold is a patient servant. The possessor of money holds demand like a hound on the leash and lets it slip at the quarry of his choice. Wares are the quarry of demand. Or, to imitate Karl Marx's pictorial language: Demand enters the market proudly confident of an easy victory; supply appears dejected like a beggar who expects more kicks than ha'pence. On the one hand compulsion, on the other hand freedom; and the two together, compulsion and freedom, determine price.

Why this difference? Because in one case there is indestructible gold to sell, in the other perishable commodities. Because one can wait and the other cannot. Because one possesses the medium of exchange, and, thanks to the physical characteristics of this medium, can, without personal loss, postpone exchange, whereas the other suffers personal loss from the postponement—a loss proportional to its duration. Because this relation makes the possessor of wares dependent upon the possessor of money; because, to quote Proudhon, money is not the key that opens the gates of the market but the bolt that bars them.

Suppose now that demand makes use of the freedom it enjoys and withdraws from the market. Supply must then, because of the compulsion to which it is subject, seek out demand, hasten to meet it and entice it back to the market by the offer of some special advantage.

Demand, instant demand, is a necessity to supply, and demand knows of this necessity. Consequently demand can usually ask for, and obtain some special advantage from its privilege of being able to withdraw from the market. Is there any reason why the possessor of money should not ask for this reward? Have we not shown that our whole enonomic system, the determination of prices through demand and supply, is founded upon exploitation of our neighbour's embarrassment?

A and B, separated by space and time, wish to exchange their wares, flour and pig-iron, and for this purpose need the money in

C's possession. C can at once effect the exchange with his money, or he can delay, hinder or forbid the exchange; for his money gives him the freedom of choosing the time at which it shall take place. Is it not obvious that C will demand payment for this power, and that A and B must grant it in the form of a tribute on their flour and pig-iron. If they refuse this tribute to money, money withdraws from the market. A and B must then retire without completing the sale and undertake the heavy cost of returning home with their unsold products. They will then suffer equally as producers and consumers; as producers because their wares deteriorate, and as consumers because they must do without the goods to obtain which they brought their products to market. If instead of gold, C owned any other product, tea, powder, salt, cattle or Free-Money, the characteristics of these media of exchange would deprive him of the power of postponing his demand; he would no longer be able to levy a tribute on other products.

Usually, therefore, that is, commercially, the present form of money acts as intermediary for the exchange of wares only on condition that it receives a tribute. If the market is a road for the exchange of wares, money is a toll-gate built across the road and opened only upon payment of the toll. The toll, profit, tribute, interest or whatever we choose to call it, is the condition upon which wares are exchanged. No tribute, no exchange.

I wish here to avoid all possibility of misunderstanding. I am not now speaking of commercial profit, of the payment which the merchant can and does demand for his work. What I speak of here is the profit which the possessor of money can demand from producers, because he can paralyse the exchange of wares by withholding his money. This profit has nothing in common with the merchant's profit; it is a separate effect produced by money itself, a tribute which money is able to exact because, unlike all other wares, it is free from the material compulsion of being offered for sale. For supply: the material compulsion inherent in wares; for demand: freedom, will, independence of time—the result must be a tribute. Wares must pay money a tribute because money is free; there is no other possibility. Without this tribute money will not be offered in exchange, and without money to effect exchanges no wares will reach their destination. If, for any reason, money

cannot exact its accustomed tribute, there is a crisis; wares lie where they are, and rot.

But if tribute is the obvious condition for the appearance of demand, it is still more obvious that it will not appear in the market if loss awaits it there. Supply is forced into the market regardless of gain or loss. Demand, if conditions are unfavourable, retires into its fortress (its fortress being its indestructibility), and quietly waits there until conditions are again suitable for a sally.

Demand, therefore, the regular offer of money for wares exists, only when the condition of the market ensures:—

1. Sufficient security against loss.
2. A tribute for money.

The tribute can be levied only on the sale of wares, and requires the fulfilment of one essential condition: During the interval between buying and selling a product, its price must not fall. The selling price must exceed the price of purchase, for the tribute is contained in the difference between them. In times of trade expansion, when the average price of wares is rising, the merchant's profit rises also. The difference between the two prices is then sufficient to cover the merchant's profit and the tribute paid to money. When prices are falling, the collection of the tribute becomes doubtful or impossible. The doubt alone is sufficient to keep the merchant from purchasing wares. No merchant, speculator or employer will discount a bill at the bank and undertake the obligation of paying interest if he suspects that the product he thinks of buying may fall in price. A fall of price may mean that he does not get back even the amount of his outlay.

If we now consider the two conditions upon which money offers its services as medium of exchange, we see that commerce is mathematically impossible with falling prices. But it should be noted that the only person who speaks of this mathematical impossibility is the possessor of money. For the possessor of wares, extreme, demonstrable losses are no obstacle to supply; for him there is no question of mathematical impossibility. Whether profit is or is not probable, wares are in all circumstances ready for exchange. But money goes on strike if its usual tribute is not assured, and that happens when, for any reason, the ratio of demand to supply is disturbed and prices fall.

But stop ! What is it that we have just affirmed ? That demand withdraws, that the circulation of money becomes mathematically impossible when prices fall ! But prices fall just because the supply of money is insufficient. Does the supply of money, when it is insufficient to prevent a fall of prices, withdraw, that is, become still smaller ?

It is indeed so; there in no misprint or mistake in what we have just written. Money actually withdraws from the market, the circulation of money is mathematically impossible, when the supply of money becomes insufficient and a fall of prices begins or is expected.

When, after the introduction of the gold standard, the production of money was reduced by the whole amount of the production of silver, and prices fell, the circulation of money became impossible and money piled up in the banks. The rate of interest steadily sank. The bimetallists then opened their campaign against the gold standard and argued that the chronic trade depression of that time was due to an insufficient stock of money. In reply, the defenders of the gold standard, Bamberger and others, pointed to the enormous bank-reserves, to the low rate of interest, and asserted that these phenomena were a conclusive proof that the stock of money was not too small, but too large. The fall of prices, they explained, was due to a general fall in the cost of production (including that of gold ?) with an overproduction of wares.

The bimetallists, above all Laveleye, brilliantly disposed of this argument by proving that the commercial circulation of money is impossible if money is not offered in a quantity sufficient to prevent a fall of prices. The large bank deposits, the low rate of interest, were a striking proof that the supply of money was insufficient.

But our monetary philosophers, wandering in the fog of "value," have never understood this. Even to-day they do not see their way clearly, although monetary history has meanwhile furnished many proofs of the correctness of this part of the bimetallistic theory. For since chance has decreed great discoveries of gold and the prices of commodities have moved strongly upwards all along the line, the great bank reserves have disappeared and the rate of interest is higher than ever. It is therefore a fact that money collects in the banks, that the rate of interest falls, because there is a lack

of money; and it is also a fact that the banks are emptied, that the rate of interest rises, because the supply of money is too great.

And prices fall precisely because the supply of money is insufficient.

An actual fall of prices is not necessary to cause the flight of money from the market. If there is a general opinion that prices will fall (no matter whether the opinion is true or false), demand hesitates, less money is offered, and for this reason what was expected or feared becomes an actual fact.

Is not this sentence a revelation? Does it not give us a clearer explanation of the nature of commercial crises than is contained in any of the many-volumed explanations of the matter? From this sentence we learn why a Black Friday, a crisis scattering death and destruction, often comes like a bolt from the blue.

Demand withdraws, conceals itself, because it is insufficient to effect the exchange of wares at the present price-level! Supply exceeds demand, therefore demand must disappear entirely. A merchant writes an order for cotton. He hears that the production of cotton has increased and consigns the order to his waste-paper basket! Is that not comic?

But production continues to throw new masses of wares upon the market, so the stock of wares increases if sales are interrupted—just as the water-level of a river rises when the sluices are closed.

Supply therefore becomes larger and more urgent because demand hesitates, and demand hesitates simply because supply is too large in proportion to demand.

Here again there is no mistake, no misprint. The phenomenon of a commercial crisis, so ridiculous to the onlooker, must have a ridiculous cause. Demand becomes smaller because it is already too small, and supply becomes larger because it is already too large.

But the comedy develops into a tragedy. Demand and supply determine price; that is, the ratio in which money and wares are exchanged. The more wares are offered for exchange, the greater is the demand for money. Wares reaching the consumer by way of credit or barter are lost to the demand for money. Prices, therefore, rise when credit sales increase, since the quantity of wares offered in exchange for money decreases by the amount of these

credit sales, and since demand and supply — the ratio in which money and wares are exchanged—determine price.

Conversely, prices must fall when credit sales decrease, since wares reaching the buyer through these side channels again create a demand for money.

The offer of wares for money therefore increases in proportion to the decrease of credit sales.

Credit sales decrease when prices fall, when selling prices fall below cost prices, when a merchant usually loses upon his stock of wares, when on stocktaking day he can buy for 900 those articles in his warehouse which cost him 1000, and must therefore write them down to 900 in his inventory. The solvency of the merchant increases or decreases with the prices of his wares, so credit sales also increase or decrease with the increase or decrease of prices.

Everyone knows this fact and everyone regards it as something quite natural. Yet the fact is strange enough.

If prices rise, that is, if demand exceeds supply, credit comes into play, deprives money of part of the wares to be exchanged and drives prices still higher. If prices fall, credit retires, wares must be exchanged for cash, and prices are still further depressed.

Need we search further for the explanation of commercial crises? *

Because we have improved our means of production, because we have been industrious and inventive, because we have enjoyed good weather and abundant harvests, because our wives have been fruitful, because we have extended the division of labour, the mother of all culture, the supply of wares (the demand for money), has increased; and because we have not balanced this greater demand for money with a greater supply of money, the prices of wares have fallen.

But because prices have fallen, demand withdraws, money is hoarded. And because demand is withdrawn and sales hindered,

* The amount of the circulation of bills of exchange in Germany in 1907 was given in the Reichstag as 35 billion marks. This sum should possibly be reduced to 9 billion marks if it represents the total bills stamped during the year, as these would be three months bills. But even in this case we can imagine how greatly the steadiness of demand and prices is imperilled by such an amount of credit—credit which depends on men's moods and the turn of the market.

the wares pile up like ice blocks in rivers when the flow of ice is obstructed. Supply breaks down the obstruction and floods the market, and the wares must be got rid of at any price. But because prices are falling all along the line, no merchant can buy wares for fear that what he is tempted to buy so cheap to-day could be bought still cheaper to-morrow by his rival with whom, in this case, he could no longer compete. Wares are unsaleable because they are too cheap and threaten to become still cheaper. This is the crisis.

The crisis breaks out, merchants' assets dwindle and their liabilities (in proportion to their assets) increase. Anyone who has signed a contract to deliver money * finds the engagement difficult to keep because of the falling prices of commodities (his assets); suspensions of payment begin, and the exchange of wares becomes a game of chance. For these reasons credit sales are restricted and the demand for money is increased by the whole mass of wares hitherto exchanged by way of credit—at a time when money is scarce and therefore disappears.

Just as the draught created by a fire makes it blaze, so obstacles to the circulation of our present form of money stimulate the demand for money. The equilibrating forces, of which so much is written, never come into play. The evil is intensified, not mitigated; there is no sign of any compensatory tendency.

Many still seek this compensation in an increased velocity of circulation of money when the demand for money increases. They imagine that the wish to buy cheap † must bring increasing quantities of "money from the reserves" into the market. The contrary is the truth. A rise of prices, not a fall, stimulates the merchant to purchase; a fall of prices can only injure him. The fear that what is offered cheap † to-day will be offered still cheaper to-morrow closes all purses. Purses remain open only as long as a rise of prices is expected. Again, where are these supposed "reserves" to be found? Are they to be found in the banks? The

* Bills of exchange, promissory notes, bonds, rents and leases, insurance policies, and so forth.

† From the merchant's point of view no ware is in itself cheap; a ware is cheap only in comparison with its selling price. When prices are falling, all wares are dear. Wares become cheap when a general rise of prices raises the price at which the merchant sells above the price at which he buys.

banks withdraw their money from circulation when, because of the general fall of prices, it cannot circulate with safety. The millions thus withdrawn from the market at the time when they are most needed cannot be regarded as reserves. If the harvest fails and the sheriff seizes a farmer's cow, the result is not an addition to the stock of cows. The banks are always overflowing when prices are falling, that is, when the supply of money is insufficient; when prices are rising they are empty. If the contrary were true, we could speak of reserves. If there are actually reserves in existence they should, in the interest of the exchange of wares, be used up as quickly as possible, since their existence would be a further cause of price fluctuations. Reserves, that is, collections of money, can be formed only by withdrawing money from circulation, from the market, from the exchange of wares. But if such reserves are formed only when money is already scarce in the market, they are not reserves but poison.

This, therefore, is the law of demand, that it disappears when it becomes insufficient.

But what happens when demand is too large in proportion to supply, when the prices of commodities rise? This state of the market must also be examined; for it is theoretically possible (p. 222), and has actually occurred, as is shown by the history of the market during the last decades. No one denies that since about 1895 prices, in spite of greatly increased production, have risen sharply.

How does the possessor of money act when prices rise? He expects or knows that what he has bought to-day can be sold to-morrow at a higher price. He knows that rising prices make everything, from the merchant's viewpoint, cheap (see footnote p. 234) and that by turning over his money he can gain increasing profits. He buys therefore as much as he can, that is, as much as his money and credit allow. And merchants obtain credit as long as prices are rising and the selling price exceeds the cost price of merchandise. The optimistic feeling among merchants caused by rising profits also makes them more inclined to purchase; they do not turn a piece of money over ten times before deciding to spend it. Money circulates more rapidly when prices are rising; during a

trade-boom the circulation of money attains the maximum velocity which the existing commercial organisation allows.

But demand is the product of the quantity and velocity of circulation of money; and demand and supply determine prices.

Because, therefore, prices rise, the demand for wares increases through the accelerated velocity of money, and at the same time the quantity of wares offered for ready money decreases, because of the increase of credit sales. Prices therefore rise because they have risen. Demand is stimulated and enlarged because it is too large. Merchants buy wares far beyond their immediate needs; they seek to secure stocks for future sale—because supply is too small in comparison with demand. When supply increased and became too large in proportion to demand, the merchant reduced his orders to the minimum, to what he could at once dispose of. He could not allow any time to elapse between buying and selling, for during this time the selling price would have fallen below the price he had paid for the ware. But if wares are scarce he is eager to buy; all the purchases he can make seem nothing to him, he is anxious by every means to increase his stocks. The debts, based on bills of exchange, that he contracts in doing so, sink daily in significance in comparison with his assets, which are daily increased by the rise of prices. These debts cause him no anxiety—as long as prices are rising.

Is not this a fantastic phenomenon, worthy of the other fantastic phenomena of a trade boom ?

The demand for wares must always increase far above its usual volume as often and as long as supply is insufficient.

Yes, our gold standard, offspring of the theory of value, stands the test. That our investigation has clearly proved. It causes an increasing demand when demand is already too large, and restricts demand to the personal bodily wants of the few holders of money the moment demand becomes too small! A starving man is deprived of nourishment because he is starving, and a glutton is filled to bursting because he is a glutton.

We know in what the true utility of money consists (Chap. 4). But the true utility of money has unfortunately been hitherto overlooked, with the result that no one was able to imagine demand

for a kind of money made of worthless paper. Something must stimulate people to purchase money, and if this something were not its utility as the medium of exchange it would have to be the utility of the material.

Now gold is in fact a material of industrial utility, and its utility would be much greater if it were cheaper. The high price of gold alone prevents its being often used instead of iron, lead or copper.

But gold is not too dear to be used at least for ornaments, where expense need not be considered. Gold is in fact the special raw material of the jeweller's trade. Bracelets, chains, watch-cases and such ornaments are made of gold, as are chalices for the Catholic form of worship. The fittings of motor cars, church clocks, lightning conductors, picture frames, etc. are plated with gold, and dentists and photographers use considerable quantities. All this gold is withheld from the currency. Coins are usually the goldsmith's cheapest raw material.

The use of gold for industrial purposes increases with the love of splendour, with the growth of prosperity and wealth; and wealth increases through production, through work. During years of prosperity goldsmiths work overtime; during periods of economic depression people in difficulties bring them back gold ornaments for the melting pot.

That is, when more wares are produced, when the demand for money, the medium of exchange, increases, large numbers of gold coins are thrown into the goldsmiths' melting pots.

But halt ! Surely this statement is mere nonsense ! The more work performed, the more wares produced, the greater is the increase of wealth. And the greater the increase of wealth, the more money (the medium for the exchange of wares) is melted down for jewellery. We cannot have heard aright !

But such indeed was the statement. There is here no misunderstanding and the words are uttered with the gravity of a judge passing a death sentence. For in these words there is cause enough to condemn the gold standard. Let those who have the temerity to deny this truth produce their arguments !

We repeat: the more wares produced, the greater is the growth of prosperity, the accumulation of wealth, and the love of splendour. The population having attained prosperity through the

production of wares, empties the jewellers' shops, and the jewellers throw part of the money they receive into the melting pot to replace with money-material (gold) the watches, chains, etc. which they have sold.

Many wares have been produced. A process has been invented for making good steel of indifferent ore. This steel has given us good tools which increase ten-fold the product of our labour. In addition, the waste products of the process prove to be an excellent fertiliser which trebles the produce of our fields. Our workmen have learned in technical schools to use their hands intelligently. In short, the supply of wares has increased. And because the supply of wares has increased, we destroy the demand for wares by melting down the medium of exchange, the bearer of demand!

What would be said of a railway company which decided that the best way to celebrate a good harvest, or a time of industrial prosperity when factories were working overtime, was to burn its rolling-stock?

If my potatoes are a success this year, I shall buy my wife a gold necklace, says the landowner.

If my cow has two calves this year, I shall buy my sweetheart a wedding ring, says the young farmer.

If I can finish twice as many pairs of trousers with my sewing machine, I shall buy a gold watch, says the tailor.

If I can produce ten times as much nitrogen with my new process, I shall regild the chapel of Our Lady of Succour, says the chemist.

If the production of my steel works again increases this year, I shall buy a service of gold plate, says the capitalist.

In short, the purchase of the wedding ring, necklace, and so-forth, is always caused by increased production of wares, increased supply, and the gold for these necklaces and wedding rings is always deducted from demand, from the coinage. (Uncoined gold, also is by law money).

The money melted by the jeweller is lost from the demand for wares, and lost, unfortunately, at a time when the supply of wares is increasing (see below). But demand and supply determine price. Prices therefore fall. And this fall of prices interrupts the exchange and production of wares. The result is unemployment and pauperism.

The gold standard, the usefulness of the money-material for industrial purposes, is thus the saw that saws away the branch upon which prosperity grows. Money is the condition of the division of labour, the division of labour leads to prosperity, and prosperity destroys money.

Prosperity always, therefore, ends by committing parricide.

The gold standard and beggary are inseparable. Frederick the Great was ashamed of ruling over a nation of beggars and thereby proved that he had an over-delicate sense of honour. He had no special cause for shame, for wherever the previous metals have become the standard of money, kings have always ruled over nations of beggars. If men continue to love display and to spend part of their increase of income in buying the products of the gold-smith's art; and if gold continues to be the raw material for the medium of exchange—the prosperity of mankind as a whole is impossible.

But a farmer does not always use a good harvest to buy his wife a gold necklace, nor do all chemists implore a blessing upon their inventions by vowing to regild a statue of the Blessed Virgin.

If the harvest turns out well, I shall buy a reaping machine, says the farmer.

If I become a successful breeder I shall drain the swamp, says the landowner.

If my invention fulfils my expectations I shall build a factory, says the chemist.

If my mill pays a good dividend and the strike is settled, I shall build a tenement house, says the capitalist.

That is, the greater the production of wares, the greater is the increase of the means of producing wares. (So-called real capital).

But from these investments, from real capital, interest is expected and the rate of interest falls if the proportion of real capital to population increases. If there are many houses and few tenants, house-rent is low. If there are many factories and few workmen, the dividends of factories are low.

If, therefore, real capital is multiplied and the interest upon it in

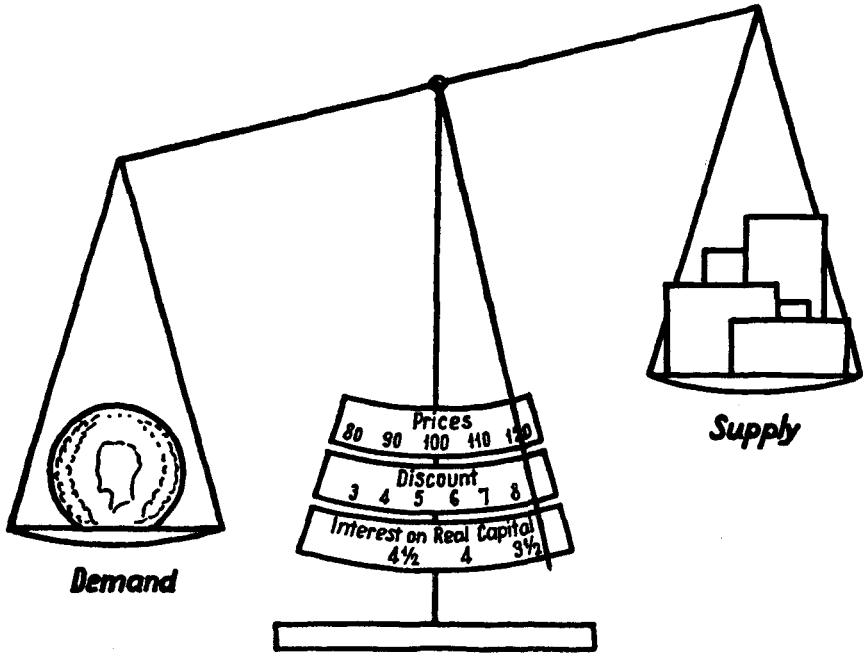

Figure 2. Trade Boom

Demand: Gold-discovery or over-issue of paper-money increases credit and the velocity of circulation of money. Demand increases, prices rise.

Supply: The rising prices cause maximum activity of economic life (full employment, overtime, night shifts), but in spite of greatly increased supply, prices are still forced upwards.

The rate of discount rises, but abundant investment depresses the rate of interest on real capital.

consequence falls below the traditional rate, no money will be given for new undertakings.*

Halt a moment! Once more, can I trust my ears? If the interest on factories, houses, ships, falls, no more houses are built, since no one will give money for new real capital? Is this true? How then can cheap houses ever be built?

These were indeed my words, this is the truth, and will anyone dare to deny it? If the interest on houses and other real capital falls, the money employed in such enterprises withdraws. What is

* The reader is referred to the theory of interest developed at the end of this volume.

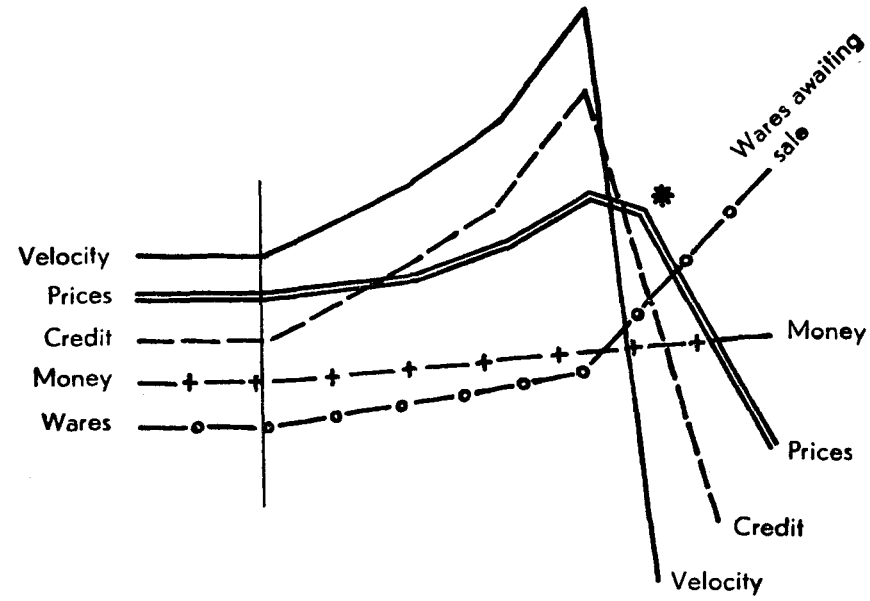

Figure 3. Trade Boom and Crisis

Explanation: The components of Demand are Quantity of Money (M), Velocity of Circulation (V), and Credit (C). Supply consists of the wares awaiting sale. The rise of prices caused by increase in the quantity of money stimulates production of wares. If the production of wares increases out of proportion to the increase of money, prices begin to fall. The result is that V and C withdraw from Demand and that the fall of prices becomes at * a slump of prices, especially as the fall of prices causes sales to stagnate, so that the quantity of wares awaiting sale increases rapidly. Prices remain stable only if M. V. C, and W run parallel, or if the deviations compensate one another.

then to become of the wares hitherto consumed in renewing and extending real capital? *

When men are industrious and inventive, when harvests are favoured by sun and rain, when many products are available to multiply houses and factories—this is the time that money (which should facilitate exchange), chooses to withdraw and wait.

And because money withdraws, because demand is lacking, prices fall, and a crisis occurs.

* At the German Congress for Housing Reform, the banker Reusch, Wiesbaden, estimated the amount of money required for house-building in Germany at 1500–2000 million marks annually.

A crisis must therefore always break out when, on account of increased production of real capital, the rate of interest on factories and houses sinks.

In the theory of interest at the end of this book, proof will be given that interest on money is independent of interest on real capital (but not vice versa). The objection that interest on money decreases simultaneously with the decrease of interest on real capital, that there is consequently no lack of money for new real capital, even if the rate of interest on real capital falls, does not, therefore, hold good.

This reason, even taken alone, is sufficient to account for the fact that economic life proceeds from crisis to crisis. Under the rule of metal money men must periodically eke out existence as homeless beggars. Gold, our hereditary king, is the true " roi des gueux ", the king of beggars.

12. ECONOMIC CRISES AND THE CONDITIONS NECESSARY TO PREVENT THEM

Economic crises, that is, stagnation of the market, unemployment and the accompanying phenomena, are conceivable only with falling prices.

Prices can fall for three reasons:

1. Because the conditions under which gold is produced do not allow the supply of money (demand) to be adapted to the supply of wares.

2. Because when the production of wares, and therefore of real capital, is increasing, the rate of interest upon the latter falls. No more money is then offered for the formation of new real capital, and the markets of wares destined for this use (an important part of production, especially when population is increasing) stagnate.

3. Because with increased production and prosperity money is melted by the goldsmiths in direct proportion to the increase in the supply of wares.*

* The Chinese are said to make silver figures which are much valued as the patron gods of the household. But silver is the general medium of exchange among the Chinese. The following course of events is therefore probable: For some reason silver flows into China in greater abundance than usual and stimulates trade and industry (trade-boom). Merchants prosper, and out of gratitude increase the size and weight of their silver household gods. The silver they obtain in exchange for their products—the cause of the trade activity—is melted and disappears for ever in the household shrine. If, however, conditions are reversed and from lack of silver prices fall and business is bad (crisis), the Chinese merchant comes to the conclusion that his household god is powerless because it is too small. So he scrapes together the little silver he has, to increase its size. Even if there were no other causes, this cause alone would be sufficient to explain the striking arrest, extending backwards over a thousand years, of the development of China.

Has a European any right to laugh at the Chinese ? If trade is good he buys a gold watch-chain for ostentation, and if trade is bad he buys a still larger one to persuade others to give him credit. Both, for different motives, saw off the branch upon which they are sitting.

Any one of these three causes of falling prices is sufficient alone to produce a crisis; and it is characteristic of them that when one cause (say the first, owing to sufficient discoveries of gold) fails to function, the others leap into the breach. One or other of these three causes of crisis regularly and inevitably occasions the periodic breakdown of economic life.

Only if gold continues to be discovered in such unusual quantities that, in spite of increased consumption of gold for industrial purposes, there is a large and steady rise of prices (at least 5% annually), can economic life develop without crises. Even the resistance to the circulation of money caused by the fall of interest on real capital would give way to such a general rise of prices; the rise of prices would compel the circulation of money. But such a general rise of prices would in itself constitute a breakdown of the monetary standard.

The explanation of the causes of commercial crises indicates the condition which must be fulfilled to prevent their occurrence. The condition is that prices must never, under any circumstances, fall.

The next question is how this condition can be fulfilled. It can be fulfilled by:

1. Separation of money from gold and the production of money in accordance with the needs of the market.

2. A form of paper-money so contrived that it will be offered in all possible circumstances in exchange for wares, even if interest on capital (interest on money as well as interest on real capital) falls or disappears.

A form of money fulfilling these conditions will be described in Part IV of this book (Free-Money).

13. REFORM OF THE NOTE-ISSUE

Demand and supply determine prices: and economic life needs a fixed level of prices to prosper and to enable the splendid possibilities of progress inherent in money to unfold themselves. If during three thousand years or more, civilisation had not been again and again forced by economic crises down the slope it had so laboriously climbed, if the widespread pauperism left behind by each crisis had not made a pauper philosophy part of our flesh and blood, capitalism* would long ago have been a thing of the past. The German workers would have ceased to tolerate the treatment they receive from their employers and from the State if the demand for their wares appeared as regularly on the market as supply. And our German landowners would not have exposed their sores to excite public sympathy, and begged for wheat-duties from emaciated workmen's wives, if they themselves had not been ruined by the fall of prices caused by the gold standard.

The pangs of hunger and pressure of debt are pernicious educational influences.

Mankind would have scaled heights as yet unknown in science, art and religion if the promising culture called into life by gold (even though bloodstained and plundered) at Rome, had not been petrified and annihilated in the economic glacial period, fifteen hundred years in length, which was created by lack of money.

Solomon wrought miracles because the money-material he received from Ophir made possible the regular exchange of wares and the division of labour. But everything he wrought was lost with the passing of the supplies of gold.

The growth of culture has always been blasted by a fall of prices. For culture means the division of labour, and the division of labour means supply. But supply cannot result in exchange if prices are sinking from want of demand, from want of money.

Money and civilisation rise and fall together. For this reason the mercantilists, who regarded gold as synonymous with wealth and culture, and planned a constant increase of the stock of gold by

* Capitalism—An economic condition in which the demand for loan-money and real capital exceeds the supply and therefore gives rise to interest.

means of import-duties, were not so very far wrong. A sound principle was foolishly applied. It is a fact that science, trade and art flourish when the stock of money is increasing. But the mercantilists confused money with gold; they thought that gold performed the miracle by means of its " intrinsic value." They overlooked money; they had eyes for nothing but gold. Money and gold meant the same thing to them. They did not know that money, not gold, carries out the exchange of wares, and that wealth is created by the division of labour which money, not gold, makes possible. They ascribed the progress resulting from the division of labour to the characteristics of gold, instead of to the characteristics of money.

Many of those who have learnt to separate money from gold, who have renounced the heresy of " intrinsic value " and convinced themselves of the importance of stable prices will now be inclined to argue as follows: Why not simply manufacture paper-money and bring it into circulation as soon as supply has overtaken demand or, in other words, when prices begin to fall ? And conversely: Why not withdraw paper-money from circulation and burn it when demand begins to exceed supply, that is, when prices begin to rise ? This is merely a question of quantity: a lithographic press and a fireplace put it in your power to adapt demand (money) so exactly to supply (the wares) that prices remain constant.

So says among others Michael Flürscheim*, a zealous propagandist of this idea, who counts me among the first who have formulated and popularised it. This honour I must, however, decline, since at the outset† and ever since I have denied that paper-money as we know it (without direct, material compulsion to circulate) could ever be as closely adapted to supply as a regular exchange of wares, national and international, requires.

I deny this possibility and intend to prove in black and white that if the State controls the amount of money issued, but neglects to control its circulation, all the anomalies we have revealed in the functioning of the present form of money will continue to exist.

As long as money, regarded as a ware, is superior to wares in general, as long as savers prefer money to wares (their own products), as long as speculators can with impunity misuse money

* Michael Flürscheim, The Economic and Social Problem.

† Silvio Gesell, Nervus Rerum, p. 36–37, Buenos-Aires, 1891.

for manipulating the market, money will not mediate the exchange of wares without exacting a special tribute over and above the legitimate profit of commerce. But money should be " the key to open the gates of the market, not the bolt to close them "; it should be a road and not a toll-gate; it should assist and cheapen exchange, not impede and burden it. And it is clear that money cannot be simultaneously the medium of exchange and the medium of saving —simultaneously spur and brake.

In addition to State control of the quantity of money in circulation (only possible by means of a paper-money standard) I therefore propose a complete separation of the medium of exchange from the medium of saving. All the commodities of the world are at the disposal of those who wish to save, so why should they make their savings in the form of money ? Money was not made to be saved !

Supply is under a direct compulsion inherent in the nature of wares, and for this reason I propose a similar compulsion for demand. In the process of settling the price, supply would then no longer be at a disadvantage in comparison with demand.*

Because of this compulsion, supply is a simple measurable object not dependent upon the will of the possessor of wares. Demand must therefore also be separated from the will of the possessor of money, demand must become an object capable at all times of measurement. If we know the amount of wares produced at any time we know the amount of supply. Similarily if we know the quantity of money in circulation at any time we should be able to foretell the quantity of demand.

This reform can be attained by the introduction of a medium of exchange subject to a material, inherent compulsion to circulate, and it can be attained only in this way. (See Part IV, Free-Money).

The material compulsion liberates money from all the hindrances to circulation caused by greed of gain, speculation and panic, and sets the whole mass of money issued by the State in constant, uninterrupted circulation which creates a constant, uninterrupted demand.

Regularised demand eliminates the stagnation of sales and the

* Those who are not yet free from the " value " superstition will not understand the justice of this claim.

congestion of wares. The immediate result of a regular demand is a regular supply influenced only by the production of wares, just as the flow of a river becomes regular when the fall is evenly distributed.

If money were under compulsion to circulate, minute changes in the quantity of money would suffice to make demand fit like a glove the natural variations of production.

Without this forced circulation of money we are at once back again to the present confusion. Demand eludes the power of the State, and the only fixed factor in the present chaos, the fact that money exacts a tribute for its services, causes money to be withdrawn from the market by private individuals as soon as it is scarce, and to be again brought into circulation as soon as it is offered in superfluity.

To test the correctness of what has just been said, I shall examine more closely Flürscheim's proposal.* This is all the more necessary since Argentina†, Brazil, India and other countries have succeeded in keeping their currencies at par with the gold standard by regulating the issue of money other than gold. This has called attention to paper-money and awakened the belief that this medium of exchange is capable of further perfection. But advocates of a paper-money standard can do their cause no greater injury than to attempt the introduction of reforms which do not exclude the possibility of failure, for each failure strengthens the position of those who defend a metallic monetary system and postpones for decades the discussion of a paper currency.

The simple reform of the note-issue, here described as inadequate, proposes to empower the State to issue or withdraw paper-money in quantities to be determined by the general level of prices. The State is to estimate the demand for money solely by the average price of the wares. The quantity of money in circulation is to be increased when prices fall, and to be decreased when prices rise. Money is not to be redeemable in gold or any other particular product; for redemption the holder of money is directed to the

* See also Arthur Fonda, Honest Money: Professor Frank Parsons, Rational Money.

† Silvio Gesell, La Cuestion monetaria argentina, Buenos-Aires, 1898; La pletora monetaria, Buenos Aires, 1907.

market. But in every other respect this paper-money is to be indistinguishable from ordinary paper-money; it may be used or misused for saving, or as a reserve for speculation. Demand is left in possession of all the privileges it possesses over supply. Demand is to remain what it is to-day, an action willed by the holder of money, and therefore the plaything of money-magnates.

Nevertheless the reform professes to eliminate the recurring periods of over-production and unemployment, to make economic crises impossible and to suppress interest on capital.

The fate of this reform would be determined by the behaviour of persons in a position to save. We must here recall our words about saving. A person who saves produces more wares than he purchases, and his surplus, bought by employers with money from the savings banks, is worked up into new real capital. But no one parts with money-savings unless promised interest, and the employer can pay no interest if what he constructs does not bring in at least as much interest as is demanded for the use of savings. And if work upon the building of houses, factories, ships, etc. continues for a time, the interest on such things of course falls. The employer cannot then pay the interest demanded for the use of savings. The money remains in the savings-banks, and as this is the money with which the surplus wares of the savers are bought, the sale of these wares is interrupted and prices fall. This means a crisis.

But here the reformers of the note-issue intervene and say, Why did the crisis break out ? Because prices fell—and prices fell because money was scarce. Because of the lowered rate of interest on real capital, part of the stock of money was withdrawn from circulation. Good ! We leave the savers or the savings-banks in possession of the money, and let them hoard it; we shall replace it with new money. The State prints money and advances it to the employers, if the money of capitalists and money-savers is held back. If the rate of interest on real capital falls, the State also reduces the rate of interest on the money it issues. If employers can extract only 3, 2, 1% from their houses, factories, ships, the State supplies them with money at 3, 2, 1%, or, if necessary, at 0%.

The proposal is simple and sounds reasonable. But it only sounds reasonable to the layman. The trained ear can detect a discord.

For money exists to facilitate exchange, and here capitalists,

speculators and money-savers are permitted to use money for purposes foreign to the exchange of wares. Money was made to help the producer of wares to exchange his products for the products of other producers. Money is a medium of exchange and nothing more. Money makes exchange possible, and exchange is complete only when two producers have exchanged their products. When a producer has sold his product for money, exchange is not yet complete; someone is in the market waiting for him. The purpose of money demands that the sale of a product for money shall immediately be followed by the purchase of a product with money, to complete the exchange. Anyone hesitating with his purchase leaves exchange incomplete and interrupts a sale for another producer. This is a misuse of money. Without purchase there can be no sale; therefore, if money is to fulfil its purpose, purchase must follow step for step on the heels of sale.

We are told that the man who has sold his products for money and does not set free his money by further purchases of products is ready to lend his money if offered interest. But this condition cannot in justice be permitted. The man must lend his money unconditionally, or be compelled to purchase wares, or to re-purchase his own products. No private individual can be allowed to make conditions of any kind about the circulation of money. Those who have money have the right of immediately purchasing wares, and no other right. A right to interest is incompatible with the conception of money, for this right would resemble a tax upon the exchange of wares for the benefit of private individuals and sanctioned by the power of the State. The right to interest is the right to interrupt the exchange of wares by holding back money, to embarrass the owners of wares waiting for this money, and to exploit their embarrassment for the purpose of extorting interest. The conditions upon which money can be lent are the private affair of the savers, with which the State has no concern. The State, to which money is purely a medium of exchange, says to the saver: You have sold more wares than you have bought and you are consequently in possession of a surplus of money. This surplus must in all circumstances be brought back to the market and exchanged for wares. Money is not a feather-bed, it is a moment's halting place by the road-side. If you have no personal need of wares you

can buy bills of exchange, promissory notes, mortgage-deeds and so forth from persons who are in need of wares and have no money. The conditions upon which you can buy bills of exchange are your affair; only on one point the State insists upon absolute obedience; that your money shall immediately be brought back to the market. If you fail to put your money in circulation voluntarily, the State, by punishment, will compel you to do so, since your delay is detrimental to the common interest.

The State builds roads for the transport of wares and provides a currency for the exchange of wares. The State insists that no one shall interrupt the traffic of a busy street by slow-moving ox-carts, and should also insist that no one shall interrupt or delay exchange by holding back money. Such inconsiderateness invites punishment.

Reformers of the note-issue with youthful enthusiasm pass over these fairly obvious conditions of an efficient monetary system, yet hope to realise their aim. It is a vain hope!

Savers produce more commodities than they consume, and they do not again set free the money they receive for their surplus unless they are promised interest. The proposal now before us is that the crisis which is the direct result of the savers' conduct should be resolved by the State supplying money to the employers at a lower rate of interest, this money to be new money straight from the printing-press.

The surplus production of the savers is in this case not bought with their money, but with new money. For the moment this is unimportant; with the help of the new money the building of houses, factories and ships proceeds without interruption. It is true that employers receive less and less interest from these enterprises, since building is now uninterrupted, and the supply of ships, tenements, etc. is constantly increasing. But parallel with the decrease of the interest they receive is the fall in the rate of interest they have to pay the Bank of Issue. As employers they are therefore indifferent to the amount of interest they receive on the ships or houses, as it must all be handed over to their creditors. Work proceeds without interruption, and there is therefore no interruption in saving. Many still find it advantageous to lend their savings at the lower rate of interest; but others, especially the small savers who, in

any case, obtain but a trivial amount of interest, will return to the old custom of keeping their savings at home and renouncing interest—even if the fall in the rate of interest is only from 5% to 4% or 3%. The small sums thus hoarded would, added together, amount to many hundred million dollars. The State replaces this amount by the issue of new money. Crisis is thus averted and work proceeds upon houses, ships, factories, the interest upon which would steadily, and probably quickly, fall. But the fresh fall in the rate of interest will still further check the flow of savings into the savings-banks. Soon even the larger class of savers will begin to find it scarcely profitable to bring money to the savings-banks; they will certainly hesitate about bringing money wanted at short notice to a savings-bank some distance away. Some persons will also consider their money safer in their own possession than under the control of strangers. All the forces preventing the re-entry of saved money into circulation, which were counterbalanced by the high rate of interest, will now be set free, and a stream of money, paper-money, will flow from the National Currency Office or Bank of Issue into millions of savings-boxes. The lithographic press of the National Currency Office will ceaselessly replace what is here withdrawn from the market. A mighty stream of paper-money, of demand due from day to day, will be lost to sight.

The more the rate of interest falls, the more the stream swells. Finally, before the market is saturated with real capital, when interest has fallen to about 1%, no one will bring his savings to the savings-banks; everyone will prefer to keep the money under his own supervision. At this stage the savings of the whole nation, huge sums amounting annually to many billions of dollars, will flow into the savings-boxes. These sums will be increased by the absence of economic crises and by the fall in the rate of interest which will make saving easier. The savings of last year will not be consumed by this year's unemployment. If interest falls to 1%, the income of the workers will be doubled, and if income is doubled savings can be increased ten-fold. It is the last addition to the income which is saved, and this addition will be equivalent to the whole amount of the income hitherto.

All this money is to be annually replaced by the State! A whole nation is to convert its savings into money, into what should be

demand falling due from day to day, into scraps of paper which have some use only because a fraction of them is required for the exchange of wares. A strange state of affairs!

Billions of dollars are lent on mortgage. But if mortgages bring in no interest they will be foreclosed and the money hoarded. The State must replace these billions by new issues. Bills of exchange to a total of over 30 billions of marks circulate regularly in Germany and at the same time serve as a medinm of exchange. But if interest disappears, no one will any longer discount a bill. Bills of exchange therefore become useless for trade purposes, and the State will have to issue an equivalent amount of money. Many hundreds of billions will be necessary. With a hundred lithographic presses printing $1000 notes day and night the State will hardly keep pace with the requirements of currency. Hundreds of billions of demand, due in the market from day to day, lying buried in the hoards!

But what if, for any reason, this demand came to life and appeared in the market? Where would then be the corresponding supply of products? If supply is lacking, prices rise, and rising prices cause differential profits. This prospect of gain entices money into the market! The rise of prices, the prospect of differential profits, bursts open the savings-boxes and the billions of demand pour like an avalanche upon the market. "Sauve qui peut!" is the cry, and in the shipwreck the only lifeboats are the wares. Those who can buy wares are safe, so everybody buys wares. Demand rises to thousands of billions, and as supply is of course lacking, prices shoot up. The rise of prices annihilates savings. The peasant again uses paper-money as he used the French assignats—to paper his cowshed.

Flürscheim indeed denies such a possibility. He asserts that the thought of a rise of prices could never occur to the savers, that is, to the holders of the billions of demand, since it is known that the State would immediately counteract the slightest tendency to rising prices by withdrawing the surplus money.

But here we meet the second contradiction in this reform. The first contradiction was the toleration by the State of the use, or rather misuse, of money as a medium of saving, with the result that it was forced to manufacture more money than was necessary for the true purpose of money, namely the exchange of wares.

The second contradiction lies in the fact that the State, when issuing money to employers, was itself not using the money as a medium of exchange. The money was not given for wares but for bills of exchange, mortgages and other securities. But money is a medium of exchange, and as such should be issued only against wares, that is, given out in accordance with its purpose. If the State had issued money only for wares (and if these wares had not in the meantime fallen into dust and decay), it would have no reason to fear the avalanche of demand caused by the return to circulation of the hoarded savings. As it is, the State holds only mortgages, promissory notes and bills of exchange which bear no interest, and with such instruments no ready money can be recalled.

The State misunderstood the function of money when it advanced the employers the money refused them by the savers. The State misused its power; and money wreaks a sharp and sudden vengeance for every misuse to which the State subjects it. Here appears the third contradiction inseparable from this reform. Different qualities are demanded of money according to whether it is used for the purpose of saving or for the purpose of exchange. As consumer the saver pays $100 for a certain quantity of wares, but as saver he does not pay this price. He prefers his $100. Thus $100 considered as a medium of saving are more than the wares that can be bought for $100. Savings can never be brought back to circulation by wares.

The State has here treated money for exchange and money for saving as equivalents; it has replaced the money withdrawn from the market in the form of savings, by purchasing bills of exchange, mortgages, and so forth. When the time comes for the State to exchange these things for savings, the impossibility of doing so becomes apparent.

This becomes still clearer if we think of two different kinds of money, say gold and tea, in circulation together. To those who use money as a medium of exchange it would be a matter of indifference which kind of money they received, as they would immediately pay it out again. But to those who wish to save money, it is by no means a matter of indifference whether they receive gold or tea, since gold is durable and tea spoils. A person who wishes to save will not give $10 of gold for $10 of tea; indeed, if he reckons with long periods of time, he will not deem gold and tea equivalent at any ratio of

exchange. For him gold and tea are simply quantities that cannot be compared.

Further, the State must act promptly. The slightest rise of prices would immediately bring speculators for a rise of prices upon the scene, and once they had pocketed their first gains from the differences in price-levels there would be no holding back the flood of paper-money. Any action by the State would then come too late. Let us picture the situation of the State. Ten billions are necessary for the regular exchange of wares, 100 billions have been issued and the difference hoarded as savings. If a fraction of the surplus 90 billions reaches the market, prices rise, and the moment prices rise, the rest of the 90 billions are flung upon the market. The sequence of events would be as follows: The merchants who believe prices are about to rise buy more than they immediately require. They obtain the money for these purchases by offering interest to the savers of money. These savings, coming into circulation, now make the rise of prices a reality. This stimulates new borrowing and new speculative purchases. So the process would proceed, step by step, until all the money from the savings-boxes had been drawn into circulation by the upward movement of prices.

The slightest want of confidence in the power of the State to prevent a rise of prices would instantly bring the billions of savings into the market, into the shops, just as the slightest doubt as to the solvency of a bank of deposit immediately brings all the depositors to the counters of the bank. They would race to market, at double-quick speed, in motor-cars, in aeroplanes. That is the inevitable result of a monetary reform that leaves untouched the misuse of the medium of exchange as a medium of saving.

As long as paper-money remains what it was meant to be, a medium of exchange, everything works smoothly. Paper-money used for any other purpose is not worth the paper upon which it is printed. It becomes a scrap of paper fit at best for lighting a pipe.

The anomaly of the physical junction of the medium of exchange and the medium of saving is still more obvious if we suppose that, as in Joseph's time, a series of fruitful years is followed by a series of bad ones. During the fruitful years the people would of course be able to save, that is, to pile up a mountain of paper-money. If during the following years of scarcity the people wish to utilise this

mass of paper it becomes apparent that there is no supply to balance the piled-up demand.

The reform which we are here examining can be effective only as long as the interest which the employer receives, and can therefore afford to pay the savings-banks or capitalists, is sufficient to induce the majority of savers to put their money into circulation again. But does not Flürscheim claim that interest, if it once begins to fall, and if economic crises can be averted, must soon fall to zero ?

A reform of this kind would be short-lived and would bring the possibility of the greatest fraud ever practised upon mankind. After such an attempt at reform the people, as in the past, would believe that their salvation lay in the gold standard and would clamour for its re-introduction.*

To me it seems preferable to make the work of reform thorough at the outset, and to add to the reform of the note-issue, just described, a change in the form of money which would dissolve the material connection between medium of exchange and medium of saving, a change which would cause the disappearance of all private stores of money, which would break the lids of all savings-boxes and force the locks of all money-chests—a change which, in war and peace, in good years and in bad, would keep exactly as much money in circulation as the market, without fluctuations in the general level of prices, could absorb.

With Free-Money the traditional connection between the medium of saving and the medium of exchange is, in conformity with the results of our inquiry, irrevocably broken. Money becomes a pure medium of exchange, independent of the will of its possessor. Money becomes materialised demand.

14. CRITERION OF THE QUALITY OF MONEY

The partisans of the gold standard ascribe the great absolute and relative economic development of the last decades to the gold standard. These millions of factory-chimneys belching forth smoke

* Throughout the foregoing analysis it is assumed that the reform is adopted universally. If only one country, or a few countries, adopted the reform, the fall in the rate of interest would be checked by the export of savings which would be sent abroad to gain the higher rate of interest. In this case the reform would not result in a catastrophe, but neither would it eliminate interest.

are the modern equivalents of sacrificial altars, and they express the nation's thankfulness for the gold standard !

There is certainly nothing surprising in the assertion that the monetary standard can cause, or make possible, an economic revival. For money makes the exchange of wares possible, and without exchange of wares there can be no work, no profit, no traffic, no marriage. When the exchange of wares is interrupted, factories shut down.

The assertion, we repeat, contains nothing at first sight surprising. On the contrary, manufacturers, shipbuilders and other employers, when asked whether they could produce more wares with their present machinery and staffs, are unanimously of opinion that production is limited only by the sale of their wares. And money makes sales possible—or makes them impossible.

That this eulogy of the gold standard should contain a tacit assumption that its predecessor, the bimetallic standard, hindered economic development also causes no surprise. For money, if it can bring progress, can also, evidently, hinder progress. More important results can be ascribed to money than economic prosperity or the reverse during a few decades.*

After the adoption of the gold standard by Germany, German landowners complained of the fall of prices and of their difficulties in finding money to meet the interest on their mortgages. The German import-duties were devised for their protection, and without this protection many farms would have come under the hammer. But with prices falling, who would have bought these farms? Large estates would have been formed, just as under the Roman Empire, and the downfall of Rome has been ascribed to its latifundia.

The assertion of the advocates of the gold standard contains, therefore, nothing remarkable, but it requires proof. For German economic development could have had other causes; the school, the many technical inventions which made work fruitful, German wives who provide a numerous and healthy stock of workers, and so forth. There is, in short, no lack of competitors eager to snatch the laurels from the gold standard.

Proofs, then, are needed. We must find some criterion for the quality of money. We must determine whether the gold standard has

*Gesell: " Gold and Peace ? " (spoken at Berne, 1916). (See page 117).

so facilitated exchange that the expansion of economic life can be ascribed to this cause alone.

If the gold standard has facilitated the exchange of products, the result must be increased safety, speed or cheapness of exchange, and this increased safety, speed or cheapness of exchange must cause a corresponding decrease in the number of those engaged in commerce. This is too obvious to require further explanation. If we improve the roads that serve for the transport of merchandise, the efficiency of carters increases, and if the amount of merchandise to be carted remains the same, the number of carters must diminish. Since the introduction of steam, sea traffic has increased a hundredfold, yet the number of sailors has diminished.

The same result should occur in commerce if the gold standard is to the cowry-shell standard as steam power is to wind, or as dynamite compared with a wedge.

But with the gold standard an exactly contrary development can be observed.

" The middleman's activity (that is, commerce) used to claim about 3 or 5% of the workers; it now claims 13 or 15, sometimes even 31%. This activity (the cost of commerce) forms an increasing proportion of price," says Schmoller (Commerce in the XIXth Century, Die Woche).

Commerce, instead of growing less difficult, grows daily more difficult. With gold as the medium of exchange not fewer but more persons are required to exchange the wares, and these persons have a better general education and a better commercial training. This can be proved from the German statistics of occupations.

	1882	1895	1907
Population of Germany -	45,719,000	52,001,000	62,013,000
Total number of workers -	7,340,789	10,269,269	14,348,016
Persons engaged in commerce	838,392	1,332,993	2,063,634

From these figures we see that the increase in the number of persons engaged in commerce has far outstripped the increase in the total number of German workers (industry, commerce, agriculture). The total number of workers has increased from 7,340,789 to 14,348,016, or 95%, whereas the number of those engaged in commerce has increased from 838,392 to 2,063,634 that is 146%.

These figures are a clear proof that since gold has been adopted as the medium of exchange, commerce has become more difficult.

It may be objected that during the last decades many producers have gone over from primitive methods of production to the division of labour, especially in the country, where less and less is produced for personal consumption and more and more for the market. This of course increases the number of merchants required. Few spinning wheels, for instance, are now in use, and the village artisans paid directly in kind (barter) have had to give way to factories.

Again a worker, thanks to improved methods of production, now produces more wares, judged by quantity or quality, than formerly. Thus a much greater mass of wares is brought to market, and this also increases the number of persons engaged in commerce. If one merchant is required to sell the calico produced by 10 weavers, then, other things being equal, two merchants are required if the 10 weavers, with improved looms, produce twice as much calico.

This objection is valid, but on the other hand it should be remembered that commercial work also has been greatly facilitated by organisation and invention. We have the decimal coinage, introduced with the German gold standard (though it is independent of the gold standard, as the English currency system proves), the metric system of weights and measures, commercial staffs trained in better schools, co-ordinated laws of commerce, consulates, extraordinary postal facilities, (cheap letter postage, parcel-post, postcards, money orders, collection of cash through the post, etc.). Add to these telegraph and telephone, stenography, typewriters, multigraphs, cash registers, cheques and current accounts, more efficient methods of advertising, consumers' co-operative societies; in short, the countless improvements introduced into the technique of commerce during the last thirty years. Finally, the better technical training of the business man must have increased his power of selling merchandise. If technical training has not done so, it is superfluous, and the merchant is a fool who pays a higher salary to a trained assistant. For he pays the higher salary because he believes that the trained assistant does more work, that is, sells more merchandise than his untrained colleague.

If the increase in production is compensated by the increased efficiency of commercial organisation, then the increase in the

proportion of those engaged in commerce retains its full force as evidence against the alleged advantages of the gold standard.

But the above figures give only the number of persons engaged in commerce, and we are more interested in the gross profit of commerce. This, to judge by appearances, has certainly increased. It cannot be deduced directly from the number of those engaged in commerce, since the average income of persons engaged in commerce is higher than that of any other workers.

To judge the effect of a monetary reform upon commerce, it would be necessary to calculate statistically the gross profit of commerce, that is, the difference between the factory price and the retail price of each product. Retail price, less factory price, equals the gross profit of commerce. It would be possible to calculate in this way the cost of commerce to a country and the efficiency of its monetary system. There is reason to believe that such statistics would prove the well-known assertion that commerce at present consumes one-third or more of the total production ! Of 1000 tons of production 333 tons fall to the traders.

15. WHY THE CRUDE QUANTITY THEORY FAILS WHEN APPLIED TO MONEY

Demand and supply determine the price of wares, and supply depends upon the existing stock of wares. If the stock increases, supply increases; if the stock decreases, supply decreases. Stock and supply are identical; instead of saying " demand and supply " we could say " demand and the stock of wares " determine price. Indeed the statement in this form brings the suppositions of the quantity theory into higher relief.

The quantity theory, which, with unimportant limitations, holds good of all wares, has been applied to money. It has been stated that the price of money is determined by the stock of money. But experience has shown that the supply of money is not so dependent upon the stock of money as this statement of the quantity theory assumes. The stock of money often remains unaltered, but the supply of money is subject to great variations. The war-chest at Spandau has not been offered as supply once in forty years, whereas other money annually changes hands 10 or 50 times. The places where money is kept (banks, safes, chests or stockings) are some-

times empty, sometimes overflowing, and accordingly the supply of money is great to-day and small to-morrow. A rumour is often sufficient to direct a torrent of money and demand from the market to the places where money is preserved. A telegram, perhaps forged, often makes hands in the act of closing the purse-strings scatter money broadcast upon the market.

The conditions of the market have the greatest possible effect upon the supply of money, and if we said above of wares that demand and supply determine their price, we could say with equal truth of money that "demand for money and the mood of its holders" determine its price. The stock of money is certainly important for the supply of money, since the stock fixes the upper limit to the supply of money. More money cannot be offered than the stock allows. But whereas with wares the upper limit to supply (that is, the stock) is also the lower limit, so that supply and stock are always equivalent, with money no lower limit can be discovered, unless we regard it as zero.

When confidence exists, there is money in the market; when confidence is wanting, money withdraws—such is the teaching of experience.

But, if as experience teaches, the supply of money does not exactly and at all times correspond to the stock of money, then the price of money is independent of the stock, and the crude quantity theory cannot be applied to money.

But if the crude quantity theory is not applicable to money, neither is the cost-of-production theory. The cost of production can determine price only by its influence upon the quantity produced, that is, the stock; and the stock of money does not, as we have seen, always correspond to the supply of money.*

Of products in general it is true that when the cost of production falls, production increases. With increasing production the stock and supply increase, and with increasing supply the price falls.

* "The increase of the stock of money alone cannot increase prices; the new money must also cause demand by being used for purchasing in the market. That is the first limitation to be made to this theory." Dr. George Wiebe, History of the Price Revolution in the 16th and 17th Centuries, p. 318.

"Money which is not offered in exchange for products has as little influence upon prices as if it were destroyed." Hume.

But with the precious metals it is by no means certain that when the stock increases supply immediately increases; still less, that supply always corresponds to the stock. Proof: the stores of silver at Washington; the war-chest at Spandau; the frequently discovered hoards of coins.

Both theories, the crude quantity theory and the cost-of-production theory, fail when applied to money, and the reason why they fail must be sought in the characteristics of the money-material. The contents of the war-chest at Spadau would long ago have fallen into dust but for certain characteristics of gold, and the silver policy of the United States would have been inconceivable but for certain similar characteristics of silver.

If gold decayed like other products, the supply of money would always correspond exactly to the stock of money. Confidence or want of confidence would have no effect upon the supply of money. In war and peace, in prosperity and adversity, money would always be offered for exchange, even when the offer meant certain loss, just as potatoes are offered for exchange quite apart from the question of profit to their owner. In short, demand and supply would determine the price of money as now they determine the price of all other products.

The price of a product like the gold at Spandau, or the silver at Washington, which, without suffering the least depreciation, can be stored for decades in damp subterranean strongrooms, the price of a product the supply of which depends not upon intrinsic necessity but upon human judgment, is as free and incalculable as the wind. The price of such a product knows no economic laws; the quantity theory and the cost-of-production theory pass it by. Its supply is determined simply by profit.

Such money, as Lassalle rightly remarked, is from the outset capital; it is offered in exchange as long as it can obtain interest, and no longer. No interest, no money!

We have now completed our investigation of money as it is, of the metal or paper-money of the present, and can turn our attention to money as it should be, to the money of the future which we have named Free-Money, that is to say, money free to circulate, money free from the anomaly of interest.

Part 4

FREE-MONEY OR MONEY AS IT SHOULD BE

INTRODUCTION

The human mind is baffled by the abstract, and money hitherto has been wholly abstract. There was nothing with which to compare it. There were, indeed, various kinds of money, metal and paper; but as regards the most important aspect of money, namely the forces regulating its circulation, these different varieties were identical, and this brought the mind of the monetary theorist to a standstill. Equal things are not comparable, and, offering no hold for the intellect, inhibit the act of conception. The theory of money stood before a blank wall, utterly unable to move on. In no country was there, or is there, a legally sanctioned theory of money upon which the administration of money could be based. Everywhere the monetary administration is guided by purely empirical rules, for which nevertheless, it claims absolute authority. Yet money is the foundation of economic life and public finance; it is a tangible object, the practical importance of which fires the imagination as does scarcely any other; an object, moreover, that has been known to, and indeed artificially produced by mankind for 3000 years. Consider what this means: In one of the most momentous of public and private interests we have for 3000 years acted blindly, unconsciously, ignorantly. If further proof were needed of the hopelessness of so-called abstract thinking, it is here.

With Free-Money, as described in this book, the situation is radically altered. Money has ceased to be abstract. Free-Money for the first time supplies the point of comparison for an examination of money. Money has found a background; it has become an object with colour tones and limiting surfaces. Give me a fulcrum, said Archimedes, and I can move the world from its axis. Given a point of comparison, man can solve any problem.

Free-Money supplies the plumb-line for the construction of the theory of money, a plumb-line by which all departures from the vertical immediately become apparent.

1. FREE-MONEY

Money is an instrument of exchange and nothing else. Its function is to facilitate the exchange of goods, to eliminate the difficulties of barter. Barter was unsafe, troublesome, expensive, and very often broke down entirely. Money, which is to replace barter, should secure, accelerate and cheapen the exchange of goods.

That is what we demand of money. The degree of security, rapidity and cheapness with which goods are exchanged is the test of the usefulness of money.

If, in addition to this, we ask that money shall cause a minimum of trouble by its physical properties, we make a claim that is valid only if the purpose for which money exists is not thereby defeated.

If security, acceleration and cheapening of the exchange of goods can be achieved by means of a form of money which cannot be harmed by moth and rust and which besides, can be conveniently hoarded, then let us, by all means, have such money. But if this form of money diminishes the security, rapidity and cheapness of the exchange of goods, we say: Away with it!

Knowing that the division of labour, the very foundation of our civilisation, is here at stake, we shall select whatever form of money is suited to its necessities, quite regardless of the wishes or prejudices of individuals.

In order to test the qualities of money we shall use no scales, crucibles or acids; neither shall we scrutinise some coin or consult some theorist. We shall consider, instead, the work done by the money. If we observe that a certain form of money seeks out goods and conveys them by the shortest route from the workshop to the consumer; if we notice that goods cease to congest the markets and warehouses, that the number of merchants diminishes, that commercial profits shrink, that no trade depressions occur, that producers are assured of a ready disposal of all they can produce while working at full capacity, we shall exclaim: This is an excellent form of money!—and we shall hold to this opinion even if, on closer examination, we find that the money in question is physically unattractive. We shall consider money as we consider, say, a machine, and form our judgment exclusively on its efficiency, not on its shape or colour.

The criterion of good money, of an efficient instrument of exchange, is:—

1. That it shall secure the exchange of goods—which we shall judge by the absence of trade depressions, crises and unemployment.

2. That it shall accelerate exchange—which we shall judge by the lessening stocks of wares, the decreasing number of merchants and shops, and the correspondingly fuller storerooms of the consumers.

3. That it shall cheapen exchange—which we shall judge by the small difference between the price obtained by the producer and the price paid by the consumer. (Among producers we here include all those engaged in the transport of goods).

How inefficiently the traditional form of money functions as an instrument of exchange has been demonstrated in the previous part of this book. A form of money that necessarily withdraws when there is lack of it, and floods the market when it is already in excess, can only be an instrument of fraud and usury, and must be considered unserviceable, no matter how many agreeable physical qualities it may possess.

Judged by this criterion, what a disaster was the introduction of the gold standard in Germany! At first a boom, fed by the millions taken from France, and afterwards the inevitable crash!

We introduced the gold standard because we expected an advantage from it, and what other advantage could we expect from a change of our monetary system than greater security, cheapening and acceleration of the exchange of goods?

But if such was the purpose, what was the justification for the introduction of the gold standard to achieve it? Gold coins, neat round shining toys, were expected to facilitate, accelerate and cheapen the exchange of straw, iron, limestone, hides, petroleum, wheat, coal, etc., but how that was to be done nobody was able to explain; it was simply a matter of faith. Everybody—even Bismarck—relied on the judgment of the so-called experts.

After the establishment of the gold standard, just as before it, the exchange of goods consumes 30, 40, and sometimes perhaps 50% of the entire output. Trade depressions are just as frequent and just as devastating as in the days of the thaler and the florin;

and by the increased number of dealers we observe how slight is the mercantile power of the new money.

The reason why the mercantile power, the power of exchanging goods, of this money is so slight, lies in the fact that it has been over-improved—improved, that is, exclusively from the view-point of the holder. In fixing upon the material for money, only the buyer, only demand was considered. The goods, supply, the seller, the producer of the goods, were entirely overlooked. The very finest of materials, a precious metal, was chosen for the manufacture of money—just because it offered certain conveniences to the holders of money. Our experts did not pause to consider that the holders of goods in selling their products had to pay for these conveniences. By the selection of gold as money-material, the buyer has been allowed time to choose the most favourable moment for the purchase of goods, and in granting this freedom the devisers of the gold standard forgot that the seller would be forced to wait patiently in the market till the buyer chose to appear. Through the choice of the money-material, demand for goods was placed at the discretion of the owners of money and delivered up to be the sport of caprice, greed, speculation and chance. Nobody saw that the supply of goods, owing to its material nature, is at the mercy of this abitrary will. Thus arose the power of money which, transformed into financial power, exercises a crushing pressure on all producers.

In short, our worthy experts when considering the currency question forgot the goods—for the exchange of which the currency exists. They improved money exclusively from the point of view of the holder, with the result that it became worthless as a medium of exchange. The purpose of money evidently did not concern them, and thus as Proudhon put it, they forged "a bolt instead of a key for the gates of the market." The present form of money repels goods, instead of attracting them. People do, of course, buy goods, but only when they are hungry or when it is profitable. As a consumer everyone buys the minimum. No one desires to have stores, in planning a dwelling house the architect never includes a storeroom. If every householder were to-day presented with a filled storeroom, by to-morrow these stores would be back on the market. Money is the thing people want to own, although everybody knows

that this wish cannot be fulfilled, since the money of all mutually neutralises itself. The possession of a gold coin is incontestably more agreeable than the possession of goods. Let the "others" have the goods. But who, economically speaking, are these others? We ourselves are these others; all of us who produce goods. So if, as buyers, we reject the products of the others, we really all reject our own products. If we did not prefer money to the products of our fellows, if instead of the desired yet unattainable reserve of money, we built a storeroom and filled it with the products of our fellows, we should not be obliged to have our own products offered for sale in expensive shops where they are, to a great extent, consumed by the cost of commerce. We should have a rapid and cheap turnover of goods.

Gold does not harmonise with the character of our goods. Gold and straw, gold and petrol, gold and guano, gold and bricks, gold and iron, gold and hides! Only a wild fancy, a monstrous hallucination, only the doctrine of "value" can bridge the gulf. Commodities in general, straw, petrol, guano and the rest can be safely exchanged only when everyone is indifferent as to whether he possesses money or goods, and that is possible only if money is afflicted with all the defects inherent in our products. That is obvious. Our goods rot, decay, break, rust, so only if money has equally disagreeable, loss-involving properties can it effect exchange rapidly, securely and cheaply. For such money can never, on any account, be preferred by anyone to goods.

Only money that goes out of date like a newspaper, rots like potatoes, rusts like iron, evaporates like ether, is capable of standing the test as an instrument for the exchange of potatoes, newspapers, iron and ether. For such money is not preferred to goods either by the purchaser or the seller. We then part with our goods for money only because we need the money as a means of exchange, not because we expect an advantage from possession of the money.

So we must make money worse as a commodity if we wish to make it better as a medium of exchange.

As the owners of goods are always in a hurry for exchange, it is only just and fair that the owners of money, which is the medium of exchange, should also be in a hurry. Supply is under an

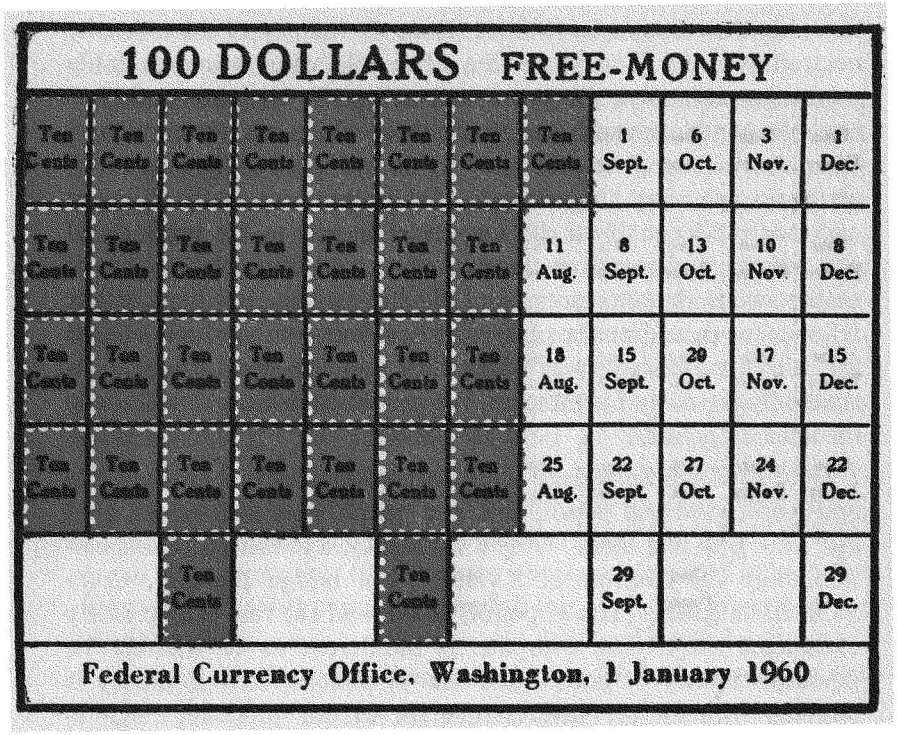

Figure 4. Free-Money, American Currency.

(Or any other decimal currency)

This $100 note (bill) is shown as it will appear during the week August 4th–11th, thirty-one ten-cent stamps ($3.10) having been attached to it by its various holders on the dated spaces provided for the purpose, one stamp for each week since the beginning of the year. In the course of the year 52 ten-cent stamps ($5.20) must be attached to the $100 note, or in other words it depreciates 5.2% annually at the expense of its holders.

Figure 5. Free-Money, British Currency.

Free-Money, British Currency, is issued in 1-shilling, 5-shilling, 10-shilling, £1, £4, £10, and £20 currency notes and in perforated sheets of stamps resembling small postage stamps, value ½d., 1d., 2½d., and 5d., which are used for attaching weekly to the notes, to keep them at their face value. A penny stamp must, for example, be attached weekly by the holder to the above £4 currency note which is divided into 52 dated sections for this purpose. The note is shown as it will appear during the week August 4th – 11th., 31 penny stamps having been attached to it by its various holders, one stamp for each week from the beginning of the year. In the course of the year 52 penny stamps (value 4s. 4d.) must be attached to this £4 note, or in other words it depreciates 5.4% annually at the expense of its holders.

immediate, inherent constraint; therefore demand must be placed under the same constraint.

Supply is something detached from the will of owners of goods, so demand must become something detached from the will of owners of money.

If we decide to abolish the privileges enjoyed by the owners of money and to subject demand to the compulsion to which supply is by nature subject, we remove all the anomalies of the traditional form of money and compel demand to appear regularly in the market, independently of political, economic or natural conditions. Above all, the calculations of speculators, the opinions or caprices of capitalists and bankers will no longer influence demand. What we term the " tone of the Stock-Exchange " will be a thing of the past. As the law of gravity knows no moods, so the law of demand will know of none. Neither the fear of loss nor the expectation of profit will be able to retard or accelerate demand.

In all conceivable conditions demand will then consist of the volume of money issued by the State, multiplied by whatever velocity of circulation is permitted by existing commercial organisation.

All private money reserves are automatically dissolved by such compulsory circulation. The whole volume of money issued is in uninterrupted, regular and rapid circulation. No one can any longer interfere with the public monetary administration by putting into circulation or withdrawing private reserves of money. And the State itself is under obligation at all times rigorously to adapt demand to supply—an obligation which it can fulfil by issue or withdrawal of trifling sums of money.

More than that is not needed to protect the exchange of goods against any conceivable disturbance, to render crises and unemployment impossible, to reduce commercial profits to the rank of a wage, and in a short space of time to drown capital-interest in a sea of capital.

And what do the priceless advantages of compulsory monetary circulation cost us, the producers, who create the money through the division of labour? Nothing but renunciation of the privilege of infecting demand with our arbitrary will, and, through it, with greed, hope, fear, care, anxiety and panic. We need only abandon

the illusion that we can sell our produce without someone else's buying it. We need only pledge ourselves mutually to buy, at once and in all possible circumstances, exactly as much as we have sold. And in order to secure reciprocity for this pledge, we must endow money with properties that will compel the seller of goods to comply with the obligations incidental to the possession of money; we must compel him to convert his money into goods again—personally, if he has any need of goods, or through others, to whom he lends his money, if he has not.

Are we then willing to break the fetters that enslave us as sellers of our produce, by renouncing our despotic privileges as buyers over the produce of our fellows? If so, let us examine more closely the unprecedented and revolutionary proposal of compulsory demand. Let us examine a form of money subjected to an impersonal compulsion to be offered in exchange for goods.

Description of Free-Money

1. Free-Money is a stabilised paper-money currency, the currency notes being issued or withdrawn in accordance with index numbers of prices, with the aim of stabilising the general level of prices.

2. Free-Money, decimal currency*, is issued in 1 – 5 – 10 – 20 – 50 – and 100 dollar (franc, mark) notes (bills). The monetary authority also sells, through the post-office, currency stamps value 1 – 2 – 5 – 10 – 20 and 50 cents.

3. Free-Money loses one-thousandth of its face value weekly, or about 5% annually, at the expense of the holder. The holder must keep the notes at their face value by attaching to them the currency stamps mentioned above. A ten-cent stamp, for example, must be attached every Wednesday to the $100 note illustrated (Figure 4), which is shown as it will appear during the week August 4th – 11th, 31 ten-cent stamps ($3.10) having been attached to it, on the dated spaces provided for the purpose, by its various holders, one stamp for each week since the beginning of the year. In the course of the year 52 ten-cent stamps must be attached to the $100 note, or, in other words, it depreciates 5.2% annually at the expense of its holders.

* For Free-Money, British currency, see Figure 5.

4. For small change up to one dollar (1 – 2 – 5 – 10 – 20 – 50 cents) the currency stamps themselves could be used, in which case they would not be re-issued when paid in at public offices, but replaced by fresh stamps. The currency stamps would be sold in small perforated sheets resembling a page from a postage-stamp booklet, the total value of each sheet being one dollar.

5. At the end of the year the fully-stamped currency notes are exchanged for fresh notes, for circulation during the following year.

6. Everyone of course tries to avoid the expense of stamping the notes by passing them on—by purchasing something, by paying debts, by engaging labour, or by depositing the notes in the bank, which must at once find borrowers for the money, if necessary by reducing the rate of interest on its loans. In this way the circulation of money is subjected to pressure.

7. The purpose of Free-Money is to break the unfair privilege enjoyed by money. This unfair privilege is solely due to the fact that the traditional form of money has one immense advantage over all other goods, namely that it is indestructible. The products of our labour cause considerable expense for storage and caretaking, and even this expense can only retard, but cannot prevent their gradual decay. The possessor of money, by the very nature of the money-material (precious metal or paper) is exempt from such loss. In commerce, therefore, the capitalist (possessor of money) can always afford to wait, whereas the possessors of merchandise are always hurried. So if the negotiations about the price break down, the resulting loss invariably falls on the possessor of goods, that is, ultimately, on the worker (in the widest sense). This circumstance is made use of by the capitalist to exert pressure on the posesssor of goods (worker), and to force him to sell his product below the true price.

8. Free-Money is not redeemed by the Currency Office. Money will always be needed and used, so why should it ever be redeemed? The Currency Office is, however, bound to adapt the issue of money to the needs of the market in such a manner that the general level of prices remains stable. The Currency Office will therefore issue more money when the prices of goods tend to fall, and withdraw money when prices tend to rise; for general prices are exclusively determined by the amount of money offered for the existing stock

of goods. And the nature of Free-Money ensures that all the money issued by the Currency Office is immediately offered in exchange for goods. The Currency Office will not be dormant like our present monetary administration which with indolent fatalism expects the stability of the national currency from the mysterious so-called "intrinsic value" of gold, to the great advantage of swindlers, speculators and usurers; it will intervene decisively to establish a fixed general level of prices, thereby protecting honest trade and industry.

9. The great importance of external trade makes it desirable that there should be an international agreement to stabilise the international exchanges. In the meantime we shall have to decide whether the monetary administration, when regulating the issue of money, is to stabilise home prices, or to stabilise the foreign exchanges. It cannot of course do both, for stabilising the exchanges means conforming to the price levels of other countries. And these price levels, in countries with metallic standards, constantly fluctuate.

10. The exchange of metal money for Free-Money will be entirely optional. Those who cannot bear to part with their gold may keep it. Gold, however, like silver formerly, will lose the "right of free coinage," and the coins will be deprived of their quality as legal tender. After the expiration of the legal period for exchange, the coins will no longer be accepted by the courts of justice or other public institutions.

11. For payments abroad use can be made as heretofore of bills of exchange offered for sale by merchants who have shipped goods abroad. For small amounts Post Office Money Orders may be employed, as is the custom at present.

12. Anyone wishing to purchase national products for export and having only gold at his disposal, that is, if he has not been able to buy any import bills, can sell his gold to the Currency Office. Anyone needing gold for the import of foreign goods, because there are no export bills on offer, can buy the gold at the Currency Office. The price of this gold will depend on how the question left open in (9) is answered.

13. The sale of the currency stamps creates a regular annual revenue for the Currency Office, amounting to 5% of the value of

the currency notes in circulation, or 200 – 300 million marks in Germany before 1914.

14. This revenue of the currency administration is an accidental by-product of the reform, and is comparatively insignificant. The disposal of this revenue will be specially provided for by law.*

2. HOW THE STATE PUTS FREE-MONEY IN CIRCULATION

The money reform deprives the Banks of Issue of the privilege of issuing banknotes. Their place is taken by the National Currency Office which is entrusted with the task of satisfying the daily demand for money.

The National Currency Office does not carry on banking business of any kind. It does not buy or sell bills of exchange, it does not classify business firms as first, second and third rate. It entertains no connections with private persons. The National Currency Office issues money when the country needs it, and withdraws money when money is in excess. That is all.

To put Free-Money in circulation all public treasuries are instructed to exchange, when requested to do so, the old national metal money or paper money for Free-Money; one dollar (franc, or shilling) of Free-Money being given for one dollar (franc, or shilling) of the old money.

Anyone not consenting to this exchange may keep his gold. No one will compel him to exchange it; there will be no legal pressure; no force will be employed. The public is merely warned that after the lapse of a certain term (1, 2 or 3 months) the metal money will be only metal, and no longer money. If by that time anyone still possesses metal money he is free to sell it for Free Money to a dealer in precious metals, but he must bargain about the price. The only form of money recognised by the State will be Free-Money. Gold, for the State, will be a mere commodity like wood, copper, silver, straw, paper or fish-oil. And just as to-day taxes cannot be paid in wood, silver or straw, so gold will not be available for the purpose of paying taxes after expiration of the term for exchange.

The State knows that there is no room for any but State money,

* For other methods of applying the principle of Free-Money see page 245.

and that consequently no special efforts are needed to give this money currency. For the indispensability of money and the necessity for State control of money automatically lead to that result. So if anyone decides to set up a private mint and to strike coins of any particular weight and fineness, the State can tranquilly look on. Coins, for the State, have ceased to exist and so, therefore, have forgers of coins. The State simply deprives all coins, including those formerly struck by itself, of its guarantee of weight and fineness, the minting machinery being sold to the highest bidder. That is all the State does to prevent gold from circulating—but it suffices.

So if anyone opposes Free-Money to the point of rejecting it as payment for his goods, nobody will interfere. Let him continue to demand gold for his products. But he will have to weigh this gold and test its purity, coin by coin, with touchstone and acids. He will, moreover, have to ascertain whether anybody will buy the gold from him, and at what price, and he must be prepared for certain surprises. If on second thoughts he finds this procedure troublesome and expensive, he is still free to seek salvation within the pale of Free-Money. He will then only be following the example of the former enemies of the gold standard, the German landowners who at first fiercely opposed the new gold money but very soon accepted it.

What is the State to do with the gold received in exchange for Free-Money ? The State will melt it down and have it manufactured into chains, bracelets and watch-cases to present to all the brides of the nation on their wedding day. What more reasonable use could be found for such a mass of treasure ?

For the State does not need gold, and by selling the gold received for Free-Money to the highest bidders it would depress its price and embarrass other nations, as happened when Germany so thoughtlessly sold its demonetised silver. If on that occasion Germany had used the silver thalers to manufacture wedding presents, or to erect in front of every pawn-shop and loan-bank life-sized statues to the champions of the gold standard—it would have been better for economic life at home and abroad, and even for the State finances. For the few millions which the State realised from the sale of silver, a mere drop in the ocean considered from the point of view of German economic life as a whole, were largely instrumental in

depressing the price of silver, and the difficulties of the German landowners, caused by the low price of grain, were partly due to these silver sales.* If Germany had adopted the above proposal and manufactured the thalers into silver wedding presents, it would have recovered the loss tenfold out of the increased taxpaying capacity of its subjects.

3. HOW FREE-MONEY IS MANAGED

After Free-Money has been put in circulation and metal money withdrawn, the sole function of the National Currency Office is to observe the ratio at which money and goods are exchanged and by increasing or decreasing the monetary circulation, to stabilise the general level of prices. In doing so the National Currency Office is guided by statistics for the calculation of the average price of all goods, as discussed in Part III of this book. According to the results of this calculation, which show whether the price-level tends to rise or fall, the monetary circulation is reduced or enlarged. (Instead of altering the volume of money the Currency Office might alter its rapidity of circulation by reducing or raising the rate of depreciation of 5·2%. But the first method proposed is preferable).

To increase the monetary circulation, the Currency Office pays new money into the public treasury which will expend it by means of a proportional reduction of taxation. If the taxes due to be collected amount to 1000 millions, and 100 millions of new money is to be issued, the taxes are reduced 10%.

That is a simple matter, but the decrease of the monetary circulation is still simpler. For since the amount of Free-Money in circulation decreases 5% annually through depreciation, all that the Currency Office has to do, to decrease the volume of money, is—to do nothing. Any surplus consumes itself automatically.† Should this not suffice the volume of the currency could be reduced by

* Laveleye: La Monnaie et le Bimétallisme.

† This refers to Gesell's original plan, published in 1891, for applying the principle of Free-Money, in which he proposes to let the face-value of the currency notes decrease from 100 at the beginning of the year to 95 at the end—instead of keeping the face-value at 100 by stamping the notes at the holder's expense. See page 245.

increasing taxation and using the resulting surplus to destroy Free-Money notes. The volume of currency could also be regulated by purchase or sale of Government securities by the Currency Office.

By means of Free-Money, therefore, the Currency Office has perfect control over supply of the instrument of exchange. It controls absolutely both the manufacture of money and the supply of money.

The Currency Office does not require a palatial building with hundreds of officials, like the German National Bank. The Currency Office carries on no banking business of any kind. It has no counters, nor even a safe. The money is printed in the national printing press; the issue and the exchange of the money is effected by the public treasuries; the general level of prices is calculated by the bureau of statistics. All that is needed is one man who takes the money from the printing house to the public treasuries, or destroys the money collected by taxation for the purpose of regulating the currency. The whole establishment consists of a printing press and a stove. Simple, cheap, efficient!

With this simple apparatus we can replace the arduous labour of gold-digging, the ingenious machinery of the mint, the working capital of the banks, the strenuous activity of the Bank of Issue, and yet make sure that to-day, to-morrow, for ever, in good days and in bad, there will never be a penny too much or too little in circulation. And we can do more than merely replace the present organisation. We can establish permanently a model currency system for all the world to imitate.

4. THE LAWS OF CIRCULATION OF FREE-MONEY

Let us now consider Free-Money more closely. What can its possessor or holder do with it? On January 1st its value in the markets, shops, pay-offices, public treasuries and courts of justice is $100 and on December 31st it is only $95. That is to say, if the holder of the note intends to employ it at the end of the year to pay $100, on a bill of exchange, invoice or demand note, he has to add $5 to the note.

What has occurred? Nothing but what occurs with every other commodity. Just as a certain egg steadily and rapidly departs from

the economic conception "egg" and is not comparable to it at all on completion of the rotting process, similarly the individual dollar note drifts away from what the dollar stands for in the currency. The dollar as the currency unit is permanent and unchanging; it is the basis for all calculations; but the dollar as a money-token has only the starting point in common with it. Nothing has occurred, then, but what occurs with everything about us. The species, the conception is unalterable; but the individual, the representative of the species is mortal and moves steadily onwards towards dissolution. All that has occurred is the separation of the object of exchange from the unit of currency, the individual from the species, and the subjection of money to the law of birth and decay.

The holder of this perishable money will beware of keeping the money, just as the egg-dealer will beware of keeping the egg any longer than he must. The holder of the new money will invariably endeavour to pass on the money, and the loss involved by its possession, to others.

But how can he do so? By selling his products he has come into possession of this money. He was forced to accept it, though well aware of the loss its possession would cause him. His products were from the first intended for the market; he was forced to exchange them, and exchange, under the given conditions, could be effected only through the medium of money; and this is the only money now produced by the State. Hence he was compelled to accept this odious Free-Money in exchange for his products if he was to dispose of them at all and so attain the object of his labour. Perhaps he might have deferred the sale, say until he was in immediate need of other goods, but meanwhile his own products would have deteriorated and become cheaper; he would have incurred a loss, perhaps greater than that involved in the possession of the money, through the diminution in quantity and the deterioration in quality of his products, and through the cost of storage and care-taking. He was under constraint when he accepted the new money, and this constraint was caused by the nature of his own products. He is now in possession of the money which steadily depreciates. Will he, in his turn, find a purchaser, will he find anybody willing to let the loss arising out of the possession of such money be passed on to him? The only person who will accept this "bad" new

money from him, is someone like himself under constraint, someone who has produced commodities and is now anxious to dispose of them in order to avoid the loss incident to their possession.

We thus at the very outset, note a remarkable fact, namely that the buyer has a personal desire, arising immediately out of the possession of his money, to pass it on to the possessor of commodities, and that this desire equals in strength the seller's eagerness to pass on his commodities to the buyer. The gain from the immediate completion of the bargain is the same for both parties, and the effect, of course, is that during the negotiations about price the buyer can no longer refer to his invulnerability (gold), and threaten to withdraw should the seller not submit to his terms. Buyer and seller are both poorly armed; each has the same urgent desire to strike the bargain. Under such conditions, obviously, the terms of the bargain will be fair and the transaction will be accelerated.

But let us now suppose that the Free-Money note which we have just been considering has come into the possession of a saver, merchant or banker. What will they do with it? In their hands also, the money-token steadily shrinks away. They came into possession of Free-Money by exchanging their former gold coins. No law constrained them to make the exchange; they might have kept the gold, but the State proclaimed that after a certain date it would refuse to give Free-Money for gold, and what could they then have done with their gold? They could have had it manufactured into gold ornaments, but who would have bought these ornaments, and at what price? And with what would the gold ornaments have been paid for? With Free-Money!

So they found it advisable not to let the term for exchange slip by. And now they are considering the new money, their property. The uselessness of the demonetised gold forced them to consent to exchange it for Free-Money, and the loss inseparable from possession of the new money now forces them to get rid of it in order to transfer the loss as quickly as possible to others.

But since as savers and capitalists they have no personal demand for goods, they now seek a market for their money with people who wish to buy goods, but at present have no money. That is, they offer the money as a loan—just as they used to do in the

case of gold. There is, however, a difference. Formerly they were free to lend the money or not, and they only lent it as long as they were satisfied with the conditions of the loan. Now they are forced to lend the money, whatever the conditions of the loan. They now act under compulsion. By the nature of their property (commodities), they were compelled to accept Free-Money, and now they are compelled by the nature of Free-Money to lend it. If they are not satisfied with the interest offered, let them buy back their gold, let them buy goods, let them buy wine which is said to become better and dearer in the course of time, let them buy bonds or Government securities, let them become employers of labour and build houses, let them enter commerce; let them do anything they please that may be done with money—one thing only they cannot do: they cannot now lay down the conditions upon which they are willing to pass on their money.

Whether they are satisfied with the interest offered by the debtor or the yield promised by the projected house; whether the securities selected are favourably quoted; whether the price of the wine and precious stones which they intend to hoard has been forced up too high by the great number of buyers with the same ingenious idea; whether the selling price of the matured wine will cover the cost of storage, caretaking, etc., makes no difference, for they are compelled to dispose of the money. And that too immediately, to-day and not to-morrow. The longer they stop to think, the greater the loss. Suppossing, however, that they find somebody willing to take the money, the loan-taker can have only one intention, namely to invest the money at once in goods, in enterprises or in some other manner. For no one will borrow money simply to put it in a box, where it depreciates. He will endeavour to pass on the loss connected with the possession of money by passing on the money.

In whatever way the money is invested, it will immediately create demand. Directly, through purchasing, or indirectly through lending, the possessor of money will be obliged to create a demand for commodities exactly proportionate to the quantity of money in his possession.

It follows that demand no longer depends on the will of the possessors of money; that price-formation through demand and supply is no longer affected by the desire to realise a profit; that

demand is now independent of business prospects and expectations of a rise or fall of prices; independent, too, of political events, of harvest estimates; of the ability of rulers or the fear of economic disturbance.

The supply of money, just like the supply of potatoes, hay, lime, coal and so forth, will be weighable, measurable, and without life and volition. Money, by an inherent natural force, will steadily tend towards the limit of the velocity of circulation possible for the time being, or rather it will in all conceivable circumstances tend to overleap this limit. Just as the moon, calm and unaffected by what may be going on here below, moves in its orbit, so Free-Money, detached from the wishes of its holders, will move through the market.

In all conceivable circumstances, in fair weather and in foul, demand will then exactly equal:—

1. The quantity of money circulated and controlled by the State. Multiplied by:
2. The maximum velocity of circulation possible with the existing commercial organisation.

What is the effect upon economic life ? The effect is that we now dominate the fluctuations of the market; that the Currency Office, by issuing and withdrawing money, is able to tune demand to the needs of the market; that demand is no longer controlled by the holders of money, by the fears of the middle classes, the gambling of speculators or the tone of the Stock Exchange, but that its amount is determined absolutely by the Currency Office. The Currency Office now creates demand, just as the State manufactures postage stamps, or as the workers create supply.

When prices fall, the Currency Office creates money and puts it in circulation. And this money is demand, materialised demand. When prices rise the Currency Office destroys money, and what it destroys is demand.

Thus the Currency Office controls the tone of the market, and this means that we have at last overcome economic crises and unemployment. Without our consent the price-level can neither rise or fall. Every movement up or down is a manifestation of the will of the Currency Office, for which it can be made responsible.

Demand as an arbitrary act of the holders of money was bound

to cause fluctuations of prices, periodic stagnation, unemployment, fraud. Free-Money makes the price-level dependent on the will of the Currency Office which uses its power, in accordance with the purpose of money, to prevent fluctuations.

Confronted with the new money everyone will be forced to conclude that the traditional custom of storing up reserves of money must be abandoned, since reserve money steadily depreciates. The new money, therefore, automatically dissolves all money hoards, those of the careful householder, of the merchant and of the usurer in ambush for his prey.

And what does this change further signify for economic life? It signifies that henceforward the population will never be in possession of more than the exact amount of the medium of exchange necessary for the immediate requirements of the market —an amount regulated so as to eliminate fluctuations of prices caused by too much or too little money. It signifies that henceforward no one can frustrate the policy of the Currency Office by flooding the market with money drawn from private reserves at a time when the Currency Office considers a drainage of the market opportune, or by draining off money into private reserves when the Currency Office wishes to replenish the stock of money. It signifies consequently that, to enforce its policy, the Currency Office need issue or withdraw only insignificant quantities of money.

But with the new form of money no one needs to provide for a money reserve, since the regularity of the circulation makes reserves superfluous. The reserves were a cistern, that is, merely a receptacle, whereas the regularity of circulation of the new money will make it a perennially-welling spring.

With Free-Money demand is inseparable from money; it is no longer a manifestation of the will of the possessors of money. Free-Money is not the instrument of demand, but demand itself, demand materialised and meeting, on an equal footing, supply, which always was, and remains, something material. The tone of the Stock-Exchange, speculation, panic and collapse cease from now on to influence demand. The quantity of money issued, multiplied by the maximum velocity of circulation possible with the existing commercial organisation, is in all conceivable circumstances the limit, the maximum and also the minimum, of demand.

Money, anathema throughout the ages, will not be abolished by Free-Money, but it will be brought into harmony with the real needs of economic life. Free-Money leaves untouched the fundamental economic law which we showed to be usury, but it will cause usury to act like the force that seeks evil but achieves good. By eliminating interest Free-Money will clear away the present ignoble motley of princes, rentiers and proletarians, leaving space for the growth of a proud, free, self-reliant race of men.

5. HOW FREE-MONEY WILL BE JUDGED

A. The Shopkeeper

The coming of Free-Money has made notable changes in my business. In the first place my customers have taken to paying cash, because it is to their immediate advantage to pay promptly, and because they are paid cash themselves. In the second place the sale of goods in small quantities has ceased, I no longer sell goods by pennyworths. Customers were formerly loath to part with their money, because the money did not compel them to pass it on; because they received interest; because they had money in the savings bank; because it was more convenient to have money in the house than goods; and finally because nobody was ever sure when he would receive the money owing to him. The circulation of money was irregular and payments were so uncertain that everyone except those in receipt of a fixed income was forced to keep some money in reserve. And this reserve was formed by purchasing whenever possible on credit and by purchasing only necessities for immediate consumption. Instead of a pound customers bought an ounce, instead of a sack, a pound. It never occurred to anyone to lay in provisions or to provide a store-room when planning a new house. The only possible kind of store was a store of money. A modern house had many rooms for special purposes such as a dark-room, a carpet-room, a box-room, etc., but never a room for provisions.

All this has now changed. The new money constantly reminds men of their duties as debtors, and they are eager to pay, as they are paid, promptly. Money is now compelled to circulate, so its circulation is steady and uninterrupted. It can no longer be arrested

by rumours. Regular circulation produces a regular turnover of goods, and as everyone, to avoid loss, is anxious to pay at once for what he has bought, the influx of money into my till has also become regular. We shopkeepers are able to rely on this regular influx of money and are therefore no longer forced to keep a reserve of money; quite apart from the fact that reserves of money are now impossible, since they depreciate. Instead of hoarding money, people now lay in stores; they prefer possession of goods to possession of cash, just as, for the same reason, they prefer paying cash to buying on credit. Instead of minute quantities, the public now buys large amounts of goods in their original packing; instead of a gallon, a barrel; instead of a yard, a roll; instead of a pound, a sack.

From this it might be imagined that we retailers are revelling in the new situation but that, unfortunately, is not so. Luckily for myself I watched developments closely and was able to adapt my business to the changed conditions. For my former retail prices I have substituted wholesale prices, and have in this way managed not only to retain, but greatly to increase the number of my customers. But other shopkeepers who had not the same foresight have been forced to close their shops. Where there were ten shops formerly there is now only one which, in spite of its tenfold increase of turnover, requires less labour to run. The rent of my shop has already been reduced by 90%, because so many shops have been vacated and are being converted into flats. But in spite of a minimum rent and a tenfold increase of turnover my profits are far from having increased proportionately, since other shopkeepers, owing to the general simplification of commerce, have also been forced to reduce their profits. Thus instead of an average profit of 25% I now charge about 1% commission. As I deliver orders in the original packages and am paid cash, a small margin of profit suffices. No book-keeping, no bills, no losses! And in spite of the tenfold increase of turnover, my warehouse has not been enlarged. My customers have agreed to take regular supplies which are delivered direct from the railway station. Shopkeeping has developed into a mere consignment business.

My fellow retailers who have been forced to close their shops are, I admit, to be pitied, especially the older ones who are past

learning another trade. As their impoverishment has been caused by the introduction of Free-Money, that is, by State-interference, they ought in justice to be compensated by a State pension. And the State is well able to pay this compensation since the disappearance of these middlemen and the consequent cheapening of all commodities has greatly increased the tax-paying capacity of the population. On a former occasion the State felt itself bound to protect landlords against a fall of rent by introducing a duty on wheat, so compensation would seem fully justified in the present case.

I must admit that shopkeeping is enormously simplified by Free-Money. Something of the kind was bound to happen. Neither small retail selling, with the tremendous cost it involved, nor the misuse of credit sales could have continued indefinitely. It was an intolerable abuse that the retail sale of daily necessities should add 25% to their price at a time when labour was forced to struggle hard for a 5% increase of wages.

Switzerland, with 3,000,000 inhabitants, in 1900 employed 26,837 commercial travellers who paid an aggregate of 320,000 francs for licences. Even if we put their daily expenses at only 5 francs per head, commercial travellers cost Switzerland 48,977,525 francs annually.

In Germany there are 45,000 commercial travellers permanently on the road. (In Switzerland this business is largely carried on as a subsidiary occupation; hence the comparatively large number of travellers and my low estimate of 5 francs a day for expenses). It has been calculated that each of these 45,000 commercial travellers costs 14 marks a day (salary, travelling expenses, hotel bills) and this is certainly not an over-estimate. That amounts to 600,000 marks a day or 218 million marks a year. To this other travelling expenses must be added. We can say that two-thirds of all travelling is travelling on business, and that two-thirds of the hotels in existence exist solely for the service of business travellers.

It was predicted that the introduction of Free-Money would render buyers more amenable, and I observe that their behaviour has already been sensibly modified. Last Saturday a customer who wanted a sewing-machine kept me talking for an hour, but the

man seemed unable to make up his mind and kept discovering imaginary defects in my good machine—until I reminded him of the imminent close of the week and the necessity of stamping his currency notes. That worked like a charm, the fortress of his indecision came tumbling down. He looked at his watch, counted his money and calculated that if he delayed any longer he would lose a penny. Forthwith his doubts were resolved, he paid and went off happy. I lost the penny, but the time gained was worth a thousand times as much.

Next a wealthy customer bought some goods but said he had forgotten his purse and asked me to charge the amount to his account. Upon my remarking that as it was Saturday it would pay him to fetch the money and thus avoid the depreciation, he thanked me for my attention, went home, and within a few minutes I had received the money. This enabled me to pay a craftsman who happened to deliver some goods at the same time. Omission to pay ready money would in this case have been simply a piece of indolence on the part of my customer, and this indolence would have prevented me from paying the craftsman. How much labour, risk and worry are saved by Free-Money! I now employ only one book-keeper instead of ten. It is remarkable that the great problem of cash payment has been solved, as it were accidentally, by the money reform. It was not poverty that kept buyers from paying cash, but self-interest, and immediately any advantage was to be gained by paying cash, cash payment became general. It is well known that under the old system the merchant was not paid more promptly by the rich than by the poor, the reason for the delay being that during the term of respite the debtor was the recipient of interest.

About the depreciation itself I have no reason to complain. Personally, as a merchant, I should welcome an increase of the rate of depreciation from 5% to 10% a year, for that would make buyers still more amenable and book entries would cease entirely, so I could dismiss my last book-keeper. I now see that the more despised money is, the more highly esteemed are goods and their makers, and the simpler is commerce. Workers can be respected only in a country where money is not superior to them and their products. This desirable result, though not quite attained by the

present rate would certainly be realised by a rate of depreciation of 10%, so possibly the rate may be raised in favour of the workers.

And what is even 10% on my average cash balance of $1000? A hundred dollars a year! A mere trifle, compared to my other expenses. I can moreover contrive to reduce this amount considerably by getting rid of my money still more speedily, that is, by paying not only cash but in advance.

To pay in advance may seem at first sight a ridiculous proposal, but it is really only an inversion of the former custom, when the goods had to make advances, money following. Money now makes the advances and the goods follow. Pre-payment binds the debtor to supply goods and work, things at his immediate disposal; post-payment obliged him to supply money, a thing he can only obtain indirectly. It is therefore more advantageous and safer for both parties when the money precedes and the goods follow, than vice versa, as formerly.

Payment in advance is all that is needed to satisfy craftsmen and to provide them with the money necessary for carrying on their business. If craftsmen were not forced to deliver their product on credit, they could successfully compete with the trusts.

B. The Cashier

Upon the introduction of Free-Money we cashiers were pitied. Prophecies were made that we should be overwhelmed with work and worry, that we should always be short in our accounts, and so forth. But what has actually happened? To begin with, office hours were reduced, as there was not enough work. Instead of ten hours I now work six. Next, the number of employees was gradually reduced, the older clerks being pensioned and the younger ones dismissed. But not even that was enough; most banking establishments have now been closed.

This development might indeed have been foreseen, but the banks were too firmly convinced of their indispensability! Bills of exchange and cheques, which used to be the cashier's daily bread, have almost disappeared. According to the returns of the National Currency Office, the currency now in circulation does not amount to one-third of our previous issue. That is because our present money circulates three times as rapidly as the old money. Scarcely

a hundredth part of the former sums now passes through the hands of the banker. Money remains on the move, in the market, in the hands of buyers, merchants, manufacturers. It passes uninterruptedly from hand to hand, it has no time to accumulate in the banks. Money is no longer a bench on which the producer may repose after the fatigue of selling his goods and wait indolently until personal needs admonish him to turn over his money. The resting point in exchange is now the commodity itself — not of course the commodity one produces, but that produced by others. The holder of money is hunted and worried by his possession, just as formerly the producer was hunted and worried by his goods until he had passed them on to someone else. From what is the word " bank " or " banker " derived ? It comes from the benches on which the holders of money sat at ease, while the holders of goods ran about and fretted. With Free-Money, it is the holders of money who run about and fret, and the sellers of goods who sit on the benches.

Again, the circulation of money having become so rapid, and everyone being in a hurry to pay, bills of exchange are no longer required and have been replaced by ready money. Neither does anyone need reserves of money, the regularity of the monetary circulation making these reserves unnecessary. The living, perpetually-welling spring has taken the place of the stagnant reservoir.

These money reserves had seduced men into the greatest folly of the century, namely the cheque. Yes, it is I, the cashier, who proclaim that the cheque was rank folly ! The use of money is to make a payment, and gold was supposed to be the most convenient means of payment conceivable, so why, then, was it not used as such ? Why let the cheque take the place of ready money, if ready money meets all requirements, as gold was vaunted for doing ? Compared with ready money the cheque is an exceedingly unwieldy instrument of payment. It is bound up with the observance of various formalities; it must be cashed at a certain place, and the security of payment depends on the solvency of the drawer and of the bank. Yet cheques were supposed to denote progress ! It was even hoped to carry matters as far as the English have done, and to pay cab fares with a cheque. As if that were an honour and an advantage for the cabman ! The model cheque, for the recipient

at least, is hard cash, for this cheque can be cashed in any shop or public house, it is bound by no formalities, and its security is never in question. We were so proud of our golden money and so convinced that we had reached the acme of perfection with it, that we were blind to the contradiction that lay in the use of cheques. Gold was too good for common use; therefore we looked for a substitute, the cheque. We resembled the man who went for a walk with an old coat and a new umbrella and could not bear to open the new umbrella lest it should become wet. So he hid it under his coat. No one scrupled to thrust whole parcels of cheques upon us cashiers, and we were able to find the total amount only by noting down the separate sums in long columns and adding them up. Disgusting work, compared to which the counting of money is child's play. Only the pieces of money have to be counted, since they are all equal in amount.

Moreover the cheques had to be cleared among the various banks, every single cheque charged to its drawer. And then the calculation of interest ! At the end of every quarter an account had to be handed in with every cheque specifically entered. Thus every cheque was entered ten times over. And that was called progress ! What an absurdity ! The unwieldiness of the gold currency and the irregularity of the circulation made bank accounts necessary, and these in their turn gave rise to the cheque, but this circumstance, instead of being considered a serious drawback of the gold currency, was regarded as something to be proud of !

And besides the cheques those heavy bags of gold, silver, copper and nickel, and paper money into the bargain ! Eleven different kinds of coins: 1, 2, 5, 10, 20 marks, 1, 2, 5, 10, 20, 50 pfennigs ! For small change under one mark alone six different coins of three different metals ! Hundreds of cheques, eleven different coins and ten different kinds of paper money !

With Free-Money I have only a few denominations and no cheques. And everything is light and clean, and always new. My cash account which formerly took me an hour is now finished in a few minutes !

I am asked how I deal with the depreciation on my cash balance. The matter is simple enough. At the close of the week, on Saturday at four o'clock, I count my cash, calculate the depreciation for the

week, and enter it among expenses. With private banks this sum is charged to general expenses, which are covered by a reduction of the rate of interest on deposits. With public treasuries the loss is only nominal, since the State profits by the depreciation of the total circulation.

Considered from the standpoint of cash-keeping technique there is nothing disadvantageous in Free-Money. The best proof of this is the fact that nine out of every ten cashiers have become superfluous. A machine that saves labour must be doing good work.

C. The Exporter

The gold standard was introduced on the plea that it would facilitate international trade. No sooner, however, had the introduction of the gold standard, in conformity with the quantity theory of money, resulted in a sharp general fall of prices than a great clamour was raised for protection. Barriers in the shape of protective tariffs were then erected in order to hamper trade with foreign countries. Is not that sacrificing the end to the means?

But granted that the gold standard could have been introduced without a depression of prices, without an economic disturbance, it would still have been little help to foreign trade. It is indeed sometimes asserted that the increase of our foreign trade since the establishment of the gold standard has been caused by it. But foreign trade increased because the population increased, and it did not even increase proportionately to the increase of the population. Besides this, the increase occurred especially in the trade with countries which had a paper currency (Russia, Austria, Asia, South-America), whereas the trade with the countries on the gold standard (France, North America) developed slowly. (England being a transit country cannot here be used as an illustration).

The gold standard would have some justification if it could be universally adopted without protective tariffs, without economic disturbances and without sudden fluctuations of prices. To lead the way in this would be a reasonable policy for a State which had the power to force the gold standard upon all the other States. But as no State has this power, and as we can only hope that other States will follow our lead, why not lead the way towards an international

paper standard? The German who buys his goods with gold while he is forced to sell them for paper roubles, paper gulden, paper pesetas, paper liras, paper pesos, paper reis and so on, is surely no better off than if he also bought his goods for paper marks. If the selling price has to be calculated in a currency different from that of the purchase price, it does not matter whether the purchase is made in a paper, or a silver, or a gold currency.

But even if the gold standard were universally adopted for international trade, its advantages are small. It was thought that the gold standard would facilitate commercial calculations; that it would suffice to name a sum of money for anyone to know its full significance for every country. But this is an illusion! In the first place the gold standard does not obviate fluctuations in the rates of exchange. Gold imports and gold exports alternate in every country. The quantities may be trifling enough, but they suffice to bring about considerable fluctuations in the rates of exchange. The rate of exchange fluctuates between the cost of import and export of gold, which may amount to as much as 3% in freight, insurance, loss of interest and minor expenses. And in addition to this there is the cost of re-coinage. For, as Bamberger rightly remarks, a journey abroad means for gold a journey to the melting-pot. Such expenses must be considered even in small transactions. But if a merchant is forced to take into account the fluctuating rates of exchange, what is the advantage of the gold standard for his calculations?

The other supposed advantage of a universal gold standard is even more deceptive. The significance of a sum of money in a country can be understood only when commodity-prices, wage-rates, and so forth in that country are known. If, for instance, I inherit debts, I shall not remain in Germany but go where money is easiest to earn. If I emigrate, the amount of the debt is not decreased, but my power of paying it increases. A man with a debt of $1000 is a poor devil in Germany, whereas in America this debt is a trifle. The reverse is true when instead of a debt I inherit a fortune. In this case what use is the gold standard? Or take another instance, an emigrant is promised a large amount of gold but at once inquires about the prices of the commodities produced and consumed by him. Not until he knows these prices can he form a

conception of the sum of money named. From gold his thoughts immediately fly to the prices of commodities; these, not the gold, are the foundation he can build upon. But if, in order to estimate the meaning of a sum of money, it is first necessary to know the prices of commodities, it surely makes no difference whether the sum of money is stated in gold or in paper. And as a matter of fact nobody knows even approximately the meaning of a given sum of money, no matter whether the money is a gold dollar or a paper rouble.

But in practice all this is of very little importance to the merchant. What are all these small arithmetical problems compared to the thousand imponderable factors on which the merchant's theory of probabilities is based? The estimate of the demand for a commodity, the determination of its quality, its chances in competition with a hundred other commodities, changes of fashion, the likelihood of new import-duties, the rate of profit that this or that kind of commodity may be expected to yield—these are the things that the merchant must take into account. The conversion of prices from one currency into another is a job for the office boy.

Far more important than the currencies of the different countries with which a merchant is doing business are the protective tariffs and their alterations. To protect the gold standard, many countries have broken away from free-trade. But an exporter would prefer any kind of currency, even the cowry-shell currency of Central Africa, and free-trade, to a gold currency coupled with protective-duties. And there is no denying the fact that wherever the gold standard has appeared, protection has followed.

In international commerce, goods are paid for with goods, and if a deficit occurs it can only to a very limited extent be paid in currency. Prolongation of credit, bills of exchange, loans and transfers of securities are here employed. For the balance of payments the policy of the Banks of Issue is far more important than the existence of a form of money suitable for export. Here, as elsewhere, prevention is better than cure. The Bank of Issue must learn to consider a fall in the rate of exchange as a sign that it is issuing too much money and thus raising prices, hindering export, and encouraging import. In this case it must promptly work for a reduction of prices by limiting the supply of money. And in the

opposite case it must increase the supply of money. If it proceeds in this manner payments must always tend to cancel each other, leaving no balance to be paid by the export of money. It is therefore, to say the least, unnecessary to provide a national currency that can be exported. Indeed the export and import of the national currency can become a grave danger to a country. If the currency can be exported, the Bank of Issue loses the monopoly of the money supply and the home market becomes exposed to the control of foreign, often hostile, influences. French money invested in German banks was, for example, withdrawn during the Moroccan crisis with the purpose of injuring Germany, a purpose which was attained. Every blunder in currency control abroad reacts on the currency at home and cannot be counteracted—except by tariffs. When foreign countries introduce a paper currency and thus drive out gold, this gold seeks employment elsewhere and comes pouring into our country, forcing up prices, perhaps at a time when they are already too high. And when foreign countries substitute the gold standard for a silver or paper currency, gold flows away from our country, not infrequently at a time when there is already a shortage of it. Such blunders in the management of the currency have again and again brought our debt-ridden German farmers into difficulties.

All this was proved theoretically long ago* but has been demonstrated in practice only since the introduction of Free-Money. For we have now a form of paper-money completely detached from gold. With Free-Money there is not even the promise of redemption in gold, but nevertheless the rate of exchange with foreign countries is more stable than before. At first the National Currency Office concentrated all its efforts on the stabilisation of the general level of prices. The effect was, that while prices remained stable, the foreign exchanges fluctuated. The reason of this was that prices in other countries, where the gold standard remained in force, fluctuated in the usual fashion. The other countries refused however to admit this explanation, maintaining that our paper money was to blame. Our Currency Office then decided to prove that the

* Gesell: Anpassung des Geldes an die Bedürfnisse des modernen Verkehrs, Buenos-Aires, 1897. Frankfurth and Gesell: Aktive Währungspolitik, Berlin, 1909.

fluctuations were due to gold, and gave up the policy of stabilising home prices, in order to stabilise the rate of exchange. When the rate of exchange of the mark rose, it increased the stock of money, and when the rate fell, it withdrew money. And since with Free-Money the stock of money is the demand for goods, the effect on the prices of goods, as well as on the foreign exchanges, was exactly as foreseen by the Currency Office: the exchanges were stabilised and prices fluctuated. Thus we demonstrated to the world that a stable rate of exchange together with a stable level of prices cannot possibly be expected from the gold standard, and that the two aims can be combined only when the stability of prices is universal. The aim in every country must therefore be the stabilisation of home prices in order to obtain a stable rate of exchange. Only through national currencies managed on the same principle in all countries can stable rates of exchange for international commerce be combined with a sound national standard. The other countries seem now at last to have grasped this fact, for an international conference has been summoned for the purpose of establishing an international paper currency and an International Currency Office.

Something must be done. We want free-trade, stable foreign exchanges and stable prices in the home market. With national institutions alone we cannot fully realise these three aims, so we must come to an agreement with the rest of the world. And Free-Money seems destined to furnish the basis for such an agreement. For Free-Money is submissive, adaptable, plastic. It lends itself readily to the realisation of any aim.

D. The Manufacturer

Sales, sales, that is what we manufacturers want; steady, assured sales, with long-term orders in advance. For industry is dependent on regular disposal of the product; we cannot dismiss our skilled hands the moment sales begin to slacken, only to engage new, unskilled labour shortly afterwards. Nor can we go on producing at random for stock, when regular orders are not forthcoming. Give us then sales, steady sales and efficient public institutions to facilitate the exchange of our products (medium of exchange, post, telegraph etc.); the difficulties of technical execution can be left to us. Regular

sales, cash payment, and a stabilised price-level—the rest we can contrive for ourselves.

Such were our wishes when the introduction of Free-Money was being discussed, and our wishes have been fulfilled.

For what is a sale? It is the exchange of goods for money. And whence the money? From the sale of goods, the movement is circular.

Free-Money forces its holder to buy: it constantly reminds him of his duty as a buyer through the losses it causes him if he neglects to buy. Purchase therefore at all times and under all possible circumstances follows on the heels of sale. And when everyone is obliged to buy as much as he has sold, how can sales slacken? Free-Money, then, closes the monetary circuit.

Just as the wares represent supply, so money now represents demand. Demand is no longer a straw to be blown about by any breeze of rumour or politics. Demand no longer depends on the will of buyers, bankers, speculators; for money has now become the very embodiment of demand. The possessors of money are now kept under discipline; money holds the possessor of money like a dog on a lead.

And this is only fair. For we producers or possessors of wares are no better off. We do not control the supply of our products, we are forced by their nature to offer them for sale. The nature of our products—the stench they emit, the room they take up, the risk of their catching fire, the decay they are subject to, their fragility, the change of fashions and a thousand other circumstances—imposes upon us the necessity of selling them immediately after their production. The supply of wares is under an inherent material constraint, so is it not just that the demand for wares, the supply of money, should be under a similar constraint?

It was a courageous act to answer this question in the affirmative by the introduction of Free-Money. Up to then the buyer alone had been considered, now at last it has come to be understood that sellers, also, have certain wishes and that buyers' wishes can be fulfilled only at the expense of sellers. What a time it took to arrive at this simple truth!

Under Free-Money, when sales slacken and prices decline, the explanation is no longer given that too much work has been done,

that there has been overproduction. We now say that there is a shortage of money, of demand. Whereupon the National Currency Office puts more money in circulation: and since money is now simply embodied demand, this forces prices up to their proper level. We work and bring our wares to market—that is supply. The National Currency Office then considers this supply and puts a corresponding quantity of money on the market—that is demand. Demand and supply are now products of labour. There is now no trace of arbitrary action, of desires, hopes, changing prospects, speculation, left in demand. We order just the amount of demand that we require, and just this amount is created. Our production, the supply of goods, is the order for demand, and the National Currency Office executes the order.

And Heaven help the controller of the Currency Office if he neglects to do his duty ! He cannot now, like the administration of the old Banks of Issue, entrench himself behind platitudes about having to satisfy " the needs of commerce." The duties imposed on the National Currency Office are sharply defined and the weapons with which we have equipped it are powerful. The German mark, formerly a vague, indefinite thing, has now become a fixed quantity, and for this quantity the officials of the Currency Office are held responsible.

We are no longer the sport of financiers, bankers, and adventurers; we are no longer reduced to wait in helpless resignation, until, as the phrase used to be, " the state of the market " has improved. We now control demand; for money, the creation and supply of which is in our power, is demand—a fact which cannot be too often repeated or too strongly emphasised. We can now see, grasp and measure demand—just as we can see, grasp and measure supply. Much produce—much money; less produce—less money. That is the rule of the National Currency Office, an astonishingly simple one !

With the money reform, fixed orders have become so plentiful that full employment is assured for months in advance. Merchants tell me that buyers now prefer possession of goods to possession of money; they do not now postpone a purchase up to the moment the thing is needed, but give their orders whenever they happen to possess money. In every house there is a special store-room, and

the purchase of Christmas presents, for example, is not deferred till Christmas Eve, but made whenever an opportunity occurs. That is why Christmas goods are now bought throughout the year, and why my toy factory receives orders all the year round. The former rush and scramble at Christmas has been replaced by a steady sale of Christmas articles from January to December. And it is the same with every industry. A man needing a winter coat does not wait for the first snowfall, but orders it whenever he has the money, even though the temperature may be a hundred in the shade. For the money in the purchaser's pocket, just like the cloth on the tailor's shelves, is something that must be got rid of. The new money gives its possessor no peace: it makes him smart and itch and tingle, reminding him incessantly that the tailor has nothing to do and would be pleased to receive orders for the coming winter even though the suit should be paid for in money still worse than Free-Money. For there is no money so bad that it is not better than unsaleable cloth.

This remarkable change in the behaviour of buyers has made commercial establishments to a large extent superfluous; for when buyers provide themselves with goods for some time ahead and no longer insist on immediate delivery, the merchant does not need to stock the goods. He keeps a sample collection and his customers give him their orders. The merchant collects orders and delivers the goods direct from the railway station when they arrive. In this way he can of course sell them cheaper.

The disappearance of shops, where formerly everything could be obtained for immediate use, forces even the most dilatory buyers to consider in advance what goods they may need, so as to secure them at the right time by an early order. Thus Free-Money has brought us at length to the point where the estimate of the need for goods is not made by merchants but by the buyers themselves—to the very great advantage of all concerned. Curiously enough, it was the merchant who formerly estimated the consumers' needs in advance, so as to be able to give his orders; and it is clear that he often miscalculated. The consumer now estimates his own needs, and as he obviously knows his own needs and means better than the merchant knows them, errors are less frequent.

Thus the merchant has become a mere exhibitor of samples, and

the manufacturer is sure that the orders which the dealer hands him reflect not merely the latter's personal opinion about the demand for goods, but the immediate demand of the consumers, their real need of commodities. The orders now provide him with an unmistakable expression of the changes taking place in the taste and needs of the people, so he is able to adapt his factory to these changes. Formerly, when orders reflected merely the dealer's personal opinions, sudden new departures, so-called changes of fashion, were an ordinary occurrence.

In this respect, again, free-money has solved many of my difficulties.

But if the manufacturer's work is so greatly facilitated, if he need only be a technical expert and not at the same time a merchant, surely his profits must be unfavourably affected. There is no lack of able technicians and if the commercial management of an industrial enterprise presents so few difficulties, every able technician will become an able manufacturer. By the laws of free competition the manufacturer's profit must be reduced to the level of a technician's salary — an unpleasant result for many manufacturers whose success was mainly due to their commercial ability. With Free-Money, creative power has become unnecessary in commerce, for the difficulties which called for the comparatively rare and therefore richly rewarded commercial talent have disappeared. And someone must benefit by the reduction of the manufacturer's profit. Either goods must become cheaper, or, to put it the other way about, wages must rise. There is no other possibility.

E. The Usurer

It was never considered dishonourable to borrow an umbrella or a book. Even if you forgot to give these objects back the offence was condoned, the loser himself being anxious to find some excuse for the defaulter. Nobody kept a record of objects lent.

But how very different it used to be when someone wanted to borrow money, even if the amount was only a dollar! Both parties were embarrassed, and the loan-giver looked as if he were having a tooth extracted, or as if he were confronted with a grave moral offence.

Need of money was considered a disgrace, a moral stain, and you had to be very sure of a man's friendship before appealing to him when in need of money. Money! Why is the fellow in straits for money? An umbrella, a shot-gun or even a horse I will lend you—but money? You evidently lead a loose life!

And yet it was very easy to be in straits for money. Business stagnation, unemployment, suspensions of payment and a thousand other causes brought everyone except those with a brilliant financial position at some time or other into straits for money. And those who were not blessed with a thick skin, those who shrank from exposing themselves on such occasions to a possible rebuff, came to me, the usurer; so I made my haul.

Those good times are now a thing of the past. With the introduction of Free-Money, money has been reduced to the rank of umbrellas; friends and acquaintances assist each other mutually as a matter of course with loans of money. No one keeps, or can keep, reserves of money, since money is under compulsion to circulate. But just because no one can form reserves of money, no reserves are needed. For the circulation of money is regular and uninterrupted.

When, however, an unexpected call for money does occur, you apply to an acquaintance, just as you apply to him for an umbrella when you are surprised by a thunderstorm. Thunderstorms and money embarrassment are, morally speaking, on the same level. And the person applied to will forthwith comply with the request without making a wry face. Indeed, he welcomes the opportunity, first because in a similar emergency he can apply to you, and secondly because it is to his immediate advantage. For the money in his possession loses value, whereas he will receive back the full amount of the loan from his friend. Hence his altered behaviour.

Still it cannot be said that people have become careless with their money, though money is not nearly so shy and retiring as it used to be. Money is, of course, highly esteemed, for it has cost work to earn. But it is not more highly esteemed than work, or than the worker. As a commodity it is no better than any other commodity, since the possession of money brings the same losses as the possession of a stock of goods. Commodities and labour are equivalent to ready money, and that means an end of my business.

The pawnbroker is in the same plight as myself. Anyone possessing some money for which he has no immediate use is now willing to lend it, without interest, against a pledge. For money has become inferior to the usual pledges. If you want ten dollars in a hurry, you need not slink through back streets to the pawnbroker's. You go to your neighbour to have the money advanced to you on a pledge. And any commodity that you happened to buy when you had a supply of money is as good as, or better than, ready money. Goods are money and money is goods, for the very simple reason that both are equally bad. Both are ordinary, perishable things in this valley of tears! All the bad qualities of goods have their counterpart in the loss to which money is subjected, so nobody prefers money to goods.

But for this reason labour is always in demand; and because it is in good demand, every man able and willing to work has, through his power to work, ready money in his pocket.

I tell you, the death-knell of usury has sounded!

But I am not yet going to admit defeat. I am going to sue the State for compensation. Money used to be, as it is now, a State institution, and I battened on it. I was therefore a kind of State official. By reforming money, that is, by forcible interference, the State has now ruined my trade and deprived me of my income, so I am entitled to compensation.

When the German landowners got into difficulties the State came to their rescue with the duty on wheat, which was introduced to relieve so-called agricultural distress. Why should not I also appeal to the State in my hour of need? Is bread-usury any better than money-usury? Both of us, I the Jew, and you, the Prussian Junker are usurers — the one as base as the other. Nay, it seems to me that you are even somewhat baser and more avaricious than I. For it is bread-usury that very frequently creates the distress that drives people to the money-usurer. So if the distressed bread-usurers were relieved by a State subsidy, usury being thus placed under State protection, it is only fair to protect the money-usurer as well. For usury is usury, whether it is for land or for money. What difference does it make to the farmer whether he is fleeced in renting land or in borrowing money? Both the money-usurer and the land-usurer will take exactly as much as they can get—neither will rebate

one jot. If the landowners have a legal claim to rent, the money-lenders have a legal claim to interest. There is no escaping this logic by the assertion that there is a difference between money and land, between interest and rent, for there was nothing to prevent me from exchanging my money for land and so converting a usurer's grievance into that of a landowner.

So I shall base my appeal on the wheat-duties, and the usurer's cry of distress will not pass unheeded by a justice-loving land.

F. The Speculator

By the Free-Land reform we were prevented from speculating in building sites, mines and farming land, and now by the Free-Money reform our business in securities and produce has also been snatched away. Wherever I plant my foot, I am on quicksand. And that is called progress and justice! To deprive honest citizens of their livelihood by invoking the assistance of the State — the State that I have served so faithfully, witness my decorations and titles! I call it simply spoliation.

I recently launched at my own expense news of serious trouble between two South-American republics (their names I have forgotten) and of possible complications with foreign powers. Do you imagine that the news made any impression on the Stock-Exchange? Not the slightest! The Stock-Exchange has grown incredibly thick-skinned. Why, not even the news of the occupation of Carthage by the Japanese has been able to rouse it; the general indifference is simply appalling. It may be explicable but it is so altogether out of keeping with the former ways of the Stock-Exchange that it comes as a shock.

Since the introduction of Free-Money, money has ceased to be the stronghold of the investing classes into which they retreated at the slightest alarm. When danger threatened, they used to "realise"* their securities, that is, they sold them for money and then considered themselves completely protected against every kind of loss.

* Nothing demonstrates more strikingly the monstrous illusion under which humanity is living than this universally current expression. For everyone the only real thing is money.

These sales were of course accompanied by a fall in the price of securities, which was proportionate to the extent of the sales.

After a while, when I believed that nothing more could be gained, I used to circulate reassuring news. The frightened public thereupon ventured out of their stronghold and were soon busily forcing up, with their own money, the price of the securities which they had sold cheap to my agents. That was something like business!

And now this wretched Free-Money! Before parting with his securities the investor must ask himself what he is going to do with the money he obtains for them. For this money no longer allows him to pause and consider; he cannot take it home with him and tranquilly wait. Money has become a mere halt by the wayside. So people ask: "What will become of the yield of these securities? You say the outlook for them is bad, and we believe you, but is the outlook any better for the money you give us in exchange? What are we to buy with the money? We do not care to purchase Government securities, since others have forestalled us and forced up their price. Are we to sell our securities at a loss, simply to buy others at an exorbitant price, that is, again as a loss? If we lose in buying Government securities, we may as well lose on our own securities. We prefer to wait a while before we sell."

That is the new attitude of the public, and it ruins our business. This confounded waiting! Through it the first impression of our news wears off, the bewilderment passes away and another party has time to spread reassuring news, exposing our exaggerations and lies; and so the game is up. For it is the first impression that tells and must be exploited. Duping the public has become a difficult business.

My working capital, moreover, is invested in this carrion money and rots away in my safe. To carry out my stroke at the right moment I am forced to keep a reserve of money. If I count this reserve after a lapse of time, I find that it has already suffered a considerable depreciation. A regular and certain loss in return for a very uncertain chance of profit!

At the beginning of the year I had a cash account of ten millions. Thinking that I should need it, as formerly, at a moment's notice, I let it lie idle in the form of ready money. We are now at the end of June but I have not yet been able to move the Stock-Exchange

to sales on any appreciable scale, so the money is lying there untouched. What did I say? Untouched? A quarter of a million of it has already melted away! I have lost, irrecoverably, this large sum, and the outlook for the future has not improved. On the contrary, the Stock-Exchange is becoming more and more thick-skinned. In the long run experience teaches even the most timorous investor that when nobody sells, prices, in spite of gloomy prospects, cannot decline, and that not alone rumours and prospects, but also facts are required to justify a fall of quotations.

How different it was in former times? Before me lies a cutting from the financial column of a newspaper, a model of the reports which I myself used to circulate:

> "A Black Tuesday. A panic broke out on the Stock-Exchange to-day upon receipt of the news that the Sultan was suffering from stomach-ache. Considerable selling orders from provincial customers coincided with great eagerness to sell on the part of local speculators, and under this pressure the market opened in a demoralised and panicky mood. 'Sauve qui peut' was the watchword."

And now? Eternally the same stupid question: "What am I to do with my money? What am I to buy if I sell my securities?" This abominable money! How different it was with the gold standard! Then nobody asked: What am I to do with the money I receive? Those beautiful securities were sold at the bidding of speculators, for gold, since gold was still more beautiful; investors were happy to see the money again, to count it and let it run through their fingers. When you had gold you were safe; gold could not possibly involve you in a loss, either in buying or in selling, for it had, as the economists put it, its "fixed intrinsic value." This wonderful gold money with its fixed intrinsic value in terms of which all other goods and stocks rose and fell like the mercury of the barometer, how easy it made speculation.

Investors now sit on their stocks as if they were glued to them, and before they sell they always put the same query: "Please tell me first what I am to do with the abominable money I should receive for my securities?" The merry old Stock-Exchange days are no more, when gold vanished the sun set in the heavens of speculation.

There is however one comfort: I am not the only sufferer. My

colleagues of the produce exchanges have fared equally badly. Their business also has been ruined by Free-Money. Formerly, the whole production of a country remained on sale up to the moment of its consumption; it was in the hands of the dealers. No consumer ever thought of laying in stores. Gold with its "fixed intrinsic value" was a substitute for all provisions and could never involve us in loss, so anyone who had a reserve of gold had everything that he might need, at his disposal. Why, then, lay in stores for the moth to eat?

But the fact that everything was always on sale made speculation profitable. Here were the consumers with not enough provisions for 24 hours, and there was the whole of supply lying ready for sale in the hands of the merchants, so speculation was simplicity itself: you just bought the existing stock and then waited for demand to come forward. Generally you were sure of your profit.

And now? The goods which were formerly held for sale in the warehouses are now held for use in millions of store rooms, so how can they be brought back to the market? And with what can these stores be bought? Not with Free-Money, for it was to get rid of Free-Money that the consumers bought the stores. These stores are no longer wares for sale: they have became unsalable property. And even if the speculator could succeed in cornering the new output, prices, because of these private stores, would not rise immediately. For people no longer live from hand to mouth. Before these stores are used up, the news spreads that the speculators have got hold of certain stocks of merchandise, so producers are on the alert and have made up the deficiency before the speculators have been able to dispose of their goods. It must be further kept in mind that the working capital of the speculators in produce is, like mine, ready money subject to the monetary depreciation. Loss of interest, loss by depreciation, storage costs, and no profit—in short we speculators are faced with ruin!

How was it possible to introduce an innovation so injurious to the State? For I, Rockefeller, am the State, and my friend Morgan and I together are the United States. Whoever injures me, injures the State.

According to our experts and professors, gold had a "fixed intrinsic value." In exchanging gold for goods the public could

never lose anything. For according to the professors, exchanging is equivalent to measuring,* and as the result of measuring a piece of linen is the same whether you begin at one end or the other, so in buying and selling goods for gold the quantity of gold must always be the same. For gold has, it cannot be too strongly emphasised, a "fixed intrinsic value"! As long as we had gold, therefore, the public was protected by the fixed intrinsic value of gold from any possible cheating. We speculators who enriched ourselves, cannot have done so at the expense of the public. Where our fortunes came from I cannot explain, but perhaps they were a gift from Heaven.

Alas, that such heavenly gifts should have been abolished by Free-Money!

G. The Saver

Free-Money disproves all predictions; none of the dismal prophecies of its opponents have been fulfilled. It was said that nobody would be able to save, and that interest would rise to unprecedented heights; but the contrary has happened.

When I have saved a sum of money I now do exactly what I did formerly—I take it to the savings bank which enters the amount in my savings book. In this respect nothing has changed. It was said that the sum of money entered in the savings book would be subject to the same rate of depreciation as Free-Money, but that is nonsense. The savings bank owes me so many dollars, American Standard, but not the notes that I handed in. And the standard dollar stands above the notes. If I lend somebody a sack of potatoes for a year, he will not give me back the same potatoes, which have meanwhile rotted, but a sack of new potatoes. It is the same with the savings bank. I lend it $100 and it agrees to give me back $100. The savings bank is in a position to do so, since it lends the money on the same terms, while the businessmen and farmers who obtain money at the savings bank for their enterprises do not keep the money at home. They buy goods for use with it, and in this way the depreciation loss is distributed among all the

* Measure of value. Medium for transporting value, store of value—and illusion of value.

persons through whose hands the money has passed in the course of the year.

Nothing has changed, then, with regard to the sum to be repaid by the bank. But I now find that I can save a great deal more than formerly.

A socialist attributed my increased power of saving to a general reduction of " surplus value " which, keeping pace with the decline of the rate of interest, has affected all capital (tenements, railways, factories, etc.). The manager of a consumers' co-operative society explained that with Free-Money commercial costs have fallen from an average of 40% to barely 10%, so that for this reason alone I economise 30% on my purchases. And a social reformer attributed my increased saving capacity to the removal of economic disturbances. They may all three be right. The fact is that instead of $100 I now save over $1000 and live more comfortably than before. And for many people Free-Money has made saving for the first time possible.

How was it formerly with my savings book? At every political rumour there was a slump in trade, accompanied by unemployment which forced me to withdraw some of my money from the savings bank. That was a setback, and it was sometimes years before I had filled the gaps in my savings book caused by an industrial crisis. Saving resembled the labour of Sisyphus. I have now regular employment and am no longer periodically obliged to have recourse to the money saved with so many privations.

I now carry my monthly surplus to the bank with astonishing regularity. And what is happening to me seems to be happening to everybody, for there is always a throng at the counters. The savings bank has already repeatedly reduced the rate of interest, and a new cut is announced for next month. It justifies its action by stating that the sums coming in are in excess of those going out. From 4% the rate of interest has in this short period fallen to 3%, and it is said that with the universal introduction of Free-Money it will fall to zero! And so it will, in my opinion, if present conditions continue.

For while the influx of money into the savings banks is continually increasing, requests for loans are decreasing, since businessmen, farmers and manufacturers, for the same reasons that make saving

easier for me, are now able to enlarge their businesses with their own surplus.

The demand for loan-money is shrinking, and the supply is growing, so the rate of interest is bound to fall. For interest expresses the ratio of demand and supply of money loans.

For the filled pages of my savings book the fall of the rate of interest is, no doubt, regrettable, but it is all to the good for the unfilled pages which are far more numerous. For what is interest? Who pays it? What I save to-day is what remains of my wages after I have paid, in my personal outlay, my share of the interest-tribute exacted by the creditors of the State and municipalities, and my share of the interest-tribute demanded by capitalists for the use of houses, plant, provisions, raw material, railways, canals, gas and water-works and so forth. If the rate of interest falls, everything becomes cheaper and my power of saving increases proportionately. My loss on the sums already saved will be compensated ten-fold by my increased savings. My house-rent, for example, amounts to 25% of my wages, and two-thirds of it is interest on the building capital. If, now, the rate of interest is reduced from 4 to 3, 2, 1, or finally 0%, I save $\frac{1}{4} - \frac{1}{2} - \frac{3}{4}$ and so on of my house-rent, that is 4 — 16% of my wages on house-rent alone! But house capital is barely one fourth of all capital, the interest on which I pay out of my wages.* If the rate of interest fell to zero I could therefore save a much larger proportion of my wages.

Out of my income of $1000 I was able to save $100 a year. At 4% compound interest that would produce $1236 in ten years. Since the elimination of interest my wages have doubled, so instead of $100 I can now save $1100 a year, or $11,000 in ten years.† Should I not therefore rejoice at the abolition of interest?

* Industrial, commercial and agricultural capital, National Debt, capital sunk in means of transport.

† This is on the assumption that the prices of commodities are kept at the same level by the Currency Office. Elimination of the interest that now goes into price, will, in this case be expressed, not by lower prices, but by higher wages. On the opposite assumption, that the prices of goods fell with the rate of interest, wages would remain at the same level. Savings would then increase because of the fall in the cost of living. But the sum thus saved is not immediately comparable with the savings formerly, since commodity prices were then higher.

So far from injuring me, therefore, the complete elimination of interest would enormously facilitate my saving. For example, if I work and economise for twenty years and then retire I shall possess:

With compound interest at 4% $3,024
With interest at 0% $22,000

My income from the former sum with interest at 4% would be $120 a year. If I exceed this sum and touch the capital, an annual expenditure of $360 would in ten years exhaust my savings, whereas with $22,000 I can for ten years spend $2,200 a year.

The old notion that gold and interest facilitate saving was a fallacy. Interest renders saving impossible for the majority of mankind; with interest at zero everyone will be able to save, whereas formerly only exceptionally efficient workers or those possessing exceptional courage to face privations were able to practice this bourgeois virtue.

For rentiers the conditions are reversed, if the rate of interest falls to zero. Since their property no longer yields interest, and since, as non-workers, they gain no advantage from the rise of wages resulting from the elimination of interest, they are forced to live on their capital until it is exhausted. The contrast between a saver and a rentier is great. When the workers save, the interest must be found out of their work. Savers and rentiers are not colleagues, but adversaries.

In return for the privilege of drawing interest on my $3,024 savings I must pay $18,976 ($22,000 less $3,024) interest to the rentiers!

Rentiers may deplore the decline of interest, but we savers or saving workers, on the contrary, have every reason to rejoice. We shall never be able to live on interest, but we can live comfortably to the end of our days on our savings. We shall leave our heirs no perpetually-welling source of income, but is it not provision enough to bequeath economic conditions that will secure them the full proceeds of their labour? Free-Land and Free-Money double the income of the worker, so by the mere act of voting for the introduction of these two reforms I have bequeathed my offspring the equivalent of a capital bearing interest equal to my former wages.

And again, let us not forget that if saving is a virtue that should be preached, unreservedly, to all men, it ought to be possible for

all men to practice this virtue without injury to anyone and without destroying the harmony of economic life as a whole.

Now, in the economic life of the individual, to save means to do much work, to produce and sell much, and to buy little. The money taken to the savings bank is the difference between the money received from the sale of our own produce and the money we paid in purchasing the produce of others.

But what must happen if everyone brings produce worth $100 to market, and buys produce for only $90—that is, if everyone wishes to save $10. How can this contradiction be resolved, how can all men be enabled to save? The answer is given, the contradiction is resolved, by Free-Money. Free-Money applies the Christian maxim: whatsoever ye would that men should do to you, do ye even so to them. It says: If you wish to sell your produce, buy the produce your neighbour wishes to sell. If you sold for 100, buy for 100 in return. When everyone acts in this manner, everyone will be able to sell his whole produce and to save. Otherwise savers mutually deprive one another of the possibility of carrying out their purpose.

H. The Co-operator

Since the introduction of Free-Money the popularity of our movement has strikingly diminished, and I hear almost daily of the dissolution of consumers' co-operative societies. This is another of those unforeseen and surprising consequences of Free-Money. But in reality there is nothing to be surprised about. The consumer buys for ready money, lays in stores and buys goods in large quantities in the original packing. The merchant is not called upon to give credit. He keeps no books, nor does he need a large warehouse, for goods are mostly delivered direct from the railway station.

The combined effect of all these circumstances is of course an extraordinary simplification of commerce. Formerly only the cleverest businessmen managed to escape the perils of buying and selling on credit; formerly only the most capable, industrious, thrifty, orderly and active persons were fit for commerce; now anyone of average intelligence can succeed in commerce. No warehouse, no scales, no errors, no book-keeping, no estimates of future

demand. At the same time cash payment, ready money on the delivery of the goods, no bills of exchange, no cheques, no humbug! Not even an invoice is asked for. Here is the case or sack, and here is the money. The matter is settled and forgotten, and the merchant is free to look out for new transactions.

Work of this kind can be done by any subordinate; and by the laws of competition the remuneration for it must fall to the level of a subordinate's wage.

So what is the use of the co-operative society? Its purpose, the reduction of the cost of commerce, is realised by the money reform. Whom is our society to associate henceforward? It was composed of the élite of the consumers, those, namely, who were able to pay cash and to purchase in quantities considerable enough to make it worth their while coming to our shop. But owing to the changed conditions of commerce such selection is no longer possible, because to-day every consumer possesses these qualities; they all pay cash and they all buy in large quantities. It would be impossible to form an association of negroes in Africa, or an association of beer-drinkers in Munich. For the same reason the money reform has made consumers' co-operative societies impossible.

Nor is the disappearance of the societies any great loss. As a nursery for public spirit they failed, because they were necessarily in opposition to the rest of the people. Sooner or later they would have come into conflict with their natural counterpart, namely societies of producers, and that would have created problems which, in theory and practice, could have been solved only by universal communism, by the abolition of every kind of property in every country. What price, for instance, would the Union of German Co-operative Societies have consented to pay to the Union of German slipper manufacturers? Only the police could answer the question.

And had we any real cause for pride in our achievements? It is a humiliating reflection that although we succeeded in ruining many small independent shopkeepers, we never ousted a single speculator in stocks or produce. But it was just there, on the Stock-Exchange, that we ought to have shown our strength!

Who can respect a "public-spirited society" which displays its power by striking only at the weak? I much prefer Free-Money

which also, indeed, ousts the small shopkeepers, but at the same time opposes as decisively the money magnates of the Stock-Exchange.

Nor can it be affirmed that the co-operative movement was exempt from the grave evils of bribery and corruption. When the administration of public funds or the funds of a society cannot be efficiently controlled, the thief is sure to appear in the course of time. And the members of the society cannot be expected to examine every invoice and to compare all the goods delivered with the samples. Nor is it possible to prevent private agreements, through which co-operative officials may be bribed to the detriment of the society. If the society dealt only in goods of uniform quality such as, for instance, money, an effective control of the officials would be possible; but is there any commodity, except money, in which quality as well as quantity must not be taken into consideration?

What we have to expect from a general application of the co-operative system is therefore communism, the abolition of private property, and widespread corruption. That is why I welcome the attainment of the object of the co-operative movement, namely the reduction of commercial costs, simply by a change in commercial practice resulting from Free-Money. Goods now pass once more from owner to owner; goods and property are inseparable. The interference of middlemen, the fixing of prices and qualities by agents on behalf of third parties not only leads to corruption, it is in itself a corruption of the idea of a commodity, a corruption of price-fixing by demand and supply.

And is it not strange that the natural aim of the co-operative movement, the association of all the societies, should have been realised by the dissolution of all the societies? For the most efficient co-operative society is always the open market, where owner deals with owner, where the quality of the goods is estimated by those concerned personally, where the buyer is not bound to certain branch shops, villages, towns; where the tokens of the society (money) are available throughout the realm, where distrust disappears and corruption is excluded, and where public control is superfluous, because no private persons with special interests act as agents to conclude the bargain on behalf of the absent principals. Provided of course, that the open market does not add to the cost

of the goods more than does the administration of the co-operative society! But this condition has been fulfilled by the creation of Free-Money. Commerce has been accelerated, secured and cheapened through Free-Money to such an extent that commercial profit can no longer be distinguished from a common wage. Which means that co-operative societies have become superfluous.

I. The Creditor

Nobody, I am sure, will blame me for not being enthusiastic about Free-Money. For has not this innovation reduced the rate of interest, and does it not threaten, if universally adopted, to abolish interest altogether? But I must confess that in some ways the introduction of Free-Money has been, even to me, a relief.

For what was, formerly, the "Mark, German Standard" which the State, the municipalities and private individuals owed me in the shape of Government securities, bills of exchange, mortgages or promissory notes? I never knew and nobody could tell me!

The State made money out of gold as long as the majority in Parliament so desired. But any day the State could decide to abolish the right of free coinage of gold and demonetise gold, just as it demonetised silver. This has actually happened with the introduction of Free-Money. In adopting these changes the State recognised that the thaler is not a little pile of silver, nor the mark a few grains of gold, but money, and that in abolishing the right of free coinage it was bound to compensate or protect from loss the holders and creditors of money.

The State might have acted differently. It does not want gold; it withdrew gold merely to melt down the coins and sell the metal to the highest bidder for industrial purposes. And this sale, even though cautiously managed, brought the State far less paper-money than it gave for the gold. If the State had not exchanged our gold for Free-Money this loss would have fallen on us. But the safeguarding of our cash is a matter of comparatively small importance in comparison with the recognition that our claims for money (Government loans, mortgages, bills of exchange, and so forth), which are a hundred times greater than the whole amount of the gold money in circulation, and in many cases only fall due fifty

years hence, are also to be paid in paper-money with fixed purchasing power, one mark of Free-Money for one mark in gold.

So in this respect I am perfectly safe. I know, now, what a "Mark, German Standard" is: I know that what I gave in goods for a mark I shall receive back in goods, to-day, to-morrow, always. I receive indeed less interest than I did before, and perhaps later I shall receive no interest at all; but my property, at least, is safe. What is the use of interest when the principal is constantly in danger? The prices of industrial shares rose and fell with the prices of commodities and it was a commonplace that a fortune was more easily made than kept. The great fortunes of the speculators were built from the ruins of other fortunes. There was also the danger of great discoveries of gold and the possibility that science might some day hit upon the philosopher's stone. Scientists speak of the unity of matter, and say that gold is merely a special form of matter; so that it may become possible to convert any kind of matter into gold. A ticklish business indeed! "Ninety days after sight pay to my order the sum of one thousand marks German Standard," was the tenor of the bills of exchange in my portfolio. "Let me see" the debtor would have said, "there are some ashes in my stove; I am going to make 1000 gold marks for you. I need only press this button. Here are your 1000 marks in gold; or rather a little more, but that does not matter."

Our laws made no provision against such accidents: the definition of the meaning of the "Mark, German Standard" was left to the decision of Parliament—Parliament in which our debtors might easily obtain the majority.*

My situation as a creditor was also rendered precarious by the possibility that the gold standard might be abolished by other countries but retained by ours. Suppose, for example, the United States decided the problem of whether silver or gold should be admitted as legal tender, by demonetising both metals, so as to hold an even balance between the conflicting interests of debtors and creditors. This would have been the most rational solution of the contradictions of American currency policy, and the only way of proving the impartiality of the State. But what would have been

* This aspect of the matter is fully dealt with in the author's pamphlet: Das Monopol der schweizerischen Nationalbank, Bern, 1901.

the result? The masses of gold which had become useless in America would have flooded Germany, forcing up our prices perhaps 50% or even 100 or 200%, so that I should have lost more from the general rise of prices than at present from the decline of the rate of interest.

Securities payable in marks, German standard, were obviously a risky investment. But now all danger has disappeared. It makes no difference to us whether the United States pass over to a paper currency or to bimetallism, whether the Bank of England puts its gold in circulation, or whether Japan and Russia retain the gold standard. Whether much or little gold is discovered, not a penny is added to or withdrawn from the monetary circulation; whether the existing stock of gold is, or is not, offered for exchange, the German monetary standard is unaffected. Whatever happens I shall get for one mark, German standard, as much merchandise as I gave for it; for such is the conception of the "Mark, German Standard," as legally and scientifically defined. And even should the majority of Parliament consist of debtors who would personally benefit by a reduction in the value of the mark, they could not indulge their desires without an open breach of faith. "The average price of commodities is the fixed and unalterable standard of money. And you have changed this standard, as everybody sees and can test by measurement. You did so for your personal advantage, in order to return less than you borrowed. Therefore you are thieves."

But nobody steals in broad daylight before the public gaze. It is profitable, however, to fish in troubled waters; and with the old currency the waters were troubled, to the great advantage of swindlers. But now the waters have become transparent; the standard of money is something which all men clearly understand.

J. The Debtor

Unless we agrarians* belonged to the genus of pachyderms we could not be insensible to the abuse showered upon us in Parliament, in the Press and in daily intercourse; we are called bread-usurers, beggars and scoundrels.

That the working class should have attacked us for making their

* Agrarian: a debt-ridden German landowner who endeavours to get rid of his debts through legislation.

bread dearer was pardonable. Towards them we played the part of the aggressor. They had done us no injury that could justify our inroads upon their lean purses. But that the other parties which had so often injured us by legislation in order to enrich themselves should have joined in the chorus of abuse, I find simply ridiculous. It shows that these parties have not yet learned the meaning of politics. Politics mean power, and those who have the power exploit politics to their own advantage. Formerly the liberal parties held the power, which they exploited, now it is our turn. So why abuse us? The abuse rebounds on those who have been in power and those who will be in power in the future.

In this quarrel our political opponents were decidedly the aggressors. They attacked us by introducing the gold standard, and to protect ourselves we tried to restore bimetallism. As we did not succeed, we had recourse to protective-duties. Why did our opponents deprive us of the double standard on which our mortgages were based? Why did they force us to repay more than we had received? Why did they alter the terms of our mortgages by depriving us of the choice between gold and silver? Why did they deprive us of the possibility of paying our debts with the cheaper of the two metals? It obviously makes a great difference whether I am free to pay my debts with 1000 kilograms of potatoes or 100 kilograms of cotton, or whether I am bound to pay in potatoes alone. We were deprived of the advantages of this clause in our contracts without receiving compensation of any kind. If I had been allowed to choose I could have paid either with 160 pounds of silver or with 10 pounds of gold, and I should have paid, of course, with the cheaper of these two metals, just as, when I borrowed the money, I was paid in the cheaper metal. The chances of profit from this advantage became apparent later when we compared the price of silver with that of gold. The price of gold increased 50% compared with silver, so instead of 100,000 marks my debts now amount to 200,000 marks—not nominally, but what is worse, in actual fact. I have to sacrifice double the quantity of produce annually to pay the interest on my debt. Instead of 50 tons of wheat, the bank now claims 100 tons annually. Had the silver currency not been abolished I could have employed the fifty additional tons to pay off my debts, and I should by now be clear.

Is not this treatment of debtors, approved of by our political opponents, simply swindling?

If debtors did not protest in a body, if the protest was confined to landowners and other mortgage debtors, the explanation is that most of the remaining debtors, who had borrowed money without giving real estate as security, went bankrupt and so got rid of their debts in the general collapse that followed the introduction of the gold standard. The matter therefore no longer concerned them.

When we supported our demand for a return to the silver standard by pointing out that after the introduction of the gold standard the price of wheat had fallen from 265 marks to 140 marks, and that we had received silver, not gold, for our mortgages, we were laughed at and told that we did not know anything about the currency or the needs of commerce. The gold standard had proved a great success (proof: a great commercial crisis and fall of prices) and could not be tampered with without unsettling the notion of property and risking a collapse of the whole economic structure. If, in spite of the blessings of the gold standard, we fared badly, our antiquated methods were to blame; why did we not adopt modern machinery, why did we not use chemical fertilisers, why did we not grow the crops needed for industrial purposes, why did we not produce more at a reduced cost, and so carry on in spite of lower prices? Our argument was all wrong; the "value" of gold was fixed, and the value of commodities had declined in consequence of the reduced cost of production! As gold has a "fixed intrinsic value," price fluctuations are always due to the commodities.

We tried to put this good advice into practice and to reduce our costs of production. The State came to our aid with reduced freights and reduced fares for the Polish labourers. And we did obtain better crops with the same amount of labour. But we did not obtain the expected advantage, for although our crops increased, prices fell from 265 marks to 140 marks, so that we actually obtained less money for the larger crops. Money was the thing we needed for it was money that our creditors claimed, not potatoes or sugar beet! They held us to our bond which had been falsified by legislation in their favour; they demanded gold.

The silver standard would have given us money—more money

and cheaper money; that being denied us, we tried by other expedients to obtain more money from our produce, and in this way we hit on protective-duties. If we had not been cheated out of the silver standard, protective-duties would have been unnecessary. The whole responsibility for the wheat-duties therefore rests on those who have been calling us bread-usurers, beggars and scoundrels, with those who robbed us through the introduction of the gold standard. An odious episode in our economic and political history, which has caused endless strife and bitterness, could have been avoided by the elementary precaution of including a legal definition of the terms "thaler" and "mark" in the proposed currency reform, and by a clear statement of the circumstances under which the State was entitled to demonetise either silver or gold.

Considering the enormous importance of the matter, it was criminal of both sides to use the thaler, and afterwards the mark, as a basis of their bid for power, and to make the answer to the question: "What is a mark, German Standard?" a matter of party politics. But now I feel safe. The National Currency Office is on the watch and Free-Money enables it to maintain an equitable balance between the conflicting interests of debtors and creditors.

K. The Unemployment Insurance Office

Since the introduction of Free-Money, applications for unemployment benefit have suddenly ceased; my assistants and I have nothing to do. Money now goes in search of goods, and goods are work, employment. Anyone possessing Free-Money invariably endeavours to get rid of it, either by purchasing goods, or by investing it in a new enterprise, or by lending it to others who are in the position to make use of it. The change is this, that no conceivable circumstances, no personal or political considerations, neither a fall in the rate of interest nor even the complete disappearance of interest and profit, can interfere with the supply of Free-Money. Even supposing that the commercial purchase of goods involved a loss instead of a profit, Free-Money is in exactly the same predicament as all other commodities; these also are offered for exchange, even should their sale involve a loss.

Anyone in possession of Free-Money is forced to pass it on, no matter whether that means a loss or a profit. Free-Money commands; it brooks no delay, it breaks all fetters. The speculator or financier who in attack or defence attempts to hinder the circulation of money is struck down by it. With the force of an explosive it bursts open all stores of money, from the cellars of the great banks to the humble money-box of some stable-boy, liberating itself and rushing to the market. Hence the name "Free-Money." Whoever sells goods for Free-Money must immediately purchase goods again. And purchase of goods means sale of goods, and sales of goods mean employment.

Free-Money is embodied demand, demand is sale, and sale is work. The money reform is an automatic insurance against unemployment; not an official insurance spoon-fed by the State and the employers, but the natural insurance inherent in the division of labour. For labour produces goods, and goods tend always to be exchanged for goods. Through the interference of gold, exchange was forced to pay tribute to two extraneous powers, interest and desire of profit, by which it was hampered. The exchange of goods became conditional upon interest and profit. If exchange did not result in interest or profit, it came to a standstill, because money, the medium of exchange, was held back.

With Free-Money such conditions are utterly impossible. Free-Money is a hungry lion seeking whom it may devour; it pounces on the goods, and goods are employment, for it makes no difference whether I buy goods or employ a labourer direct. The merchant from whom I buy the goods will seek to replenish his stock and get rid of the money by ordering new goods from the manufacturer.

An absurdly simple insurance against un employment, an absurdly simple labour bureau! Every Free-Money note put in circulation by the State is a substitute for an application for employment: every thousand of these notes is a substitute for a labour exchange. Anyone who sells goods and receives money in return will immediately buy goods again, either for himself or through someone to whom he lends the money; so everyone buys the same quantity of goods that he sells, and everyone sells the same quantity of goods that he buys. There is no room for any surplus; the exact quantity of goods produced is sold. Under such conditions how can

slumps, overproduction and unemployment occur? Such phenomena are possible only when people at times, or usually, buy less goods than they themselves produce.*

What happened formerly? The merchant had to pay interest on his capital, so he made the purchase of goods dependent on the exaction of interest. If the situation made it impossible for him to add the interest to the selling price of the goods, he left the products of the workers untouched, and the latter were thrown out of work through the cessation of sales. No interest, no money; no money, no exchange of goods; no exchange, no employment.

Interest was the necessary condition of the circulation of money, upon which employment depends. The Reichsbank itself never issued money without interest, even at times when by universal admission the market was short of money—and this in spite of the fact that according to its charter the main task of the Reichsbank was to adapt the monetary circulation to the needs of the market. (I do not reproach the Reichsbank; even a god would have been powerless if bound by the clumsily framed regulations of its charter).

To-day the circulation of money has ceased to be conditional. Money means the sale of goods, no matter what the result. Money — sales of goods — employment — money. Under all possible circumstances the circuit is closed.

The merchant was, of course, bound to keep his profit in mind; the selling price had to exceed the purchase price. That was the natural, inevitable and, moreover, fully justified condition of all commercial activity. And the price paid by the merchant or debited

* Free-Money does not of course guarantee the individual producer the disposal of his output; it only protects the community as a whole. If someone produces poor goods or asks too high prices, or produces blindly without consulting the needs of the market, Free-Money will not enable him to dispose of his produce. The term "unlimited sales," which is repeatedly used here, applies only to the community; after the introduction of Free-Money neither the claims of interest nor the "tone of the market" can obstruct the disposal of goods. Everyone will be compelled to buy immediately exactly as much as he has sold; and when everyone is under such compulsion there can be no surplus. If anyone has no further need of goods he will either cease working or he will lend his money-surplus to others who require more goods than they themselves have sold at the moment. If competition in some commodity is too great (sugar-beet, pig-iron, dancing lessons) its price will fall; and if production at the reduced price does not pay, everyone will know what steps to take.

to his account was in every case a known and unalterable quantity (except with sales by commission), whereas the selling price was a lottery, and commerce as a whole resembled a gambling table at Monte Carlo. For between the purchase and the sale there was an interval of time during which the market might change.

Before making a purchase the merchant considered the state of the market, trade prospects and home and foreign politics. If he thought that others shared his belief that a general rise of prices was imminent, he hastened to buy, so as to participate in the looked-for rise with as large a stock of goods as possible. If he was not mistaken, if he had many fellow believers, so that many did buy, that alone was reason enough for the expected to happen, namely a rise of prices—no matter what the reasons upon which the expectation had been founded. For it is clear that if everybody believes in the advent of higher prices, everybody possessing a money reserve will buy, and when all money reserves are employed for purchases, prices must rise.

This case supplies proof of the doctrine that he who believeth shall be saved.

The reverse was of course true when there was a general belief in a fall of prices. When a merchant believed that his fellow merchants believed that prices would fall, he tried to dispose of his stock of goods; on the one hand by forcing their sale, if need be through a reduction of prices, and on the other hand by delaying his orders until a more propitious moment. But as his fellow believers acted in the same manner this again was the sole reason for bringing about the thing they feared. Their belief had made fools of them. For under the gold standard everything happened that people believed. Belief reigned supreme. The belief in the coming of higher or lower prices was quite sufficient to make this belief a reality.

Beliefs, moods, weather reports determined whether money was or was not offered in exchange for goods, whether the workers played football or worked night-shifts and overtime. The offer of the whole monetary reserves in exchange for goods depended on belief!

Free-Money has changed all this. Money does not now wait to inquire about the beliefs or moods of its possessor. It commands,

it places orders of its own accord. But just because belief has been eliminated from commerce because faith, hope and love of profit no longer influence the circulation of money, demand is regularised. Mercantile hopes and fears are now simply personal matters without any effect on the market. Labour and the demand for goods are no longer dragged at the heels of an arbitrary power, money; they are no longer subject to the will of the possessors of money, for money is now demand itself.

It used to be considered a matter of course that the worker should go out to look for money, that is, work. Only exceptionally did money go out to look for work. Money compelled goods, work, to come to it. No protest was raised against this breach of the principle of equal rights; everyone tolerated the privilege of money—probably because the privilege was supposed to be indissolubly bound up with the monetary system. The worker and the possessor of goods incurred a heavy, daily increasing loss through postponement of the sale, whereas money produced interest for the potential buyer. So it was natural and inevitable that if buyers stayed at home sellers set out to find them and to urge them personally to buy.

This view is now no longer a matter of course. For the possessor of money feels the money burning in his pocket and is compelled to exchange it, just as the worker is compelled by the perishable nature of his power of work (which cannot be stored) to find a purchaser for it as speedily as may be. So the possessor of money no longer waits patiently for the possessor of goods (worker) to come and find him. He rises earlier, looks about him, and goes to meet the goods half-way.

But when two are searching for one another, they will meet sooner and more surely than when only one is on the look-out. The animal kingdom would be in a sorry plight if the females tried to hide from the males. How would the toad in the pond find his mate if she did not crawl out of the mud at his call?

Formerly the possessor of money gained by hiding from the possessor of goods; for the length of the quest made the latter more amenable. In his dressing-gown and bedroom slippers, so as to make it appear that the worker or seller of goods had disturbed him in his slumber. That is how the buyer met the seller!

So money now under all circumstances goes out to seek the commodities. Money has suddenly become hungry. Its hunger-cure has made it nimble and sharpened its hunting instinct. It does not, indeed, run after the goods, for the goods do not slink out of sight; they cannot do so. The two meet half-way. But if money finds no goods to buy, it does not wait until chance throws what it wants at its feet; instead of that it tracks the article to its source, which is labour.

Thus Free-Money has replaced the official insurance by an automatic insurance against unemployment. Free-Money has become an automatic labour bureau, and I and my 100,000 officials have been turned out on the street. By the irony of fate, the only unemployed in the realm are now the officials of the unemployment insurance office!

L. The Disciple of Proudhon

With the introduction of Free-Money our whole programme has been fulfilled. The goal towards which we had been groping has been reached. What we had hoped to attain by means of complicated, vaguely-conceived institutions such as exchange-banks and co-operative societies, namely a perfect exchange of goods, has been realised in the very simplest and easiest way through Free-Money. What did Proudhon say:—

> "In the social order reciprocity is the formula of justice. Reciprocity is defined in the maxim: Do as you would be done by. Or translated into the language of political economy: Exchange products for products, buy your products mutually from one another. Social science means simply the organisation of mutual relations. Give the social body a perfect circulation, that is, an exact and regular exchange of products for products, and human solidarity is assured, labour is organised."

And Proudhon is right, at least as regards the products of labour, though not as regards the products of the land. But how can this regular exchange of products be realised? What Proudhon himself proposed for the achievement of this perfect circulation was impracticable. Even on a small scale, a goods-bank as conceived by Proudhon was unworkable, so how could the whole economic body have been organised on these lines?

Again, he ought to have investigated why we failed to buy each other's produce, as complete and regular exchange demands. That

was the question to be answered first of all, before he set about proposing remedies.

Proudhon did indeed suspect that there was something wrong about metal money; for did he not call gold "a bar to the market, a sentinel guarding the gates of the market with orders to let no one pass." But he never tried to find out exactly what was wrong with money, although this was the point at which his investigations should have started. It was his failure to do so that led him astray. In raising labour, or the result of labour, the commodity, to the level of ready money (that is, gold) Proudhon thought he had discovered the solution of the social problem. But why was it necessary to "raise" goods to a higher level, what was there in gold (then money) that placed it above the level of labour?

Here, in this idea of raising goods to the level of gold, lay Proudhon's error. He should have inverted the proposition and said: "We wish money and goods to circulate on the same level, so that money shall never be preferred to goods; goods thus becoming money, and money goods. Let us therefore debase money to the level of goods. We cannot alter the qualities of goods and endow them with the advantages inherent in gold as a commodity. We cannot make dynamite harmless, or prevent glass from breaking, or iron from rusting, or furs from being eaten by moths. Goods invariably have natural defects; they decay, they are subject to the destructive agencies of nature—gold alone is exempt. In addition to this, gold has the privilege of being money and, as money, of being universally saleable; and it can be conveyed from one place to another without appreciable expense. How, therefore, can we possibly raise goods to the level of gold?

But the opposite procedure is easy: Money is adaptable; we can do with it as we please, since it is indispensable. Let us degrade it to the level of goods, let us give it qualities that will counterbalance the evil qualities of goods."

By the introduction of Free-Money this logical idea has now been put in practice, and the result proves how much truth and just observation is contained in Proudhon's pithy phrases, and how narrowly he missed the solution of the problem.

With the money reform, money has been debased to the level of goods, and the result is that goods are at all times and in every

situation equal to money. "Buy your products from one another," said Proudhon, "if you wish to find markets and employment." That is now done. Demand and supply have been welded into one by the new money, just as they were when exchange was effected by barter; for everyone who in those times brought goods to the market took other goods home with him. So there was always as much produce going out as coming in. Since the introduction of Free-Money the money realised by the sale of goods is immediately converted into goods again by the purchaser, so a supply of produce now causes a demand for the same amount. The seller, who is pleased to be rid of what he had to dispose of, finds himself compelled by the nature of his money to put into circulation again the money yielded by his sale, either by purchasing commodities for his own consumption, or by building a house, or by giving his children a better education, or by improving his live-stock and so forth. If he is not attracted by any of these possibilities he lends the money to others who need goods but, for the moment, have no money. Other expedients, such as hoarding the money; or making the loan of it dependent on interest; or purchase of goods only on condition that they yield a profit; or calculated waiting for better prospects, are no longer possible. You were compelled by the nature of your products to sell; and now you are compelled by the nature of your money to buy, there is no alternative. In rapid succession, compulsorily, purchase now follows sale, and money passes from hand to hand. In good times and in bad, in victory and in defeat, money pursues its orbit through the market as steadily as the earth revolves around the sun. Demand now appears as regularly in the market as labour in search of employment or goods in search of a purchaser.

Buyers at first, indeed, complained about being compelled to get rid of their money. They called this compulsion a restriction of their liberty, an attack upon property. But everything depends on what you mean by money. The State proclaims that money is a public means of intercourse and that it is managed solely in the interests of the exchange of goods. And these interests demand that the sale of goods shall immediately be succeeded by an equivalent purchase of goods. But experience proved that the mere wish that everyone should of his own accord, and for the benefit

of all, at once put into circulation the money he receives was not in practice sufficient to ensure a regular monetary circulation, so it was necessary to introduce into money a force compelling it to circulate. This was done and the aim was realised.

Anyone unwilling to be deprived of the liberty of dealing with his property at his own pleasure and discretion, may, if he prefers, keep his produce, his undoubted property, at his own house and sell it only when he needs to buy other products. If he prefers to keep hay, lime, trousers, tobacco-pipes, or whatever his produce may be to selling them in advance for Free-Money, he is at liberty to do so; no one will prevent him, and nobody will complain. But if through the agency of money, he has been relieved of the burden of his own goods, he must remember the duties which he has assumed as a seller and as a possessor of money; he must allow others to benefit by the circulation of money. For the exchange of goods is based on reciprocity.

Money must not be a resting place in the interchange of goods; its role is transitory. The State manufactures money at the public expense and cannot tolerate the abuse of this means of intercourse by others for purposes foreign to the exchange of goods. Nor is it just that money should be circulated gratis by the State, for the cost has to be paid out of public funds, and many citizens make little use of money. That is why the State levies an annual duty of 5% on the use of money. In this manner the State ensures that money is not misused for speculation, exploitation, or as a medium of saving. Only those who really need money, the medium of exchange, those, namely who produce goods and wish to exchange them for other goods, now make use of money. For all other purposes it has become too expensive. Above all the instrument of exchange is now strictly separated from the instrument of saving.

What the money reform demands of the man who has sold his goods is mere justice: "Now buy goods in order that others may get rid of theirs." But this demand is not only just; it is also wise, for to be able to buy other goods a man must sell his own. Buy, therefore, that you may be able to sell all your own products. Otherwise to be a lord as buyer, you must be a slave as seller. Without purchase, no sale; and without sale, no purchase.

Purchase and sale combined make up the exchange of goods;

they are, therefore, parts of a whole. With metal money purchase and sale were often separated by a lapse of time; with Free-Money they are made to coincide. Metal money separated goods by inserting between sale and purchase an interval of time, interested delay, greed of gain and a thousand other forces extraneous to exchange; Free-Money, on the contrary, brings goods together by making purchase follow close upon sale and by not allowing time or space for extraneous forces to intervene. Metal money, according to Proudhon's dictum, repeatedly quoted in this book, was a bar to the market; Free-Money is the key.

M. The Theorist on Interest

Free-Money has robbed me of my whole intellectual capital. My finest theories have been refuted by this hateful innovation. For behold, interest which since the dawn of history had always remained at the same level, has now, in utter disregard of all my theories, started on its course towards zero. And those interest-free loans which had always appeared to me as mere Utopian dreams are now considered not only possible but probable. Interest-free loans ! Money, machinery, houses, factories, goods, raw materials no longer capital ! My head is whirling !

The convincing " theory of utility," the attractive " theory of fructification," the inflammatory " exploitation theory," the somewhat bourgeois, but all the more popular " abstinence theory,"* and whatever else I called them, have all collapsed with the advent of Free-Money.

It seemed natural, obvious, indeed inevitable that the lender of an instrument of production should be able to secure interest for this " service." Yet interest is falling to zero, and capitalists (if they may still be called so) are delighted when anybody consents to take their money with no other condition than simple restitution of the sum borrowed. They say that competition has increased to such an extent that it is more advantageous for them to lend the money in this way than to keep it at home as a reserve for future

* This terminology is taken from Boehm-Bawerk's treatise on interest. Irving Fisher's " Impatience Theory " belongs to the abstinence theories of interest.

use. For at home part of the money would annually be lost through depreciation, so it is better to lend it, even without interest, on a mortgage or a bill of exchange which can be converted into ready money again, by selling or discounting, whenever ready money is required. There is then indeed no interest, but neither is there any loss from depreciation.

Interest-free loans are now an advantage not only to the loan-taker, but to the loan-giver as well. Who ever imagined such a possibility ! Yet now it has been realised, for what is the saver to do ? A man saves for the future, for old age, for a pilgrimage to Jerusalem, for hard times, for marriage, for illness, for his children and so forth. But what is he to do with his savings in the meantime, until he needs them ?

If he buys cloth, foodstuffs, wood, etc., and stores them, he is no better off than if he keeps Free-Money, for all such stores are subjected to rust, rot and decay. It may here be objected that gold and precious stones may be kept indefinitely without deterioration, but what would happen if this form of saving became general ? How high would the price of these things soar in good years, when everybody saves; how low would it drop when, after bad harvests or in war-time, the savings (that is, the gold and precious stones) were brought to the market in large quantities ? Precious stones are the things that people buy last and sell first. The experiment would not be repeated; this form of saving would be a deplorable failure. (The same is true of wine which is said to become better and more valuable the longer it is kept).

It is surely more advantageous to invest one's savings in bonds, Government securities, bills of exchange and so forth, which, although they yield no interest, are always convertible into ready money without loss.

It may be asked, why not, instead, build houses, or buy industrial shares ? And people do buy and build houses although houses have also ceased to yield interest. They are satisfied with the sums written off annually for depreciation, which the tenants pay in the rent. This form of investment is sometimes even more advantageous than the purchase of Government securities, as it gives a regular return which keeps pace with the depreciation of the house (factory, machinery, ship, etc.), yet leaves a pledge, namely the piece of

property, in the lender's hands. That is why so much building is going on in spite of the fact that rents are only just sufficient to pay for repairs, depreciation, taxes and fire-insurance; that is why houses are considered a good medium of saving.

Nevertheless all this is most disturbing. It is difficult to grasp the fact that men still build houses to let, though expecting to obtain as rent merely the repayment of the capital, without interest. For it used to be considered a scientifically established fact that money bore interest only because the instruments of production bore interest, that the interest-bearing power of money was fundamentally a transferred or borrowed power. And it now seems that the reverse is true, for how else could a monetary reform have influenced interest?

As a matter of fact it was illogical to say that money yields interest because it can be used to buy instruments of production which yield interest. For this fails to explain why instruments of production yielding interest are sold for money which is declared to be barren. Does an ox give milk when you barter it for a cow?

Catch-words were here evidently substituted for clear thinking. It is nonsense to talk of transferred and borrowed qualities; such transfer of qualities and forces is just as impossible in economics as it is in chemistry. If money had not the intrinsic power of levying interest, where did the revenue derived from the issue of paper-money come from?

If money was unable by its own power to levy interest, interest-bearing instruments of production and barren money were incommensurable quantities, things not admitting of any comparison and therefore not exchangeable. There are many things which cannot be bought with money.

And what price was paid for a piece of land yielding a rent of $1000? The calculation was based on the fact that $100 bore $5 interest, and the price of the land was as many times 100 as 5 is contained in 1000. But how did this rate of 5% originate? That is the crux of the matter.

So there can be no question of a transferred power; the interest-bearing power must have been an inherent quality of money. But where was this quality of money hidden? Formerly it would have been difficult to discover, but with Free-Money as an object of

comparison the difficulty disappears. For since with Free-Money money has manifestly lost its interest-bearing quality, we need only investigate wherein the two forms of money differ, in order to lay bare the source of interest. Now Free-Money differs from the traditional form of money in being subject to an inherent compulsion to be offered in exchange for goods, whereas the traditional form of money was exempt from such compulsion. Here then, in the absolute liberty of the possessor of metal money to offer his property for exchange whenever he pleased, in the arbitrary power of capitalists and savers who controlled the supply of money, we have to look for the source from which interest sprang.

And we have not far to look. Money is admittedly indispensable for commerce, for the exchange of the products of the division of labour. For how do the makers of goods act when they cannot sell their products for money? Does the cabinet-maker sleep in his coffins, does the farmer eat all his potatoes? Nothing of the kind; they try to effect the sale by reducing their prices, they all try to attract money by lowering their claims. If capitalists and savers have withdrawn money from circulation and will return it only if promised interest, they obviously find the ground well prepared for the levy of interest in the readiness of the possessors of goods to surrender part of their produce for the use of money. "You want money for the mutual exchange of your products, and this money is locked up in our safes. If you are willing to pay us something for its use, if you are willing to pay us interest, 4% annually, you may have it, otherwise we shall turn the key and you must make shift without it. Interest is the condition we lay down. Consider the matter; we can wait, we are not compelled by the nature of our money to yield it up."

Clearly it depends on the owners of money whether commerce is to carry on with money or without. At the same time the State makes the use of money inevitable by levying taxes in it. Hence the owners of money can always extort interest. A parallel would be a bridge over a river cutting the market in two, and guarded by a toll-gate keeper. Because the bridge is indispensable for traffic between the two halves of the market, and because the toll-gate keeper can close or open it, he is in a position to levy a toll on all the goods in the market.

Interest was a toll which the makers of goods were forced to pay to the owners of money for the use of the means of exchange. No interest means no money; no money means no exchange of goods; no exchange means unemployment and hunger. Rather than starve, the producers of goods paid interest.

The interest-bearing power of money was not a " borrowed " or " transferred " power. It was a quality of metal money due, ultimately, to the fact that in the manufacture of money a material had been chosen which holds a privileged place among the other products of the earth, since it may be kept indefinitely without injury and without expense, whereas all other products of human industry deteriorate, become antiquated, and are expensive to store.

This explains why people exchanged a field for a sum of money; for both the field and the money, each by virtue of its own power, yielded a rent. In order to establish the exchange ratio of the two things it was only necessary to calculate the sum of money which would produce interest equal to the rent of the field. The field and the money were then perfectly commensurable objects. In the case of the field there was no question of a " borrowed " or transferred power of exacting interest, and the same was true in the case of money.

That hackneyed and meaningless phrase about the transferred power of money deceived me completely, for money, the medium of exchange, was intrinsically capital.

Let us consider for a moment what must happen if we elevate a species of capital to be the means of exchange of all commodities.

1. Money can be capital only at the expense of commodities, for it is on the commodities that money levies the toll that stamps it as a form of capital.

2. If commodities have to pay interest they cannot possibly be capital themselves, for if both commodities and money were capital, neither of the two could assume the role of capital in connection with the other, and in their mutual relation, at least, they would cease to be capital.

3. If commodities seem to us capital in commerce, because their selling price, besides the cost price and commercial profit, includes capital-interest, the explanation is that the merchant has already

deducted this interest from the producer's or the worker's remuneration in the purchase price. The commodities here merely play the part of bank messengers for money capital. If the selling price is $10 commercial profit 3, and interest 1, the producer receives $6.

From this it follows that if the medium of exchange, money, were not itself a form of capital, the whole exchange of goods would be effected without any charge for interest. That is what Proudhon always maintained, and it seems that he was right.

Let us now consider the effect of a medium of exchange which is itself capital upon the creation of instruments of production.

How did the instruments of production (machinery, ships, raw materials and so forth) come into existence ? Does a man still make his own instruments of production out of raw materials found on his own land ? Possibly that may happen exceptionally now and then, but the general rule is that the instruments of production have to be bought and paid for with a sum of money. The foundation capital of all enterprises of any magnitude is a sum of money which is entered on the first page of the ledger. Now if this money paid for instruments of production is intrinsically capital, if the owners of the money, by merely locking it up can prevent the creation of an enterprise, it is clear that they will not advance any money for enterprises which yield no interest. If I can obtain 5% on my money from the purchase and sale of commodities. I am obviously not going to be satisfied with less in the manufacture of them. If I can collect ore at the surface I shall not dig a pitshaft.

Hence it follows that the number of houses built is limited by the fact that rents must remain high enough to include the interest-tribute that money can exact. If by chance more houses have been built, if the supply is greater than the demand, rent of course falls and the houses do not yield the interest required. Whereupon workers in the building trade are dismissed, and house-building is suspended until, through the increase of population, the demand for houses has increased to the point where rents again yield the full interest exacted by money. Only then can the building trade make a fresh start.

It is exactly the same with industrial enterprises. When these have become so numerous that the demand for labour which they

incorporate has forced up wages to a point at which the employer is no longer able to squeeze capital-interest out of the sale of the product, the founding of new enterprises is interrupted—until the increase in the number of workers and the resulting increased supply of labour again reduces wages and allows scope for the levy of interest.

The instruments of production appear to us as capital simply because they are created by money capital, and because money capital artificially limits their creation so as to place them in a privileged position in relation to the workers. There are always less instruments of production than workers, and the surplus of workers resulting from the shortage of factories depresses wages below the full proceeds of labour.

The picture becomes still clearer if we consider the employer merely as a pawnbroker who advances the necessary money to the worker for machinery and raw materials and is repaid by the worker's produce.

Money, then, controlled absolutely the exchange of goods and the creation of instruments of production. Everything was tributary to it. It intervened between consumer and producer, between workman and workgiver, separating those who were naturally destined to unite and exploiting the embarrassments so arising. Its booty was called interest.

Even I now begin to understand clearly why with Free-Money the rate of interest is falling and already approaching zero.

Money can no longer be withheld from the market; regardless of interest it must be put into circulation, either directly in exchange for goods, or indirectly as a loan. It cannot intervene between the producers to separate them; in spite of itself, in spite of its predatory nature, it is forced to carry out its function and act as the medium for the exchange of goods. Money is no longer a tyrant or bandit obstructing the exchange of commodities; it has now become the unpaid servant of exchange.

Commodities are now no longer excluded from the market and workers dismissed as soon as the rate of interest falls; the exchange of goods proceeds, regardless of interest.

But where work proceeds regularly people save. Immense sums

are saved and carried to the banks to be offered as loans. And if this continues year after year, if the workers are not again and again forced by recurring economic crises to eat up their savings, the time must come when the money offered for loan by the savings banks is no longer sought for, the time when the loan-takers say: We have built so many houses that we cannot find tenants for them; we have built so many factories that we cannot find workmen for them. Why continue to build when even now we find it hard to pay interest?

But then the savings bank will answer: We cannot leave our money idle, we cannot store it. Free-Money forces us to lend it. We do not insist on 5, 4, or 3%, we are willing to negotiate. If we let you have the money at 2, 1 or 0%, you can reduce your rents accordingly, whereupon those who were satisfied with one room will rent two, and those who had five will want ten. You will then be able to build more houses. There is real need of houses, it is only a matter of price. So take the money at 2% if 3% is now more than you can pay. Build away, reduce your rents; you cannot suffer any loss, for we shall provide you with correspondingly cheaper loan-money. There is no fear that either you or we shall ever be short of money, for the more we reduce the rate of interest and you reduce the rents, the larger will be the sums that the savers will put by and pass on to us. Nor is there any fear that this great quantity of money will force up prices, for every penny of it has previously been withdrawn from circulation; the volume of money has remained unchanged. Those who saved the money produced and sold more goods than they consumed, so there is a surplus of goods corresponding to the amount of money which we supply to you.

Take the money, therefore, without anxiety. If the interest yielded by your houses falls, we shall follow suit with our money interest, even if interest should be thereby depressed to zero. For even with interest at 0% we are compelled to lend the money.

But it is not only we who are under compulsion; you are in the same plight. For if you attempt to keep up the rent of the houses already in existence by ceasing to add to their number, and so reject our offer, we shall point out that there are other builders who possess no houses and are not bound by such considerations. We

shall give them the money for building, and the new houses will be built, whether you like it or not.

It is the same with industrial undertakings. If money is available at 0% no employer can extract interest from his enterprise, either in the form of a reduction of wages or in the form of an increase of prices. For such is the law of competition.*

N. The Theorist on Economic Crises

Free-Money has injured me quite as much as my colleague, the writer on the theory of interest; it has reduced my whole collection of theories to waste paper.

It seemed so plausible that a period of growth should be succeeded by a period of decay. It is so in nature, and it must be so in economic life, since man and everything he creates is part of nature. The ant-hill and the economic system of the bees are products of nature, so the economic system of men and nations must be the same. Man grows and passes away; why, then, should not economic life, after a period of growth, end in dissolution? Ruin overtook the Roman Empire, therefore ruin must overtake the economic life of all other nations periodically every few years in the shape of a great crisis. Just as summer is succeeded by winter, so a boom must be succeeded by a slump.

Was not that a theory worthy of a poet's pen? How simple it was, with its aid, to explain the intricate problem of unemployment! I had also ready to hand a soothing theory guaranteed not to disturb middle-class complacency. A lullaby, not a theory, was what was asked for, and in this respect the current explanation of economic crises was most suitable. In consequence of "speculative purchases" prices had risen and there was "feverish activity" in every field. Overtime and night-shifts were required to meet the increasing demand; wages soared. Of course this "hot-house growth" was an unhealthy manifestation which was bound to end in a sudden collapse. And the collapse occurred. Naturally demand fell short of such an enormous output of every kind; and demand failing, prices fell. Everything without exception, the products of

* The reader will find the theory of interest more fully presented in the last part of this book.

industry, agriculture, mining, forestry, declined in price and the whole structure of speculation came down with a crash. The avaricious workers had absorbed with their overtime the whole "Wage-Fund" and the "Wage-Fund" being exhausted, there was not enough employment to go round. There were mountains of bread and clothes, yet the workers went cold and hungry.

Or take the classical Malthusian theory—how convincing it sounded and how widely it was accepted! It sternly rebuked the dissolute masses: "The only use you could make of prosperity was to get married; you increased your miserable race beyond the limit of decency. At every turn our eyes are offended by swaddling clothes and cradles. The streets swarm; the schools are like rabbit-warrens. So now your own children have grown up to crowd you out of your occupations and to reduce your wages. Lowered wages mean falling prices; falling prices make business a losing venture and nip the spirit of enterprise in the bud. Propagation is the forbidden fruit, it is tainted with original sin, but is doubly sinful for the proletariat. Abstain then, leave breeding to the heathen, send your daughters to the nunneries, and we shall no longer have more workers than are necessary to deal with the available work. With wages rising, prices will also rise and stimulate enterprise. Moderation in all things, my friends, in the production of goods as well as in the production of children, otherwise we shall have overproduction both of goods and of consumers."

Or again there was a new theory, one of the best in my collection. Owing to accumulation of riches in comparatively few hands and disproportion between the purchasing power and the producing power of the masses, consumption falls short of production. Hence a glut of unsaleable goods in the market, a fall of prices, unemployment, depression and crisis. The rich are unable to consume up to their incomes, and the workers have no incomes to consume. Were incomes properly distributed, consumption would keep pace with production and crises would be averted.

How plausible this sounded! And it is the sound that matters, for this theory was meant for the proletariat, and it is useless to appeal to the intelligence of a crowd of people nurtured on adulterated food and beer, crushed with cares and incapable of standing a hearty shock.

For I had a theory for every grade of society and every taste. If, occasionally, I met with serious objections I had recourse to my reserve theory which connected crises with the currency system. Usually the word currency sufficed to silence the objectors. " That is enough," they cried, " We know what Disraeli says, that next to love, the currency problem is the chief cause of lunacy, and we have no wish to risk a dangerous overburdening of our brains for the sake of a theory of economic crises ! " Yet this was comparatively the simplest and soundest of all my theories. Commodities, I argued, are almost exclusively disposed of by way of commerce, that is, their exchange is effected through the agency of merchants. The merchant, however, does not buy commodities unless he expects to sell them at a profit. The prospective selling price must be higher than the purchase price, the price asked by the worker or manufacturer. So if prices tend to fall, the merchant is unable to estimate what price he ought to pay, while the manufacturer cannot, short of incurring an actual loss, reduce his offer below his own cost price. With the consumer the case is different. He buys, paying the price asked. He rejoices when prices fall and is chagrined when they rise, his only limit for the price paid being his own income. The merchant, on the contrary, must realise a price that will exceed a certain figure, namely the purchase price. He does not know whether he can obtain such a price. His selling price is uncertain, whereas the purchase price, once the bargain is struck, is a definite quantity.

When prices in general are stable or, still more, if they are rising, all is well; the sale will, in all probability, cover and exceed the outlay, so the merchant is safe in signing his order. But when prices fall, and keep on falling, 1, 2, 5, 10, 20, or 30%, as has often happened, the merchant has no foothold, so the only reasonable thing he can do, if he is a prudent man, is to wait. For the merchant cannot calculate his selling price on the basis of his outlay; he has to make an estimate of the price he hopes to realise. And if, within the period between purchase and re-sale, prices fall, he is forced to reduce his selling price and incur a loss. So the safest thing to do in times of falling prices is to postpone orders. For the motive power in the commercial turnover of goods is not the need of commodities but the hope of profit.

This postponement of the merchant's usual orders meant a stoppage of the manufacturer's sales. But the manufacturer is, as a rule, dependent on the regular disposal of his ouput, since he cannot store bulky or perishable goods. The stoppage of sales compelled him, therefore, to dismiss his workers.

Employment and wages failing, the workers, in their turn, were unable to buy, which brought prices still lower. Thus the initial decline of prices had created a vicious circle.

The moral of all this was that we must prevent prices from falling, that we must manufacture more money. In this way there will always be sufficient money to buy commodities, and merchants, being aware of the large cash reserves of banks and private individuals, will never be alarmed by the prospect of a shortage of money and slump of prices.

That meant a bimetallic standard or paper-money.

At bottom none of these theories satisfied me. The first, which looks upon the crisis as a kind of natural phenomenon, is too crude to need refutation. The second theory, which makes speculation responsible for the crisis, does not examine whether the surplus of money in the hands of private individuals and professional speculators, without which speculation would be impossible, was not the real cause of speculation and consequently of the crisis itself. What is the use of setting up a central Bank of Issue and granting it a monopoly of the issue of banknotes for the purpose of " adapting the monetary circulation to the needs of the market," if notwithstanding the bank and its monopoly " speculation " can decide to force up prices whenever it pleases ? And because this theory overlooks that aspect of the question, it falls into the error of expressing pious wishes instead of indicating the necessary reforms. " Do, pray, abstain from speculation," is all it has to recommend as a protection against crises.

This theory does not, moreover, consider the real motive of the " feverish activity, overtime and night-shifts." For without this speeding up of labour, all speculation would be doomed to failure. What is the use of a manufacturer proposing overtime to his workers if they reply that their present working hours suffice to meet their wants ? So if, at present, the workers are willing to join in " the feverish activity," it is simply because they have urgent wants which

they expect to satisfy with the wages earned by overtime. But if demand is as urgent as supply, how can a crisis occur ? The speculation that induces money reserves to seek a market accounts only for the general rise of prices, but does not explain the failure of consumption to keep pace with production, or the fact that sales usually fall off with dramatic suddenness.

This failure to explain why consumption and production do not, as a rule, balance, is the weak point common to all these theories; but this question clamours most loudly for an answer in the case of the third theory, the theory of over-population. Overproduction resulting from over-population is here advanced as the cause of the crisis, which amounts to saying that the excessively large loaves are due to the excessive hunger ! The absurdity of such an argument becomes apparent if we keep in mind that commodities are produced for exchange, and that the hungry workers are both willing and able to give other products in exchange for those they need. If it were merely a question of over-production of some special kind of goods, say coffins, no explanation would be necessary; but there is too much of everything, for example both of agricultural and industrial products.

The theory that attributes the crisis to deficient consumption resulting from an unequal distribution of income is quite as unsatisfactory, for it fails to explain why sales go sky-high at one moment and then drop to earth the next; why a constant and latent cause (in our case the unequal distribution of incomes) should have an acute and sudden effect (boom and slump). Had faulty distribution of incomes been the cause, the crisis must necessarily have manifested itself as an uninterrupted, latent condition, a constant, unchanging surplus of labour; that is, the direct opposite of what was observed to happen.

But even the assumption that the incomes of the wealthy classes generally exceeded their personal wants was erroneous, as was proved by the debts of the land-owners great and small, and their clamour for protection by the State. Wants have no limit; they are infinite. The wants of the weavers in the Eulengebirge were, surely, not satisfied with the potato parings that fell to their lot, and the ducal coronets which the American millionaires bought for their daughters were not sufficient to appease their craving for dignity.

They reached out for an imperial crown, piling million on million, toiling day and night, reducing perhaps their own, and certainly their workers' standard of living to obtain it. And had they obtained it, a priest would have appeared and told them that earthly crowns are perishable that they must still toil and save, to bequeath billions to the Church and assure themselves a throne in the Kingdom of Heaven. Between potato parings and the church treasury there extends an ocean of wants large enough to engulf the maximum that men can produce. Neither is any man so rich that he is not bent on growing still richer; on the contrary, the greed of gain develops with successful gaining. The mighty fortunes of our epoch could never have been formed if after reaching the first million their possessors had said: " We have acquired enough, let others now have an innings." No rich man ever allowed his surplus to lie idle as long as there was a prospect of a profitable investment. Interest, no doubt, was the essential condition for the lending of the capitalist's money, but in this respect the richest in the land acted no differently from the meanest saver of pence. No interest—no money, was the watchword all down the line. All of them made the lending of money dependent on interest, and even had we levelled all incomes it would not have altered the fact that the money-saver, the man who produced and sold more goods than he consumed, would not have put his money surplus into circulation until he was assured his interest. Thus the activity of the savers necessarily brought about an excess of commodities, stagnation of the markets and unemployment as soon as commerce and industry ceased to yield interest. The cause of the crisis lay in the fact that capitalists refused to invest their money unless they obtained interest, and that when the supply of houses, industrial plant and other instruments of production passed a certain limit, the rate of interest fell below the minimum yield necessary to pay the interest on the money invested in them. (Competition among house-owners in respect of tenants has the same effect as competition among the owners of industrial enterprises in respect of workers: it reduces the rate of interest. In the one case it diminishes rent, in the other it raises wages). As soon as this point was reached employers were no longer able to pay the interest demanded of them, and capitalists had no motive to lend their money gratis.

They preferred to wait for the crisis which could be counted on to "ease" the situation and to restore the normal rate of interest. They found it advantageous to renounce all interest for a short time in order to make sure of a higher rate, rather than immobilise their money in a long-term investment at a low rate. A certain minimum rate could always be extorted merely by waiting.

So the disproportion between the income and the consumption of the wealthy classes and between the purchasing power and the producing power of the workers cannot be regarded as the true cause of industrial crises.

The last theory, which connected the crisis with the currency, came nearest the truth.

That as long as prices tended downwards and goods could be sold only at a loss, no one thought of creating new enterprises or enlarging existing ones; that no merchant bought goods which he would have been forced to sell below the purchasing price; and that in these circumstances a crisis became inevitable, is obviously true. But this theory answered the question with new questions. It was right in stating that a crisis is equivalent to a general fall of prices, but it failed to provide a satisfactory answer to the question how the fall of prices occurred. It did indeed trace the fall of prices to a shortage of money, and hence proposed as remedy an increased manufacture of money (bimetallic standard, paper-money); but the proof was lacking that with or after the increase of the stock of money the supply of this money would adapt itself to the supply of goods, and more especially that money would be supplied to the market when the rate of interest began to decline. And that, after all, is the issue.

This point was not altogether overlooked; it was proposed to dissociate the currency from any kind of metal by abolition of the right of free coinage of silver and gold, so that the manufacture of money (not the supply of money) might be regulated; more money being manufactured when prices fell and less when prices rose. It was supposed that by this simple method the supply of money could always be adapted to the demand.

This proposal was never put into practice, which was lucky, for it would have proved a failure. Its authors mistook a stock of money for a supply of money, believing as they did, that because a large stock of potatoes means an equally large supply of potatoes, it must be the same in the case of money. But that is by no means true. The supply of potatoes or any other commodity corresponds exactly to the stock, since storage involves heavy expense. Had the traditional form of money resembled the general run of commodities, had it not been possible to hoard metal money without expense, the supply of money might reasonably have been estimated by the stock. But that, as we know, was not the case. The supply of money depended absolutely on the will of its owners. And not one penny was put in circulation commercially or financially as long as no interest could be obtained. No interest—no money; even though the stock of money were increased a hundred-fold.

Now suppose that such a reform in the system of issuing paper-money had achieved its purpose, namely the prevention of trade depression and acute crises. The country adopting the reform would then have speedily become so well stocked with houses, industrial plant and so forth that such things would have failed to yield the customary interest. Whereupon the old round would have started again; the money savers and capitalists would have opposed a reduction of the rate of interest, and employers of labour would have been unable to pay the old rate. Thousands of years of experience have taught the owners of money that their money will fetch 3—4 or 5%, according to the investment, and that to obtain this rate of interest they need only wait. So they would have waited.

But while the owners of money were waiting, demand for goods would have failed, and prices fallen. This in its turn would have alarmed commerce which, uncertain of the future, would have held back orders.

And thus we should have been once more face to face with slump, unemployment and crisis.

It was indeed proposed that in such cases the State should enable the employers of labour to carry on by supplying them with money at a lower rate or, if need be, free of interest. In this manner the State would have replaced the money withdrawn from circulation by the savers and capitalists. But what would this have led to? On the one hand, the capitalists' useless masses of paper-money, on

the other hand, in the national treasuries, corresponding masses of bonds and bills of exchange—long-term bills, moreover, and bonds such as employers require, not subject to withdrawal at short notice.

The masses of paper-money hoarded by private individuals (all private fortunes would finally have assumed that form) might any day have been set in motion by some trivial event, and this money, being only redeemable in the market in exchange for goods, would suddenly have become an enormous mass of demand which the State would have been powerless to control by means of the bonds and long-term bills. In this manner prices would have soared sky-high.

It was fortunate that we escaped this peril by introducing Free-Money, for the disastrous failure of the partial reform would of course have been used as an argument against the theory of paper-money, and we should have relapsed, perhaps for centuries, into the barbarism of metal money.

Free-Money makes the supply of money independent of all conditions; the exact quantity of money that has been put in circulation by the State is supplied to the market. What had hitherto been taken for granted, namely, that the supply of money, like the supply of potatoes, must always be equal to the stock, has for the first time become a reality. The supply of money no longer runs an independent course; it has ceased to be an arbitrary act; it is not influenced by human volition. The quantity theory now holds good, even in the simple form sometimes termed "crude."

Under such circumstances, how can a crisis occur? Even if the rate of interest decreases, even if it falls below zero, money will nevertheless be supplied; and should prices tend to fall, the State will raise them again, simply by increasing the stock of money. The supply of money will then in all conceivable circumstances balance the supply of goods.

Now if it is Free-Money which prevents crises, we have to look for the cause of the crisis at the point where the traditional form of money differed from Free-Money. And the difference lies in the motives controlling the supply of money now and formerly.

Interest was formerly the essential and obvious condition of the

circulation of money; whereas money is now supplied without interest.

Formerly, when a general fall of prices set in (already an indication that the supply of money was insufficient) money was withdrawn from the market (because with prices falling nobody buys or can buy goods commercially, without incurring the risk of losing on the outlay), and in this way a general fall of prices frequently developed into a frantic universal scramble for ready money, which inevitably precipitated prices to the lowest depths. Whereas at present money is supplied in all conceivable circumstances.

And with a general rise of prices, the index of an excessive supply of money, all private reserves of money sought a market, because everyone was anxious to participate in the generally expected further rise with as large as possible a stock of goods or of industrial shares. This made the expected rise inevitable, forcing up prices to the very highest level attainable by the supply of all private reserves of money. Whereas at present prices cannot rise at all, because there are no longer any private reserves of money.

The amount of money supplied to the market, the answer to the question whether a capitalist should or should not buy commodities, used to be determined by guess-work, public opinion, rumour, very often merely by the frown or smile of a sovereign. If the digestion of the "leading" stock jobbers was sound, and fine weather coincided with some favourable piece of intelligence, the "tone" of the market changed, and the sellers of yesterday became the buyers of to-day. The supply of money was a straw blown by the wind. And consider the haphazard fashion in which money was produced! If the diggers found gold—good; if they did not—we had to manage without. All through the Middle Ages down to the discovery of America commerce had to be conducted with the stock of gold and silver inherited from the Romans, because all the mines then known were exhausted. Trade and traffic were restricted to a minimum, because the scarcity of the medium of exchange did not permit the division of labour. Since that time much gold and silver has been discovered; but how irregular were these discoveries! There were "finds" in the fullest sense of the term.

Added to these fluctuations in the discovery of gold were the fluctuations in the currency policies of the various countries which

sometimes introduced the gold standard by means of loans of foreign gold (Italy, Russia, Japan), thus withdrawing immense quantities of gold from the markets, and sometimes reverted to a paper standard and so thrust their gold back on the foreign markets.

The supply of money was thus the shuttlecock of the most varied and conflicting circumstances. That was the difference between the former monetary system and Free-Money; that was the cause of economic crises.

O. The Theorist on Wages

Now that railways, steam navigation and the right of free movement have placed vast tracts of fertile soil in America, Asia, Africa and Australia at the disposal of the workers; now that the growth of personal credit (the result of higher moral and educational standards and enlightened commercial legislation) has made capital accessible to the workers, the " iron law " of wages no longer holds good.

The labourer is no longer delivered over to the tender mercy of the landowner; he can break away from his serfdom and shake the dust of his native land from his feet. The land monopoly has been broken. Millions of workers have sought freedom by emigration, and the landowners are compelled to treat those who remain as free men. For the possibility of emigration has set them all free.

I was forced to abandon the iron law of wages; the facts disproved me. According to Moleschott and Liebig the quantities of nitrates and carbohydrates necessary for a man working twelve hours a day are contained in a pint of fish-oil and a few pounds of broad beans. These substances cost twopence, to which may be added one halfpenny for potato parings, clothing, housing and religious needs, total twopence halfpenny. This, then, was the iron limit above which wages could not rise. But wages were higher, so the law of the iron wage was a fallacy.

I tried to evade this difficulty by saying that the iron wage is the minimum required for the worker to maintain and propagate life on the level of his cultural standard (minimum cultural standard of existence). But this did not carry me far. For how had the worker fed on broad beans attained to a cultural standard at all?

How could the rascal escape from his well-guarded compound? And apart from that, what is culture, what is a minimum standard of existence? Fish-oil and broad beans are a Christmas feast for the weavers in the Eulengebirge. Such elastic terminology is useless for science. According to many people (nature faddists, cynics and so forth) a life without material needs is a sign of the highest culture, so the iron wage based on the standard of living would have to diminish with the increase of culture, which weans men from material needs. Are the weavers in the Eulengebirge less civilised than the obese persons who begin their day with a beer breakfast and look more like pigs than human beings? Nor is it true that wages rise with the number of tankards or the quality of the tobacco.

The Minister of Commerce in the Prussian Diet stated that the average wages of the miners in the Ruhr district were as follows:

	Marks		Marks
1900:	4·80	1903:	3·88
1901:	4·07	1904:	3·91
1902:	3·82		

Thus wages fell 25% within a space of three years! Did the cultural standard of the miners also fall by 25% in this short period*? Or did they lapse into the barbarism of total abstinence? Abstainers manage with less money, which would be an excellent reason for further reducing the minimum wage to the level of the cultural standard of total abstinence. But here the question arises why our rulers are not more enthusiastic supporters of the abstinence movement. Were it possible by means of total abstinence to reduce wages in favour of unearned income, the manufacture and sale of alcoholic drinks would be quickly prohibited! But our rulers know better: Beware of your abstainers! Without intoxicants a people cannot be " governed."

In a word, the minimum cultural standard of existence is humbug, and so is the iron law of wages. Wage movements take no heed of the standard of civilisation. The increase of wages which the workers imagine they have " wrested " for good from their employer is lost

* We assume that the real wage fluctuated with the money wage. Otherwise the so-called " German Currency Standard " is simply a fraud.

again to-morrow if business takes an unfavourable turn. If, on the other hand, the market improves, the increase of wages will automatically fall to their lot without a struggle and even without their demanding it, just as the higher price of wheat falls to the farmer without a struggle, when the prospects of the American harvest are reported to be poor.

For what are wages? Wages are the prices paid by the buyer (employer, merchant, manufacturer) for the goods supplied him by the producer (worker). This price, like the price of any commodity, is determined by the prospective selling price. The selling price, less rent on land and capital-interest, is the so-called wage. It follows that the law of wages is contained in the law of rent on land and the law of capital interest. The commodity, less rent and interest, is the wage. There is, then, no special law of wages. The word wage is a superfluous term in economic science, for wage and price are one. If I know what determines the price of commodities, I also know what the worker obtains for his produce.*

Free-Money has opened my eyes to all that; it has liberated me from my illusions about so-called "value," the very existence of Free-Money being a tangible refutation of all theories of value and of the very belief in value. And the belief in value being disposed of, the conception of "labour" went overboard, being wholly superfluous for an examination of economic laws. What is labour? Labour cannot be measured by the movements of the arms, or by the degree of fatigue, but solely by the produce of labour. James Watt in his grave does more work to-day than all the horses alive. It is not the labour, but the result of labour, the product, that matters. The product is the thing bought and paid for, as is clearly demonstrated in the case of piece-work. And at bottom all labour is piece-work.

But to buy commodities is to exchange commodities. Economic life therefore resolves itself into a series of exchange-transactions, and all terms such as "wages," "value," "labour" are simply superfluous circumlocutions for the two basic conceptions "commodities" and "exchange."

* In the last part of this book I shall show that the owners of the means of production (manufacturers) are simply pawnbrokers—a fact now, indeed, generally admitted.

6. INTERNATIONAL TRADE

1. The Mechanism of the Exchanges

It is often asserted that foreign trade cannot be carried on with paper-money, that gold is needed for this purpose. But in reality foreign payments can be made with paper-money, and the mechanism of such payments is simple enough, though it is still not generally understood.

Do you see the lemons in the greengrocer's over there? They come from Malaga. And the packing cases yonder being trundled from the Hamburg Parasol Company to the station are going to Seville. The question is, can these two transactions be carried on with German and Spanish paper-money, without the intervention of gold?

If the same dealer imported the lemons from Spain and exported the parasols to Spain, everybody would see that paper-money offers no obstacles to the execution of the two transactions. The dealer would sell the parasols in Seville for Spanish paper-money, and with this paper-money buy lemons in Malaga. He would then send the lemons to Hamburg, sell them for German paper-money, and with it pay for the parasols. He would repeat this transaction indefinitely without being troubled by the circumstance that Spanish paper-money is not legal tender in Germany. The Spanish paper-money received for the parasols is spent in Spain for lemons, and the German paper-money paid him for the lemons is used for the purchase of parasols. His capital changes continually: to-day it consists of lemons, to-morrow of German marks, next of parasols and then again of Spanish pesetas. The dealer is concerned only about the profit, about the surplus yielded by the continual transmutation of his capital. And his guarantee that there will be a surplus depends, not on the currency, but on the laws of competition.

Import and export are seldom, however, united in one hand, as a rule we have here also division of labour which requires a special action to effect the payment. But here again paper-money is no obstacle. The transaction is as follows: The importers and the exporters living in the same town meet on the Exchange where the exporter of parasols sells to the importer of lemons, for German

money, his claim on Seville in the form of a bill of exchange. At what price (rate of exchange) that is done we shall see presently. This bill of exchange, which is made out in Spanish pesetas, is sent by the importing firm to Malaga in payment for the lemons received. The wording of the bill is as follows:

Thirty days after sight pay to the order of Hamburg Lemon Importers Ltd. the sum of One Thousand Pesetas, value received (our invoice of August 1st. for parasols).

To Mr. Manuel Sanchez, Seville. — The Hamburg Parasol Company.

The sale of the bill by the parasol exporting firm to Lemon Importers Ltd. is already certified by its being made out to the order of Lemon Importers Ltd. The further sale of the bill to the lemon exporting firm at Malaga will be inscribed on the back of the bill, as follows: For us to the order of Messrs. Cervantes y Saavedra, Malaga, Hamburg Lemon Importers Ltd.

From Malaga the bill is sent through a banking-house to Seville and is there met by the dealer in parasols, Mr. Manuel Sanchez.

The transaction in parasols and lemons is then effected in all four directions, the parasol exporting firm in Hamburg and the lemon exporting firm in Seville having received their money, the lemon importing firm in Hamburg and the parasol importing firm in Seville having paid their bills. Yet the only money that entered into the transaction was German and Spanish paper-money. Although there were four parties concerned in the export and import, goods were paid for with goods, German goods with Spanish goods.

The transaction is similar if instead of being negotiated between the importing and the exporting firms direct, the bills are handed in at banks, which is the general rule if the importer and the exporter live in different towns. It would lead us too far to describe the whole course of such a transaction, but there is no essential difference.

One important question has yet however to be answered: What determines the rate of exchange of the peseta bill of exchange in Hamburg, what is the price, in German money, paid by the lemon importing firm in Hamburg for the bill of exchange made out in a foreign currency?

This question, also, we shall answer. The price of bills of exchange, like the price of lemons and potatoes, is determined exclusively by demand and supply. Many potatoes, many bills, mean low prices for potatoes and bills. Now many Spanish peseta bills are offered for sale in Germany when many goods are exported to Spain, and there is little demand for peseta bills in Hamburg when few goods are imported from Spain. Hence the price (rate of exchange) of peseta bills falls, to rise again when the tide turns.

As long as imports and exports remain unchanged, the supply of and the demand for bills will balance. But a change immediately occurs if, for any reason, prices in Spain or Germany (to come back to our example) depart from their general level. If commodity prices rise in Spain, say because comparatively more paper-money has been issued there than in Germany, these higher prices will attract more foreign commodities and at the same time make the export of Spanish goods less profitable or altogether unprofitable. Imports into Spain therefore increase, while exports decrease. The supply of peseta bills in Hamburg is then large, whereas the demand for them becomes small. But demand and supply determine the market price of the peseta, so the peseta, instead of standing at 80 pfennigs will cost 75 or 70 pfennigs or even less. The parasol exporters do not realise in German currency as much as formerly for their bill of exchange on Seville, so that what they gained by the high prices obtained for their parasols in Seville, the expected additional profit, they lose again by the falling rate of exchange when selling their bill of exchange in Hamburg. The lemon importers on the contrary, will recover in the lower price of the peseta bill of exchange in Hamburg the excess paid for the lemons in Malaga.

This play of forces continues until the high prices of Spanish goods caused by the inflation of the Spanish currency, have been compensated by the fall in the rate of exchange of the peseta, when the stimulus to increased imports and decreased exports disappears. The equilibrium between import and export is thus automatically restored, which means that a special fund for the payment of balances between two countries with paper currencies is superfluous, because such balances cannot occur.

We need hardly add that if prices rise in Germany and remain stable in Spain, things will be reversed: the export of parasols

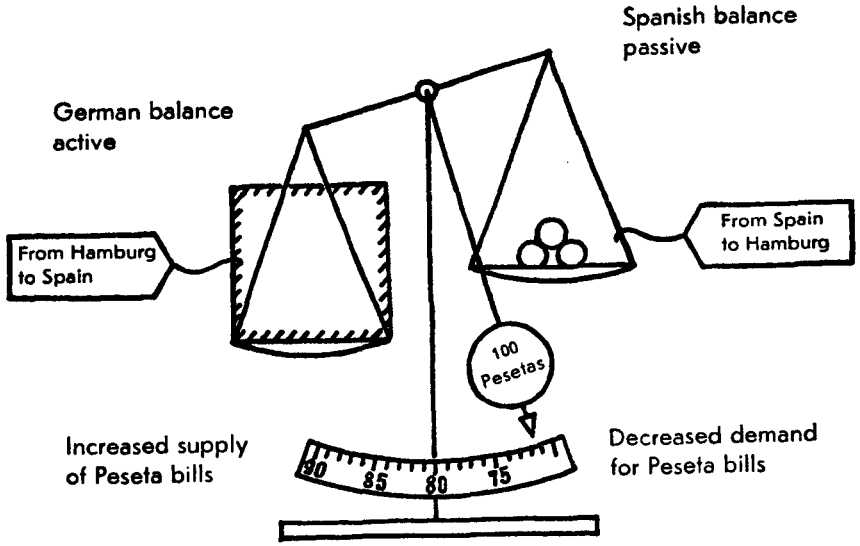

Figure 6A. German-Spanish Balance of Trade.
Surplus of German Export.

The supply of peseta bills increases, and the demand for peseta bills decreases, so the German rate of exchange falls (in the figure to 72 marks for 100 pesetas).

The German exporter then loses, and the Spanish exporter gains, on the rate of exchange.

becomes unprofitable, while import into Germany from the countries with which Germany normally competes in the world market becomes increasingly profitable. Fewer foreign bills of exchange are then offered for sale in Germany, whereas there is a brisk demand for them; this means higher prices (in German paper-money) for foreign bills, and the rising price (rate of exchange) of these bills automatically restores the equilibrium between imports and exports.

Fluctuations in the rate of exchange at one moment favour and at the next injure exporters or importers and so add greatly to the risk of commerce. Between two countries with different paper currencies there is evidently no limit to such fluctuations in the rate of exchange, for they depend simply on the internal currency policies of the two countries. But does not the fact that it is possible

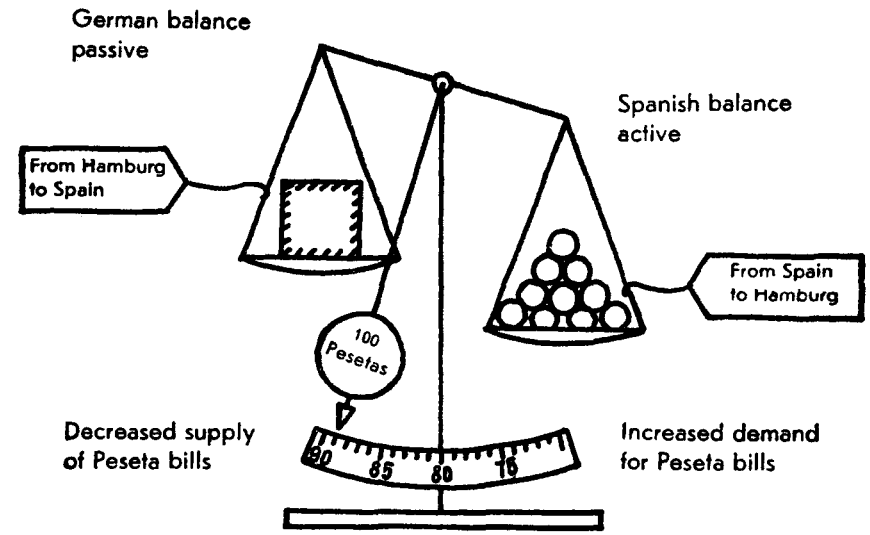

Figure 6B. German-Spanish Balance of Trade.
Deficit of German Export.

The supply of peseta bills decreases, and the demand for peseta bills increases, so the German rate of exchange rises, (in the figure to 89 marks for 100 pesetas).

The German exporter then gains, and the Spanish exporter loses, on the rate of exchange.

Both figures (6A and 6B) show how a surplus balance of trade depresses the rate for foreign bills of exchange and restricts export. Fluctuations in the rate of exchange tend, therefore, to counteract their causes.

through currency policy to cause arbitrary and unlimited fluctuations of the rates of exchange prove that it is also possible through suitable currency policy to stabilise, to fix arbitrarily, the rates of exchange? If the equilibrium of exports and imports can be disturbed by currency policy, it must be possible, by currency policy to forestall the fluctuations of imports and exports, even those due to natural causes, such as failure or unusual abundance of the harvest. All that is necessary is the adoption of a uniform currency policy by the countries concerned. If we in Germany and the Spaniards in Spain by suitable regulation of the currency maintain a stable level of prices, the ratio of exports and imports will

also remain stable. The ratio of demand and supply of bills of exchange and, finally, the rate of exchange will then also be stabilised. For a solution of this problem we only need an agreement between the two countries and action based thereon.

What we here demand of the currency administration was realised, to a certain extent automatically, by the international gold standard. When the currency (gold and banknotes) in any country became over-abundant and prices consequently rose above their natural level in the world market, what happened was exactly what now happens in a country with a paper standard when the circulation is increased. The bills drawn on the country with rising prices had a falling rate of exchange. If, for example, the country was Spain, the rate of exchange of the peseta in Hamburg fell from 80 to 79 or 78 pfennigs and continued to fall until the seller of such gold peseta bills (in our example the exporter of parasols) wrote to his correspondent in Seville: "I find it difficult to sell the bills drawn on you for the parasols supplied. I am offered only 78 pfennigs instead of 80 for a peseta. I therefore cancel the bill and request you to remit the amount of my invoice in gold coins of your country." Our parasol exporter has now of course to pay the expense of this shipment of gold, so he will not have recourse to this expedient unless the loss on the rate of exchange exceeds the expense of shipping the gold. The Spanish gold coins are delivered to the Reichsbank, which converts them for the parasol exporter free of charge, into German currency, or else exchanges them for banknotes at the fixed rate of 2790 marks for a kilogram of fine gold.

Now what happens here and in Spain in consequence of this business custom? In Spain the currency is diminished by the amount of the gold shipment from Seville. If the gold is withdrawn from the Spanish central Bank of Issue, this bank is obliged to withdraw from circulation three times the amount in banknotes, in accordance with the law that the notes issued must be covered up to one-third of their value by gold. In Germany, on the contrary, the circulation of money is increased by three times the amount of the shipment of gold from Spain. The effect is that prices in Spain fall, and prices in Germany increase, and this increase continues until equilibrium is restored.

Had the general rise of prices which caused the fluctuation in the rate of exchange occurred in Germany instead of in Spain, the lemon importer in Hamburg would have acted like the parasol exporter. He would have written to his Malaga correspondent that on account of the high rate of the peseta in Hamburg he was sending German gold coins, instead of making the customary remittance by bill of exchange in payment for the lemons he had received.

As gold shipments of this kind were frequent, it was generally believed that reserves of gold were necessary for this purpose, but that was a misconception. For equilibrium would have been restored automatically without these gold shipments, through the obstacles or facilities to import or export resulting from fluctuations in the rate of exchange. The effect of the shipments of gold, and of the gold reserves which rendered them possible, was not due to the shipping of the gold itself, but to the influence of the gold shipments on commodity prices. It was the change of prices and not the gold shipments that restored equilibrium. If the currency administration in countries with rising rates of foreign exchange (for example in Germany when peseta bills fetched a high price in marks) had reduced the circulation of currency by withdrawing banknotes from circulation, the consequent fall of prices would immediately have restored equilibrium of exports and imports, and the rate of exchange would have returned to par. A very simple action, namely an increase of the rate of discount for bills of exchange by the Bank of Issue, would have rendered gold shipments and the gold-reserves destined for them superfluous.

A conscious action must be substituted for a dead mass of gold, since the monetary standard cannot be conceived as a substance, but only as an action, as an administrative measure.*

With the gold standard fluctuations in the rate of exchange could never exceed the cost of shipping gold. At a low level of civilisation, in which no intelligent State control is possible, such automatic compensation of currencies has certain advantages. But at the present day, the retention of the gold standard for this reason is an insult to the national administrations.

* See also: Frankurth und Gesell: Aktive Währungspolitik.

For a machine automatic regulation may be preferable to the human hand, but the currency cannot be compared with a machine. The regulation of the currency under the gold standard is moreover, automatic only in a restricted sense. The shipments of gold are not automatic, for the gold has to be counted, packed, shipped, insured, recoined. The withdrawal of an equal sum of money from circulation as an administrative measure of the Bank of Issue would have the same effect, with less effort and no expense whatever.

We must further keep in mind that with the gold standard fluctuations in the rate of exchange between distant countries, allowing for interest, may amount to 4% or more.*

The automatic mechanism of the gold standard does not prevent fluctuations; it begins to act only when the fluctuations have reached the maximum, at the so-called gold point (the cost of gold shipments mentioned above), or in other words, with the setting in of the import and export of gold. When the fluctuations in the rate of exchange have done all the damage they can, and not till then, does the remedy begin to operate. With a paper standard, on the other hand, if the statistical service of the currency administration is reasonably efficient, the remedial measures make themselves felt simultaneously with the first signs of a disturbance of the equilibrium, and the fluctuations of the exchanges are confined to these signs. With the gold standard it might indeed also be possible to prevent and forestall fluctuations, and the central Banks do assert that they are not mere automata. But if the gold standard has to be assisted by a conscious act, what remains of the automatic functioning claimed by its advocates ?

What has here been said applies to ordinary paper-money. With Free-Money, owing to its compulsory circulation, the measures of the monetary administration are immediately effective, and the claim that no reserves of any kind are necessary to maintain stable rates of exchange becomes doubly true.

* The expense of a shipment of gold from Europe to Australia is fully 2%. It is composed of the interest lost during the voyage, freight, insurance, packing and brokerage. The rate of exchange between Europe and Australia may therefore fluctuate above or below par by 2%, so in this case the margin may exceed 4%. That is what was called a standard !

2. Stabilisation of the International Exchanges: Theory. Some Facts.

1. Silver five-franc pieces circulated freely before the war in the countries of the Latin Currency Union. (France, Italy, Switzerland, Belgium and Greece). These five-franc pieces were free to pass from one to another of these countries; they were legal tender at par with the national currencies, and usually circulated at par with them.

2. Yet these five-franc pieces were " fiduciary " money; they were for some time " covered " only to the extent of 50% by the silver they contained; they could buy double their weight of silver. Hence, of two such coins, one could be regarded as purely " fiduciary " money. Five-franc pieces lost half their value in the melting-pot.

3. Because of their freedom of circulation, these coins had a regulating effect upon the international exchanges, and acted as an automatic arbitrage mechanism, bringing prices to a level in the different countries.

4. The balance of trade and payments was regulated by this automatic arbitrage mechanism.

5. If one country of the Latin Currency Union increased the quantity or the rate of circulation of its currency out of proportion to the other countries, its general level of prices rose above theirs. Hence the imports of this country increased, its exports decreased, and its balance of trade and payments closed with a deficit which had to be made good by the export of five-franc pieces.

6. The export of five-franc pieces lowered prices in this country and raised them in the other countries, especially as five-franc pieces were counted as " cover " for notes and, if removed from a Bank of Issue usually caused the withdrawal of double the quantity of notes from circulation. The effect of exporting five-franc pieces was usually, therefore, doubled. The export of five-franc pieces lasted until equilibrium was established in the balance of trade and payments.

7. If the increased issue of notes continued until the country was completely drained of five-franc pieces, it could no longer make up the deficit by exporting them. The automatic arbitrage mechanism

then ceased working and an agio (premium on foreign money) appeared.

8. If the country wished to eliminate the agio, it withdrew notes from circulation. Prices then fell, imports decreased, exports increased, the deficit in the balance of trade and payments gradually decreased and was replaced by a surplus. The five-franc pieces which had been driven away by the increased issue of notes then began to flow back and conditions were reversed—until a general equilibrium was reached. Prices in the different countries were levelled by the five-franc pieces, as water, after a disturbance, is levelled by a system of communicating pipes.

9. If all the countries of the Latin Currency Union were guided, when issuing notes, by the danger-signals described in paragraphs 7 and 8, the fluctuations of their exchanges remained within the cost of transporting five-franc pieces from one country to another.

10. The countries of the Latin Currency Union therefore stabilised their exchanges by declaring one class of coins an international medium of payment, not by internationalising their whole currencies.

This was not, of course, the original purpose of the Union, whose founders could not have foreseen that silver would become "fiduciary" money.

The regulating effect of the five-franc pieces upon the exchanges can be explained only by the theory of paper-money.

Inferences from these Facts.

1. The play of forces described above is in accordance with the quantity theory of money and is a proof of its correctness.

2. The results would have been the same if five-franc notes had been substituted for the five-franc pieces—which acted as an international medium of payment because of an international agreement, and not because of the silver they contained.

3. International paper-money issued in one denomination under the supervision of the countries concerned, and for this purpose only, would circulate freely like the five-franc pieces and regulate import and export, thus keeping the exchanges in equilibrium.

4. An unusual influx of these international five-franc notes would prove that insufficient national currency was in circulation.

An unusual efflux of the international notes would prove that the national currency was over-abundant.

5. The complete disappearance of the international notes and the resulting agio (premium upon the international notes) would be a warning signal that the country in question should proceed to drain the market of national notes until the agio disappeared and international notes began to flow back.

6. Too large an influx of international notes would mean that insufficient national currency was in circulation—unless all the other countries were expelling international notes by issuing too much national currency. The latter supposition leads to the question of currency standard, which must not be confused with the question of the exchanges.

We shall now give a summary of our proposals for an international union for regulating both the currency standard and the exchanges: The International Valuta Association.

3. Stabilisation of the International Exchanges: Practice. The International Valuta Association. (Iva).

1. Countries desiring to join the International Valuta Association adopt the "Iva" unit of currency standard.

2. This new unit is not static (substance); it is dynamic (action). As the result of a continuous active currency policy it can remain a fixed quantity only as long as that currency policy keeps it so.

3. The currency policy of the Iva countries is based upon stabilisation of the currency.*

4. The statistics of prices required for a policy of stabilisation are recorded on a unified system by all the countries of the Association.

5. An active currency policy with stabilisation as aim depends upon the quantity theory of money, upon the fact that if the general level of prices fluctuates, it can under all circumstances, even in time of war, be brought back to a starting point by an increase or decrease of the monetary circulation.

6. The currency systems of the Iva countries remain national,

* By currency stabilisation is meant the equilibrium between the supply of money and the supply of goods—the fixed general level of prices—resulting from an active currency policy with this aim.

but are based on unified principles, valid in all circumstances and for all stages of development.

7. This unified national currency policy removes the chief cause of disturbances in the balance of trade and of the resulting fluctuations in the exchanges.

8. Small disturbances in the balance of trade caused, for example, by the course of the seasons, are still possible.

9. To eliminate completely the effect of these disturbances upon the exchanges, a special form of international paper-money is issued which is imported and exported without hindrance by all the countries of the Association and is recognised by them as legal tender at par with the national currency.

10. This international paper-money is issued by the Iva Office, say at Berne, to the countries of the Association and under their supervision. The Iva notes are issued free of charge, except for the expense of printing and administration.

11. The quantity of Iva notes is determined solely by their regulating effect upon the exchanges, about 20% of the national issues being required for this purpose.

12. For the amount of the Iva notes issued to each country the Iva office at Berne receives a bill of exchange payable only in case the country, by mismanagement of the national currency resulting in a permanent deficit in its balance of trade, has forced the export of its Iva notes, Iva notes being obtainable only on payment of an agio. From the date of this occurrence the bill of exchange bears interest.

13. The Iva notes are issued in a denomination especially suitable for retail trade. Scarcity of superfluity of the notes is therefore felt immediately.

14. It is in the interest of the countries of the Association to take the measures necessary for keeping the Iva notes at par with the national currency.

15. For this purpose national notes are issued when Iva notes are flowing into the country, and national notes are withdrawn when Iva notes are leaving the country.

16. If this international currency policy, undertaken in the interest of the Iva note, leads to an appreciable and lasting discrepancy with currency stabilisation, an international investigation

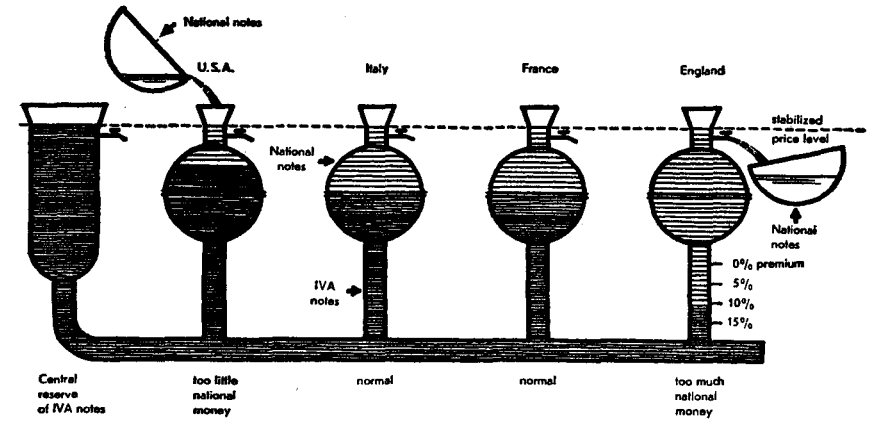

Figure 7.

Stabilisation of the International Exchanges by means of international (Iva) notes.

The upper, lightly shaded part of the reservoirs represents national notes; the darker shading international notes.

Explanation of Figure 7.

Just as water in a system of communicating pipes tends, when disturbed, to return automatically to the same level, so in countries which link their currencies by means of Iva notes, prices will remain at the same level, or tend, if disturbed, to return to that level—provided, of course, that the national currencies are based on the principle of stabilisation.

If one of these countries abandons the principle of stabilisation and pays no heed to the danger signals (export and import of Iva notes), it will become flooded with Iva notes (U.S.A. in the figure), or completely drained of them (England in the figure). But it is detrimental to a country to become flooded with international notes, since it loses the interest on the national paper-money that it might have issued. And it is still more detrimental to a country to become drained of Iva notes, on account of the resulting premium on these notes which disturbs its foreign trade. The normal situation is shown in the reservoirs marked France and Italy. In the reservoir marked U.S.A. the plethora of international notes is being relieved by a strong dose of national notes. In the reservoir marked England, on the contrary, the premium on Iva notes is being removed by withdrawal of national notes. (The open tap in the figure).

The drawing represents a closed system, but the communicating pipe is shown with a coupling (on the right) to facilitate the entry, later, of other countries into the Iva system.

Any form of international currency, not only gold, will stabilise the international exchanges. Countries adopting the gold standard had stabilised exchanges but a fluctuating price level. Countries adopting the Iva system have stabilised exchanges but, as well, a stabilised price level.

is instituted by the Iva Office to discover the cause of the disturbance and to issue to all the countries of the Association the instructions necessary for its elimination.

17. To exclude the influence of the cost of transport (import and export) of Iva notes upon the exchanges, this expense is borne by the Iva Office.

18. The expense of administration is divided among the countries of the Association in proportion to the amount of Iva notes issued to them.

19. Any non-European country observing paragraphs 1 and 9, and adopting the principle of currency stabilisation can join the Association and will then receive the usual amount of Iva notes (20% of the national issue).

20. A country can leave the Association at any time on redemption of the bill of exchange mentioned in paragraph 12.

21. To dissolve the Association, these bills of exchange could be paid to the Iva Office which could then destroy the Iva notes so recalled.

Part 5

THE FREE-MONEY THEORY OF INTEREST

1. A STORY OF ROBINSON CRUSOE.

To introduce the theory of interest here expounded, and to facilitate the removal of old prejudices, which are nowhere stronger than in connection with the subject of interest, I shall begin with a story of Robinson Crusoe.*

Robinson Crusoe, as is well known, built his house, from motives of health, on the south side of the mountain, whereas his crops grew on the damp but fruitful northern slopes. He was therefore obliged to carry his harvests over the mountain. To eliminate this labour he decided to construct a canal around the mountain. The time required for this enterprise which, to avoid silting, would have to be continued without interruption, he estimated at three years. He had therefore to lay in provisions for three years.

He slaughtered some pigs and cured their flesh with salt; he filled a deep trench with wheat, covering it carefully with earth. He tanned a dozen buckskins for suits and nailed them up in a chest, enclosing also the stink-glands of a skunk as a precaution against moths. In short, he provided amply and, as he thought, wisely, for the coming three years.

As he sat calculating for the last time whether his "capital" was sufficient for the projected undertaking, he was startled by the approach of a stranger, obviously the survivor of a shipwreck.

"Hallo, Crusoe!" shouted the stranger as he approached, "my ship has gone down, but I like your island and intend to settle here. Will you help me with some provisions until I have brought a field into cultivation and harvested my first crops?"

At these words Crusoe's thoughts flew from his provisions to the possibility of interest and the attractions of life as a gentleman of independent means. He hastened to answer "yes."

"That's splendid!" replied the stranger, "but I must say at once that I shall pay no interest. I would prefer to keep myself

* To save space I have not subjected the loan-contract here described to the regulating effect of competition. If the conditions of the loan were determined by competition in the form of several loan-givers (Crusoes) to one loan-taker (the Stranger) the contract would be still more favourable to the loan-taker. It is also assumed that both parties are guided by the principles of Free-Land, for otherwise the outcome would be, not a loan contract, but a fight.

alive by hunting and fishing, for my religion forbids me to pay, or to receive, interest."

Robinson Crusoe: An admirable religion! But from what motive do you expect me to advance you provisions from my stores if you pay me no interest?

Stranger: From pure egoism, my dear fellow, from your self-interest rightly understood. Because you gain, and gain enormously.

R.C. That, stranger, you have yet to prove. I confess that I can see no advantage in lending you my provisions free of interest.

S. I shall prove it in black and white, and if you can follow my proof, you will agree to a loan without interest, and thank me into the bargain. I need, first of all, clothes, for, as you see, I am naked. Have you a supply of clothes?

R.C. That chest is packed with buckskin suits.

S. My dear Crusoe! I had more respect for your intelligence. Just fancy nailing up clothes for three years in a chest — buckskins, the favourite diet of moths! And buckskins must be kept aired and rubbed with grease, otherwise they become hard and brittle.

R.C. That is true, but I have no choice in the matter. They would be no safer in my clothes-cupboard—less safe, indeed, for it is infested by rats and mice as well as by moths.

S. The rats and mice will get them in any case. Look how they have already started to gnaw their way in!

R.C. Confound the brutes! I am helpless against them.

S. What! A human being helpless against mice! I will show you how to protect yourself against rats and mice and moths, against thieves and brittleness, dust and mildew. Lend me these clothes for one, two or three years and I agree to make you new clothes as soon as you require them. You will receive as many suits as you have lent me, and the new suits will be far superior to those you would have taken from this chest. Nor will you regret the absence of the particular perfume you have employed! Do you agree?

R.C. Yes, stranger, I agree to lend you the chest of clothes; I see that in this case, the loan, even without interest, is to my advantage.*

S. Now show me your wheat; I need some for bread and seed.

R.C. It is buried in this mound!

S. Wheat buried for three years! What about mildew and beetles?

R.C. I have thought of them and considered every other possibility but this is the best I can do.

S. Just bend down a moment. Observe this beetle crawling on the surface of the mound. Note the garbage and the spreading patch of mildew. It is high time to take out the wheat and air it.

R.C. This capital will be my ruin! If only I could find some method of protecting myself against the thousand destructive forces of nature!

S. Let me tell you, Crusoe, how we manage at home. We build a dry and airy shed and shake out the wheat on the boarded floor. Every three weeks the whole mass is turned over with wooden shovels. We also keep a number of cats; we set mouse-traps and insure against fire. In this way we keep the annual depreciation down to 10%.

R.C. But the labour and expense!

S. Exactly! You shrink from the labour and expense. In that case you have another course. Lend me your wheat and I shall replace it, pound for pound, sack for sack, with fresh wheat from my harvest. You thus save the labour of building a shed and turning over the wheat; you need feed no cats, you avoid the loss of weight, and instead of mouldy rubbish you will have fresh, nutritious bread.

R.C. With all my heart I accept your proposal.

S. That is, you will lend me your wheat free of interest?

R.C. Certainly: without interest and with my best thanks.

S. But I can use only part of the wheat, I do not need it all.

R.C. Suppose I give you the whole store with the understanding that for every ten sacks lent you give me back nine sacks?

* This obvious fact has been overlooked by every writer upon interest up to the present day, even by Proudhon.

S. I must decline your offer, for it would mean interest—not indeed positive, but negative interest. The receiver, not the giver of the loan, would be a capitalist, and my religion does not permit usury; even negative interest is forbidden. I propose therefore the following agreement. Entrust me with the supervision of your wheat, the construction of the shed, and whatever else is necessary. In return you can pay me, annually, from every ten sacks two sacks as wages.

R.C. It makes no difference to me whether your service comes under the heading of usury or labour. The agreement is, then, that I give you ten sacks and that you give me back eight sacks?

S. But I need other articles, a plough, a cart and tools. Do you consent to lend them, also, without interest? I promise to return everything in perfect order, a new spade for a new spade, a new, unrusted, chain for a new chain, and so forth.

R.C. Of course I consent. All I have at present from my stores is work. Lately the river overflowed and flooded the shed, covering everything with mud. Then a storm blew off the roof and everything was damaged by rain. Now we have drought, and the wind is blowing in sand and dust. Rust, decay, breakage, drought, light, darkness, dry-rot, ants, keep up a never-ending attack. We can congratulate ourselves here upon having, at least, no thieves and incendiaries. I am delighted that, by means of a loan, I can now store my belongings without expense, labour, loss or vexation, until I need them later.

S. That is, you now see the advantage you gain by lending me your provisions free of interest? *

* Knut Wicksell, Wert, Kapital und Rente, p. 83, "Boehm-Bawerk asserts that present goods are at least equal to future goods, since, if need be, they can simply be 'stored for use in the future.' This is certainly a great exaggeration. Boehm-Bawerk does, indeed, mention that perishable goods, such as ice, fruit, etc., are an exception. But this exception applies more or less to all foodstuffs. Perhaps, indeed, all goods except precious stones and precious metals, if kept for future consumption, require special labour and attention—to which must be added the danger of loss through accidents such as fire."

(Banks now provide, for private use, special store-rooms for gold, precious stones and securities. For the use of these rooms, however, rent must be paid. The "present goods" are here inferior to the "future goods," by at least the amount of this rent).

R.C. Of course I do. But the question now occurs to me, why do similar stores of provisions at home bring their possessors interest?

S. The explanation lies in money which is there the medium of such transactions.

R.C. What? The cause of interest lies in money? That is impossible, for listen to what Marx says of money and interest: "The change of value of money that converts it into capital cannot be derived from the money itself, since money in its function of medium of payment does no more than pay the price of the commodity it purchases, and, as hard cash it is value petrified, never varying. Just as little can the change occur in the second act of circulation, the re-sale of the commodity. [For in both cases] equivalents are exchanged, and the commodity is paid for at its full value. We are therefore forced to the conclusion that the change originates in the use-value of the commodity, after its purchase and before its sale." (Capital I. VI).

S. How long have you been on this island?

R.C. Thirty years.

S. I thought so! You still appeal to the theory of value. My dear sir, that theory is dead and buried. At the present day it has no defenders.

R.C. What? Marx's theory of interest dead and buried. Even if no one else defends it—I defend it!

S. Well then, defend it not only with words but also in practice—if you wish, in relation to me! I hereby break off the bargain we have just made. From their nature and destination your goods are the purest form of what is usually called capital. But I challenge you to take up the position of a capitalist towards me. I need your stuff. No worker ever appeared before a capitalist as naked as I stand before you. Never has there been so clear an illustration of the relation between the owner of capital and the individual in need of capital. And now make the attempt to exact interest! Shall we begin our bargaining again from the beginning?

R.C. I surrender! Rats, moths and rust have broken my power as a capitalist. But tell me, what is your explanation of interest?

S. The explanation is simple enough. If there were a monetary system on this island and I, as a shipwrecked traveller, needed a loan, I should have to apply to a money-lender for money to buy the things which you have just lent me without interest. But a money-lender has not to worry about rats, moths, rust and roof-repairing, so I could not have taken up the position towards him that I have taken up towards you. The loss inseparable from the ownership of goods (there is the dog running off with one of your—or rather my—buckskins!) is borne, not by money-lenders, but by those who have to store the goods. The money-lender is free from such cares and is unmoved by the ingenious arguments that found the joints in your armour. You did not nail up your chest of buckskins when I refused to pay interest; the nature of your capital made you willing to continue the negotiations. Not so the money-capitalist; he would bang the door of his strong-room before my face if I announced that I would pay no interest. Yet I do not need the money itself, I need it only to buy buckskins. The buckskins you lend me without interest; but on the money to buy buckskins I must pay interest!

R.C. Then the cause of interest is to be sought in money? And Marx was mistaken?

S. Of course Marx was mistaken, and as he was mistaken about money, the nervous system of economic life, he was mistaken about everything. He and his disciples excluded money from the scope of their enquiry; he was fascinated by the shining metal disks, otherwise he could never have written: "Gold and silver are not by nature money, but money is by nature gold and silver, witness the coincidence of their natural properties and its functions."

R.C. Practice certainly doesn't confirm Marx's theory—that has been clearly shown by our negotiations. For Marx money is simply a medium of exchange, but money does more, it seems, than "merely pay the price of the commodities it purchases," as Marx asserted. When the borrower refuses to pay interest, the banker can close the door of his safe without experiencing any of the cares which beset the owner of goods —that is the root of the matter.

S. Rats, moths and rust are powerful logicians! A single hour of economic practice has taught you more than years of study of the text books.

2. BASIC INTEREST

Orthodox and Marxian economists are agreed that interest is an inseparable concomitant of private ownership of the means of production. "Those who reject communism, community of property, and desire liberty in economic life, must accept an economic system founded upon interest, that is, capitalism." So say all who have hitherto investigated the problem of interest. The investigators differ, indeed, widely in their moral judgment of interest, but that is a matter of secondary importance which does not help to clarify the problem. Whether interest, as the socialists aver, is the result of forcible appropriation, of an immoral abuse of economic power, or whether, on the contrary, the orthodox economists are right in ascribing it to the economic virtues of order, industry and thrift, is of little importance to the dispossessed workers, to the proletariat which has to bear the burden of interest.

In conformity with the above doctrine Marx and his followers are compelled to seek the origin of interest (surplus-value) in the factory or, at least, in the separation of the workers from the means of production; and there, in fact, they claim to have found it.

Nevertheless I shall now proceed to prove that interest has no connection with private ownership of the means of production; that interest is found where no mass of dispossessed workers (proletariat) exists or has existed; that interest has never been determined by thrift, order, industry and efficiency. I shall reject the above theories of capital and show that interest springs from the ancient form of money handed down to us from the times of the Babylonians, Hebrews, Greeks and Romans, and that is it protected by the physical, or legally acquired. advantages of that form of money.

Curiously enough Marx also began his inquiry into the nature of interest by investigating money.* But unfortunately at the critical

* The reason why, in the following pages, I frequently probe weak places in Marx's theory of interest, is simply that, of all the socialistic theories, his is the only one which has any influence upon the political struggles of

moment, in spite of Proudhon's warning, he made a false assumption. Like the orthodox apologists of interest he assumed that money and commodities are equivalents.*

Through this fatal mistake Marx went astray at the outset.

Marx finds nothing to criticise in money. Money, as adopted by us from the Babylonians, Israelites, Greeks and Romans, is a complete and perfect medium of exchange which has from the beginning brilliantly fulfilled its function. The fact that during the Middle Ages an economic system founded on money, and consequently the division of labour, could not develop, because of scarcity of the money-material; that the prohibition of interest by the Popes paralysed an economic system founded on money—although this prohibition was simply the forcible establishment of the equivalence of money and commodities assumed by Marx—is not sufficient to shake Marx's belief that money is a perfect medium of exchange, that it is a true, universal " equivalent." Needless to say, therefore, that Marx recognises no special form of power founded on money; he is forced to deny that mankind is exploited by a golden " International," composed of speculators and usurers. A speculative scheme on the Stock-Exchange is to him mere cheating, not robbery with violence. The speculator operates by fraud, not force; he is only a thief. Robbery requires the use of force, and force is the attribute, not of the money-magnates, but of the owners of the means of production. Money and commodities are, in short, at all times and in all places equivalents, and it makes no difference whether the money is held by a purchaser buying for his own consumption, or by a purchaser buying as a merchant. In Marx's own words " Gold and silver are not by nature money, but

our time. Marx's theory is for the proletariat a dangerous apple of discord, witness the two sections of the German Socialistic party, both holding Marx's theory of interest as a dogma, and at present settling their differences with rifles and hand-grenades.

* Two commodities are " equivalents " if neither is in a privileged position in relation to the other, and if they can be exchanged without profit. If, for example, usurers, savers or misers, when considering whether it is more advantageous to hoard commodities or money, are always forced to the conclusion that it is immaterial for their purpose which they choose, then a dollar's worth of gold and a dollar's worth of commodities are equivalents. But if savers and speculators conclude that a dollar's worth of money is for their purpose preferable to a dollar's worth of commodities, then the equivalence assumed by Marx does not exist.

money is by nature gold and silver, witness the coincidence of their natural properties and its functions."*

Dies Kind, kein Engel ist so rein,
Lasst's eurer Huld empfohlen sein !

This Marxian hymn in praise of gold and of the gold standard has completely diverted the attention of the proletariat from money, and has placed speculators, usurers and rogues under the direct protection of the dispossessed classes. Hence the present tragic farce wherein, throughout the world, " the watchmen at the gates of Mammon's temple have been replaced by the Red Guard."

It is a remarkable fact that in the social-democratic press and propaganda literature the words " interest " and " money " never occur !

It is still more remarkable that although Marx's own formula for the normal process of exchange M-W-M' (Money, Wares, Surplus-Money; buying in order to sell at a profit) is a contradiction of the equivalence he had affirmed between wares and money, he seeks the explanation of the contradiction elsewhere, namely in the long chain of intermediate stages.

This " long chain " is simply the process of production; the chain begins and ends in the factory. The employer is not, says Marx, one of many exploiters, he is **the** exploiter. Exploitation takes place nowhere but in the pay-office.†

To explain the contradiction felt by Marx between the formula M–W–M' and the alleged equivalence of money and commodities I shall not require this chain of intermediate stages; I shall dangle my hook before the mouth of interest and draw it directly, visible to all men, from its element. I shall reveal that the force expressed

* Marx, Kapital I.II

† " True commercial capital is the purest expression of the circuit M-W-M' (Money, Wares, Surplus-Money; buying in order to sell at a profit). And the movement takes place wholly within the sphere of circulation. But since it is impossible to deduce from the circulation alone the conversion of money into capital (the formation of surplus value), it would appear that merchants' capital is an impossibility as long as equivalents are exchanged, that it can therefore originate only through the two-fold advantage gained over both the selling and the buying producers by the merchant who pushes himself parasitically in between them. If the transformation of merchants' money is to be explained otherwise than by the producers being simply cheated, a long chain of intermediate stages is necessary." Capial I.V.

by the formula M-W-M' lies directly in the act of exchange; I shall show that money in the form we have blindly adopted from antiquity is not an "equivalent"; that it can circulate only according to the formula M–W–M'; that every nation which, to stimulate the division of labour and to facilitate the exchange of commodities, adopted this form of money, was inevitably forced into capitalism, into an economic system based on interest.

The force that makes money circulate according to the formula M–W–M', that is, the capitalistic quality of money, originates as follows:

1. Money is the essential condition of a highly developed division of labour.

2. The physical properties of the traditional form of money (metal money and paper-money) allow it to be withdrawn indefinitely from the market without material cost of storage; whereas producers (workers), to whom money is essential for effecting exchanges, are compelled, by the constantly increasing losses connected with the storage of wares,* to create a demand for money.

3. The merchant can therefore force the possessors of wares to make him a special payment in return for the fact that he refrains from arbitrarily postponing, delaying, or, if necessary, preventing the exchange of wares by holding back his money.

* Wares decay, at different rates indeed, but with some unimportant exceptions (precious stones, pearls, precious metals), they all decay. Care bestowed upon the wares can retard, but cannot prevent their decay. Rust, rot, breakage, damp, drought, heat, frost, worms, flies, ants, moths, beetles, fire, etc. join in the work of destroying wares. If a merchant closes his store for a year, he must write off 10–20% of his capital because of this decay, in addition to the outlay for rent and taxes. But if the possessor of money closes his safe for a year he suffers no loss. Gold treasure found among the ruins of Troy has not lost demonstrably in weight and is worth 2790 marks per kilogram at the counters of the Reichsbank to-day.

It is often stated in this connection that as wine becomes more valuable during storage, it is therefore, apparently, an exception to the general rule that the storage of wares always means a loss. Wine, however, (like a few other products) is not a manufactured product but a natural product which, at the beginning of the storage period, has not reached the stage of development at which it becomes fit for human consumption. The juice that flows from the wine-press into the casks is must which only gradually becomes wine. It is this process of converting wine into a finished product that increases its value, not the storage itself. If this were not so, the increase in value would continue, which is not the case. The storage itself causes, as always, expense: rent for storage space, casks, bottles, years of care, breakage, etc.

4. Interest on commercial capital is composed of this regular payment which, distributed over the total annual transactions, amounts, as we know from thousands of years of experience, to about 4 or 5% per annum of the capital sum involved.

This special payment, sharply to be distinguished from commercial profit,* cannot of course be exacted by the ordinary purchaser impelled by his bodily wants (also called consumer), for here the possessor of money can as little postpone or renounce the purchase of wares as the producer can postpone or renounce their sale. Only the merchant approaching the market as owner of money can exact this tribute—the man who buys as a merchant, that is, with the purpose of selling again; the man who is free to buy, but can, if he thinks fit, abstain from buying, without incurring the pangs of hunger; the man, in short, who buys a cargo of wheat although one sack of wheat may suffice for his personal consumption. The merchant is of course in need of commercial profit, and he can obtain it only through the purchase of commodities. The impulse stimulating the merchant's purchases of commodities is not, however, physical necessity, but the wish to obtain the commodities as cheap as possible and, with this object, to use as a weapon every turn of the market and every weakness discoverable in the seller. If the seller's position is weakened by waiting, the merchant lets him wait. In general the merchant does all he can to increase the embarrassment of the seller (producer, worker) and the facts set forth under the above three headings are a constant source of embarrassment. The consumer, under the pressure of personal wants, cannot wait, although his money would allow him to do so; neither can the producer wait, although his personal wants would in many cases allow him to do so. But the possessor of money coming forward as a merchant, the holder of the universal, essential medium of exchange, can wait and thereby embarrass both producer and consumer by holding back the medium of exchange. And in commerce one man's embarrassment is another man's capital. If producers and consumers were not separated by time and place they

* Commercial profit is what remains over for the merchant after he has paid the interest on his capital. The profit of a merchant dealing exclusively in merchandise bought on credit is pure commercial profit, for he must hand over the interest spoken of above (No. 3) to his capitalist. He is thus a sort of bank-messenger for his capitalist.

would be able to manage, as still happens in barter, without the merchant's money; but as things stand at present, the intervention of the merchant, and consequently interest, is, for by far the largest part of production, a necessity.

Because of the latter fact we can leave the consumer's money quite out of our calculation. All commodities and all money pass through the hands of the merchant. For this reason we need here consider only the laws of circulation of the merchant's money.*

Having established these facts I shall next answer the question: What circumstances limit the amount of interest that money can exact for performing the function of exchange? The reason for considering this question at once is that the answer best reveals the true nature of interest on money.

If money is capital because it can arbitrarily interrupt the exchange of commodities, it will be asked why interest does not rise by the full amount of the advantage we derive from the use of money in our economic system; an advantage measurable by the difference in efficiency between division of labour and primitive production. Similarly the question is justified, why landowners, when fixing their rents, do not in every case apply the law of the "iron wage"; or why the shareholders in the Suez Canal, when fixing the canal dues, are not exclusively influenced by competition of the sea-route around the Cape of Good Hope.

But the tribute which money claims for its use follows other laws than those governing the use of land; it more resembles the tribute exacted by the robber barons of the Middle Ages. Merchants who were forced to use a road which passed the baron's castle were thoroughly plundered; dues of 30, 40, 50% were exacted. But if the merchant had a choice of other roads, the baron became more modest, he guarded his road, improved its surface, built bridges, protected it from other robbers and, if need were, even reduced the toll, to prevent the merchant from avoiding the road altogether.

It is the same with money; money also knows that competitors will appear if it sets its tribute too high.

* Readers with any difficulty in recognising that merchant's money and consumer's money obey different laws of circulation should reflect a moment upon the mechanism by which savers' money is drawn back into circulation as a medium of exchange.

(I shall prove later than in money-lending there can never be competition. The competitors just mentioned make their appearance, not when money is being lent, but when it is being exchanged for wares).

It is clear that the division of labour could be much further developed than at present. The gold standard is a world standard, so when considering it we must consider the economic system of the whole world. But three-quarters of the inhabitants of the world still cling to primitive production. Why? Partly because the exchange of commodities by money is too heavily burdened by interest. This expense must cause producers to forego the production of commodities for exchange (wares) in certain branches of their activity, or even in general, and to continue the primitive system of production. The choice between production of goods for home use and wares for market depends on an arithmetical calculation, and the interest with which the production of wares is burdened may often enough lead to preference being given to primitive production. Many German small farmers for example, may prefer to feed pigs with their potatoes and to kill the pigs for their own use, if meat is slightly increased in price because of the interest exacted by the agent of exchange. The small farmer will then produce fewer wares (potatoes for the market) and more goods for his own consumption. For this reason he will require less money.

This part of production must not, even in Germany, be underestimated, and here money must moderate its demand for interest, to avoid forcing modern production back into primitive production. In Asia and Africa the bulk of the population acts like the German small farmer described above.

If, now, the possessors of money demand too large a tribute from the wares, that part of present-day production which oscillates about the marginal utility of the division of labour is abandoned, and primitive production takes its place.

The demand of too large a tribute by money reduces the production of wares (commodities for exchange) and correspondingly increases primitive production. This means that the supply of wares decreases. Prices therefore rise.

For the present we simply register this fact.

Barter has the same effect upon the demand for money, for the medium of exchange, if money claims too high a rate of interest. Money indeed owes its existence to the difficulties of barter. It was invented to overcome these difficulties. But if money claims too high a tribute for performing the work of exchange, barter can often successfully resume competition with it, especially when, as in many parts of Asia and Africa, producers and consumers are not separated by time and place. The more the exchange of products is burdened with money-interest, the easier it is for barter to challenge the supremacy of money. Products sold by barter reach the consumer without the payment of interest. For which of the parties should pay interest ? * It is clear, therefore, that if money is to replace barter, it cannot demand any tribute it chooses, especially as the owners of products can overcome the main obstacle to barter, their separation in time and place, by arranging to meet on certain days in certain places (market-days).†

In this way they demolish the foundation upon which money is built, namely the demand for the medium of exchange embodied in the wares. Commodities reaching the consumer by barter are lost to money, just as a gipsy in his cart is a customer lost to the railway.

For our present purpose we need not calculate what fraction of the world's production oscillates between barter-sales and money-sales, what quantity of commodities is excluded by too high a demand for interest from using the medium of exchange. It is sufficient if we have demonstrated that barter is a competitor of

* If potatoes are bartered for fish, and each party burdens his product with 10% interest, the two demands for interest cancel each other. But this by no means excludes the possibility of interest derived from loans, as distinct from interest derived from barter.

† Barter is not quite so difficult as is usually represented. The difficulty that those who hold the products I need, do not always need my products, or do not need them in just the quantity corresponding to the quantity (often indivisible) of products they have to offer, has been much exaggerated. In reality this difficulty is resolved by the appearance of the merchant. For a merchant who buys everything can sell everything. He can always pay me with what I need. If I bring him an elephant-tusk I can obtain any of the commodities in his shop, and in just the quantity I require. At the present day commerce is carried on in this manner among the German colonists of Southern Brazil. These German colonists seldom receive money for their produce.

money whose chances of success increase in proportion to the amount of interest demanded by money. If interest rises, many commodities are diverted from money-sales to barter-sales, and the demand for money decreases. Prices therefore rise, exactly as with an increase of primitive production. This fact also, we are content for the present simply to record.

Bills of exchange have the same effect as primitive production and barter, if the claims of money are raised too high. Commodities sold by means of bills of exchange also escape the interest-tribute to money—and a high rate of interest stimulates a more extended use of bills of exchange.

Bills of exchange are not, indeed, as safe and convenient as money; in many cases they cannot replace money at all, as is apparent from the fact that they are frequently exchanged (discounted) at the bank for money, although they suffer thereby a deduction. This would not happen if the bill of exchange could always replace ready money. Nevertheless, bills of exchange, particularly in wholesale commerce and as a reserve, have often only small disadvantages in comparison with money. A slight rise in the rate of interest can in such cases cause a preference for bills of exchange.

Money-interest affects the use of bills of exchange as an increase of railway fares affects the use of canals. The higher the rate of interest, the greater is the stimulus to avoid this tribute to money by the use, in commerce, of bills of exchange. For the same reason everything that artificially increases the natural disadvantages of bills of exchange (in comparison with money) must strengthen the position of money and increase the tribute it demands. If the rate of interest is lowered to 5% by the competition of bills of exchange, it will rise to 5¼—5½—6%, if the use of bills of exchange is made difficult by alarming news or by a stamp-duty. The greater the insecurity of bills of exchange, the higher is the rate of interest demanded by money; the more heavily bills of exchange are burdened by stamp-duties, the higher are the claims of its competitor, that is, the higher the rate of interest. If we burden bills of exchange with a tax of 1%, the deduction made by the bank when changing a bill of exchange (discount) will rise 1%. If bills of exchange are taxed

5%, the deduction will rise from 5% to 10%. (Unless the other competitors of money, barter and primitive production, intervene).

(For this reason the State is illogical in proposing to increase its revenue by a stamp-duty upon bills of exchange when at the same time it complains of being able to place its loans only at a high rate of interest. The State, as a debtor, should, on the contrary, abolish the tax upon bills of exchange in order to reduce the interest upon its loans. What the State lost in stamp-duties it would gain a hundred-fold by the decrease of interest upon its loans. At the same time the burden of interest upon the whole nation would be lightened).

If, now, instead of a tax, we imagine a premium (of any kind) upon bills of exchange, it is clear that, with such a premium, the circulation of bills of exchange could also be stimulated or retarded; stimulated by raising the premium, retarded by lowering it.

But is not the saving of interest afforded to commerce by the circulation of bills of exchange such a premium, rising and falling with the interest upon money ? The circulation of bills of exchange increases, therefore, in direct proportion to the increase of interest upon money.

But wherever bills of exchange circulate, corresponding quantities of commodities circulate in the opposite direction. These commodities also, are lost to the demand for money. Money has been deprived of them by bills of exchange. There is thus a corresponding decrease in the demand for ready-money. Prices therefore rise in proportion to the increase in the circulation of bills of exchange, and the circulation of bills of exchange increases with the increase of interest upon money. This fact, also, we at present simply record.

Money is not, therefore, an absolute monarch of the market. It has competitors, and for that reason it cannot set the rate of interest as high as it chooses.

The objection may here be made that money is often, particularly in modern cities, indispensable, that in most cases it could even claim the larger share of commodities as payment for performing the function of exchange without causing a return to barter or primitive production. Even if the deduction (discount) were 50%, money could not, in many cases, be replaced by bills of exchange.

And bills of exchange pass only from one trusted hand to another.

They are not sufficiently divisible for the needs of retail commerce. They are subject to certain laws and bound to certain times and places. All this greatly restricts their radius of action.

These facts could be used in support of the objection that in all such cases payment for the function of exchange would be much higher than at present, if money really exacts interest because it can arbitrarily postpone the exchange of wares.

But this objection leaves out of account a fact which we learned in the third part of this book, namely that a general rise of prices forces money into the market. A general rise of prices of commodities means for the possessor of money a loss exactly proportionate to the rise of prices, and the only way of avoiding this loss is to offer the money in exchange for commodities. A general rise of prices means, for our traditional form of money, a compulsory circulation similar in many of its effects to the compulsory circulation of Free-Money. During a rise of prices everyone endeavours, by purchasing commodities, to avoid the loss which threatens his money—by passing on the loss to others.

We can therefore say that to raise the tribute claimed by money above a certain level automatically liberates the forces which again reduce the tribute.

The reverse is true when money-interest falls below this limit. Owing to the lessened cost of commerce, the division of labour is introduced where primitive production was hitherto profitable, and money-sales take the place of barter. At the same time bills of exchange lose their attraction (with money at 0% they would disappear). These circumstances, namely an increase in the production of wares (at the cost of primitive production) and a simultaneous increase in the offer of wares for ready money (at the cost of the circulation of bills of exchange) would depress prices and impede the exchange of wares. And the resulting embarrassment of producers would again bring money into use with increased interest.

The forces liberated by money-interest (through its effect upon the interest-free competitors of money, and consequently upon prices) have thus an automatic regulating effect upon interest itself, so that the upper limit of money-interest is also its lower limit. (The fact that the rate of interest on bills of exchange [discount] is

subject to great variations, is not, as we shall show later, a proof to the contrary).

Interest upon money must therefore always fall back to the point at which it stimulates or restricts primitive production, barter, or the circulation of bills of exchange.

There is even at the present day a general opinion that the rise or fall of interest is determined by competition among those who lend money.

This opinion is wrong. There is no such thing as competition between money-lenders; competition is here an impossibility. If the money offered for loan by capitalists is drawn from the existing circulation, the capitalists, by lending this money, merely fill the holes they have dug by withdrawing it. Ten, a hundred or a thousand money-lenders mean ten, a hundred or a thousand holes dug by these money-lenders in the path that money has to pursue. The greater the amount of loan-money offered, the larger are these holes.* Thus, other things being equal, a demand for loan-money must always arise exactly equal to the amount of money that the capitalists have to lend. Under these circumstances we can no longer speak of competition capable of influencing the rate of interest. If this were competition, the fact that changes of residence take place at Martinmas should influence rents. But rents are not influenced, since the increase in the number of those seeking houses is balanced by the increase in the number of vacant houses. These changes of residence in themselves have no influence whatever upon rents, and it is the same with the competition of money-lenders. Money is here merely taking part in a general Martinmas flitting.

But if the money offered for loan is new money, say from Alaska, this new money will drive up prices, and the increased prices will force all who are obliged to borrow money for an enterprise to increase the amount of the loan demanded, by the amount of the rise of prices. Instead of 10,000 dollars, a builder

* In the celebrated crisis which swept over the United States in 1907, it was Morgan who "hastened to the rescue" of the Government with a loan of 300 million dollars. Where did these dollars come from? They were urgently needed dollars. Morgan had previously withdrawn them from circulation and thereby brought his country into trouble. When the slump in stocks had taken place and the differential gains been pocketed, the rogue generously, out of pure patriotism, offered them to the Government.

will need 11—12—15,000 dollars to build the same house, so the increased supply of loans due to the new money will automatically cause a corresponding increase in the demand for loans. In this way the influence of the new money upon the rate of interest is soon cancelled. The fact that an increase of the quantity of money in circulation (due to discovery of gold or issue of paper-money) not only does not cause a fall but actually causes a rise in the rate of interest will be explained later.

Competition between money-lenders which could affect the rate of interest does not, therefore, exist; such competition is an impossibility.

The only competition which can restrict the power of money is competition in the three forms already enumerated; primitive production, barter and bills of exchange. An increase in the tribute claimed by interest automatically causes an increase of primitive production, an increase of barter and an increased circulation of bills of exchange. The result is a general rise in the price of commodities which makes the possessors of money more accommodating. (For the better understanding of this sentence we refer the reader to a later chapter "Components of Gross Interest").

Only one straight line can be drawn between two points; the straight line is the shortest, and the shortest — translated into economic terms — is the cheapest.

The shortest and therefore the cheapest road between producer and consumer is money. (With primitive production, goods do, indeed, make a still shorter journey, namely from hand to mouth. But this form of production is less fruitful than the production of wares which results from the division of labour).

The other roads (barter, bills of exchange) which commodities can use to reach the consumer are longer and more expensive. If it were otherwise, if ready money had no advantages, as a medium of exchange, over bills of exchange, why would anyone give $105 in bills of exchange for $100 in money?

But the shortest and cheapest road can be closed by the possessor of money, and he never leaves it open unless he is paid for the advantages of the straight road, money, over the devious roads. If he demands more than this difference, commodities choose the longer road; if he demands less, money is overburdened,

that is, commodities which would othewise have been sold by means of bills of exchange and so forth, now claim ready-money. The demand for money increases, prices fall, and when prices are falling, the whole circulation of money is arrested.

Money claims interest for each time it is used, somewhat as a cab claims a fare. Interest is counted among the general expenses of commerce and collected with these—it is immaterial whether as a deduction from the price paid the producer or as an addition to the price demanded from the consumer. As a rule the merchant can estimate by experience the price which he can obtain from the consumer. From this price he deducts the costs of commerce, wages for his own work (net profit of commerce), and interest. Interest is calculated by the average time, known to the merchant by experience, which elapses between the purchase and the sale of his merchandise. What remains is for the producer. If, for example, the retail price of a box of cigars in Berlin is ten marks, the cigar-manufacturer in Munich of course knows that he cannot claim the full ten marks for himself. He must reduce the price to the cigar-merchant in Berlin sufficiently to enable the latter to pay for carriage, shop-rent and his own services, from the difference between the factory price and the retail price. And something more must remain, since the cigar-merchant is obliged to "put money into his business." This money usually comes directly or indirectly from the banks or savings-banks which of course give it only for interest. The cigar-merchant must obtain this interest from the above mentioned difference in price. If that is not possible with present prices, he waits; and while he waits, the manufacturer and consumer must also wait. Not a single cigar can pass from the factory to the lips of the smoker without paying a tribute to money. Either the manufacturer must moderate the price asked for, or the consumer must increase the price offered. The capitalist regards the outcome with indifference, for in either case he receives his tribute.

Interest is therefore simply added to the other costs of commerce. These are, in general, the reward for work done. The carter feeds his horse, greases the axles, sweats and curses; it is only just that he should be paid. The merchant keeps his shop, pays his rent, broods and calculates; he, also, should receive something. But the banker, the savings-bank, the money-lender—what is their service?

A king stands beside the barrier; he obstructs the stream of commerce across the frontier and says "The tithe is mine!" A money-lender stands beside his safe; he obstructs the exchange of commodities which requires its contents, and says "Interest is mine!" King and money-lender render no service, they exact a tribute simply by obstruction. Interest is thus, like import-duties, a tribute, with the difference that the king uses import-duties to pay State-expenses, whereas the capitalist keeps the money-interest for himself. Money-interest is our payment for the activity of the capitalist —and this activity consists of putting obstacles in the way of commerce.

Of the three competitors of money that set the limits to money-interest, which is the most important? In commercially developed countries and in ordinary times, the bill of exchange, in less developed countries, the other two competitors. Suppose, for example, Germany were a self-contained economic State with its own paper-money standard. Without bills of exchange money would then be able to exact a very high tribute before primitive production and barter could intervene with sufficient force to cause the rise of prices necessary for the liberation of money.* One is even justified in assuming that without bills of exchange, (including, of course, credit sales, deferred payments and so forth), money would, under such conditions, raise the interest-tribute until it very nearly equalled the advantage derived from the division of labour—as is strikingly proved by the abandonment of work in times of crisis. Primitive production and barter are only quite exceptionally, and to a small extent, of use to the unemployed. An unemployed worker can mend his trousers, shave himself and cook his own meals. He can bake his own bread, perhaps teach his own children and, instead of going to the theatre he can write a comedy for his family—if hunger leaves him so disposed.

But if bills of exchange are with us the most important regulator of interest, primitive production and barter are the chief regulators of interest in undeveloped countries such as Asia and Africa, where bills of exchange are little used. That primitive production and barter must be effective regulators in such countries is plain from

* For the better understanding of this statement I again refer to the chapter at the end of this book on "The Components of Gross Interest."

the fact that in earlier times, when the division of labour had been adopted only by a fraction of the population, for example under the Romans, or in England under Queen Elizabeth, the rate of interest was about what it is at the present day. (The facts are set out at the end of this book).

The constancy of the rate of pure money-interest is most remarkable and justifies the assumption that the three totally different regulators of interest, adapted to such totally different stages of culture, are interdependent and supplementary. For example, a highly developed division of labour, not capable of great further extension, makes barter and primitive production impossible, but produces the degree of culture, the social, legal and commercial organisation, under which the circulation of bills of exchange expands and prospers. The 36 billion marks of bills of exchange which circulated in Germany in 1907 are a better measure of the development of German commerce than the network of railways and other external signs of progress.

On the other hand where the stage of culture excludes the substitution of bills of exchange for money, primitive production and barter are the faithful guardians that prevent money from raising its claim for interest above a certain level.

Let us summarise what has been said in this section:

Money-interest is the product of an independent capital, namely money, and is comparable with the tolls exacted in the Middle Ages by robber barons, and until lately by the State, for the use of the roads. Interest on money is not influenced by interest on so-called real capital (houses, factories) though the converse, as we shall see later, is true. The competition of money-lenders has no influence upon money-interest. Money-interest is limited only by the competition of the other forms of exchange, namely barter and bills of exchange, and of primitive production.

When money is lent, the ownership of the money is changed, but nothing is changed in the money itself; just as nothing is changed if the toll-gate is closed and the toll collected, not by the toll-keeper himself, but by his wife. The substitution of bills of exchange and barter, on the contrary, is not an ineffective personal change of this kind, for it means effective competition to money through the provision of other roads for the exchange of commodities.

Through the rise of prices caused by bills of exchange, primitive production and barter, the circulation of money is subjected to an economic compulsion which prohibits the abuse, beyond certain limits, of the power of money, even in relation to commodities which cannot be exchanged by way of barter or bills of exchange. It is here the same as with wage-earners whose wages are determined by the proceeds of labour of emigrants even although they themselves do not all threaten to emigrate. (See Part I, Distribution).

Money-interest is exacted from the wares, that is, directly from the circulation of wares and money. (We have already noted that Marx denied this possibility). Interest upon money is quite independent of the existence of a proletariat deprived of the means of production; it would be no whit less if all the workers were provided with their own instruments of production. Interest on money would in that case be levied by the merchant (possessor of money) from the workers when they were handing him over their produce. It would be levied because the merchant, by withholding his money, could prohibit the exchange of the wares produced by the workers —without direct loss to himself, and with direct, inevitable loss to them, since all wares, with a few unimportant exceptions, lose daily in quantity and quality and, in addition, cause considerable expense for storage and caretaking.

Interest upon money we shall call from now on " basic interest."*

3. TRANSFER OF BASIC INTEREST TO THE WARES

If a commodity is to be burdened with basic interest it must of course be capable of bearing this burden; that is, it must meet with market conditions permitting the payment of its cost price, plus basic interest, out of its selling price. The market conditions must allow the circulation of money in accordance with the formula Money—Wares—Surplus Money.

This is obvious. For if it were not so, money would refuse to act as the intermediary of exchange, and the consequent embarrassment of producers would cause them to increase the difference between the cost price and the selling price of wares until the selling

* The use of the term basic interest for money-interest, in contrast to the interest on " real " capital (houses, factories, and so forth) will serve to emphasise the distinction between the two forms of interest.

price, besides the other costs of commerce, could bear the cost of basic interest.

This whole process is automatic. For our traditional form of money, our medium of exchange, being by nature capital, allows no wares to enter commerce without its brand, so wares must necessarily always find the market conditions which permit them to appear as interest-exacting capital—at least to the consumer, since he pays the price which the producer receives, plus interest. To the producer, on the contrary, wares (his produce) must appear the reverse of capital (negative capital) since he receives the price paid by the consumer, less interest. Money has wrested this part of his produce from him. But a thing that must pay interest cannot properly be called capital. If commodities were capital, they would also be capital in barter, and can anyone imagine how interest could be exacted in barter* ? Two forms of true capital, when confronted, neutralise each other. Rented land and money, for example, exchange for one another without interest. Each taken separately is capital, but they cannot meet each other as capital. Money, however, is always capital in relation to wares.

It should be noted that even to the consumer wares have only the appearance of capital; if he examines the matter more carefully he soon finds that wares are simply the quarry of money-capital.

Every producer is also a consumer, and just as in barter each party receives the other party's whole product, so every producer must at present regard the full price paid by the consumer as the return service for his own product. If he does this, wares must seem to him negative capital. Wares then appear in their true character namely as bank-messengers for money-capital. Wares collect basic interest from the consumer, not for the producer but for the possessor of money (medium of exchange), somewhat as a postman collects the price of a cash-on-delivery parcel. The weapon with which money arms its messenger is the power of breaking the connection between producer and consumer by withdrawal of the medium of exchange.

If the mediator of exchange, the capitalist, is deprived of the power of interrupting the exchange of wares for the purpose of

* Marx does indeed deduce capital in some mysterious way from barter !

exacting basic interest—as is achieved by Free-Money—money must give its services free of cost and the wares can be exchanged as in barter, without the payment of interest.

To facilitate the free exchange of commodities, the State at present charges the owners of bullion nothing for the conversion of their metal into coin. If the State substituted for this free coinage an annual payment for coinage of 5%, money would really act free of charge as the instrument of exchange.

4. TRANSFER OF BASIC INTEREST TO SO-CALLED REAL CAPITAL

A commodity is bought with money and sold again to the consumer loaded with interest. When the commodity has been sold, money is again free for a new foray.* This is the true meaning of Marx's formula Money—Wares—Surplus Money.

Basic interest thus exacted by money from the wares is not booty snatched on one occasion only, it is a perpetually flowing fountain and the experience of thousands of years permits us to estimate it on the average at 4% to 5% annually of the money sum involved. The interest that the merchant exacts directly from the wares as they pass through his hands is the true and full basic interest. What the merchant delivers to his capitalist is basic interest less the cost of collection†; just as the tolls which the toll-collector delivers to the State are not the full toll-money.

But if someone with his money-capital buys bricks, lime, wheelbarrows, not in order to sell them again but to build a tenement house, he voluntarily puts an end to the periodic return of the money; he gives up the perpetually-flowing fountain of interest. He has then a house but no money, no source of interest. Obviously he will give up such a valuable possession only on condition that the house brings him in the interest which, experience shows, the

*According to this, the consumer must always spend more money than as producer he receives. The difference, consisting of basic interest, the producer obtains by producing and selling more commodities than he buys. The surplus so delivered by the producers is bought by the money-capitalists for their personal use with the money which they receive as interest. It is the same with the cost of commerce paid by the consumer.

† We shall see later that the cost of collection is not inconsiderable. The chief item is the devastation caused in economic life by commercial crises.

money necessary for its construction can always exact in commerce. If money in the course of a year can exact 5% interest from the wares, the house must be able to exact the same tribute from its tenants, the ship from its freight, the factory from wages;* otherwise money simply remains in the market with the wares, and the house is not built.

Money therefore lays down this obvious condition for the construction of a house, or factory, or ship, that the house must be able to exact from its tenants, or the factory from its workmen, or the ship from its freight, the same interest that money itself can at any time exact from the wares. No interest means no money for houses, factories, ships. And without money how could anyone collect and put together the thousand different articles necessary for the construction of a ship, a factory, a house? Without money it is inconceivable that a house or ship or factory could ever be constructed, so the foundation capital of every capitalistic undertaking consists of a sum of money. For the millions of factories, ships, rented houses, it may be said, "In the beginning was the money."

But if no money is given for the construction of houses unless they can exact the same interest that money itself exacts from the wares, building is suspended and the consequent scarcity of houses raises rent; just as the scarcity of factories reduces wages.

Houses, ships and factories, in short all so-called real capital, must therefore necessarily yield interest equal to the tribute which money can impose as basic interest upon the exchange of wares.

Houses, factories, machinery are capital. They do not, like the wares, collect interest as bank-messengers in order to hand it over to the possessors of money; they collect it for the owner of the house or factory. This power does not, however, lie in the characteristics of such things, but in the fact that money here, precisely as with the wares, prepares the market conditions necessary for the collection of interest. The ratio of houses to tenants, of ships to freights, of workmen to factories is regularly, artificially and

* I use this expression unwillingly, as it is ambiguous. It is better to speak of the price which the employer pays the workmen for their produce, since it is for this, the completed, tangible achievement, not for the activity of the workman that the employer pays.

inevitably so constituted by the present form of money that demand (tenants and workers) is always faced with an insufficient supply.

The traditional form of money (medium of exchange) provided by the State protects all existing houses from the interest-reducing competition of new houses. Money takes jealous care that its creatures shall not degenerate; it is given only for the construction of as many houses as can be built without causing the yield of interest to fall below basic interest. This fact is confirmed by thousands of years of experience.

So-called real capital is therefore anything rather than "real." Money alone is true real capital, basic capital. All other capital objects are completely dependent upon the characteristics of the existing form of money; they are its creatures; they receive the title of nobility, the title of capital, from money. Deprive money of the privilege of forbidding the workers to build new houses, tear down the barrier raised by money between the workers and real capital, and the supply of such things will increase until they lose the characteristics of capital.

The statement sounds monstrous, and one must be very sure of one's reasoning to make it, that the houses, factories, ships, railways, theatres and power-stations, in short, the whole dark and mighty ocean that one can overlook, say, from the Kreuzberg in Berlin, is capital, and must necessarily be capital, only because money is capital. Is it possible that this mighty ocean of capital, at least 100 times as great as money-capital, yields interest only because money yields interest? The statement sounds improbable.

But the apparent improbability at once decreases if we reflect upon the antiquity of money, upon the fact that for three or four thousand years money has by artificial means regularly and automatically restricted the construction of houses, so that demand has always exceeded supply, and houses, for this reason, have remained capital.

And the improbability disappears if we recall to mind the economic glacial period (as we have named the Middle Ages) and the thousand economic crises caused, since then, by money. Real capital worth billions of dollars would have been constructed but for forced unemployment; it is the absence of this real capital, due to money, that permits the existing real capital to exact interest.

The scarcity of houses, ships, factories, revealed by the fact that these things yield interest, is the result of a cause which has been uninterruptedly at work for thousands of years.

If during the years of crisis 1873 – 1878, the starving and unemployed masses had been allowed to build houses and machinery, would not house-rent have been forced down by this addition to supply? And those were but five years! Nor must it be forgotten that the other causes of economic crises, unconnected with interest (as described in the third part of this book: "Money as it is") act in the same direction, that is, restrict or prevent exchange.

Clearly, therefore, so-called real capital produces interest because it can be created only by spending a sum of money, and because this money is capital. So-called real capital has not, like money, the power of extorting interest. Real capital, just as the wares, merely makes use of a state of the market forcibly established for its own ends by money, namely an artificial limitation of the production of real capital with the aim of keeping the supply of it constantly below the demand.

By forced unemployment our traditional form of money, stamped and managed by the State, inevitably creates the homeless and destitute mass of workers, the proletariat, essential for the continuance of the capitalistic character of houses, ships, and factories.

Money is indispensable for the formation of this real capital, and without interest there is no money. But real capital cannot exist without a proletariat.* Consequently the indispensability of money must produce the proletariat necessary for interest upon real capital and for the circulation of money.

Money creates a proletariat, not because the burden of interest deprives the masses of their property, but because it forcibly prevents the masses from constructing property for themselves.

To account for the existence of the proletariat we need not have recourse to the facile expedient of the alleged historical explanation; for the proletariat is a regular concomitant of the traditional form of money. Without a proletariat; no interest upon real capital; without interest: no circulation of money; without the circulation of money: no exchange of commodities — the result of which is impoverishment.

* Proletariat: workmen deprived of their own means of production.

In former times, no doubt, the sword was a powerful factor in the production of a proletariat. The throne (legislation) and altar also helped. Even in our time attempts are still made to put land-rents under the protection of the law; wheat-duties are devised to deprive the people of the weapons they have forged against rent, namely ships, railways and agricultural machinery. A right to exact rent is set up against the right to work and the right to eat. But even without this aid, capital would not have been the poorer by a single proletarian. A few more economic crises, a few more thousand superfluous workers, would have been effective substitutes for legislation and the sword. Even without the sword and legislation money-capital has sufficient intrinsic power to create the proletariat necessary for real capital. With the impetus of a natural agent money creates a proletariat. Metal money and a proletariat are inseparable.

So-called real capital consists, no doubt, of very real and indispensable objects, but as capital these objects are anything rather than real. The interest at present produced by them is the creature of basic capital, of money.

5. COMPLETION OF THE FREE-MONEY THEORY OF INTEREST

We have called money basic capital because it prepares the road for so-called real capital, and asserted in this connection that real capital owes its interest-earning capacity solely to the fact that money, through forced crises, forced unemployment, that is, through fire and sword, prepares the market conditions which enable real capital to exact interest equal to basic interest. But we must also be able to prove that interest upon real capital is so governed by basic interest that it must necessarily again conform to basic interest if, for any reason, it temporarily deviates therefrom.

For we assert that demand and supply determine interest on real capital—and thereby recognise that interest is subject to many influences.

What we have to prove, therefore, is this: That if from other causes interest on real capital rises above basic interest it must inevitably, from the nature of things, fall again until it reaches the level of basic interest. And conversely, if interest on real capital

falls below basic interest, it will be automatically raised again to this level by money. Basic interest is therefore always the maximum and the minimum return usually to be expected from real capital. **Basic interest is the point of equilibrium about which interest on all forms of real capital oscillates.**

But if this is so, we must also be able to prove that if the artificial obstacles to the formation of so-called real capital, caused by the present form of money, are removed, the supply of such capital, resulting from the now untrammelled work of the people, will sooner or later, without the intervention of any other agent, cover demand in the sense that interest throughout the world, wherever there is free-trade and freedom of movement, will fall to zero.

(Capital interest is an international quantity, it cannot be eliminated by one country alone. If, for instance, houses in Germany yielded no interest, and such interest were still obtainable in France, no houses would be built in Germany. German capitalists would send their surplus across the frontier by purchasing French bills of exchange with the proceeds of which they would build houses in France).

We must therefore prove:

1. That the power and means exist of drowning interest in a sea of real capital, within a reasonable time.
2. That the impulse or will to produce real capital, such as tenement-houses, factories and ships, does not decrease when such things no longer yield interest.

That interest on real capital can at any time deviate in an upward or downward direction from basic interest is easily proved as follows:

Let us suppose that three-quarters of mankind are carried off by the plague. The present ratio between proletariat and real capital would be fundamentally changed; to every tenant there would be four houses, to every farm labourer four ploughs, to every gang of workmen four factories. Under these circumstances real capital would no longer yield interest; the competition of house-owners would depress rents, and the competition of employers would reduce profits to such an extent that probably not even the full costs of upkeep and amortisation could be recovered.

During the years of crisis from 1890 – 1895, for example, it was possible to inhabit, rent-free, the finest houses in the provincial capital of La Plata in Argentina. The house-owners were unable to obtain even enough rent to cover repairs.

Under such circumstances only one form of capital would continue to exist, namely money. For although all other capital objects would have lost the power of exacting interest, money would have no need to reduce its claim for interest, even if 99% of the population had died out. The produce of the interest-free instruments of production, the wares, would still be compelled to pay the same interest for their exchange, just as if nothing had happened.

The case we have supposed throws a vivid light upon the nature of money and upon the relation of money to real capital.

If we assume that the quantity of money in circulation was unaffected by the plague, the disproportion between money and commodities would cause a rise of prices, but the relatively large stock of money would not reduce interest, since, as we have proved, competition between money-lenders is impossible. Gross interest would even be increased by the rise of prices. (See later, Chapter 7, " The Components of Gross Interest ").

Under the circumstances we have imagined it is obvious that no one would give money for the construction of a factory. Money would be given for that purpose only when, partly through an increase of population, partly through fires and other accidents, to which must be added the passage of time, the supply of real capital had so decreased that the original ratio of real capital to population, and with it the level of basic interest, had been reached. Why this must happen we have already explained.

Thus interest on so-called real capital can at any time, as the result of exceptional circumstances, fall below basic interest; but the natural agents of destruction to which real capital is subject (see the annual statistics of shipwrecks and ships broken up, railway accidents, fires, and the sums annually written off for depreciation in every factory), in conjunction with the circumstance that money permits no production of new real capital until the interest upon existing real capital reaches the level of basic interest, necessarily re-establish the former relation between the demand and supply of real capital.

But we must also prove that interest upon real capital cannot permanently rise above basic interest.

That it can rise above basic interest under special circumstances, and that it has actually done so for decades at a time in countries with relatively large immigration, we readily admit. For this is a conclusive proof of the theory of interest whereby demand and supply alone determine whether real capital produces interest, and the amount of interest it produces.

The amount of capital in houses, instruments of production, shops, railways, canals, harbours and so forth that falls to each workman's family in the United States is unknown to me. It may be $5,000 or it may be $10,000. Suppose it is only $5,000. To provide shelter and means of production for the 100,000 immigrant families annually landing in America, the Americans would then have to provide 500 million dollars annually in new houses, factories, railways, ships.

If all German workmen were to emigrate to the United States, everything needed to employ and house these masses would be wanting. The want of factories, machinery and houses would depress wages and at the same time enormously increase house-rent. Interest upon real capital would rise high above basic interest.

Usually this process is completely concealed from immediate observation, since capital goods rise in price with the rise in the yield of interest. A house which can be sold for $10,000 because it brings in $500 interest, rises in price to $20,000 if interest on the house rises to $1,000. Arithmetically the house then yields only 5%. For it is basic interest that serves as the basis for calculating the price.

We must next be able to explain the fact that every rise in the rate of interest upon real capital above basic interest inevitably, naturally and automatically causes a steadily increasing new production of houses, factories, etc., and that, under pressure of this supply, the interest on such things soon falls back to the point of equilibrium or limit, namely basic interest—as automatically as, in the opposite case, it rises to this limit. We must prove that there are no economic or psychological obstacles to interfere with this process. The will to work, the power of working and natural resources must at all times and in all places suffice to provide capital

in such quantities that the supply of this capital is bound to reduce interest to the limits of basic interest.

(Flürscheim's* statement that "Interest is the father of interest" is no absurdity. Flürscheim means that the burden of interest prevents the people from producing the amount of real capital necessary for the elimination of interest; just as rent prevents peasants from buying the rented land they occupy.

But the statement that "Interest is the father of interest" also implies that rising interest must cause an unlimited further rise of interest. If, as Flürscheim claims, the law of falling bodies is applicable to interest when interest begins to fall, the law must apply in the reverse direction when interest begins to rise. This contradiction was insoluble by the methods of investigation employed by Flürscheim).

That such quantities of real capital are forthcoming we see from the fact that the United States, in a comparatively short period of time, have passed from demand to supply in the international capital market; that they have carried out the great undertaking at Panama with their own resources; that they have rescued many a princely house in Europe from ruin with their daughters' dowries; that they are seeking other outlets abroad for their surplus capital. This proof is all the more convincing, first because the great influx of destitute immigrants into the United States created an abnormal increase of demand for real capital, and secondly because the formation of real capital was frequently interrupted by devastating economic crises. Such is the fact; we now need the explanation.

The interest produced by so-called real capital stimulates saving, and the higher the interest, the greater is the stimulus to saving. It is indeed true that the higher the interest, the greater also is the burden of interest, and the more difficult it is for those who have to pay interest to create, by saving, a capital of their own. But in the present order of things new capital is only to a small extent formed from the surpluses of the earning, interest-paying classes.†

* "The Economic Problem," Michael Flürscheim, 1910.

† Savings-banks deposits, the capital of the proletariat, were in Prussia:

Year.	Number of savings books.	Amount saved. Million Marks.	Average amount for each book. Marks.
1913	14,417,642	13,111	909
1914	14,935,190	13,638	913

New capital is chiefly formed from the surpluses of capitalists, and these surpluses naturally increase with the increase of the capitalists' income, that is, with the increase of interest upon capital.

We must here keep the following fact in mind:

The income of the earning class increases if interest falls, whereas the income of the capitalistic class increases if interest rises. Employers' income consists partly of the wages for their work, and partly of interest upon capital; in their case, therefore, the effect of changes in the rate of interest depends upon what proportion of their income is derived from interest, and what proportion from wages for their work.

The earning class is, therefore, better able to save when interest is falling, and the capitalistic class when interest is rising. It would be a fallacy, however, to conclude from this that the function of saving, as a whole, and the increase of capital, is unaffected by the fact that interest rises or falls.

For in the first place an increase of income has an effect upon the spending, and therefore upon the saving of a capitalist, different to its effect upon the spending and saving of a worker. With the capitalist the increase of income does not meet so many wants awaiting satisfaction, often for decades. The capitalist finds it easier to save the whole increase of his income, but the worker's impulse to save only comes after the satisfaction of many other needs.

Again the capitalist's only method of providing for his children is saving. With the birth of the third child he must increase his capital if he wishes to make the mode of life possible for his children, for which, by his example, he has educated them. The worker has no such cares, he need not bequeath anything to his children, for they will support themselves by work.

The capitalist therefore must save; he must increase his capital (although this increase depresses interest) to provide his increasing offspring with the life of ease befitting their station. And if, as a rule, he must save, we can assume that he will also, as a rule, employ the surplus derived from an increase of interest to create new capital.

From this we can conclude that an increase of interest, though it always takes place at the expense of the workers and small savers, must nevertheless increase, rather than diminish, the sums available in a country for the creation of new real capital. An increase of interest increases the forces that depress interest. And the higher the interest, the greater is this pressure.

We cannot indeed give examples of this; statistical proofs of what we have just stated are not possible, for the statistics available under the gold standard are unsuitable. If Carnegie had given his workers 20% or 50% more wages he would probably never have reached his first million. In that case would the steel-factories (built by Carnegie from his savings) which increased the supply of real capital, drove up wages and depressed interest, have been built from the savings of the workers? Would not the workers, perhaps, have preferred to spend the 20% or 50% increase of wages on sufficient food for their children, on healthier houses, on soap and baths? In other words, would the workers, collectively, have brought together as great a surplus for the construction of new steel-works as Carnegie alone, with his modest personal wants? (To preserve the existing ratio between the demand and supply of real capital, the workers would even have to produce a much greater mass of real capital. For their present scanty wages cause an appalling infant mortality which the increase of wages would have reduced. The resulting great increase in the number of workers would have increased the demand for means of production).

We are at first inclined to answer the above question with a categoric negative—and thereby to commit a gross error. For what did Carnegie achieve by the multiplication of real capital, by his personal thrift? He again and again reduced the interest on real capital below basic interest and thereby caused crisis after crisis. The good man in this way destroyed or prevented the formation of as much real capital as, by wise management, he brought into existence. If Carnegie had distributed the surplus of his undertakings to the workmen in the form of increased wages, it is true that only the smaller part of these increased wages would have been saved for new real capital; the rest would have been dissipated in orgies of pork and beans, or soap. But on the other hand the intervals between one crisis and the next would have lengthened.

The workers would consequently have lost less by forced unemployment, and would have made up for the greater sum spent. The effect upon interest would have been the same; that is, without Carnegie's thrift, the supply of real capital would have been the same to-day as with his thrift.

The difference between what Carnegie could personally save and what the workers could have saved is regularly and inevitably destroyed by economic crises.

The capitalist's impulse of self-preservation and the fact that he must assure the future of his children force him to provide a surplus and, what is more, an interest-bearing surplus. He must provide this surplus even if his income decreases; indeed, his impulse of self-preservation bids him increase the strictness of his saving in direct proportion to the decline of interest. If, for example, a capitalist wishes, by increasing his capital, to compensate the loss of income caused by a fall of interest from 5 to 4%, he must increase his capital one-fifth by economising on his personal expenses.

If interest rises, capitalists can save; if interest falls, they must save. In the first case the amount saved will, indeed, be greater than in the second case, but that does not limit the importance of the fact for the determination of interest. It remains true that the greater the fall in interest, the more the capitalist must, by reducing personal expenses, draw on his income to form new real capital—even although it is precisely the increase of real capital that has caused his difficulty.

We who assert that in the nature of things real capital must multiply until it destroys itself or, in other words, until interest disappears completely, can see in the above fact a conclusive proof of what we have yet to show, namely that when interest falls, the will and need to create new interest-depressing capital enterprises must continue to exist—on condition, of course, that we remove the obstacles to the creation of such enterprises, caused by our traditional form of money.

If the rate of interest falls from 5 to 4%, the capitalist must, by reducing his personal expenses, raise his capital from 8 to 10. If interest falls from 5 to 4%, the capitalist will therefore renounce

his plan of a summer residence for his family and build, instead, a tenement-house in the city. And this new tenement-house will still further depress the interest upon house-capital. For capital in general it would be better if the capitalist built the summer residence and not the tenement-house. For the individual capitalist, however, the opposite is true.

If interest (under the pressure of the new tenement-house) falls further from 4 to 3%, the capitalist must still further reduce his expenses. Instead of paying, as he had contemplated, the debts of a princely son-in-law, he must give his daughter to a building-contractor. The tenements erected with the dowry would then produce interest, but at the same time still further depress the rate of interest. And so on.

The nature of the capitalist, his impulse of self-preservation—the impulse in which the human will is strongest—makes it certain that the greater the fall of interest, the greater must be the percentage of the capitalist's income set aside by him to create new real capital which, in its turn, still further depresses interest.

Expressing what has been said in figures we have the following picture:

	Billion Marks
The interest paid by the workers in Germany amounts annually, at 5%, to	20
Of this the capitalists devote 50% to new capital enterprises	10
spending the remainder on their personal requirements.	
The rate of interest then falls from 5% to 4% and the yield of interest therefore falls from 20 to	16
The capitalists therefore lose	4
This loss of income, equivalent to a capital loss of 100 billions, forces the capitalists to set aside a larger part of their income for the creation of new capital enterprises. Instead of 50% they now set aside 60% of their income (which has meanwhile fallen from 20 to 16 billions) for new capital enterprises. The amount set aside is, therefore, instead of 10 billions	9⁶/₁₀

But the capitalists' loss of income means a corresponding gain of income to the workers. If the workers, through the savings-banks, invested the whole of the surplus in new interest-bearing enterprises, the decrease of interest of - - - - - 4
would increase the sum set aside for the creation of new capital enterprises (given by us above as 10 billions) to - - - - - - - - - - $13^{6/10}$
or 4 billions from the workers and $9^{6/10}$ billions from the capitalists.

But we have assumed that the workers will save only part of the remitted burden of interest, perhaps about one half. Even in this case a decrease of interest from 5 to 4% would increase the sum annually available for new capital enterprises from 10 to - - $11^{6/10}$
and the greater the fall in the rate of interest, the greater is the sum destined for new capital enterprises which depress, and finally eliminate, interest. Capitalists would save from necessity, and workers would save because they could now at last satisfy the impulse of saving. Thus the nature of new real capital forces it, as it were, to commit suicide.

The greater the fall in interest, the greater the amount of real capital created which, in its turn, depresses interest. Possibly the physical law of falling bodies is applicable to interest—but only, of course, after removal of the obstacles which the traditional form of money opposes to the creation of such masses of real capital.

The objection has here been raised that if real capital were free from interest no one would build a tenement-house, factory, brick-oven, etc. Savings would be spent upon pleasure-trips instead of upon flats in which others would live in rent-free dissipation.

But more is here asserted than the expression "free from interest" implies. House-rent is only partly composed of interest. Interest on the building capital is a component of house-rent, but there are other components such as: ground-rent, repairs, depreciation, taxes, insurance, the expense of cleaning, heating, care-taking, furnishing, and so forth. Interest is often 70 or 80% of the rent, but often, in the centre of a city, as little as 20 or 30%. Even when

interest disappeared completely from house-rent there would always remain expenses enough to prevent everyone from claiming a palace.

It is the same with the other forms of real capital, which cause their users, besides interest, other expenses such as upkeep, depreciation, insurance, ground-rent, taxes, etc.—expenses which generally equal or exceed the amount of interest. House-capital is here, indeed, in a relatively privileged position. In 1911 2,653 German limited liability companies with 9,201,313,000 marks capital wrote off 439,900,475 marks as depreciation, that is, on the average about 5%. But for the annual renewals (in addition to improvements) nothing would be left of such capital in 20 years.

But quite apart from this, the objection does not hold good, especially in the case of persons who have up to the present lived from unearned income.

These persons will, as we saw, be forced to greater thrift by the decrease of capital-interest, and they will be still more careful, when interest disappears entirely, to consume as slowly as possible their remaining investments, which will then no longer be capital. And this they can achieve by spending for their personal requirements only part of the sum annually written off their capital as depreciation, and by devoting the remainder to the construction of new houses, ships, etc. which will, indeed, yield no interest, but will at least give them security against immediate loss. If they keep the money (Free-Money) they will, in addition to receiving no interest, suffer an actual loss. By building new houses they will avoid this loss.

A shareholder in the Norddeutscher Lloyd, for example, who, under the Free-Money reform, will receive no dividends, will not ask the company to pay out his full share of the sums set aside for depreciation (with which the company at present builds new ships). He will content himself with part of his share in order to postpone as long as possible the day on which the last dollar of his investment will be repaid him. New ships will always, therefore, be built, even although, instead of interest, they only produce the sums written off for depreciation. It is true that even so the last ship of the Norddeutscher Lloyd would in time fall to pieces if others did not take the place of the ex-capitalist living from the amounts

written off his capital; that is, if the workers, relieved of the burden of interest, did not assume the function that the ex-capitalist could no longer fulfil. New savers would replace the part of the depreciation consumed by the ex-capitalist—though only, indeed, with the same purpose of being able to live upon and consume in old age the sums written off for depreciation.

Houses, factories, ships, etc. need not, therefore, produce interest to attract from all sides the means for their production. After the introduction of Free-Money these things would prove to be the best means of storing savings. By investing their savings in houses, ships, factories, which bring in no interest but resolve themselves again into sums set aside for depreciation, savers would avoid the expense of storage and caretaking—and that too from the day they made the surplus to the day on which they consumed it. As decades often lie between these two dates (for example in the case of a youth saving for old age) the advantages of such investments to the savers are obvious.

Interest is, no doubt, a special attraction for the saver. But this special attraction is not necessary, for even without it the impulse of saving is sufficiently strong. Interest, again, may be a great incentive to saving, but the obstacles to saving caused by interest are also great. Because of the burden of interest, saving at present means, for the majority of mankind, severe privation, renunciation, hunger, cold, semi-suffocation. Precisely because of the interest which workers must raise for others, the proceeds of labour are so reduced that for most workers saving is an impossibility. So if interest is an incentive, it is still more an obstacle to saving. Interest limits the possibility of saving among workers to small classes, and the capability of saving to the few individuals in these classes with courage enough to face continual privation. If interest falls to zero the proceeds of labour rise by the whole amount of the burden of interest, and the possibility and capability of saving are correspondingly increased. It is certainly easier to save $5 from $200 than from $100. If with $100 wages a man, partly because of the stimulus of interest, deprives his stomach of $10 for his own and his children's benefit, with $200 wages he could probably, from the natural impulse of saving, set aside, if not $110 at any rate much more than $10.

Saving is practised throughout nature without the incentive of interest. Bees and marmots save, although their stores bring them no interest and many enemies. Primitive peoples save although interest among them is unknown.* Why should civilised man act otherwise? Men save to build a house, they save for marriage, illness, old age; and in Germany they even save for masses for the repose of their souls and for a burial fund, although burial brings the corpse no interest. And when did the proletariat begin to save for the savings-bank? Did the money formerly hidden in mattresses yield interest? Yet such a form of saving was customary until 30 years ago. Winter provisions, too, bring no interest but much annoyance.†

Saving means that the saver produces more wares than he consumes. But what does the individual saver, or the population, do with this surplus of wares? Who keeps the wares and who pays the cost of keeping them? If we answer here: "The saver sells his surplus produce," we merely transfer the problem from the seller to the buyer. To the population in general this answer does not, obviously, apply.

If a person saves, that is, produces more wares than he consumes, and finds someone to whom he can lend his surplus on condition that after a certain period his savings are to be given back without interest but without loss, the saver has concluded an extraordinarily advantageous bargain. For he avoids the expense of upkeep of his savings. He gives 100 tons of fresh wheat as a young man and receives 100 tons of fresh wheat, of equally good quality, in his old age. (See the Story of Robinson Crusoe, p. 365).

The simple restitution, without interest, of the borrowed savings represents, therefore—if we leave money out of the account—a considerable piece of work done by the debtor or borrower, namely the payment of the expense of upkeep of the borrowed savings. The saver himself would have had to bear this expense if he had

*African negroes, Red Indians, Hottentots, have never obtained interest from their savings, yet none of them would exchange these savings (provisions) for the savings of our proletariat (savings-bank book).

†That the prohibition of interest by the medieval Popes prevented the growth of an economic system based on money (the scarcity of the precious metals was a contributing cause), shows that the impulse of saving was obeyed even without interest. The savers hoarded the money.

found nobody to take charge of his savings. True, the borrowed goods do not cause the borrower any expense of upkeep since he consumes them in his undertaking (example: borrowed seed-wheat). But when loans are made without interest, the borrower transfers this advantage, which is really his, to the lender, without receiving any return service. If lenders were more numerous than borrowers, borrowers would claim payment for this advantage in the shape of a deduction from the amount of the loan (Negative interest).

Thus from whatever view-point the problem of loans without interest is examined, no obstacles of a natural order can be discovered. On the contrary, the greater the fall of interest, the greater the incentive to the multiplication of houses, factories, ships, canals, railways, theatres, crematoria, tramways, lime-kilns, blast-furnaces, etc.; and the work upon such enterprises reaches its highest intensity when they produce no interest at all.

To Boehm-Bawerk it is obvious that a "present good" must be more highly valued than a "future good," and upon this assumption his new theory of interest is based. But why is this assumption supposed to be obvious? Boehm-Bawerk himself gives the somewhat strange reply: Because wine can be bought which becomes annually better and dearer in the cellar.* But because wine—and among all commodities Boehm-Bawerk discovered no second with this wonderful property — automatically, it seems, without labour or costs of any kind and without, therefore, costs for storage, becomes annually dearer and better in the cellar, do the remaining commodities, potatoes, flour, powder, lime, hides, wood, iron, silk, wool, sulphur, ladies' costumes, also become annually better and dearer. If Boehm-Bawerk's explanation is correct, we have here a complete solution of the social problem. We need only pile together sufficient products (the inexhaustible fertility of modern production and the army of unemployed workers provide an excellent opportunity), and the whole population can, without work of any kind, live from the proceeds of these commodities which will constantly become better and dearer (a difference in quality can always, in economic life, be traced to a difference in quantity). It is indeed not easy to see why one should not make the opposite deduction: Because all comodities, with the exception of money and wine, soon fall into decay, therefore wine and money fall into decay! Yet up to the time of his death (1914)

* Compare footnote p. 374.

Boehm-Bawerk was the foremost authority on interest, and his works were translated into many languages.

The anxieties of savers do not in themselves concern us, as our sole purpose is to establish the fundamental theory of interest; but it may perhaps contribute to the elucidation of our theory if we examine these anxieties more closely.

Let us assume, therefore, that after gold has been removed from the path of circulation of commodities someone wishes to save in order to live without work or care in his old age. The question at once arises: What form will he give his savings? The plan of piling up his own produce or the produce of others may at once be dismissed; and a hoard of Free-Money is also impossible. The first practicable solution would be loans without interest to employers, artisans, farmers and merchants who wished to enlarge their businesses; and in the case we are considering, the longer the term of repayment, the better. The saver of course runs the risk of not being repaid his money. To eliminate this risk, however, he can compel his debtor to pay a special contribution to cover risk, such as is added to the interest on every loan at the present day. But if the saver wishes to be quite secure from such loss he will use his savings to build, say, a house for letting. With the sums annually written off for depreciation, which are at the present day also included in house-rent, the tenants will gradually repay the whole cost of building. And the form of building chosen will be determined by the amount of depreciation the saver wishes to receive annually. He will build a stone house if he wishes to receive 2% depreciation annually; he will put his savings into shipbuilding if 10% depreciation suits him better; or, if he needs his money soon, he can buy a powder-factory, when the sum set aside for annual depreciation will be 30%. In short, he will have ample choice.

Just as the toil that the children of Israel, 4,000 years ago, put into the building of the Pyramids becomes living again to-day, without loss, if the stones are rolled from the summit, so the savings built into an interest-free house will appear again, undiminished, in the rent, in the form of sums annually set aside for depreciation. The saver will not, indeed, receive interest, but he will retain the priceless advantage of carrying his surplus without

loss, through the period in which he does not require it, to the period in which he desires to use it.

A person who builds a tenement-house with the purpose of letting it free from interest is thus in the same position as a person who lends money without interest against a pledge and stipulates for repayment by instalments.

In practice, no doubt, small inexperienced savers, to avoid trouble and anxiety, will hand over their savings to life-insurance companies which will build the houses, ships, factories, etc. With the sums set aside for depreciation on these objects, the insurance companies will then pay each saver a life-annuity; healthy men 5% of the deposit; old people or invalids 10% or 20%. Under these circumstances there will be no expectations from wealthy uncles. The coffin-lid will be nailed down with the last nail of the property. The saver will begin to consume his property when he ceases working, and at his death it will be consumed completely. Under such circumstances, however, no one is forced to provide for his posterity. It is provision enough to liberate their work from the burden of interest. An individual liberated from the burden of interest no longer needs an inheritance, just as the widow's son at Nain no longer needed crutches. Everyone earns his own goods and chattels, and finances, with his surplus, the aforesaid insurance-companies. Thus the annual depreciation upon houses, ships, etc. paid to the old will be constantly replaced, through new construction, by the savings of the young. The expenditure of the old will be met by the savings of the young.

A worker at present pays interest upon about $12,500 in houses,* means of production, national debt, railways, ships, shops, hospitals, crematoria, etc. That is, he has to pay $500 annually either directly, as deduction from wages, or indirectly in the prices of commodities, as interest upon capital and rent upon land. Without interest upon capital, the proceeds of his labour would be doubled. If such a worker, with $1,000 wages, at present saves $100 annually, it would be a long time before he could live on his capital, especially as his saving, in the present order of things, causes periodic

* Germany with about 10 million workers (that is, those who live from the proceeds of their work) pays interest upon a capital of about 500 billion marks (including the land). A single worker therefore pays interest upon about 50,000 marks or $12,500.

crises which again and again force him to have recourse to his savings, or possibly even result in their total loss, through the failure of his bank in the crisis his saving had provoked. But if, through the elimination of interest, the worker's income is doubled, he can, in the case we have supposed save annually $1,100 instead of $100. Even though his savings are not "automatically" increased by interest, the difference, at the end of the years of saving, between the amount he will have saved, without interest, and the amount he could have saved, with interest, will be so great that he will rejoice at the disappearance of interest. For the difference will not be simply in the ratio 100 (plus interest) to 1,100; it will be much greater, since the worker will not be compelled, in times of unemployment, to have recourse to his savings.

One more objection which has been raised against the possibility of equalising demand and supply in the capital market we have still to refute. It is objected that, since production can be cheapened by more or better machinery, every employer will make use of the fall in the rate of interest to enlarge and improve his factory. From this the deduction is made that the fall of interest and, still more, the complete absence of interest, would create in the capital market a demand from employers too great for supply ever to cover, with the result that interest could never fall to zero.

Otto Conrad * says for example: "Interest can never completely disappear. For suppose a piece of machinery, say a lift, is to replace five workmen with a total annual wage of 4,000 kronen. With interest at 5%, the cost of the lift must not exceed 80,000 kronen. Now suppose that the rate of interest falls, say to 1/100%. The lift could then be profitably installed even if it cost 40 million kronen. If interest sinks to zero or near zero, the utilisation of capital would increase to a degree that cannot even be imagined. The most complicated and expensive machines could be installed to save the smallest piece of manual labour. Interest could be kept at zero only by the existence of infinite capital undertakings. No special proof is needed that this condition is not fulfilled to-day, and that it can never be fulfilled."

To this argument against the possibility of loans without interest

* Jahrbuch für Nationalökonomie und Statistik, Jena, 1908.

we reply as follows: Among the expenses of a capital undertaking must be reckoned, in addition to interest, the cost of upkeep, which is always, especially in industrial undertakings, extremely high. A lift which cost 40 millions would certainly cost, for upkeep and depreciation alone, 4–5 millions. The lift would thus have to replace, not, as Conrad imagined, five workmen but 4,000 workmen with wages at 800 kronen—even if not a penny of interest were required. With 5% for upkeep and 5% for depreciation, the lift, to replace five workmen with wages at 800 kronen, must not cost more than 40,000 (instead of 40 million) kronen in interest-free money. If the cost of construction exceeds this amount, the cost of upkeep is not covered, the lift is not built, and there is no extra demand upon the loan-market.

Where little or no depreciation takes place, as for example with certain forms of permanent land-improvement, the indefinite increase of demand for interest-free loans will be prevented by the wages claimed by the workers. The problem here merges into the problem of rent upon land. Nor will any private individual undertake to blast rocks and clear forests if this work brings him no advantage. If he builds a factory or tenement-house, he has the advantage of gradually receiving back his money in the sums annually set aside for depreciation. The expectation of receiving back the money was, in fact, the motive for building the tenement. Being mortal he wishes to reap before his death what he has sowed in the sweat of his brow; he can therefore undertake only such works as resolve themselves into depreciation. If he and his works disintegrate at the same rate he has judged correctly from the individual standpoint. Works of eternal value are not for the individual, who is mortal, but for the people, which is eternal. The people, which exists eternally, counts upon eternity and blasts the rocks, although this work yields no interest and does not resolve itself into depreciation. At death's door the old State-forester draws up a plan for the reafforestation of a waste. Such works are for the State. But the State will undertake them only to the extent to which interest-free money is placed at its disposal. Such undertakings are not, therefore, an obstacle to freedom from interest, they are the consequence of it.

Those who raise this objection also forget that a simple extension

of an undertaking (10 lathes instead of 5; 10 brick-moulders where 5 were at work) requires a corresponding increase in the number of workmen employed. An increased demand for money for extending a factory therefore always means a simultaneous increase of demand for workers who, by increasing their claims for wages, cancel the gain expected by the employer. An employer cannot by simply extending his factory expect any special advantage from loans free of interest, so the disappearance of interest will not stimulate him to create an unlimited demand for loans. The limits to such loans will be set by the wages claimed by the workers, who alone profit by the decrease of interest. And this is natural; for the relation between employers and workmen is fundamentally the same as the relation between those who lend money (pawnbrokers) and those who borrow money (their customers) against a pledge.* Here also the fall of interest is to the advantage of the borrowers.

The employer does not buy work, or working hours, or power of work, for he does not sell the power of work. What he buys and sells is the product of labour, and the price he pays is determined, not by the cost of breeding, training and feeding a worker and his offspring (the physical appearance of the workers is only too conclusive a proof that the employer cares little for all that), but simply by the price the consumer pays for the product. From this price the employer deducts interest on his factory, cost of raw material, including interest, and wages for his own work. The interest always corresponds to basic interest; the employer's wage, like all wages, follows the laws of competition; and the employer treats the raw material he intends his workmen to manufacture as every shopkeeper treats his merchandise. The employer lends the workmen machinery and raw material and deducts from the workers' produce the interest with which the raw material and machinery are burdened. The remainder, so-called wages, is in reality the price of the product delivered by the workmen.

Factories are simply, therefore, pawn-shops. Between a pawnbroker and Krupp there is no difference of quality but simply a difference of size. With wages for piece-work the nature of the

* Eugen Dühring said long ago: "Employers let their factories to the workmen for a certain charge." Dühring calls this charge for letting, profit. Marx calls it surplus-value. We call it simply interest.

contract is obvious. But all wages are fundamentally wages for piece-work, since they are determined by the piece of work the employer expects to obtain from the individual worker.

But as well as simple extension of enterprises, which increases the demand for workmen, we must consider improvements of the means of production, which result in the production of more commodities with the same number of workmen. If a farmer, for example, doubles the number of his ploughs he must also double the number of his ploughmen. But if he buys a steam-plough he may be able to plough double the number of acres with the same number of labourers.

Employers always aim at such improvements in the means of production (sharply to be distinguished from simple multiplication of the means of production). For what affects an employer is net profit,* and this is larger when his means of production are superior to those of his competitors. Hence the competition among employers to improve the means of production; hence the demand for loans from employers who have not themselves the means necessary for scrapping obsolete machinery and building well-equipped factories, as they desire.

Nevertheless it does not follow that the demand for interest-free loans for the improvement of the means of production must at all times be unlimited; it does not follow that supply can never overtake the demand caused by the absence of interest. And the reason why this deduction cannot be made is that the money necessary for carrying out such improvements in the means of production is only of secondary importance.

Show someone how to bind a broom and he can bind a hundred. But offer him money, free of interest, on condition that he improves his means of production and produces more or better brooms with the same amount of labour, and he will have no answer to give you. Improvements of the means of production are the fruit of intellectual effort which cannot be bought like potatoes at so much

* Net profit—employer's profit—proceeds of the employer's labour—is what remains over for the management of the business after payment of the cost of production, including interest, and is to be regarded as the profit of management. It has nothing to do with interest. In corporations and trusts the patent-rights of the inventors, or the "shameless" salaries and wages claimed by exceptionally efficient or irreplaceable directors and workmen, absorb this net profit.

per hundredweight. Improvements of the means of production cannot be turned out to order—no matter how "cheap" the money available. Anybody could at any time earn millions by thinking out new patents — but for the fact that he lacks the necessary intelligence.

It may be that after 10 or 100 years the means of production will be so improved that every workman will perform twice, five times or 10 times his present work. Employers will hasten to adopt such improvements. But contemporary employers are forced to use whatever machinery is offered them by the contemporary, backward, technical arts.

Apart from this, however, let us assume that a costly machine is discovered with which everyone can double his present production. This would cause an unprecedented demand for loan-money to purchase the new machine. Everyone would install it and scrap the old machines. Even if interest upon loan-money had disappeared, this enormous new demand would cause its reappearance. Under these circumstances (the conversion of all existing machinery into scrap-iron) interest might even reach an unprecedented height. But this condition of affairs could not last long. Commodities would become 50% cheaper (not cheap in the sense of a fall of prices, but cheap because everyone could double the quantity of his produce and use this double quantity for exchange) and this would allow the population to make extraordinary savings. And the supply of these savings would soon overtake the extraordinary demand for loan-money.

One can therefore conclude that the demand for loan-money for the improvement of the means of production must itself produce a supply of loan-money much more than sufficient to cover this demand.

Thus from whatever side we consider the problem of covering the demand for loan-money so completely that interest would disappear; whether we approach the problem from the side of demand or the side of supply, we find that there are no natural obstacles to such covering. Except for the traditional form of money, the road is free for loan-money without interest, as well as for houses and means of production without interest. The elimination of

interest is the natural result of the natural order of things when undisturbed by artificial interference. Everything in the nature of men as in the nature of economic life urges the continual increase of so-called real capital—an increase which continues even after the complete disappearance of interest. The sole disturber of the peace in this natural order we have shown to be the traditional medium of exchange. The unique and characteristic advantages of this medium of exchange permit the arbitrary postponement of demand, without direct loss to its possessor; whereas supply, on account of the physical characteristics of the wares, punishes delay with losses of all kinds. In defence of their economic welfare both the individual and the community have been and are at enmity with interest; and they would long ago have eliminated interest if their power had not been trammelled by money.

We have now studied this new theory of interest from so many sides that we can finally put and answer a question which should logically have been asked at the beginning of our inquiry, but which we have purposely postponed till now, since knowledge and insight which can only be assumed to exist at the end of our inquiry are necessary for its complete understanding.

We said that money is capital because it can interrupt the exchange of commodities. From this the deduction can be made that if, by the proposed change of form, we deprive money of the power of interrupting exchange, money as a pure medium of exchange is no longer capital, that is, money can no longer exact basic interest.

Against this deduction no objection can be raised; it is correct.

But if it is further deduced that, since money can exact no interest from commodities, we may count upon interest-free loans from the day that Free-Money is introduced—this deduction is not correct.

As medium of exchange, in direct relation to commodities, that is, in commerce. Free-Money will not be capital, just as commodities are not capital when exchanged for one another. With Free-Money, commodities will be exchanged free of interest. But when Free-Money is introduced it will meet with the market conditions created by its predecessor, gold, for the purpose of exacting interest upon loans; and as long as these conditions continue to exist, that is, as

long as demand and supply permit the exaction of interest in the loan-market (in all its branches), interest will have to be paid also upon loans contracted in Free-Money. Free-Money will find before it world-wide poverty, the result of which is interest. This poverty must disappear, and it will not disappear in the course of a few days. Work is here the remedy. Until this poverty is removed, the instruments of production and commodities will continue to yield interest in all forms of loan-transactions (not, however, in exchange-transactions). But Free-Money does not make interest the condition of its services, it will allow our economic system, as the result of work uninterrupted by crises, to put on fat; and it is this fat which is to eliminate, and doubtless will and must eliminate, interest. Interest feeds upon the sweat and blood of the people, but it has no liking for fat or, in other words, economic prosperity. For interest, fat is poison.

It is quite certain that the disproportion between the demand and supply of real capital, which is the cause of interest, will continue to exist for some considerable time after the introduction of the money-reform, and that it will only gradually disappear. The effects, accumulated through thousands of years, of the traditional form of money, namely the scarcity of real capital, cannot disappear as the result of twenty-four hours' working of the lithographic press. The scarcity of houses, ships and factories cannot be eliminated by gaily-printed slips of paper, in spite of the belief to the contrary held by the paper-money lunatics of all times. Free-Money will permit the building of houses, factories and ships in unlimited quantities; it will permit the mass of the population to work as much as it pleases, to sweat and curse the pauperism that gold has left behind. But Free-Money will not itself provide a single stone for the missing cities. The lithographic presses upon which Free-Money is printed cannot themselves contribute a drop to the ocean of real capital necessary to drown interest. Freedom from interest can be realised only by years of dogged and uninterrupted toil. Lasting freedom must always be striven for; freedom from interest must also be striven and fought for. Bathed in sweat the people must cross the threshold of their first interest-free dwellings, their first interest-free factories; bathed in sweat they must organise the interest-free State of the future.

The day on which gold is driven from its throne, the day on which Free-Money assumes the function of exchanging commodities, will see no great change in interest. The interest upon existing real capital will remain for some time unchanged. Even the new real capital which the people can now produce with untrammelled labour will yield interest. This new real capital will, however, depress interest in direct proportion to its own increase in quantity. And if beside a city like Berlin, Hamburg, Munich, a second, larger, city is built, the supply of dwellings will perhaps cover the demand and bring interest upon houses down to zero.

But if real capital is still producing interest and it is possible to buy with money commodities which can be assembled into new, interest-bearing, real capital, it is clear that anyone seeking a loan of money must pay for it interest equal to the interest yielded by real capital. That is obvious from the laws of competition.

Loans of Free-Money must therefore pay interest as long as real capital yields interest. Real capital will long remain capital because metal money allowed it to exist only in insufficient quantities, so its component parts, namely, money and raw materials, will also long remain capital.

Up to the introduction of Free-Money interest on real capital depends on basic interest; after the introduction of Free-Money basic interest will disappear, and interest on loans will be exactly determined by interest on real capital. Borrowers of money will no longer pay interest because money can exact a tribute from the wares, but because the demand for loans, for the time being, exceeds the supply.

Basic interest is not interest on a loan; the exchange of money for wares and the tribute thereby exacted have nothing in common with a loan. Basic interest is not, therefore, determined by demand and supply. In exchange for the money the producer gives his produce. This is an exchange-transaction during which basic interest is exacted because the possessor of money can prohibit, or allow, the exchange. Basic interest corresponds to the difference of efficiency between money and the substitutes for money (bills of exchange, barter and primitive production) as media of exchange. No offer of loan-money, however large, could eliminate this difference, and upon it depends basic interest.

With the interest on real capital, on the contrary, we have, not an exchange, but a loan. The landowner lends his land to a farmer, the house-owner lends his house to a tenant, the manufacturer lends his factory to the workmen, the banker lends money to his debtor—but the merchant who exacts interest from the wares lends nothing; he makes an exchange. Farmer, tenant, workman, debtor, give back what they received; but the merchant receives for his money something totally different from money. For this reason exchange has nothing in common with lending, and for this reason, also, basic interest and interest upon real capital are determined by totally different causes. We ought really to cease designating two so fundamentally different things by the same word, interest.

Interest on real capital is determined by demand and supply; it is subject to the laws of competition and can be eliminated by a simple change in the ratio of demand to supply. With basic interest this would never be possible. Interest on real capital has up to the present been protected from such a change—the condition for the production of real capital being that it should be able to exact interest equal to basic interest.

Free-Money will deprive real capital of this protection, but the disproportion between the demand and supply of loans of every kind, loans in the form of tenement-houses, factories and machinery, as well as loans in the form of money, will continue to exist.

The material for the interest upon these money-loans will, however, no longer be drawn from commerce (Money-Wares-Surplus Money) but from production. It will consist of the increase of the product obtained, without increase of the cost of production, by the employer with the aid of a loan—and claimed by the loan-giver for himself, because the ratio of demand and supply temporarily permits him to do so.

Basic interest is exacted during exchange, not during production. It is not a share in the increased quantity of wares produced with the help of a loan, but a share in all the wares dependent upon the medium of exchange. Basic interest would still have been exacted even if all workmen had possessed their own, precisely similar, means of production; if all debts had been paid; if everyone paid for his purchases in cash; if everyone lived in his own house; if the loan-market had been closed; if loans in every form had been

prohibited; if the exaction of interest had been forbidden by law and religion.

The demand for loans, especially in the form of means of production, is caused by the fact that more or better wares can be turned out with these means of production than without them. If the worker creating this demand finds an insufficient supply, he must surrender to the loan-giver part of the surplus he hoped to realise with the desired means of production—for no other reason than that the ratio between demand and supply so decrees. And this ratio will continue to exist for some time after the introduction of the Free-Money reform.

As long as the means of production are capital, the produce of labour will also, even after the introduction of Free-Money, be capital—not however as a ware, not in the market, not where men bargain about the price. For there the claims for interest upon the wares would cancel one another. But outside the circulation of wares, where the question is, not a price, but the conditions of a loan, not for purchasers, but for borrowers; the produce of labour can remain capital and indeed must remain capital as long as the means of production are capital. The opposite is true of our traditional form of money which exacts its interest, not from borrowers, but from the circulation of wares. It has plunged its snout into the very blood-circulation of the people. Free-Money will deprive the medium of exchange of its present leech-like characteristics. Free-Money is for this reason not intrinsically capital. It cannot under all circumstances extort interest. It shares the fate of the means of production, which can exact interest only as long as demand does not overtake supply. If interest on real capital falls to zero, interest-free loan-money will also have become a fact. With the Free-Money reform basic interest disappears from the moment Free-Money meets the wares. Free-Money as a medium of exchange is on the same level as the wares. It is as if we had inserted potatoes as medium of exchange between iron and wheat. Does anyone imagine that potatoes could exact interest from wheat or iron? But the disappearance of basic interest after the introduction of Free-Money is no reason for the immediate disappearance of interest upon loan-money. Free-Money will only clear the road for interest-free loans; more it cannot do.

In this distinction between basic interest and interest on loans, everything we have hitherto said about interest is focussed to a point. Basic interest has up to the present escaped observation because it was concealed behind its offspring, ordinary interest upon loan-money. When a merchant borrows money and adds the interest he pays, with his other general expenses, to the price of his wares, this was, up to the present, assumed to be interest upon a loan. The merchant was supposed to advance the money to the wares, to lend them something; and the producer was supposed to pay the interest upon this loan. Such was the explanation. And those who let this fallacy pass were not necessarily superficial thinkers. For appearances are here indeed deceptive. Only the closest observation could discover that the interest paid by the merchant for loan-money is not the beginning but the end of the whole transaction. The merchant uses money to exact basic interest from the wares, and as the money does not belong to him, he delivers the basic interest to his capitalist. He acts here simply as cashier for the capitalist. If the money had been his own he could have exacted basic interest just as easily and put it in his pocket. In this case where is the loan? With a loan, service and return service are separated in time. The interest upon a loan is wholly governed by the time that elapses between the service and return service. But when money is being exchanged for wares, when basic interest is being exacted, service and return service are at precisely the same point of time. A loan-transaction leaves a debtor and creditor; an exchange-transaction leaves no trace. A person goes into a shop, buys something, pays and goes away. The transaction is then completed. Each party gives and receives in the present the whole amount agreed upon. Where is, in this case, the loan? Loans often mean poverty, distress or burdensome debt; and they always mean incapacity to pay at once for the thing desired. A person who buys bread on credit because he cannot pay ready money receives a loan and pays interest in the form of an increased price. But when a farmer brings a cart-load of fat pigs to market to exchange them for money, there is no poverty, no distress and no burden of debt. A loan-giver gives from his superfluity; a loan-taker takes because of his want. But in exchange each party has simultaneously superfluity and want; want of what he asks for, superfluity of what he offers.

Basic interest, therefore, is in no way related to interest upon loans. Basic interest is, as we have said, a tribute, a tax, an extortion; it is many things, but it is not a return service for a loan. Basic interest is a unique phenomenon which must be considered by itself; it is a fundamental economic conception. A merchant is willing to pay interest upon a loan of money because he knows that he can recover the interest from the wares. If basic interest disappears, if money loses the power of exacting basic interest, merchants will no longer be able to offer interest for loans to buy wares.

Here again a comparison with barter will be useful. In barter wares are exchanged for one another without interest. But if at the time of barter someone desires wares, not in exchange for his wares, but as a loan, the ratio between the demand and supply of loans determines absolutely whether, or how much, interest can be exacted. If a house can be let for a rent greater than the amount of depreciation, it is obvious that anyone who rents a house in its component parts (in the form of a loan of wood, lime, iron, etc) will have to pay interest.*

6. FORMER ATTEMPTS AT EXPLAINING CAPITAL INTEREST

Readers who now understand to what circumstances houses, means of production, ships, etc. and money, owe their characteristics as capital, will also wish to hear something of the attempts hitherto made to explain interest. Those who desire thorough information on the subject will find the theories of interest very fully described in Boehm-Bawerk's " Capital and Capital-Interest." The following classification is taken from that work. The author puts the question: Whence and why does a capitalist receive interest? and groups the answers as follows:—

1. Theories of Fructification.
2. Theories of Productivity.
3. Theories of Utility.
4. Theories of Abstinence.
5. Theories of Work.
6. Theories of Exploitation.

*** The frequent repetitions in this chapter were necessary in order to avoid the danger of confusing basic interest upon money with interest upon loans.**

As Boehm-Bawerk does not confine himself to criticising the different theories, but also proposes a theory of his own, he is inevitably guided by his own theory when examining the theories of others, and his attention is attracted by evidence which speaks for or against it—at the cost of other evidence which, considered from another standpoint, gains greatly in importance and deserves a more thorough investigation than that accorded it by Boehm-Bawerk. I find for instance on p. 47 the following remarks:—

" Sonnenfels,* influenced by Forbonnais,† sees the origin of interest in the interruption of the circulation of money by money-collecting capitalists out of whose hands money can be enticed again only by a tribute offered in the form of interest. He ascribes various evil effects to interest: that it increases the price of commodities, that it diminishes the reward of diligence (by this is meant probably the proceeds of labour) of which it allows the owner of money to partake. He even calls capitalists a class of non-workers who live by the sweat of the working classes."

For us a man advancing such opinions is an attractive personality, but Boehm-Bawerk does not examine this theory in detail; he dismisses the originator of it with a few words about " contradictory eloquence." But it may be that if these early writings on interest were studied from the point of view of basic interest they would be found to contain many remarkable statements. Possibly the independent interest-creating power of our traditional form of money has not had to await discovery and proof until the present day.

We shall now give a greatly condensed summary of the above six theories, referring all who wish to study the history of the theories of interest more closely to the above-named excellent work of Boehm-Bawerk.

A detailed examination of these theories is unnecessary, as anyone, with the help of the theory of basic interest, can discover the point at which the theorist, lured from his course by a siren in the shape of a theory of value, runs full-sail upon some reef of error.

1. The Theory of Fructification, by a flight of fancy, deduces

* Sonnenfels, Handlungswissenschaft. Vienna, 1758.

† No reference.

interest from rent on land. Because a field that yields interest can be bought with money, money and everything that can be bought with money must yield interest. True, but this theory proves nothing at all, for it fails to explain why money, which is expressly declared to be unproductive, can buy a field that produces interest. Among those who adopted this theory we are surprised to find Turgot and Henry George—honest men in doubtful company. But probably we have here simply opinions held without deep conviction and passed on to provoke discussion and to call the attention of others to the problem of interest.

2. **The Productivity Theory** explains interest by asserting that the means of production (capital) assist production (labour). And this is true, for what could the proletariat do without means of production? But this theory asserts, further, that the resulting increase of produce must obviously and naturally belong to the owner of the means of production. This is not true and certainly not obvious, as is shown by the fact that work and the means of production cannot be separated; that it is impossible to say what part of the product is due to work and what part to the means of production. If interest were due to the fact that a proletarian worker can produce more with instruments of production than with his naked hands, nothing whatever would in most cases be left over for the worker. An agricultural worker without a field and a plough, or an engine-driver without an engine is helpless. But work and the means of production cannot be separated, and division of the product between owner of the means of production and worker must be determined by circumstances other than the amount of assistance rendered to production by the instruments of production. What are these circumstances?

Our answer is: The ratio in which the workers share the product with the owners of the instruments of production is determined by the demand and supply of these instruments, quite independently of their efficiency. The means of production assist labour, hence the demand from the proletariat. But this demand alone cannot determine interest; supply has also a word to say. In the division of the product between capitalists and proletariat everything depends upon the ratio of demand to supply. The capitalist can expect interest on his means of production only as long as demand exceeds

supply. And the better, the more efficient the instruments of production placed at the disposal of the workmen by the capitalist, the more the produce of these instruments will help to swell their supply, and thus to depress interest. But according to the productivity theory, the contrary should be true: interest should increase in proportion to the efficiency of the means of production. If there were a universal ten-fold increase in the efficiency of the means of production, the productivity theory would expect an enormous gain for the capitalist, whereas in reality such an event would soon cause the supply of means of production to overtake demand, with the result that interest, under pressure of this supply, would disappear (on the supposition that money was not able to prevent such a development).

The productivity theory is unable to explain interest because it treats capital statically (as matter) instead of dynamically (as a force).* It sees only the demand caused by the usefulness of the means of production and fails to consider supply. The productivity theory treats capital simply as matter; it overlooks the forces necessary to convert this matter into capital.

3. **The Utility Theories** are the offspring of the productivity theory, says Boehm-Bawerk. But Boehm-Bawerk obscures the simple train of thought which leads to the productivity theory by converting the problem into a problem of value—without saying upon which theory of value his proof is based. When he speaks of the value of the product we may think of the ratio in which commodities exchange for one another. But what can we make of the expression "value of the means of production"? The exchange of instruments of production is exceptional, yield of interest, not price, being here spoken of. If the exception occurs, if an employer sells his factory, the price is determined entirely by the yield of interest, as is proved by the daily fluctuations of industrial shares and by the fact that the selling price of a field is the sum which yields interest equal to the rent. And what theory of value could be applied to the field? If the factory to be sold is resolved into its component parts, that is, into commodities, and the value of these commodities is established, we have commodities and prices, not

* See Dr. Christen: Absolute Währung, Annalen d. Deutschen Reiches, 1917, p. 742.

means of production and interest. Commodities are produced for sale, means of production for personal use or as capital to lend. Is there any theory of value in existence which applies simultaneously to commodities and means of production, to price and interest? An impenetrable fog overhangs this region.

Our author says for example on page 131:

"It should be obvious that even if we have proved that capital has a power of producing goods or of producing more goods, we are still not justified in assuming as proved that capital has a power of producing more value* than would otherwise have been produced, still less of producing more value than it possesses.† To substitute the latter conceptions for the former in the train of reasoning would clearly be equivalent to pretending that something had been proved which in reality had not been proved."

It may be that everything here said of so-called value, of intrinsic value, of production of value, of stores of value, of extracted or petrified value is obvious to those who hold the same opinions as Boehm-Bawerk. But how can he possibly assume that all his readers hold these opinions? Does "the problem of value" no longer exist? For many of us it is "obvious" that when the fog of value condenses into a "conception of value," what the author really means is simply a product in a certain quantity and of a certain quality, which can be exchanged. But to those who understand value in this sense it is quite obvious that the power of capital to produce more goods includes the power of capital to produce more value. If, for example, the general use of the steam-engine doubles the product of labour, everyone will obtain, in exchange for his doubled produce, double the quantity of goods he obtained formerly. If, now, he calls the "value" of his produce what he obtains in exchange for it, he obviously obtains in exchange for his produce (doubled by the use of the steam-engine) exactly double the quantity of "value."

4. **The Abstinence Theory,** proposed by Senior, begins well by seeking the explanation of interest in the existing disproportion between the demand and supply of means of production. But the

* Again the machinery of value!

† Again intrinsic value!

abstinence theory stops halfway. Senior regards mankind as confirmed spendthrifts, who prefer to live a few days in dissipation and for the remainder of the year to pay interest upon a loan, rather than to renounce an immediate enjoyment. Hence the scarcity of the means of production, the disproportion between demand and supply; hence interest. The few persons who practice abstinence are rewarded for their rare virtue by interest. Even these few persons are abstinent, not because they prefer future enjoyment to present prodigality, not because as youths they wish to save for marriage, as men for old age, as fathers for their children; but because they know that their savings will yield interest. Without this reward of virtue they, also, would live from hand to mouth, they, also, would save no seed-potatoes but squander the whole harvest in one mighty potato feast. Without interest no one would have any motive for producing and preserving capital. Present enjoyment is always and obviously preferable to future enjoyment. For no one knows whether he will be alive in the future to enjoy the goods he saves!

If such is human nature (how abstemious in comparison are bees and marmots!) is it not astonishing that mankind continues to exist and that anyone ever makes a loan in money? Human beings who are such reckless managers of their own property must, when entrusted with the property of others, be under still greater temptation to sacrifice future enjoyment to the sweets of the present. How can they ever pay interest or repay borrowed capital? And if our ancestors always consumed their winter provisions before the winter began, it is difficult to account for the fact of our existence. Or did our forefathers renounce immediate enjoyment because the provisions in their cellars yielded interest, that is, became more valuable, more abundant and of better quality? Yet there is some truth in Senior's theory. Doubtless interest owes its existence to scarcity of capital, and scarcity of capital must be due to thriftlessness. But, strangely enough, the spendthrifts are not those who pay the interest, but those who exact it. It is true, indeed, that what the capitalists spend does not belong to them, but to others; for the unemployment they cause for the purpose of exacting basic interest through the interruption of the monetary circulation, is at the expense of the workers. Capitalists spend the

property of others, namely the power of work of the toiling, thrifty masses. To prevent over-production of capital and a fall in the rate of interest, they allow produce worth billions of dollars to be destroyed, at the expense of others, as over-production during economic crises. Hence the scarcity of capital, hence interest. Sermons about abstinence should therefore be addressed to the capitalists, not to the workers. The workers have shown that they can practice abstinence even unto death by starvation to snatch back a small fraction of the capitalists' booty. Such heroic abstinence they have shown in a thousand strikes; so if they could be persuaded that to abolish interest they need only save—chew no tobacco, drink no brandy—presumably they would do so. But under present conditions what would be the result? The moment interest upon real capital fell below basic interest, a crisis, an economic catastrophe, would rob the workers of the fruit of their abstinence.

But in any case the abstinence theory leads straight to the following contradiction: Work, toil, sweat, to produce and sell many commodities, but buy as few commodities as possible. Starve, freeze, abstain, buy nothing of what you produce (that is, of what you have destined for sale)—in order to gain the largest possible surplus of money for the formation of new real capital.

The originators of the abstinence theory would have come upon this complete contradiction if they had followed up their original line of argument, for they would have discovered the defects of our present monetary system. Probably the same line of reasoning taught Proudhon that gold blocks the road between commodities and real capital, and prevents the conversion of an over-production of commodities, which depresses prices and leads to an economic crisis, into an over-production of capital, which depresses interest and stimulates exchange.

5. **The Theories of Work** declare that interest is the product of the capitalist's labour. Rodbertus calls the reception of interest an office; to Schaeffle coupon-cutting appears an economic profession, his only criticism of which is that its "services" are expensive; and Wagner calls stockholders "public functionaries for the formation and employment of the national fund for the means of production." Yet Boehm-Bawerk does these persons the honour of numbering them among the investigators of interest!

6. **The Theories of Exploitation** explain interest simply as a forcible deduction from the product of labour, which the owners of the means of production are able to exact because the workers must live by their work, and cannot work without instruments of production.

But does this particular theory deserve the ill-epithet of "exploitation?" Does not the abstemious man, in the abstinence theory, also exploit market conditions, when he makes use of the scarcity of capital in the market to exact interest?

According to this theory—its chief upholders are the socialists—the owner of the means of production measures the deduction from the product of labour, strangely enough, not by commercial principles of trade and exchange, but by historical and moral standards. Marx says: "A moral and historical factor enters into the determination of the value of labour, in contrast to other commodities." (Capital, Vol. I. VI).

But what has the maintenance of labour to do with history and morality, with certain countries and certain times? For the average amount of food required to maintain labour is determined by the labour itself! It may vary with the difficulty of the task, with race, with the strengthening or weakening of the digestive organs, but it can never vary because of moral and historical causes. If morality is allowed to be a factor in this, the central point of Marx's doctrine, he can no longer speak of the "labour" contained in a commodity. With such spongy terminology anything can be proved.

According to this theory the capitalist makes careful inquiries: how the workman's mother, grandmother and great-grandmother fed themselves, what these foodstuffs cost, and how much of them a workman consumes in bringing up his children; for the capitalist is greatly concerned that not only "his" workmen, but workmen in general shall remain strong and healthy. This minimum the employer leaves to the workers. The remainder he removes, unobtrusively, for himself.

This division of the product of labour between employer and workman which is Marx's easy method of evading the whole problem of interest (for in this manner the theory of wages includes the theory of interest and rent) is the weak point in the theory of

exploitation. The preliminary assumption of this theory, that wages are determined by the cost of breeding, training and feeding workmen and their offspring, is unsound, as is the subterfuge that whenever wages go above or below this limit, the feeling of the community as to what a workman needs determines the amount of wages!

"During the last five years wages have risen to such an extent on East-German estates that they are hardly distinguishable from West-German rates, and the seasonal migration of labourers (Sachsengängerei) has greatly diminished." This was recorded in the newspapers in 1907. It is remarkable how suddenly the feeling of the community changes in respect to what a worker needs for living! The change of prices on the exchanges is, indeed, even still somewhat more sudden. Nevertheless a period of five years is not long enough to be called a "historical" development.

In Japan wages have risen 300% within quite a short period—but surely not because the feeling of the community about hunger and repletion has so suddenly changed to this extent. This explanation of the contradictions with which the theory of exploitation bristles, bears every mark of an argument advanced, for want of a better, by someone driven into a corner.

One would be equally justified in stating the theory of exploitation as follows: The capitalist takes from the product of the worker everything he requires for living up to the standard prescribed for his class by history and the feeling of the community, and for bequeathing suitable legacies to his children. The rest he throws, without taking the trouble to measure or count it, to the workers. This statement of the theory has, indeed, several advantages over the form chosen by Marx. It certainly sounds more plausible, for the capitalist would first, obviously, think of himself before inquiring whether the workers could manage upon what remained. The introduction of wheat-duties by the German agrarian party gave wide publicity to this obvious fact.

The explanation, put forward by this theory, of the origin of the proletariat essential for interest is also extremely arbitrary. That large enterprises have often advantages over small enterprises does not prove that these advantages must necessarily accrue to the

owners of the large enterprises. This would first have to be established by a sound theory of wages. At the present day capital, whether in the form of a machine of 10 or of 10,000 horse-power, produces the same interest, namely, on the average, 4-5%. Even if large enterprises had always advantages over small enterprises this would still not prove that the owners of the small enterprises must be reduced to the ranks of the proletariat. Artisans and farmers need not always remain so dull-witted as to fold their arms and let themselves be supplanted by large enterprises—nor, as a matter of fact, have they done so. They defend themselves—they combine a number of their small enterprises into one large enterprise and in this way often succeed in uniting the advantages of a large enterprise with the thousand minor advantages of small enterprises (co-operative creameries and steam-threshers, village bulls, etc). Nor is there any reason, founded on the advantages of a large enterprise, why its shares must be held by capitalists rather than by the workers themselves.

It is not, in short, so easy to explain the origin of the proletariat. One may invoke the laws of rent or forcible expropriation by the sword. But this does not explain why a proletariat is evolved in the colonies. The sword is there unknown, and freeland lies before the gates of the cities.

In the German colonies in Brazil (Blumenau, Brusque) many industries, especially weaving factories, have been founded, and in these factories the daughters of the German colonists work under wretched conditions for low wages. Yet the fathers, brothers and husbands of these proletarian women have unlimited quantities of the finest land at their disposal. Hundreds of daughters of German colonists also work as domestic servants in Sao Paulo.

It is not easy to explain the continued existence, still less the increase, of the proletariat at the present day, when movement is free, when the proletarian can emigrate to uninhabitated countries and there obtain land*, when everyone can easily, by co-operation, enjoy the advantages of a large enterprise—especially as modern

* For the journey from Europe to Argentina the Norddeutcher Lloyd in 1912 charged 25 dollars, or only about a week's wages of a German harvest worker.

liberal legislation tends to protect the proletariat from economic brigandage.

But as well as the sword, as well as the advantages of large enterprises, as well as legislation devised to protect rent, there is another cause at work that can explain the existence of the proletarian masses—a cause that has hitherto been overlooked by the investigators of interest. Our traditional form of money is capable, unaided, of reducing the mass of the population to the condition of a proletariat; to do so it needs no allies. The proletariat is an inevitable regularly-appearing concomitant of our traditional form of money. The proletariat can be deduced directly, without subterfuges, without arbitrary reasoning, without ifs and buts, from the present form of money. Our present form of money must always be accompanied by mass-poverty. In former times the sword was an efficient weapon for separating the people from the means of production. The sword, however, cannot hold the booty won. But from money the booty can never be torn. Interest cleaves closer to money than blood or rent to the sword.

Many, in short, may share in the plundering of the workers, and may, for this purpose, make use of divers weapons, but all these weapons rust. Gold alone never rusts, gold alone can boast that neither the division of inheritances, nor legislation, nor any form of co-operative or communistic order, has power to deprive it of interest. Interest upon money is proof against legislation and against the anathema of the Church. The diversion by legislation of rent on land into the coffers of the State is possible and compatible with private ownership of the land. Here and there an attempt of this kind is being made. But no law can deprive our traditional money of even a fraction of the interest it exacts.

Our traditional form of money has produced the proletarian masses, the existence of which gives rise to the theory of exploitation; and it has successfully counteracted the natural forces tending to dissolve these impoverished masses. To be complete, the theory of exploitation must go back a step and seek interest, not in the factory, not in private ownership of the means of production, but in the exchange of the produce of labour for money. The separation of the people from their means of production is merely a result, not the cause, of interest.

7. THE COMPONENTS OF GROSS INTEREST

(Basic Interest, Premium for Risk and Hausse-Premium) *

Those who seek to test the correctness of the above theory of interest by statistics will frequently come upon apparent contradictions. The reason is that besides basic interest the rate of interest usually contains components which have nothing to do with interest.

In addition to insurance against risk, the rate of interest often contains a peculiar component dependent upon variations in the general level of prices of commodities. To emphasise the connection with rising prices, and to provide a term which can be used outside Germany, I shall call this component a Hausse-premium. This means the share of the profit from an expected rise of prices (Hausse) falling to the giver of money.

To understand the nature of this component of interest one need only observe the conduct of borrowers and lenders of money when a general rise of prices is expected. A characteristic feature of a general rise of prices is that borrowed money can be paid back with part of the commodities that have been bought by means of the money and then sold. An extra profit, over and above the legitimate profit of commerce, a surplus, therefore remains. This surplus must of course provoke a universal appetite for buying proportionate to the probable amount of the surplus and, above all, to the degree of certainty with which the continuation of the rise of prices can be expected.

Those who work with borrowed money then increase their requests for money from the banks to the extreme limit of their credit (which, as a rule, increases, since the rise of prices favours debtors); and those who have previously lent money prepare to start business independently, foregoing their intention only if borrowers, by raising the rate of interest offered, make them sharers in the expected gain.

Through the general rise of prices (trade-boom, business prosperity) the possessor of ready money and claims to ready money

* I have substituted "Hausse-premium" for "Ristorno," the word formerly used by me, as it better expresses the meaning: the money-giver's share in an expected rise of prices.

(Government loans, mortgages, etc.) is threatened with loss, since he receives less and less commodities for his money. The only way in which the possessor of money can protect himself against this loss is to sell the threatened securities, and with the money realised to buy industrial shares, commodities, houses, as the prices of these things, it is commonly expected, will increase. After this double transaction the trade-boom can no longer injure the individual in question; the loss falls on the purchaser of the threatened securities. But as these purchasers also understand the situation, they buy the Government securities only at a reduced price, and they increase the deduction (discount) which they make when buying bills of exchange. In this way a kind of equilibrium is established.

But now suppose some clever person says to himself: "I have, indeed, no money, but I have credit. I shall borrow money upon bills of exchange and buy commodities, industrial shares and the like. And when the bills of exchange fall due, I shall sell, at the higher prices, what I have bought, and pay my debt, keeping the difference for myself." Clever persons of this kind are plentiful, and they are all to be found at the same time, in the same place, namely in the banker's waiting-room. Small manufacturers, small merchants and the richest in the land are there in company. They have all an insatiable appetite for money. But the man of money sees the throng and knows that his money is insufficient to satisfy them all. (If he did satisfy them, they would return next morning and ask for double the amount). To reduce the throng he raises the rate of interest (discount) and he keeps raising it until the clever persons are uncertain whether the profit from the transaction they have planned can cover the increased amount of interest. Equilibrium is then established; the appetite for money disappears; the throng in the waiting-room of the man of money melts away. What the possessor of money loses through a rise of prices has then gone over into the rate of interest.

Thus the rate of interest must replace what money-capital loses through a rise of commodity prices. If, for instance, the expected rise of prices amounts to 5% annually, and basic interest is 3 or 4%, the interest upon loans must rise to 8 or 9%, to leave money-capital unaffected. If the capitalist deducts from this 9% the 5% corresponding to the rise of prices and adds it to his capital, his

position is as strong as before the rise of prices. 105=100, that is, for 105 he now receives the same amount of commodities as he used to receive for 100.

It would not be surprising if a closer examination revealed that in spite of the higher dividends and the higher rate of interest during the last 10 or 15 years, German capitalists (with the exception of landowners) had received, on the average, an abnormally low rate of pure interest. Prices during this period have risen sharply. 1,000 marks fifteen years ago purchased quite as much as 1,500 marks at the present day. If a capitalist makes the above calculation, what becomes of the profit from the high dividends and the increase in the price of shares? Where is the so-called increase of value? And a capitalist must so calculate, for the amount of his money, expressed in figures, is immaterial, otherwise a millionaire would only have to travel to Portugal to become a multi-millionaire.

The greatest sufferers from a rise of prices are the holders of securities bearing a fixed rate of interest; for if they sell such securities they lose through the fall in the selling-price, and if they keep them, they receive less commodities for the interest. If the great rise of prices had been foreseen fifteen years ago, the price of consols would have fallen still further perhaps to 50.*

It is therefore clear that the expectation of a general rise of prices will increase the requests for loans of money, and that the owners of money will consequently be in a position to exact a higher rate of interest.

The rise in the rate of interest is therefore caused by the universal, or almost universal, belief that prices are about to rise, and it depends ultimately upon the fact that borrowers hope to meet their liabilities with part of the commodities that owe their existence to the borrowed money. During a rise of prices the rate of interest admits a foreign component that has nothing to do with capital interest. We call this component a hausse-premium, that is, the money-giver's share in the profit expected from a rise of prices.

This component of the rate of interest disappears of course at once when the expected general rise of prices has been realised.

*All this was written before the war. See also: Gesell, Die Anpassung des Geldes an die Bedürfnisse des Verkehrs. Buenos Aires, 1897.

It is not the realisation of a rise of prices, but the hope of a future rise of prices that stimulates people to purchase commodities, to invest their money in new enterprises and to besiege the bank with requests for loans. When the hope of a further rise of prices has dwindled away, there is no stimulus to purchase, and money returns to the banks. The rate of interest then falls; the hausse-premium withdraws from the rate of interest. Obviously when a general fall of prices is expected every trace of hausse-premium disappears from the rate of interest.

The amount of the hausse-premium depends of course entirely upon the amount prices are expected to rise. If a sudden large jump of prices is expected, the claims of the banks will advance at the same pace and there will be a sudden large jump in the rate of interest.

When a general rise of prices was expected in Germany a few years ago, the rate of interest rose to 7%. Shortly afterwards a fall of prices was expected and the rate of interest fell to 3%. The difference can be ascribed with certainty to the hausse-premium. In Argentina the rate of interest sometimes stood at 15%, namely at times when the continuous increase of the stock of paper-money drove prices up by leaps and bounds. When, afterwards, the increase of paper-money ceased, interest fell to 5%. We have here a hausse-premium of 10%. Henry George states that there was a time when 2% monthly was not considered an exorbitant rate of interest in California. This was during the great Californian gold discoveries.

As there is no limit to a general rise of prices (a pound of candles at one time exchanged for 100 livres in assignats at Paris), there is no limit to the hausse-premium. It is easy to imagine circumstances in which a hausse-premium would drive the rate of interest up to 20, 50 or 100%. The increase in the rate of interest is determined simply by the amount prices are expected to rise before the date of repayment. If. for example, a rumour gained currency that gold deposits of immense richness had been discovered under the ice-fields of Siberia and if, in confirmation of this news, great shipments of gold were reported, the inevitable result would be a universal zest for buying which would increase to infinity the requests for loans made to the owners of money. Such

a discovery of gold would cause an unparalleled rise in the rate of interest. The hausse-premium could never, of course, quite equal the surplus expected from the general rise of prices, since in that case, the expected gain would at once be completely absorbed by the discount. But the more reliable and certain the estimate of the expected rise of prices, the more nearly would the hausse-premium equal the surplus.*

In consequence of pressure from the creditor-class laws have been passed from time to time in many countries with the purpose of reducing the prices of commodities to an earlier lower level. (By the withdrawal from circulation of paper-money which had been issued overabundantly, or by the demonetisation of silver, for example). A few years ago (1898) such a law was passed in Argentina by which the general level of prices was reduced from 3 to 1.

If any country at the present day were, on the contrary, to yield to the wishes of debtors and to drive prices step by step upwards by increasing the stock of money in such a way that prices annually increased 10%, the certainty of the expected surplus would bring the hausse-premium very near this 10%.

The recognition of the hausse-premium as a special component of the rate of interest is essential for the explanation of most phenomena in connection with interest. How, for instance, can we otherwise explain the fact that the rate of interest and the amount of savings-bank deposits as a rule increase simultaneously —unless we abandon the theory that interest is deducted from the proceeds of labour?

The division of the rate of interest into interest, premium for risk and hausse-premium gives a completely satisfactory explanation of what appears to be an inexplicable anomaly. For only pure capital-interest is deducted from the proceeds of labour; the hausse-premium is resolved into the higher prices. The worker, whose wages also follow the rise of prices, is consequently unaffected by the higher rate of interest. He pays higher prices and receives a higher wage; equilibrium is here established. The borrower pays a high rate of interest but receives a higher price

*At the end of the German paper-money swindle (1923), interest was paid at the rate of 100% per diem; the capital doubling in this way daily!

for what he sells; here also equilibrium is established. The capitalist receives back his money scourged and mutilated, but is compensated by the higher rate of interest. Here again there is equilibrium. Only the explanation of the increase of savings is wanting, and it must be sought in the fact that during a general rise of prices (a trade-boom) unemployment disappears.

It is only the rate of interest, therefore, not interest itself, that increases simultaneously with savings-banks deposits.

8. PURE CAPITAL-INTEREST A FIXED MAGNITUDE

We have just shown that when a general rise of prices (trade-boom, trade-prosperity) is expected, the rate of interest contains, besides capital-interest and a premium for risk, a third component, a hausse-premium. (The money-giver's share in an expected rise of prices.) From this it follows that if we wish to determine the variation in capital-interest, we cannot at once compare the rates of interest at the different periods. To do so would be as futile as to compare money-wages in different countries, at different times, without at the same time taking into account the prices of commodities.

But as the hausse-premium occurs only during a rise of prices and at once disappears when the rise of prices comes to an end, we can assume that the rate of interest during periods of falling prices, many of which are recorded in history, consists only of pure capital-interest and a premium for risk. The rate of interest during such periods is therefore a reliable index of the movements of capital-interest.

A continuous general fall of prices occurred, as is well-known, during the period from about the century before the birth of Christ to about the year 1400*. During this long period the monetary circulation was confined to gold and silver (paper-money did not yet exist), and the mines of these metals, especially the Spanish silver mines, were exhausted. Partly owing to prohibitions of interest (though these were often inoperative) the gold handed down from former times circulated with difficulty and was

* In the cities of France, Italy and Spain which lowered the monetary standard or, in other words, which practised so-called debasement of the coinage, the fall of prices came to an end sooner.

gradually lost. This general fall of prices has been proved by well-known facts and is, indeed, nowhere denied.

In Gustav Billeter's "History of the Rate of Interest in Greece and Rome up to the Reign of Justinian" the following facts are recorded:

p. 163: "At Rome from the time of Sulla (82 B.C. to 79 B.C.) we already find the rate of interest fixed in its chief types, namely 4% to 6%."

p. 164: "Cicero writes at the end of the year B.C. 62 'Persons of repute, with good credit, find money in plenty at 6%'." Billeter adds "This tacitly expresses a falling tendency and, in fact, we find shortly afterwards a lower rate."

p. 167: "The rate of interest at the time of the civil wars (about the year 29 B.C.) was 12% and even persons with good credit were obliged to pay this rate. From 4–6% the rate of interest had thus reached 12%. But it soon sank back to the old level of 4%."

(The temporary rate of interest of 12% in war time is perhaps sufficiently explained by an unusually high premium for risk. We must also take into account the possibility that in spite of the general scarcity of money, prices may occasionally have increased from local or temporary causes, and that the rate of interest may therefore occasionally have contained a hausse-premium. A change in the rate of circulation of money, caused possibly by a change in the administration of the laws against interest, would suffice to explain such phenomena.)

p. 180: In the Roman Empire before the reign of Justinian: "For safe investments we find 3–15%, but 3% is extremely rare; this rate appears plainly to be the lowest even for investments resembling annuities. 15% is altogether rare; 12% is not exactly rare, but not typical; 10% is rare. The typical rate lies between 4 and 6%. Within these limits we can find no differentiation due to place or time; the only differentiation is due to the nature of the investment, 4% being a low rate, 6% quite the normal rate, and 5% the intermediate rate for very safe investments; these rates being also normal for ordinary security. The normal rate of interest when expressly stated is 4–6%, never 12%. The rate of capitalisation is 4% and 3½%."

p. 180: The time of Justinian (527-565 A.D.) " The conclusions to be drawn are therefore that under special circumstances the rate of capitalisation can rise to near 8% and fall to about 2% or 3%. Examination of the average rates gave 5% as probably normal, generally a little too high; 6%–7% also as an average rate but somewhat high, so that this rate could not be considered quite normal. We can probably assume that a rate a little below 5%, to about 6%, was the true average."

Billeter's researches here come to an end. Let is recapitulate his results:

In Sulla's time (82–79 B.C.) the rate of interest was 4–6%. In Cicero's time (62 B.C.) money was plentiful at 6%. After a short interruption caused by war (29 B.C.) the former rate of interest, 4%, reappeared. During the period of the Roman Empire before Justinian, the usual rate was 4%–6%. During the reign of Justinian, 527–565, the average rate of interest was 5–6%.

What is the meaning of these figures? They mean that during a period of 600 years the rate of interest tended to remain at almost exactly the same level as at present, 1,500 years later. The rate of interest of 4–6½% was perhaps slightly higher than at the present day, but the difference can be ascribed to the premium for risk which, in classical times and during the Middle Ages, was higher than at present when legislation, morality and the Church have extended their protection to interest.

These figures prove that interest is independent of economic, political and social circumstances. They give the lie to all the economists who have hitherto attempted to explain interest, particularly to those who hold some form of the theory of productivity (the only current theory with even the semblance of truth). That the same interest is paid for modern means of production such as steam threshing-machines, self-binders, double-barrelled guns and dynamite, as was paid 2000 years ago for reaping-hook, flail, cross-bow or wedge proves plainly enough that interest is not dependent upon the usefulness or efficiency of the means of production.

These figures mean that interest is due to circumstances that made their influence felt 2,000 years ago, and that this influence continued during a period of 600 years in almost exactly the same

strength as at the present day. What are these circumstances? Not one of the current theories of interest gives even a hint in answer to this question.

Billeter's investigations unfortunately end at the period of Justinian and, as far as I know, there is no trustworthy investigation of the following period up to the time of Columbus. It would, indeed, be difficult to obtain reliable data relating to this period, at any rate in Christian countries; for the prohibition of interest became more and more strict, and the monetary circulation, and with it commerce, decreased in consequence of the progressive scarcity of the precious metals. From 1400 onwards begins the depreciation on a large scale, of the monetary standard, and the recognition of pure capital-interest in the rate of interest becomes impossible. For this period Billeter would have had to combine his investigations with statistics of prices, to separate the hausse-premium from the rate of interest.

(The fact that Pope Clement V at the Council of Vienne (1311) could threaten with excommunication lay princes who passed laws favourable to interest shows the weakness of commerce at that date and the infrequency of loan-transactions. It was possible to treat isolated sinners with severity; but if commerce had been brisk and the breaking of the prohibition a daily occurrence, the Pope could not have dared to use such a threat. The proof of this is that when commerce increased, the opposition of the Church to interest at once fell away).

With the expansion of base coinage in the fifteenth century (which had the same effect on prices as the invention of paper-money) and with the opening of the silver mines in the Harz mountains, in Austria and in Hungary, an economic system based on money become possible in many parts of Europe; and with the discovery of America began the great price-revolution of the sixteenth and seventeenth centuries. Prices rose steadily and the rate of interest was burdened with a heavy hausse-premium. It is not surprising, therefore, that during this period the rate of interest was very high.

From Adam Smith's " Wealth of Nations " I take the following figures: In 1546, 10% was fixed as the maximum legal rate of interest. This law was renewed by Queen Elizabeth in 1566, and 10% remained the legal rate until 1624.

At the latter date the price-revolution had almost come to an end and the general rise of prices proceeded more quietly. Simultaneously the rate of interest fell. The legal rate was reduced in 1624 to 8% and, shortly after the restoration of the Stuarts (1660), to 6%. In 1715 it was reduced to 5%.

Adam Smith remarks that the legal regulation of the rate of interest appears always to have followed, not to have preceded, the market rate.

Since the time of Queen Anne (1703-1714) 5% seems to have been above, rather than below, the market rate. This is natural, since at that period the price-revolution was complete. The rate of interest now consisted solely of pure capital-interest and a premium for risk.

"Before the last war," writes Adam Smith, "the Government borrowed at 3%, and private persons with good credit borrowed in the capital and in many other parts of the kingdom, at 3%, 4 and 4½%."

That is, exactly the conditions which we have at the present day.

Are further facts necessary to prove that pure capital-interest is a fixed magnitude; that it never falls below 3%, or rises above 4–5%; that fluctuations in the rate of interest are not due to fluctuations in the rate of basic interest? When has the rate of interest risen in modern times? Only in conjunction with a rise in the prices of commodities. After the Californian gold discoveries the rate of interest rose to such a height that, in spite of the increased price of wheat, German landowners with debts drew public attention to their plight. The increased prices of wheat were absorbed by increased demands for wages. And when the Californian mines became exhausted, prices fell, in company with the rate of interest. Then came the war-indemnity from France, high prices and a high rate of interest. After the great collapse in 1873 both prices and the rate of interest fell. During the last periods of economic prosperity, 1897 to 1900, and 1904 to 1907, the rate of interest rose. Prices then fell and with them the rate of interest. At present prices are slowly rising; so is the rate of interest. In short, if one deducts from the rate of interest the hausse-premium due to the general rise of prices, what remains, namely pure interest, is a fixed quantity.

But for variations in the price-level, the rate of interest would have remained at 3 – 4% during the last 2,000 years.

Why does interest never fall below 3%? Why does interest never, even temporarily, even for one day in the year, even for one year in the century, even for one century in two thousand years, fall to zero?

The answer has been given in this book.

I now conclude my exposition of The Natural Economic Order, my aim being, not to furnish detailed solutions of separate economic problems, but to indicate the formulae by which such problems can be solved. No separate economic problem, however, has hitherto been brought to my notice which could not be satisfactorily solved by application of the formulae, Free-Land and Free-Money.

Those who raise objections to The Natural Economic Order should begin by asking themselves whether they do not belong to the numerous class of persons who profess the following creed: "I hate disturbance, I hate civil strife and international warfare. I am steeped in pacifism and only ask to be allowed to live in peace with my fellow-countrymen and all the world — **on my income derived from rent and interest.**"

To the criticism of these good people I reply: "With your objections you are merely searching for some means of escape, whereas in reality there is no escape. Nothing that I say has any effect on you, for your personal wishes, unconnected with the subject under discussion, again and again block the road to understanding. Your perverted impulse of self-preservation resists acceptance of my theory and prevents you from finding the answers to your own objections. Consider the young man to whom Jesus said: 'Go and sell what thou hast and give to the poor, and come and follow me.' But the young man went away sorrowful, for he had great possessions."

Everyone would of course like to enjoy the blessings of civil and international peace, and at the same time live on capital-interest. But those who have discovered that the possibility of doing so is a

Utopian fantasy, an illusion of naive minds; those who recognise that war and interest are inseparable, must choose one or other of these alternatives: Either interest and war, or earned income and peace. Such persons, if really animated by peaceful, Christian feelings, will accept with enthusiasm the latter alternative; such persons have the right inner preparation for understanding The Natural Economic Order; it is for them that the book has been written, and it is they also who, undeterred by opposition, will carry through the reforms it proposes.

LIST OF WRITINGS BY SILVIO GESELL

1891. Currency Reform as Bridge to the Social State. (Buenos Aires. 45 pages).
Contains most of Gesell's ideas in outline, including his proposal for non-hoardable money.

1891. Nervus Rerum. (Buenos Aires. 84 pages).
Motto on the title-page: " With our present form of money, the slightest alarm causes the withdrawal of money from circulation. At any moment, consequently, the exchange of commodities may be arrested; at any moment the most important of all means of intercourse organised by the State may refuse its services."

1892. The Nationalisation of Money. (Buenos Aires. 105 pages).
Motto on the title-page: " The currency should be, like railways, simply a public organisation for mediating the exchange of commodities; those who use it should be obliged to pay freight."
In an economic parable Gesell describes an island settlement which adopts an acorn currency. At first the commodities are exchanged by weighing the acorns (non-hoardable currency, as the acorns shrink). Later, payments are made by counting the acorns (hoardable currency, leading to interest).

1897. The Adaptation of Money to the Needs of Modern Commerce. (Buenos Aires).

1898. The Argentine Currency Question. (Buenos Aires. 36 pages). On the disastrous consequences of deflation.

1901. The Monopoly of the Swiss National Bank. (Bern. 30 pages).
A warning about the danger of inflation latent in the proposed charter of the Bank.

1902-4. A monthly periodical for currency- and land-reform. (Bern).
Advocating individualism and *laissez-faire* in contrast to State-control, " the religion of slaves." The economic parable, praised by J. M. Keynes, with which Gesell introduces his analysis of interest (p. 365) is reprinted from this periodical.

1906. The Natural Economic Order. (See back of short title).

1907. Active Currency Policy. (Leipzig. 80 pages).
In collaboration with Ernst Frankfurth—a currency policy under the gold standard with price-stabilisation as aim, including central-bank discount policy and open market operations.

1916. Gold and Peace? (Bern. 20 pages).

1917. Free-Land, the Essential Condition of Peace. (Zürich. 23 pages).
Two lectures on peace, reprinted in the German and French editions of *The Natural Economic Order.*

1920. A German Currency Office: Economic, Political and Financial preliminaries for its establishment. (Berlin. 30 pages).
A memorandum addressed to the National Assembly at Weimar.

1920. International Valuta Association (IVA).
On stabilisation of the exchanges. See p. 359.

1922. Memorandum for the German Trade Unions for use in action concerning Currency, Foreign Exchanges, Reparations. (Erfurt. 96 pages).

1927. Dismantling the State. (Berlin. 94 pages).
German title: Der abgebaute Staat. A plea for elimination of bureaucracy in every sphere of life, and a forecast of the resulting society.

For the German titles of Gesell's works see the German edition of *The Natural Economic Order* (Zitzmann Verlag, Lauf bei Nürnberg, Germany). A biography of Gesell by Werner Schmid was published at Bern (in German) in 1953.

Six of the above works have been translated into English.

METHODS OF APPLYING THE PRINCIPLE OF FREE-MONEY

(Translator, 1958). There are many methods of applying the principle of Free-Money, the most important being: **Tabular Free-Money, Stamped Free-Money, Serial Free-Money,** and **Supplementary Free-Money.**

Tabular Free-Money was the earliest proposal. In *Currency Reform as Bridge to the Social State* (1891), Gesell suggests letting the face-value of the Free-Money notes (" rusting banknotes " as he then called them) decrease from 100 at the beginning to 95 at the end of the year, the current value of the note being shown in a table printed on it. This plan, which has advantages from the banker's standpoint, was retained in the first edition of the present work (1906).

Stamped Free-Money, suggested by George Nordmann, a Swiss merchant, was adopted by Gesell in the second (1916) and subsequent editions. The Free-Money notes, instead of losing 5% of their face-value in the course of the year, would be kept at their full face-value by weekly or monthly stamping at the holder's expense.

With weekly stamping, shown in schematic form on page 270 the number of stamps (52) on each note could be reduced to 13 by grouping the stamps in quarters (13 stamps to each quarter) and cutting off each fully-stamped quarter when the note was passing through a bank or public treasury, with the mention: " First (or Second, or Third) Quarter fully-stamped." Or the notes could be re-issued at 6-monthly or quarterly intervals, instead of annually. With monthly stamping and half-yearly note-issues, six stamps would be the maximum number attached to a note.

If the currency stamps were used only for stamping the notes (and not also as small change), they could be printed on cellophane rolls like the self-adhesive tape used for fastening parcels. Or, instead of adhesive stamps, machine stamping could be adopted, as at present with letters and parcels.

Stamped Free-Money has advantages in the market, outside the gathering places of money. In almost all the practical realisations of Free-Money (in Germany by Hans Timm in Gesell's lifetime, and

by the mining entrepreneur Hebecker, using Timm's "Wära," at Schwanenkirchen in 1931, in Austria by the Mayor of Worgl in 1932, and in the many later experiments throughout the United States) stamped Free-Money was the form adopted.

With Serial Free-Money each denomination of the currency notes is issued in four or more series distinguished by a number and bold marking, for example 1 – 4 red bars across the note. At determined intervals one of the series, drawn by lot, ceases to be legal tender but is exchanged for a fresh series by the Currency Office—after deduction of the legal depreciation *for all four series*. With some modifications this plan could be applied to small-change coins. Serial Free-Money has the merit of reducing interference with the currency to one-quarter; three-quarters of the currency continues to circulate undisturbed.

With Supplementary Free-Money the legal depreciation is compensated in each transaction by a supplementary payment by the holder of the note, as at present in many countries with the purchase tax (sales tax).

Theoretically the principle of Free-Money could be applied by a continuous regular inflation of prices of 5% annually, with, to protect creditors, a corresponding modification of all long-term money contracts. (For 18 years the continuous *irregular* inflation, without modification of money contracts, practised by almost all countries, has realised one aim of Free-Money: the elimination of depressions and unemployment—but at the expense of creditors, and with many grave economic disturbances).

During the great American depression of the thirties, when the United States currency, in spite of liberal credit policy, failed to circulate, legislation was introduced in the Senate and House of Representatives (Bankhead—Pettengill Bill, 1933) directing the Federal Treasury to issue $1,000 million in $1 stamped notes. To each of these notes it was proposed to attach *weekly* a 2-cent stamp, a depreciation charge of 100% which would have made the whole issue self-liquidating within a year, through sale of the stamps.

In Switzerland a plan for applying the principle of Gesell's Free-Money was proposed in 1948 in the Federal Parliament as an amendment (Bernoulli—Schmid) to the charter of the Swiss

National Bank. To forestall depressions, this plan proposes to empower the Bank to counteract any statistically observed slackening of velocity of the currency circulation, by cancelling some or all the higher denominations of the notes, the cancelled notes to be immediately exchanged for fresh notes after a deduction not exceeding, in any one year, 6% of the value of the note.

Gesell rejected the plan of 5% compensated inflation and he also rejected proposals to raise the legal depreciation rate of the notes above what is needed to load money with the carrying costs to which, by their nature, the wares are subject—estimated at about 5% annually. But Gesell did not advocate exclusively any of the other proposals; he held that the technique of Free-Money, like all technique, must be determined in practice, by trial and modification. *

* See Professor Irving Fisher: Stamp Scrip (1933); Fritz Schwarz: Das Experiment von Wörgl (1950); Karl Walker: Die Technik der Umlaufsicherung des Geldes (1952). The New York Public Library has an immense collection of material relating to the American local realisations of Free-Money.

PUBLISHED REFERENCES TO GESELL'S THEORY

Dr. Ernst Hunkel, Deutsche Freiwirtschaft (April, 1919):

" Gesell is not an academic economist laboriously compiling foot-notes and bibliographies, and adding statistics to statistics in partial economic investigations. He has two advantages over the vast majority of experts hall-marked by the State; first, long experience as a merchant, importer, landowner and farmer; but above all the genius that penetrates and grasps economic principles. I have studied economics under such sterling investigators and teachers as Wagner, Schmoller, Sering and Neumann, and remain their grateful pupil, but I confess that in spite of this piled-up learning the real nature of economic and social problems remained for me a book with seven seals until I became acquainted with Gesell's ideas. When I understood them and made them my own, economic science became as clear as crystal."

Dr. Oscar Stillich, Lecturer, Berlin University: Das Freigeld, eine Kritik (Berlin, 1923):

" The Natural Economic Order is a great independent achievement such as few contemporary economists can claim; in contents and expression it is a constructive work which stands mountain-high above the average products of modern economic literature. The literature on the currency question hitherto published in Germany was unintelligible to those without previous economic training, and for this reason it was never read by the masses. Then appeared Silvio Gesell and his school with a series of brilliant writings which threw new light on the currency problem and acted as a powerful stimulant. Gesell's works are models of clear and stimulating exposition; they contain a noble wine, excellent for the palate though perhaps for many somewhat heady. But these works include much that is fruitful and of scientific value, much that will not disappear from economic science. Gesell has destroyed the illusion of gold and given a theory of paper money that can claim to be considered final. The whole theory of metal covering for money is closely examined and completely rejected. Here where nominalists such as Knapp failed, Gesell has succeeded. To sum up, Gesell has produced the most fundamental analysis of the currency question that we possess."

Gustav Landauer, revolutionary socialist: Aufruf zum Sozialismus (Berlin, 1919):

" Of great value is Silvio Gesell's proposal to introduce a medium of exchange that does not, as at present, gain in value from year to year, but, on the contrary, loses value progressively, so that anyone who has obtained possession of the medium of exchange has no other interest than to exchange it again as soon as possible for the produce of others. Gesell is one of the very few who have recognised Proudhon's greatness, and while learning from him, have succeeded in developing his theories along independent lines."

John Maynard Keynes: General Theory of Employment, Interest and Money (1936):

"Gesell's main book is written in cool, scientific language; though it is suffused throughout by a more passionate, a more emotional devotion to social justice than some think decent in a scientist. The purpose of the book may be described as the establishment of an anti-Marxian socialism, a reaction against *laissez-faire* built on theoretical foundations totally unlike those of Marx in being based on an unfettering of competition instead of its abolition . . . . I believe that the future will learn more from the spirit of Gesell than from that of Marx. The preface to *The Natural Economic Order* will indicate to the reader the moral quality of Gesell. The answer to Marxism is, I think, to be found along the lines of this preface." (p. 355).

" The idea behind Gesell's stamped money is sound." (p.357).

Professor Irving Fisher, Yale University:

Booms and Depressions (1933) p.142.

" If only buying could be started first, business borrowing would follow. For this purpose (of directly stimulating the buyers), a unique ' stamped dollar ' plan has been devised—a sort of tax on hoarding. This plan did not come to my attention until after this book had been finished. The plan offers the most efficient method of controlling hoarding and probably the speediest way out of the depression."

Stable Money (1934) pp. 9, 11.

" One of the most interesting examples of monetary manipulation is to be found in the silver ' Bracteates " of central Europe

between 1150 and 1350 . . . Recoinage was periodical . . . A ruler would call in all outstanding coins twice or three times a year and exchange them for new ones after deducting a seignorage fee of about 25% . . . It is said that trade, handicrafts and the arts received a stimulus from the eagerness of the people to get rid of their money . . ."

" This first example of something akin to velocity control is of particular interest in the history of stabilisation. After the bracteates had disappeared about 1350, this principle was forgotten until it reappeared definitely in the writing of Silvio Gesell. After his death velocity control was in some instances applied in the form of Stamp Scrip during 1931 - 33 in Germany, Austria and the United States."
Stamp Scrip (1933) p.67.

" There are some of us who believe Stamp Scrip to be more than a temporary auxiliary currency for the present emergency, believing that if its volume and stamp intervals were regulated according to various conditions, it would be the best regulator of monetary speed, which is the most baffling factor in stabilising the price level."

H. T. H. Gaitskell, later Chancellor of the Exchequer: What everybody wants to know about Money, by nine economists from Oxford. Edited by G. D. H. Cole (1933).

" Gesell has a great deal in common with John Bright . . . this remarkable suggestion presented by its author with such clarity and literary grace . . . Theory would anticipate and practice has shown that given certain conditions the adoption of Free-Money must improve a trade situation . . . good policy for depression in countries where notes are used freely . . . theoretically perfectly sound. It is one of the few attempts which have been made to deal with what is undoubtedly one of the intractible elements in industrial fluctuations. The prolongation of the depression in face of vigorous expansionist monetary policy can only be ascribed to a further fall in velocity. Any method for dealing with this must merit attention."

Subhas Chandra Bose (1897 – 1945) sometime Mayor of Calcutta, member and sometime President of the Indian National Congress:

" We have no use for the teachings of the former generation

regarding land-tenure and money. New teachings on money-interest have come to the forefront, as those evolved by Silvio Gesell. Free India will not be a country of capitalists, big landowners and castes, but a true social and political democracy." (Undated quotation from *Freedom and Plenty*, Los Angeles).

Mahmout Abu Saud, economic adviser, Moroccan Government; economic expert, Arab League; external Professor of Law, Rabat University. (Formerly Prof. of economics, Kabul University, and economic adviser, State Bank of Pakistan).

" No great investigator of the social and economic structure has so long been denied recognition as Silvio Gesell. His masterpiece, *The Natural Economic Order*, is a key to economic problems and a challenge both to capitalism and to Marxian socialism. Gesell's theory of interest is in harmony with the teaching of the Koran and should be welcomed in all Islamic countries. His plan for an interest-free economy is a solid basis for constructive attempts to liberate man from the slavery of his own illusions, from the tyranny of mistaken tradition, and from exploitation by his fellow-man." (Mitteilungen der LS. Partei der Schweiz, Bern. February, 1958).