KARL MARX FREDERICK ENGELS

Collected Works

~**&**

Volume 29 Marx: 1857 - 1861

Contents

Preface XI

KARL MARX

ECONOMIC WORKS

1857-1861

ECONOMIC MANUSCRIPTS OF 1857-58

(First Version of Capital)

Outlines of the Critique of Political Economy (Rough Draft of 1857-58) [Second Instalment]	5
[III. Chapter on Capital]	7
[Section Two. Circulation Process of Capital. Conclusion]	7
[Fixed and Circulating Capital]	7
[Fixed Capital and the Development of the Productive Forces of Society]	80
[Circulation and Reproduction of Fixed and Circulating Capi- tal]	99
Section Three. Capital as Bearing Fruit. Interest. Profit. (Produc- tion Costs, etc.)	129
[Addenda to the Chapters on Money and on Capital]	162
[Money as Measure of Values]	171
[Money as Means of Circulation and as Independent Value]	186
[Machinery and Profit]	198
[Alienation]	209
[Varia]	211

v

	I. Value Gold-Weighing Machines	252 254
A	Contribution to the Critique of Political Economy. Part One	257
	Preface	261
	Book One. On Capital	267
	Section One. Capital in General	269
	Chapter One. The Commodity	269
	A. Historical Notes on the Analysis of Commodities	292
	Chapter Two. Money or Simple Circulation	303
	1. Measure of Value	30 3
	B. Theories of the Standard of Money	314
	2. Medium of Exchange	323
	a. The Metamorphosis of Commodities	324
	b. The Circulation of Money	334
	c. Coins. Tokens of Value	342
	3. Money	356
	a. Hoarding	359
	b. Means of Payment	370
	c. World Money	381
	4. The Precious Metals	385
	C. Theories of the Medium of Circulation and of Money	389
	•	

FROM THE PREPARATORY MATERIALS

Index to the 7 Notebooks	421
[First Draft]	421
I) Value	421
II) Money	421
III) Capital in General	423
[Second Draft]	423
The Original Text of the Second and the Beginning of the Third	
Chapter of A Contribution to the Critique of Political Economy	43 0
[Chapter Two. Money]	430
[2. Money as Means of Payment]	430
3. Money as International Means of Payment and Purchase, as World Coin	435
4. The Precious Metals as Vehicles of the Money Relation- ship	452
5. The Manifestation of the Law of Appropriation in the Simple Circulation	461
6. Transition to Capital	478

Contents

Chapter Three. Capital	501
A) The Process of Production of Capital	501
1. The Transformation of Money into Capital	501
[Additional Notes]	508
Invariable Value of Money	508
Money as Money (World Coin, etc.)	508
Draft Plan of the Chapter on Capital	511
I. The Process of Production of Capital	511
II. Circulation Process of Capital	514
III. Capital and Profit	516
[IV.] Varia	516
References to My Own Notebooks	518

NOTES AND INDEXES

Notes	535
Name Index	551
Index of Quoted and Mentioned Literature	563
Index of Periodicals	577
Subject Index	579

ILLUSTRATIONS

Page 32 of Notebook VI with the Outlines of the Critique of Political	49
Economy	43
Title page of the first edition of A Contribution to the Uritique of Political Economy	259
Page 13 of Notebook B' with a fragment of the original text of the second chapter of A Contribution to the Critique of Political	
Economy	453
Page 28 of Notebook B" with References to My Own Notebooks	519

i

TRANSLATORS:

- VICTOR SCHNITTKE: Outlines of the Critique of Political Economy; Index to the 7 Notebooks
- YURI SDOBNIKOV: The Original Text of the Second and the Beginning of the Third Chapter of *A Contribution to the Critique of Political Economy*, Additional Notes; Draft Plan of the Chapter on Capital; References to My Own Notebooks

Preface

Volume 29 of the Collected Works of Marx and Engels contains writings belonging to the cycle of Marx's economic works of 1857-1861. They include: the concluding part of the manuscript of 1857-58—Outlines of the Critique of Political Economy (Rough Draft); A Contribution to the Critique of Political Economy and preparatory materials to it; two drafts of the Index to the 7 Notebooks; the original text of the second and the beginning of the third chapter of A Contribution to the Critique of Political Economy; a Draft Plan of the Chapter on Capital and the References to My Own Notebooks. Together with the manuscripts included in Volume 28 of the present edition these writings represent a definite stage in the shaping of Marxist political economy, a highly important preparatory period in the creation of Marx's main work, Capital.

The concluding part of the economic manuscript of 1857-58, with which the volume begins, embraces the end of the Chapter on Capital, namely the final subsections of Section Two, "Circulation Process of Capital", and Section Three, "Capital as Bearing Fruit. Interest. Profit. (Production Costs, etc.)", of which Marx only wrote the beginning. The seventh and last notebook of this manuscript also includes the "Addenda to the Chapters on Money and on Capital", which are very extensive and significant in content.

This part of the manuscript deals mainly with the circulation of capital. Marx's novel approach to this problem compared with the way in which it was dealt with by bourgeois economists is manifested first and foremost in his considering production and circulation of capital as a dialectical unity. The functioning of capital, he stresses, represents a continuous movement, a constant transition from one state to another, a variation and change of form. "This change of form and substance is similar to that in an organic body" (see p. 51 of this volume).

In considering the circuit of capital, Marx traces the metamorphoses of its components: fixed capital (value of the instruments of production) and circulating capital (value of the raw materials and labour power). He shows that the first transfers its value to the product in parts, whereas the value of the second is reproduced in the product entirely. Taking these specifics into account, Marx establishes the relation between the time required for circulation and the time required for the production of the commodity, determines the effect of this relation on the rate of surplus value, and reveals other aspects of the law-governed connection between the various phases and forms of the movement of social capital.

In capital's circuit Marx singles out the exchange between capital and labour power, calling this the "lesser circulation". It is precisely at this stage that circulation of capital appears as an "exchange of equivalents which is posited in form, but actually supersedes itself, which posits itself as merely formal (the transition of value into capital, where the exchange of equivalents turns into its opposite and, on the basis of exchange, exchange becomes purely formal, AND THE MUTUALITY IS ALL ON ONE SIDE) ... " (see p. 63). The very growth of capital, its valorisation, Marx again stresses, takes place in the sphere of exchange between capital and labour power through the appropriation of the surplus value produced by the worker. Exchange is here transformed into "the alienation of his labour" (see p. 64). For this reason Marx regards "lesser circulation" as the decisive link in capital's circuit, the link which determines all the others, as the substance of the whole process, the basic condition of the existence of the capitalist mode of production.

The specifics of capital's circuit determine the various ways in which capitalist income is formed and distributed, and the source of all kinds of capitalist income, as Marx proves, is surplus value. In Section Three of the Chapter on Capital Marx endeavoured to sum up the results of his analysis of the transformation of surplus value into profit and other forms of non-earned income (interest, etc.). He formulated here "the 2 immediate laws manifested to us by this conversion of surplus value into the form of profit" (see p. 146). The first of these laws is that the rate of profit is always less than the rate of surplus value. The second law—that the rate of profit tends to decrease—is characterised by Marx as the "most important law" of modern political economy, a law which, "despite its simplicity, ... has never been grasped and still less has ... been consciously formulated" (see p. 133). Marx linked this law with technical progress and the increase in labour productivity, with the change in the organic composition of capital, with the quicker growth of its constant part, which comprises the value of the means of production and the raw materials, in comparison with the variable part, i.e., the part which goes to pay for labour power. This relative increase of the share of constant capital necessarily leads, as Marx shows, to a fall in the rate of profit, although the amount of surplus value constantly increases due to the expansion of capitalist production.

In Marx's opinion, the tendency of the rate of profit to decrease gives rise, among other things, to the growing discrepancy between the development of society's productive forces and the bourgeois relations of production, and this discrepancy inevitably leads to economic crises.

His analysis of the transformation of surplus value into profit here, as in other parts of the manuscript where this problem is dealt with, led Marx to the understanding of the law of average profit and the price of production, which regulates the distribution of surplus value between branches of production with different organic composition of capital. However, the study of this process, as well as the investigation of the origin and economic nature of the other converted forms of surplus value (commercial profit, interest, ground rent), was far from being completed in the first version of *Capital*. Marx continued his analysis of these problems in his subsequent writings and it was in his Economic Manuscripts of 1861-1863 that he achieved the scientific solution of many problems facing him in this connection (see present edition, Vols 30-34).

Marx devoted serious attention in his manuscript to scientific and technical progress and its influence on production. He noted capitalism's inherent striving not only to constant expansion of production, but also to its technical improvement, to mechanisation and automation and to the application of scientific discoveries and inventions for this purpose. Looking into the future, he pointed out that this tendency leads to increasing transformation of "the production process from the simple labour process into a scientific process, one forcing the powers of Nature into its service and thus setting them to work in the service of human needs" (see p. 86). At the same time Marx revealed the contradictory features in the application of science to production under capitalism. He showed that under capitalism technical progress is subordinated to the interests of increasing absolute and relative surplus value. The results of technical progress frequently turn against the immediate producers, from a means of easing labour technical progress becomes an instrument of its intensification, furthering the subordination of living labour to capital and turning the worker himself into an appendage of the machine. "The activity of the worker, restricted to a mere abstraction of activity, is determined and governed in every respect by the movement of the machinery, not vice versa" (see pp. 82-83).

Capitalist relations with their inherent antagonistic contradictions, Marx stressed, stimulate scientific and technical progress one-sidedly, limiting to a certain degree their harmonious and all-round development and the utilisation of scientific and technical achievements in the interests of all members of society. From the fact that machine production is the true basis of capitalism, Marx writes, "it in no way follows that its subsuming under the social relation of capital is the most appropriate and best social production relation for the application of machinery" (see p. 85). Elsewhere he points out: "Beyond a certain point, the development of the productive forces becomes a barrier to capital, and consequently the relation of capital becomes a barrier to the development of the productive forces of labour" (see p. 133).

The conclusion to be drawn from these arguments is obvious: only the communist system will give full scope to scientific and technical progress, only under the communist system will full development be given to the tendency towards the transformation of science, knowledge into an "*immediate productive force*" (see p. 92). The application of science to production will really become a lever for satisfying the requirements of the working people and for saving labour time not for the purpose of increasing the capitalists' profit but for the benefit of society as a whole.

With the establishment of communism Marx linked the elimination of that phenomenon inherent in class-antagonistic social formations which he designated as the alienation of labour. In his economic writings of the time, above all in the Outlines of the Critique of Political Economy, Marx continues to use the concept of "alienation" (in the original "Entäusserung", "Veräusserung") or "estrangement" ("Entfremdung"), although here in his analysis of economic relations this concept no longer plays such a universal role as in the Economic and Philosophic Manuscripts of 1844. The sphere of application of this category became less broad and more

Preface

definite from the time when he had worked out the system of economic concepts revealing the concrete operation of the mechanism of capitalist exploitation. However, Marx considered this broad concept quite suitable and accurately expressing the existing reality for a philosophical generalisation of the exploiter essence of the capitalist system and the destitution of those who produce the material values, in the first place, of the wage workers. Treating alienation as a historical category, he expounded its essence and peculiarity in capitalist society. Marx sees in the transformation of the conditions and products of labour into something alien and hostile to the worker a profound distortion of the social nature of labour, a manifestation of the glaring contradiction between the social character of production itself in the capitalist epoch and the appropriation of its fruits by property-owners. Marx stresses that capitalism is a system under which "social wealth in huger portions confronts labour as an alien and dominating force" (see p. 209). The emphasis is laid not on the mighty potential of social labour, its capacity to materialise or objectify natural resources, but on its "alienation", on the fact that "this enormous power" belongs "not to the worker, but to the personified conditions of production, i.e. to capital" (p. 210).

Seeing alienated labour under capitalism as the extreme form of alienation in general, Marx considered it a historically transient, temporary phenomenon. When capitalist production is replaced by collective production, he pointed out, the sources of all alienation of labour will be eliminated, the perversion of its social character will be overcome. On the basis of collective production there will be created the material preconditions not only for the powerful growth of the productive forces of society as a whole, but also for the integral and all-round development of every worker. This, and not an increase in surplus time, will be the purpose of saving labour time under communism. On the other hand, leisure time will in its turn be a most important factor of social progress. It will broaden people's outlook and knowledge, giving them access to all the achievements of world culture, which is bound to have a favourable effect on their role in production too. "The saving of labour time," Marx wrote, "is equivalent to the increase of free time, i.e. time for the full development of the individual, which itself, as the greatest productive force, in turn reacts upon the productive power of labour. From the standpoint of the immediate production process, it can be considered as the production of fixed capital, this fixed capital BEING MAN HIMSELF" (see p. 97 of this volume).

The next series of Marx's economic writings published in this volume is directly connected with his work A Contribution to the Critique of Political Economy, the first part of which was published in book form in the summer of 1859. It was a landmark in the history of Marxism. It was in this book that Marx made public for the first time some of the findings of his theoretical research. The book was not merely an elaboration of the corresponding sections of the 1857-58 manuscript. In it Marx enriched and deepened his understanding of the questions he analysed and made the exposition more streamlined and systematic. Although the increased bulk of the material obliged him to confine his analysis to the commodity and money, devoting a special chapter to each subject (the Chapter on Capital was not included in the final text), the exposition nevertheless embraced the basic, major problems of political economy, the elements which served as its foundation and points of departure for analysing all its categories. By elucidating these problems from fundamentally new positions radically different from those of bourgeois economic doctrines, Marx in substance revolutionised the very basis of political economy as a science.

In his review of Marx's book in the newspaper Das Volk in August 1859, Engels pointed out that its purpose was by no means "a discussion of some economic issue or other in isolation. On the contrary, it is from the beginning designed to give a systematic résumé of the whole complex of political economy and a coherent elaboration of the laws governing bourgeois production and bourgeois exchange. This elaboration is at the same time a critique of all economic literature, for economists are nothing but interpreters of and apologists for these laws" (see present edition, Vol. 16, p. 472).

Marx's preface to the first part of A Contribution to the Critique of Political Economy is of exceptional methodological and theoretical significance. In it he reveals the profound link between the general philosophical foundations of the dialectical and materialistic world outlook, the understanding of the general laws of social development and the scientific method of analysing economic phenomena. By giving a concise survey of the history of his economic studies Marx showed that they represented an organic part of all his theoretical and practical revolutionary activity. The development of each component element of the revolutionary doctrine determined and stimulated progress in all the others.

The most valuable part of the preface is the characterisation of the essence of the materialist conception of history discovered by

Preface

Marx. The definition given here by Marx of the essence of historical materialism reflected a new and higher stage in the development of his theory of the historical process since that theory was first expounded in the form of a harmonious conception in *The German Ideology* in 1845. This classical formulation took into account in a generalised form the new results of Marx's study of whole epochs in world history, of the experience of the 1848-49 revolutions in Europe and of comprehensive research in the field of political economy. The terminology and the system of concepts of historical materialism were also perfected. In particular, the interpretation of history as the process of succession of social formations was formulated in the appropriate terms. (The very term "social formation" appears for the first time on the last page of the principal economic manuscript of 1857-58.)

In this work Marx expounded in a concentrated form the fundamentals of his doctrine on the principal laws governing the development of human society, on the aggregate of the production relations, as forming the economic structure of society, its real basis determining the political and juridical superstructures and, in the final analysis, the various forms of social consciousness, on the dialectical development of the productive forces and the relations of production, on the inevitability-due to the conflict between the developing productive forces and the obsolete relations of production-of social revolution leading to the replacement of one mode of production by another, more progressive one, of the old social formation by a new one, a replacement which in its turn involves an upheaval in the whole enormous superstructure. "In broad outline, the Asiatic, ancient, feudal and modern bourgeois modes of production may be designated as epochs marking progress in the economic development of society," Marx wrote, making abstraction here of the earliest stage in human development-primitive communism (see p. 263). Capitalism, Marx stressed, is the last social formation based on class antagonisms. However, within it the conditions are created for the elimination of the antagonism, for the revolutionary transition to a higher system under which social production will cease to be carried on in antagonistic forms. "The prehistory of human society accordingly closes with this social formation," Marx notes (see p. 264).

As Lenin said, Marx gave in the preface to A Contribution to the Critique of Political Economy "an integral formulation of the fundamental principles of materialism as applied to human society

Preface

and its history". In so doing he "indicated the way to a scientific study of history as a single process which, with all its immense variety and contradictoriness, is governed by definite laws" (V. I. Lenin, *Collected Works*, Vol. 21, pp. 55, 57).

In his book Marx applied the method of materialist dialectics to the study of economic problems in all their aspects, in particular to analysing the commodity, labour, value and money. Unlike the bourgeois economists, who considered the commodity and value eternal and natural categories, Marx shows their historically transient character. He notes that the product only takes the form of a commodity under definite social relations, that commodity production appears at a certain historical stage and passes through various stages in its development from simple commodity production to the capitalist type. Marx considers the commodity as an elementary particle of capitalist society, the "unit" of bourgeois wealth. He stresses that it is necessary to study the commodity in order to elucidate the very nature of the contradictions which manifest themselves in a more complex and developed form in capital.

Economists prior to Marx had already noted the dual character of the commodity as use value and exchange value, but they were unable to clarify their actual correlation. Marx in his analysis was the first to establish that use value and exchange value form a contradictory unity reflecting the really existing contradiction between the private and social labour of the commodity producers. Analysing the commodity, Marx discovered that the contradiction. inherent in the commodity is conditioned by the contradictory character of the labour expended on its production. Here Marx formulated with great precision the proposition concerning the dual character of labour embodied in the commodity (concrete labour and abstract, general labour) which he had already established in his manuscript of 1857-58. In his own words, this discovery was the "point of departure" which made it possible to explain the true nature of value and a number of other most important categories of political economy.

Basing himself on his study of the commodity and labour and proceeding from the conclusions he had drawn in 1857-58, Marx developed his theory of value. Sharing the view held by the classics of bourgeois political economy on labour as the source of value, he went further than his predecessors in analysing the nature of value, clarifying the qualitative nature and the specifics of the labour which creates it. He showed that value is the embodiment of abstract, socially necessary labour, which is its measure. By his theory of value Marx provided the premisses for understanding how surplus value arises in the process of exchange between labour and capital.

It was in this book that Marx for the first time clearly disclosed the meaning of the phenomenon which he later described in Capital as "commodity fetishism". In the world of commodity producers, especially at the capitalist stage, the external manifestation of economic laws, he stressed, is different from their essence. On the surface the exchange of commodities appears to be an exchange between things, the capacity to be exchanged seems to be a natural, inherent property of the object itself, whereas in reality commodity exchange is the result of historically determined production relations between the producers. "Only the conventions of everyday life make it appear commonplace and ordinary that social relations of production should assume the shape of things, so that the relations into which people enter in the course of their work appear as the relations of things to one another and of things to people" (see p. 276). This illusory appearance by which properties expressing relations between people are attributed to the things themselves, an appearance which confused even such perspicacious economists as Smith and Ricardo, is intensified all the more, Marx points out, as the veiled economic relations between people are more complex and more concealed by the surface phenomena of capitalist society.

Marx achieved great perfection in elaborating the theory of money. In the chapter "Money, or Simple Circulation" Marx disclosed the economic essence of money, analysed its historical origin and its role in bourgeois society. He demonstrated that money is a necessary product of the development of commodity exchange and serves as the complete expression of value, the embodiment of that form of value in which the particular individual labour which creates the commodity appears, through a process of alienation, "as its opposite, impersonal, abstract, general-and only in this form social-labour" (see p. 308). Marx elucidates in detail the causes determining the functioning of precious metals, gold and silver, as money. In this chapter he discusses in detail the functions of money as a measure of value, a medium of circulation, a means of payment, a means of hoarding, and finally as world money. On the basis of his analysis of these functions Marx establishes the factors determining the amount of money required in circulation and discloses other laws of money circulation.

2*

Each chapter in Marx's book is provided with historical and critical surveys: in the first chapter of the analysis of commodities, in the second of theories of money as a standard of measure and a medium of circulation. In these surveys and in a number of notes Marx subjects to a critical analysis the views of bourgeois economists and the utopian doctrines built on the illusion that the contradictions of capitalism can be eliminated by reforming money circulation, replacing the existing monetary systems by "labour money", and so on.

The book A Contribution to the Critique of Political Economy holds a prominent place among the classical works of Marxism. Marx himself later regarded the first volume of Capital as, in a certain sense, its continuation. He considered it necessary in the first section of that volume to summarise its contents for coherence of exposition, at the same time substantially supplementing certain aspects of the theories of the commodity, value, and price which, from the standpoint of his new studies, had not been sufficiently disclosed in A Contribution to the Critique of Political Economy. Nevertheless, even after the publication of Capital this book did not lose its independent scientific significance. A number of propositions elucidated in detail in it, especially in the chapter on money and in the historical excursions in the field of the theory of the commodity and money circulation, were treated only cursorily in Capital, the reader being practically referred to the earlier monograph for a more detailed acquaintance with them. Up to the present time the book remains the best work on money in world economic literature. It is important also as a model of the application of the Marxist methodology in studying fundamental economic and sociological processes.

This volume contains also manuscripts belonging to the preparatory materials for *A Contribution to the Critique of Political Economy.* These include the *Index to the 7 Notebooks*, which was drawn up in the form of two drafts. The *Index* shows Marx's striving to group the materials of his basic rough manuscript in connection with the transition to a new stage in the work on his planned economic study, the stage of preparing it for publication. Intending, at the time, to publish it in six books, Marx outlined in one of the drafts in question the grouping of the material for the first book, devoted to analysing value, money and capital— "capital in general", as he entitled this section in his letter to Engels on April 2, 1858, and in a letter to Lassalle on March 11 of the same year. In the second draft he systematised in greater detail the material for the section on money.

The Index is of interest because it gives an idea of Marx's method of scientific work and of the character of the initial outline for the first book of his intended study. In one of the drafts Marx outlined for the first time the subdivisions of the section "Capital in General", which anticipated in a rudimentary form the distribution of the material in the theoretical part of the future *Capital* in three parts.

Among the preparatory materials is the extensive "Original Text of the Second and the Beginning of the Third Chapter of A Contribution to the Critique of Political Economy", written directly before the final text. It contains several sections which were not included in the final text because it was written before Marx decided to confine himself in the first part of the book to the chapters on the commodity and money and to publish the third chapter as the second part of the work. For this reason the last sections of the Chapter on Money—"The Manifestation of the Law of Appropriation in the Simple Circulation" and "Transition to Capital" and also the beginning of the chapter on capital in the initial variant substantially supplement the final version as published by Marx.

In these sections Marx shows in a systematic and precise form the conditions for money's transformation into capital, the transition from simple money circulation to the circulation of capital, defines the directions and sphere of study of the sources of its growth, which are to be found in the exchange between capital and the labour power of the producers and are realised in the very process of capitalist production. Here the reader becomes acquainted, as it were, with an intermediary stage in the analysis of the economic foundations of capitalist society, a stage which reveals the organic link between Marx's theory of value, exchange value, and money and his doctrine on surplus value. Marx's study of money's metamorphosis, its transformation into capital, besides throwing light on the historical sources of capitalism, also shows the place of simple money circulation in the general movement of capital as a subordinate link in its circuit. "The examination of the simple circulation," he writes, "shows us the general concept of capital, because within the bourgeois mode of production the simple circulation itself exists only as preposited by capital and as prepositing it. The exposition of the general concept of capital does not make it an incarnation of some eternal idea, but shows how in actual reality, merely as a necessary form, it has yet to flow

into the labour creating exchange value, into production resting on exchange value" (see p. 505).

Two other manuscripts from the preparatory materials were produced when A Contribution to the Critique of Political Economy had already been published and Marx had resumed work on the second part, which he had now decided to devote entirely to the problems of "capital in general".

A Draft Plan of the Chapter on Capital is a detailed text in which the theoretical questions concerning capital are divided into three parts: "The Process of Production of Capital", "Circulation Process of Capital", and "Capital and Profit". The first two of these are worked out in particular detail. The section "Varia" contains separate remarks and references to the corresponding material in the manuscript of 1857-58, obviously intended to supplement the above-named three sections. One of the remarks is particularly characteristic; it reveals the Marxian understanding of capital: "*capital*, not simple relationship, but process" (see p. 516).

The plan as a whole served Marx as a general guideline in creating new variants of his economic work. In the course of this work the thought matured in Marx of concentrating the exposition of the problems of political economy not in six books as planned in 1858, but around the questions which he wanted to elucidate in the three above-named sections of the chapter on "capital in general". What formerly had been intended as the scheme for one chapter or one part was now altered into the structure of the whole work. The References to My Own Notebooks, which Marx drew up in this connection, reflect his intention to make use of the materials of his earlier manuscripts, including the original text of A Contribution to the Critique of Political Economy, which had a bearing on the given theme, omitting what had already been utilised in the first part. The References therefore represent a far more detailed scheme for working out the problem of "capital in general" than that drawn up by Marx in 1858 in the Index to the 7 Notebooks and are based on more extensive material.

The 1857-61 period, to which the works of Marx published in Volumes 28 and 29 belong, was thus marked by paramount results in the development of Marxist thought. In these years there appeared a whole cycle of economic manuscripts by Marx, the first rough version of his *Capital* was produced, and his book *A Contribution to the Critique of Political Economy* was published. It

Preface

could not yet embrace Marx's main discovery—his theory of surplus value, which crowned the revolutionary upheaval he wrought in political economy. However, in the form of a draft research paper intended to clarify things for himself, Marx had already evolved this theory as a whole; at least its main features had been elucidated—the economic premisses for the formation of surplus value, the basic aspects of this process, and its determinant place in the entire system of bourgeois production relations. The published first part of the conceived work contained all the necessary postulates for expounding this theory.

Nevertheless Marx himself did not yet consider his study of this central problem of political economy complete. Being an exacting scientist, he set himself new research tasks, aiming in particular at fully elucidating questions which he had only posed in his writings of 1857-61, namely the problem concerning the correlation between surplus value and its converted forms. This was the main cause of the delay in publishing the second part of A Contribution to the Critique of Political Economy and his subsequent decision not to publish it at all because of a change in the general plan of his intended work. Many years later Engels wrote in this connection to one of the Russian socialists: "Marx worked out the theory of surplus value in the fifties in solitude and stubbornly refused to publish anything about it until he had fully clarified all the conclusions to himself. That was the reason why the second and subsequent parts of A Contribution to the Critique of Political Economy were not published" (Engels to V. Y. Shmuilov, February 7, 1893).

All the same, during the years 1857-61 Marx covered a gigantic, and one may say the decisive part of the road to the summits of the new economic science. This was a time of great scientific accomplishments in comprehending the economic laws of the development of capitalist society and in economically grounding the inevitability of its revolutionary communist reorganisation.

* * *

This volume comprises rough manuscripts, partly unfinished, and one work which appeared in print during the author's lifetime.

The translations of these writings, as of the manuscripts included in Volume 28, are based on the text: Marx-Engels Gesamtausgabe (MEGA), II, 1; II, 2, Berlin, 1976-1981.

The fact that these manuscripts were rough drafts explains many of their textual features and determines the principles of their publication in the present edition, which were expounded in a general form in the editorial preface to Volume 28. The specifics of each of them and the corresponding form of presenting them in this volume are mentioned in the notes.

In this edition the manuscripts are printed in a new English translation. Foreign expressions including those in Greek and Latin are given in the original language. English quotations, phrases, expressions and individual words encountered in the original are set in small caps. Some of the words are now somewhat archaic or have undergone changes in usage. For example, the term "nigger", which has acquired generally—but especially in the USA—a more profane and unacceptable status than it had in Europe during the 19th century.

All the manuscripts included in the section "From the Preparatory Materials" are here published in English for the first time. The concluding part of the economic manuscript of 1857-58— Outlines of the Critique of Political Economy (Rough Draft) is given in a new English translation.

A Contribution to the Critique of Political Economy is published according to the first edition of 1859 with the account being taken of the amendments made by Marx himself in his own copy and in a copy he presented to his friend Wilhelm Wolff. The English text is based on the translation by Salo Ryazanskaya published in K. Marx, A Contribution to the Critique of Political Economy, Progress Publishers, Moscow, 1971. For the present edition this translation was checked and made more precise and the arrangement of the text was brought into conformity with the rules accepted in the publication of similar works in other volumes.

The volume was compiled, the preface and notes were written and all the indexes prepared by Tatyana Vasilyeva and edited by Lev Golman (Institute of Marxism-Leninism of the CC CPSU).

The translations were made by Victor Schnittke and Yuri Sdobnikov and edited by Svetlana Gerasimenko, Yelena Kalinina, Margarita Lopukhina, Andrei Skvarsky and Yelena Vorotnikova (Progress Publishers).

The scientific editor for this volume was Larisa Miskievich (Institute of Marxism-Leninism of the CC CPSU).

KARL MARX

.

.

ECONOMIC WORKS

1857-1861

ECONOMIC MANUSCRIPTS OF 1857-1858

-i

(First Version of Capital)

.

OUTLINES OF THE CRITIQUE OF POLITICAL ECONOMY (ROUGH DRAFT OF 1857-58)

٠

[Second Instalment]¹

Written between late 1857 and May 1858

First published in full in Karl Marx, Grundrisse der Kritik der politischen Oekonomie (Rohentwurf). 1857-1858, Moscow, 1939 Printed according to the manuscript

[Section Two]

[CIRCULATION PROCESS OF CAPITAL]

[Conclusion]²

[FIXED AND CIRCULATING CAPITAL]

[VI-19] Retournons maintenant à nos moutons.^a

Conceptually, the phases through which capital passes, which constitute one turnover of capital, begin with the conversion of money into the conditions of production. However, now that we proceed not from capital in its process of formation, but from capital as it has emerged from that process, it passes through the following phases:

(1) The creation of surplus value, or the immediate process of production. Its result is the product. (2) Bringing the product to market. Conversion of the product into a commodity. (3) (α) The entry of the commodity into ordinary circulation. Circulation of the commodity. Its result: conversion into money. This appears as the first moment of ordinary circulation. (β) Re-conversion of the money into conditions of production: money circulation; in ordinary circulation, commodity circulation and money circulation always appear as allotted to two distinct subjects. Capital first circulates as a commodity and then as money, and vice versa. (4) The renewal of the process of production, which appears here as the reproduction of the original capital and the process of production of surplus [VI-20] capital.

The costs of circulation are reducible to the costs of movement; the costs of bringing the product to market; the labour time which is necessary for effecting the conversion from one condition into the other. All these costs are, in essence, reducible to accounting operations and the time they take (this the basis for a special,

^a Let us return to our subject (literally: "...to our sheep").- Ed.

technical money business). (It will emerge later whether or not the latter costs are to be regarded as deductions from surplus value).

In considering this movement, we find that the circulation of capital, mediated by exchange operations, opens up, on the one hand, to release the product into general circulation and to restore itself by drawing from it an equivalent in the form of money. We are not concerned here with what becomes of this product, which has thus dropped out of the circulation of capital and reverted to ordinary circulation. On the other hand, capital again ejects from its circulation process its form as money (partly so, to the extent that it is not wages), or it moves now in the form of money-after it has realised itself in it as value and simultaneously posited in itself the measure of its valorisation-but money only as means of circulation, and absorbs from general circulation the commodities necessary for production (the conditions of production). As a commodity, it ejects itself from its circulation into general circulation; as a commodity, capital also escapes from general circulation and incorporates it into itself, into its movement, in order to flow into the process of production. The circulation of capital is thus related to general circulation, constituting a moment of it, while general circulation itself appears to be posited by capital. This to be discussed later.

The overall production process of capital includes both the circulation process proper and the production process proper. They constitute the two great divisions of its movement, which appears as the totality of the two processes. On the one hand, there is labour time, on the other, circulation time. And the movement as a whole appears as the unity of labour time and circulation time, as the unity of production and circulation. This unity is itself movement, process. Capital appears as this dynamic unity of production and circulation, a unity which can be considered both as the totality of its production process and as the particular process through which capital goes during a *single* turnover, a *single* movement returning to itself.

The fact that capital needs circulation time, as well as labour time, is, however, only the adequate, ultimate form of a condition posed by production based upon the division of labour and exchange. The costs of circulation are costs of the division of labour and exchange, and are inevitably encountered in every less developed, pre-capital, form of production carried on on this basis.

As the subject, as value which dominates the various phases of this movement and maintains and multiplies itself in it, as the subject of these transformations, which occur in a circular way—a spiral movement, a series of expanding circles—capital is *circulating capital.*³ Hence circulating capital is, to begin with, not a *particular* form of capital. It is capital *as such*, in a more highly developed determination, as the subject of the movement described, which is capital itself as its own process of valorisation. In this respect, therefore, every capital is *circulating capital*.

In simple circulation, circulation itself appears as the subject. One commodity is cast out of it; another enters it. However, a given commodity is only evanescent in it. Money itself, to the extent that it ceases to be a means of circulation and is posited as independent value, withdraws from circulation. By contrast, capital is posited as the subject of circulation, and circulation as its very life process.

However, while capital as the totality of circulation is *circulating capital*, the transition from one phase to another, it is, in each phase, also posited in a specific determination, confined to a particular form, which negates it as the subject of the movement as a whole. In each particular phase capital, therefore, is the negation of itself as the subject of the various transformations. Non-circulating capital. *Capital fixe*, properly speaking *fixed* capital, fixed in one of the various determinations, phases, through which it has to pass. As long as it persists in one of these phases, that phase itself not appearing as a fluid transition—and each phase has a certain duration—capital is not circulating but fixed.

As long as it is tied up in the process of production, it is incapable of circulation, and hence is virtually devalued. As long as it is tied up in circulation, it is incapable of production, posits no surplus value, is not capital-in-process. As long as it cannot be thrown onto the market, it is fixed as a product; and as long as it must remain on the market, it is fixed as a commodity. So long as it cannot be exchanged for conditions of production, it is fixed as money. Finally, if the conditions of production remain in their form as conditions and do not enter into the process of production, capital is once again fixed and devalued. Capital as the subject which passes through all the phases, as the moving unity, the unity-in-process comprising circulation and production, is *circulating* capital; capital as itself locked up in any one of these phases, as posited in its *distinct forms*, is *fixed*, or *engaged* capital. As circulating capital it fixes itself, and as fixed capital it circulates.

Consequently, the distinction between *circulating capital* and *fixed capital* appears first of all as a determination of the form of

capital, depending on whether it appears as the unity of the process or as a particular moment of it. The concept of dormant *capital*, capital lying fallow, can only refer to its lying fallow in one of these determinations, and it is a feature of capital that part of it always lies fallow. This is manifested in the fact that part of the national capital is always tied up in one of the phases through which capital has to pass. Money itself, so far as it constitutes a particular part of a nation's capital, but always remains in the form of means of circulation and hence never passes through the other phases, is therefore regarded by A. Smith as a pseudo-form of fixed capital.^a Similarly, capital may lie fallow, be fixed in the form of money, of value withdrawn from circulation. In crises-after the moment of panic-at the time when industry lies stagnant, money is fixed in the hands of BANKERS, BILL-BROKERS, etc., and pants after a FIELD OF EMPLOYMENT in which it can be utilised as capital as the hart pants after the water brooks.^b

The fact that the determinations of capital as circulating and fixed are, to begin with, merely capital itself posited in the two determinations, first as the unity of the process, and then as a particular phase of it, capital distinct from itself as a unity,- not as two particular types of capital, capital of two particular types, but as different formal determinations of the same capital-this fact has given rise to a great deal of confusion in political economy. If one aspect of a material product was seized upon according to which it was to be regarded as circulating capital, it was easy to point to the opposite aspect, and vice versa. Capital as the unity of circulation and production is just as much their distinctness, namely their falling apart in space and time. In each of these moments, capital exists in a form which is indifferent to the other moment. So far as the individual capital is concerned, the transition from the one to the other appears to be a matter of chance, dependent upon external, uncontrollable circumstances. The same capital therefore always appears in both determinations, which is expressed in the fact that one part of it appears in one determination [VI-21] and the other in the other; one part as tied up, the other as circulating. However, it circulates here not in the sense that it is in the phase of circulation proper as distinct from the phase of production, but that the phase in which it happens to be is a *fluid* phase, a phase-in-process, leading on to the other phase. It is

^a A. Smith, An Inquiry into the Nature and Causes of the Wealth of Nations, Vol. II, London, 1836, pp. 271-85, and Vol. III, 1839, pp. 70-106. (See present edition, Vol. 28, p. 149.)— Ed.

^b Psalms 42:1.—Ed.

not tied up in either phase as such and hence is not checked in its overall process.

E.g., the industrialist employs in production only part of the capital available to him (whether borrowed or his own, is irrelevant here; nor, if one considers total capital, does this affect the economic process), because the other part needs a certain time before it returns from circulation. The part active in production is then the circulating one; the part in circulation is the fixed one. The overall productivity of his capital is thus limited; the part reproduced is limited, and therefore also the part which is thrown into the market.

This also applies to the merchant: part of his capital is immobilised in the form of *stock in TRADE*, the other part circulates. True, as in the case of the industrialist, now one part of his capital adopts this determination, now another, but his total capital is constantly posited in both determinations.

On the other hand, since this limit, arising from the nature of the valorisation process itself, is not a fixed one but alters with the circumstances, and capital may be closer to or further from its adequate determination as circulating capital, and since the splitting-up into these two determinations, with the valorisation process simultaneously appearing as the process of devaluation, contradicts capital's striving for the greatest possible valorisation, it invents CONTRIVANCES to shorten the phase of its fixity. Moreover, rather than coexisting side by side, the two determinations alternate. During one period, the process appears as a completely fluid one-the period of the maximum valorisation of capital. During the other period, a reaction to the first one, the other moment asserts itself all the more violently-the period of the maximum depreciation of capital and stagnation of production. The moments when the two determinations appear side by side are themselves merely intermediate periods between these violent transitions and upheavals.

It is very important to conceive of these determinations of circulating and fixed capital as *form determinations* of capital in general, since [otherwise] many phenomena of the bourgeois economy—the period of the economic cycle, which is essentially distinct from the time of the single turnover of capital; the effect of new demand, and even of new gold- and silver-producing countries, upon general production—cannot be understood. There is no point in talking about the stimulus given by the Australian gold⁴ or by a newly discovered market. If it were not inherent in the nature of capital to be never fully employed, i.e. to

be always partly *fixed*, devalued, unproductive, no stimuli could impel it to greater production. On the other hand, there are the absurd contradictions in which those economists—even Ricardo get involved who assume that capital is always fully employed, and who therefore can only explain an INCREASE in production by the creation of new capital. Every INCREASE would then presuppose an earlier one or an expansion of the productive forces.

These limits to production based on capital are inherent to a still greater degree in the previous modes of production, in so far as they are based on exchange. But they do not constitute a law of production as such; when material production is no longer limited by exchange value, but [solely] by its relation to the overall development of the individual, all this business, with its convulsions and pains, comes to an end. We have already seen that money transcends the barriers imposed by barter only by making them general, i.e. by entirely separating purchase and sale from one another.^a Later we shall see that *credit* likewise transcends them to their most general form, by positing the period of overproduction and underproduction as two periods.

The value posited by capital in one turnover, ONE revolution, one circuit, is = to the value posited in the production process, i.e. to the value reproduced + the new value. Whether we consider the turnover to be completed when the commodity has been converted into money, or when the money has been reconverted into conditions of production, the result, whether expressed in money or in conditions of production, is always absolutely equal to the value posited in the production process. Here, we take [the cost of] the physical bringing of the product to the market as being zero; or rather as forming part of the immediate production process. The economic circulation of the product only begins when it is put on the market as a commodity—only then does it circulate. Here we are only dealing with the economic distinctions, determinations and moments of circulation, not with the physical prerequisites for bringing the finished product into the second phase, its circulation as a commodity. This is of as little concern to us as the technological process by which the raw material has been transformed into a product. The greater or lesser distance of the market from the producer, etc., is as yet of no concern to us.

^a See present edition, Vol. 28, pp. 87-89.- Ed.

What we want to state first of all is that the costs arising from the traversing of the different economic moments as such, the *circulation costs* as such, add nothing to the value of the product, are not costs which posit value, whatever the labour involved. They are mere *deductions from* the value *produced*. Suppose there are two individuals, each of whom produces his own product, but their labour is based on the division of labour, so that they exchange with each other, and the utilisation of their product for the satisfaction of their needs depends upon this exchange. The time which the exchange would cost them, e.g. their bargaining with each other and the calculations they must make to come to an agreement, would obviously not add the least amount to either their products or their exchange value.

If \hat{A} claimed to B that he had spent such and such an amount of time on the exchange, B would claim exactly the same to A. Each of them loses exactly as much time in the exchange as the other. The time taken by the exchange is the same for both of them. If A demanded 10 thaler for his product—its equivalent and 10 thaler for the time it costs him to obtain the 10 thaler from B, the latter would declare him ripe for the madhouse. This loss of time arises from the division of labour and the need for exchange. If A himself produced everything, he would not lose any of his time on exchanging with B, or on converting his product into money and the money back into a product.

The circulation costs proper (and they acquire a significant independent development in the money business) are not reducible to productive labour time. They are by their very nature confined to the time necessary to convert the commodity into money and the money back into a commodity, i.e. to the time needed for the translation of capital from one form into another. B and A might now find that they could save time by introducing a third person, C, as an intermediary between them, who would devote his time to effecting the circulation process. This could come about if, e.g., there were enough exchangers, enough subjects of circulation processes for the time taken by them in the successive acts of bilateral exchange over a year to be equal to a year. If every individual in turn had to spend (say) 1/50 of a year in the act of circulation, and if there were 50 of them, then one individual could devote all his time to this occupation. If this individual were paid only his necessary labour time, i.e. if he had to give up all his time in exchange for the NECESSARIES OF LIFE, the remuneration he would be receiving would be wages. But if he charged payment for the whole of his time, the remuneration that he would receive

would be an equivalent—in the form of objectified labour time. Now, this individual would not have added anything to value; he would merely have shared in the surplus value of the capitalists A, B, etc. They would still have gained by this, since by assumption a smaller amount would have been deducted from their surplus value. (Capital is not merely a quantity, or merely an operation; it is both at once.)

Money itself, [VI-22] in as much as it is made of precious metals or, in general, in as much as its production involves expense—as is the case even with, e.g., a paper currency—money itself, in as much as it costs labour time, adds nothing to the value of the objects exchanged, the exchange values. Its cost is, rather, a deduction from these values, a deduction which must be borne proportionately by the exchangers. The costliness of the instrument of circulation, of the instrument of exchange, merely expresses the *costs of exchange.* Rather than adding to value, they subtract from it. E.g. gold and silver money are themselves values *like any others* (not in the sense of money) to the extent that labour is objectified in them. But the fact that these values serve as *means of circulation* forms a deduction from available wealth.

It is the same with the production costs of the circulation of capital. Circulation adds nothing to values. The circulation costs as such do not posit value; they are the costs of realising values—deductions from values. Circulation [appears]as a series of transformations in which capital posits itself, but as far as value is concerned, it adds nothing to capital but merely posits it in the form of value. The potential value which is converted into money by circulation is presupposed as the result of the production process. To the extent that this series of processes takes place in time and involves costs, costs labour time or objectified labour, the costs of circulation are deductions from the quantity of value.

Assuming the costs of circulation to be zero, the result of one turnover of capital, in terms of value, is equal to the value posited in the process of production. I.e. the value preposited to circulation is that which emerges from it. At most, a smaller value may emerge from circulation—because of the circulation costs than that which entered into it. From this angle, circulation time adds nothing to value; it does not appear alongside labour time as time which posits value. If a commodity of a value of £10 has been produced, circulation is necessary to set this commodity equal to the £10, its value, which exists in the form of money. The costs occasioned by this process, this alteration of form, are a deduction from the value of the commodity. The circulation of capital is the alteration of form through which value passes in different phases. The time which this process takes, or which is required to effect it, forms part of the production costs of circulation, of the division of labour, of production based on exchange.

This applies to one turnover of capital, i.e. to one passage of capital through these its different moments. The process of capital as value has money as its point of departure and ends in money, but in a greater quantity of money. The difference is merely a quantitative one. M-C-C-M has thus acquired a content. If we consider circulation up to this point, we are back at the point of departure. Capital has again become money. But it is now also presupposed, it has now become a condition, that this money becomes capital again, money which multiplies and maintains itself by purchasing labour, by going through the process of production. Its form as money is posited merely as a form, one of the many through which it passes in its metamorphosis.

If we now consider this point not as the end-point, but—as we must now consider it—as an intermediate point, or a new point of departure, itself posited by the production process as a transitory end-point and a merely apparent point of departure, then it is clear that the reconversion of the value posited as money into value-in-process, value entering into the production process, can only occur—or that the *renewal of the production process* can only take place—when the part of the circulation process which is distinct from the production process has been completed.

The second turnover of capital-the reconversion of money into capital as such, or the renewal of the production process, depends on the time which capital requires to complete its circulation, i.e. on its circulation time, as distinct from the production time. On the other hand, we have seen that the total value produced by capital (reproduced as well as newly produced value), which is realised in circulation as such, is wholly determined by the production process. Hence the sum of values that can be produced in a given period of time depends upon the number of times the production process can be repeated during this period. But the repetition of the production process is determined by the circulation time, which is equivalent to the velocity of circulation. The more rapid circulation is and the shorter the circulation time, the more frequently the same capital can repeat the production process. Hence, in a given cycle of turnovers of capital, the sum of values produced by it (therefore the sum of surplus values as well, since capital always posits necessary labour only as labour necessary for surplus labour) is directly proportional to the labour time and inversely
proportional to the circulation time. In a given cycle, the total value (hence also the sum of the surplus values posited) is equal to the labour time multiplied by the number of turnovers of the capital.

Or, the surplus value posited by capital no longer appears to be determined purely by the surplus labour it appropriates in theprocess of production, but by the coefficient of that process, i.e. the number expressing the frequency of its repetition in a given period of time. And this coefficient is determined by the circulation time capital requires for one turnover. Consequently, the sum of values (surplus values) is determined by the value posited in one turnover multiplied by the number of turnovers capital performs in a given period of time. One turnover of capital is equal to the production time+the circulation time. Assuming the circulation time as given, the total time required for one turnover depends upon the production time. Assuming the production time [as given], the duration of one turnover depends upon the circulation time. So far as circulation time determines the total mass of production time in a given period of time, and so far as the repetition of the production process, its renewal in a given period, depends upon it, it is itself a moment of production, or rather appears as a limit to production.

It is the nature of capital, of production based upon it, that circulation time becomes a moment determining labour time, the production of value. The independence of labour time is thereby negated, and the production process itself is posited as determined by exchange, so that the social relation and the dependence on this relation in immediate production is posited not merely as a material moment, but as an *economic* moment, a determination of form. The maximum of circulation—the limit to the renewal, through circulation, of the production process—is obviously determined by the duration of the production time during one turnover.

Suppose that the production process of a given capital, i.e. the time it requires to reproduce its value and to posit surplus value, takes three months. (Or the time that is necessary to complete a certain quantity of product=the total value of the producing capital+surplus value.) In this case, the capital could not, under any circumstances, renew the process of production or valorisation more frequently than four times a year. The maximum number of turnovers this capital could make in the course of a year would be 4, i.e. there would be no interruptions between the completion of one production phase and the beginning of another. The maximum of turnovers would be equivalent to continuity of the production process; as soon as the product was completed, new raw material would be worked up into product. The process would be continuous not merely within a single [VI-23] phase of production; there would also be continuity of the phases themselves.

But suppose now that, at the end of each phase, the capital requires one month of circulation time in order to assume once more the form of conditions of production. In this case, it could only perform three turnovers a year. In the first case, the number of turnovers = 1 phase \times 4; or 12 months divided by 3. The maximum production of value by capital in a given period of time is this time period divided by the duration of the production process (the production time). In the second case, the capital would perform only three turnovers a year; it would repeat the valorisation process only three times. The sum of its valorisation processes would therefore=12/4=3. Here the divisor is the total circulation time it requires for one production phase \times by the number of times this circulation time is contained in a year.

In the first case, the number of turnovers=12 months, one year, the given time, divided by the duration of one production phase, or by the length of the production time itself. In the second case, it equals the same time divided by the [total] circulation time. There is maximum valorisation of capital, and maximum continuity of the production process, if circulation time = 0, i.e. if the conditions under which capital produces, its limitation by circulation time, the need to pass through the different phases of its metamorphosis, are transcended. Capital necessarily strives to posit circulation time as = 0, i.e. to transcend itself, for it is only capital that posits circulation time as a moment determining production time. It is the same as transcending the necessity of exchange, of money and of the division of labour based on them, i.e. the same as transcending capital itself.

If for the time being we abstract from the conversion of surplus value into surplus capital, a capital of 100 thaler that produced a surplus value of 4% on the total capital in the production process, would in the first case reproduce itself 4 times, and would, by the end of the year, have posited a surplus value of 16. By the end of the year the capital would=116. It would be the same as if a capital of 400 had made one turnover in a year, likewise producing a surplus value of 4%. In relation to the total production of commodities and values, surplus value has quadrupled. In the other case, a capital of 100 thaler would only produce a surplus value of 12; the total capital at the end of the

year=112. In relation to the total production—whether of values or use values—the difference would be still more significant. In the first case, a capital of 100 would have converted e.g. 400 thaler's worth of leather into boots, while in the second case it would have converted only 300 thaler's worth of leather.

Hence the total valorisation of capital is determined by the duration of the production phase-which we assume here, for the time being, to be identical with labour time \times by the number of turnovers, or renewals of the production phase, in a given period of time. If the number of turnovers were only determined by the duration of one production phase, the total valorisation would be determined solely by the number of production phases contained in a given period of time. Or the number of turnovers would be absolutely determined by the production time itself. This would be the maximum of valorisation. So it is clear that circulation time, considered absolutely, is a deduction from the maximum of valorisation < than absolute valorisation. Therefore, it is impossible for any velocity of circulation or reduction of circulation time to bring about a valorisation > than that posited by the production phase itself. The most that velocity of circulation could effectand then it would have to rise to ∞ -would be to posit circulation time as=0, i.e. to abolish itself. Therefore, it cannot constitute a positive value-creating moment, since its abolition-circulation without circulation time-would imply the maximum possible valorisation; its negation would imply that the productivity of capital had attained its highest possible level. //The productivity of capital as capital is not the productive power which multiplies use values, it is capital's capacity to produce values, the degree to which it produces values.// The total productivity of capital=the duration of one production phase \times by the number of times it is repeated during a certain period of time. But this number is determined by circulation time.

Assume that a capital of 100 makes 4 turnovers in a year, i.e. completes the production process 4 times. At the end of the year, taking surplus value as 5% each time, the surplus value produced would be 20. On the other hand, for a capital of 400 that completed one turnover in a year, surplus value, given the same percentage, would also be 20. Hence a capital of 100 which circulated 4 times a year would yield a gain of 20%, while a capital 4 times as big which turned over only once, would yield a profit of only 5%. (We shall see presently, on closer examination, that the surplus value is exactly the same.) It appears, therefore, that size of capital can be compensated for by velocity of circulation, and

velocity of circulation by size of capital. The appearance is thus created that circulation time is in itself productive. We must, therefore, use this CASE to clear the matter up.

Another question which arises is this: If 100 thaler is turned over 4 times a year, each time at, say, 5%, the production process could be commenced at the beginning of the second turnover with 105 thaler, and its product would be $110^{1}/_{4}$; at the beginning of the *third turnover*, $110^{1}/_{4}$, the product of which would be $115^{61}/_{80}$; at the beginning of the fourth turnover, $115^{61}/_{80}$, and at its end, $121^{881}/_{1,600}$. The actual numbers chosen are without significance for the matter in hand. The point is that if a capital of 400 turns over only once a year, at 5%, the gain can only be 20; whereas if a capital a quarter as large turns over 4 times at the same percentage, the gain is $1+^{881}/_{1,600}$ more. It thus appears that the mere moment of turnover—the fact of repetition—that is to say, a moment determined by circulation time, or rather by *circulation*, not merely realises value, but increases it in absolute terms. This, too, must be investigated.

Circulation time expresses merely the velocity of circulation; the velocity of circulation is merely a limit upon circulation. *Circulation without circulation time*—i.e. the passage of capital from one phase to another with the same speed with which one concept supplants another—would be the maximum, i.e. the coincidence of the renewal of the production process with its completion.

The act of exchange—and the economic operations by means of which circulation takes place are reducible to a succession of échanges---up to the point where capital relates not as a commodity to money or as money to a commodity, but as value to its specific use value, labour—the act of exchanging value in one form for value in the other, money for a commodity or a commodity for money (and these are the moments of simple circulation), posits the value of one commodity in terms of another, thus realising it as exchange value, or, to put it another way, it posits the commodities as equivalents. The act of exchange thus posits value, in so far as values are presupposed; it realises the *determination* of the objects of exchange as values. But an act which posits a commodity as value or, what comes to the same thing, which posits another commodity as its equivalent—or, the same thing again, posits the equivalence of the two commodities-obviously adds nothing to value itself, just as the sign \pm neither increases nor decreases the number which follows it.

If I posit 4 as +4 or -4, it remains, irrespective of the sign, equal to itself, 4, after this operation, and does not become either 3 or 5.

Similarly, if I [VI-24] exchange one lb. of cotton, with an exchange value of 6d., for 6d., it is posited as value; and it can equally be said that the 6d. is posited as value in the lb. of cotton; in other words, the labour time contained in the 6d. (the 6d. regarded here as *value*) is now expressed in terms of another material representing the same labour time. But since by the act of exchange the lb. of cotton and the 6d. of copper are each equated to their value, it is impossible that this exchange should bring about a quantitative increase in the value of the cotton or the value of the 6d., or in the sum of their values.

Exchange, as the positing of equivalents, merely alters the form; it realises the potentially existing values; realises the prices, IF YOU LIKE A positing of objects, e.g. of a and b as equivalents cannot raise the value of a, for this act posits a as equal to its own value, hence not as unequal to it. It is posited as unequal only with respect to the form, in so far as it was not posited as value previously. At the same time, this act posits the value of a as equal to the value of b, and the value of b as equal to that of a. The sum of values exchanged = the value of a + the value of b. Each remains=to its own value; hence their sum remains equal to the sum of their values. Exchange, as the positing of equivalents, cannot therefore, by its very nature, raise the sum of values or the value of the commodities exchanged. (That things are different in the exchange with labour is due to the fact that the use value of labour itself posits value, but is not directly connected with its exchange value.)

A single exchange operation cannot increase the value of what is exchanged, nor can a sum of exchanges.

//It is essential to make this clear since the distribution of surplus value among capitals, the *calculation* of aggregate surplus value among individual capitals—this *secondary* economic operation—gives rise to phenomena that in ordinary political economy are confused with primary ones.//

Whether I repeat an act which does not produce any value once or an infinite number of times, IT CANNOT CHANGE ITS NATURE by virtue of its repetition. The repetition of an act which does not produce value can never turn it into an act which does. E.g., the number 1/4expresses a definite proportion. If I convert 1/4 into decimals, positing it as 0.25, its form is altered, but this alteration of form leaves the value unchanged. Similarly, if I convert a commodity into the form of money, or money into the form of a commodity, the value remains the same; but its form has changed.

It is clear, therefore, that circulation-since it comes down to a

series of operations in which equivalents are exchanged—cannot increase the value of the circulating commodities. Hence if labour time is required to effect this operation, i.e. if values must be consumed—for all consumption of values comes down to the consumption of labour time or objectified labour time, products if circulation involves costs, and if circulation time costs labour time, then this is a deduction, a relative abolition of the circulating values, their devaluation by the amount of the circulation costs.

Suppose we have two workers-a fisherman and a hunterwho exchange with each other. The time that both of them lose in effecting the exchange would produce neither fish nor game; it would be a deduction from the time during which they can produce values, the one by fishing and the other by hunting, objectifying their labour time in a use value. If the fisherman wished to compensate for this loss by demanding more game from the hunter, or by giving him fewer fish, the hunter would similarly be entitled to compensation. They would sustain the same loss. These costs of circulation, of exchange, could only appear as a deduction from their total product or the value they had created. If they commissioned a third person, C, to carry on these EXCHANGES, and in this way avoided the direct loss of labour time, each of them would have to cede a proportional part of his product to C. All they could gain by this would be a greater or smaller [reduction of] loss. However, if they worked as joint proprietors, no exchange would take place, but, rather, joint consumption. The costs of exchange would therefore be eliminated. Not the division of labour, but the division of labour as based on exchange. J. St. Mill is therefore wrong in treating the circulation costs as the necessary price of the division of labour.^a They are merely costs of the naturally evolved division of labour, a division based not upon community of property, but upon private property.

The circulation costs as such, i.e. the consumption of labour time or of objectified labour time, values, occasioned by the operation of exchange and by a series of exchange operations, are therefore a deduction either from the time used for production or from the values posited by production. They can never increase value. They belong to the *faux frais de production*,^b and these belong to the immanent costs of production based on capital. The

^a J. St. Mill, Essays on Some Unsettled Questions of Political Economy, London, 1844, pp. 55, 56.— Ed.

^b Overhead costs of production.--Ed.

merchant business and STILL MORE the money business proper-to the extent that their sole function is to perform the operations of circulation as such, e.g. the determination of prices (the measurement and calculation of values), in general, to perform these exchange operations as a function rendered independent by the division of labour, and hence represent this function of the overall process of capital—represent merely the faux frais de production of capital. In so far as they reduce these faux frais, they contribute to production, not by producing value but by diminishing the negation of the values produced. If they confined themselves to performing this function, they would always represent only the minimum of the faux frais de production. If they enable the producers to produce more values than they could produce without this division of labour, and so much more that a surplus remains after paying for this function, then they have, in effect, increased production. However, in this case, the values have increased not because the operations of circulation have created value, but because they have absorbed less value than they would have done otherwise. However, they are a necessary condition for production by capital.

The time lost by a capitalist in carrying out exchange is not as such a deduction from labour time. He is a capitalist-i.e. the representative of capital, personified capital-only in as much as he relates to labour as alien labour and appropriates and posits alien labour time. Hence circulation costs do not exist in the sense that they take away the time of the capitalist. His time is posited as superfluous time: not-labour-time, time that does not produce value, although it is capital that realises the value produced. The fact that the worker must work surplus time is identical with the capitalist's not having to work; it follows that his time is posited as not-labour-time, and that he does not work even the necessary time. The worker must work surplus time to be allowed to reify, utilise, i.e. objectify, the labour time necessary for his reproduction. On the other hand, the capitalist's necessary labour time, too, is therefore free time, time not required for his immediate subsistence. Since all free time is time for free development, the capitalist usurps the free time created by the workers for society, i.e. civilisation, and Wade is indeed right in this sense when he equates capital with civilisation.^a

In so far as circulation time claims the time of the capitalist as

^a J. Wade, History of the Middle and Working Classes, 3rd ed., London, 1835, pp. 161, 162 and 164.—Ed.

such, it is, from the economic viewpoint, exactly of as much concern to us as the time he spends with his doxy. If TIME is MONEY, this applies, from the standpoint of capital, only to alien labour time, which is, indeed, the MONEY of capital in the most basic sense of the word. With respect to capital as such, circulation time can be equated with labour time only in so far as it interrupts the time during which capital can appropriate alien labour time-and it is clear that this relative devaluation of capital adds nothing to its valorisation, but can only detract from it-or in so far as circulation costs capital objectified alien labour time, values. [VI-25] (E.g., because capital must pay someone else to perform this function.) In both cases, circulation time only comes into consideration in so far as it cancels, negates alien labour time, whether by interrupting the process of appropriation of alien labour time by capital, or by obliging capital to consume part of the produced value in order to accomplish the operations of circulation, i.e. in order to posit itself as capital. (This must be carefully distinguished from the private consumption of the capitalist.)

Circulation time comes into consideration only in its relation to-as a limit upon, negation of the production time of capital; but this production time is the time during which capital appropriates alien labour, the alien labour time posited by capital. It is the greatest confusion to regard the time spent by the capitalist on circulation as time positing value or, indeed, time positing surplus value. Capital as such has no labour time other than its production time. The capitalist does not concern us here at all, except as capital. As such, too, he is active only in the overall process which we have to analyse. Otherwise one could even imagine that the capitalist is entitled to compensation for the time during which he does not earn money as the wage worker of another capitalist-or else that he loses that time. That it belongs to the production costs. The time he loses or employs as a capitalist is, in general, lost time, placé à fonds perdu,^a from this viewpoint. We shall have to discuss later the so-called labour time of the capitalist—as distinct from that of the worker-which is supposed to form the basis of the capitalist's profit as wages sui generis.

Nothing is more common than to include transport, etc., in so far as they are connected with commerce, among the pure costs of circulation. By bringing a product to market, commerce gives it a new form. Of course, it only changes the spatial location of the product. But we are not concerned with the way in which its form

^a A wasted fund.-Ed.

is altered. Commerce imparts a new use value to the product (and this is true right down to the retailer, who weighs, measures and packs it up, thus giving the product a form that makes it suitable for consumption). This new use value costs labour time and hence is simultaneously exchange value. The bringing to market is part of the production process itself. The product is a commodity, is in circulation, only when it is on the market.

//"In every species of industry the entrepreneurs become sellers of products, while the entire rest of the nation and often even foreign nations are buyers of these products... The continuous, constantly repeated movement made by *circulating capital* in departing from the entrepreneur and in returning to him in the form it first possessed, is comparable to its traversing a circle. Hence the name 'circulating' applied to capital, and 'circulation' applied to its movement'' (Storch, *Cours d'économie politique*, Vol. I, Paris, 1823, pp. 404-05. Notebook,⁵ p. 34).^a

"In the broad sense, circulation includes the movement of every commodity which is exchanged" (p. 405, l.c.). "Circulation is effected by exchanges ... once money is introduced, they [commodities] are no longer exchanged, they are sold" (pp. 405-06, l.c.). "To put a commodity into circulation, it is sufficient to offer it [for sale]... Wealth in circulation: *commodity*" (p. 407, l.c.). "Commerce is only a part of circulation. The former comprehends only the purchases and sales by merchants; the latter those by all entrepreneurs and even all INHABITANTS" (p. 408, l.c.).

"Circulation is real, and its value increases the annual product, only as long as the costs of circulation are indispensable for getting the commodities to the consumers. From the moment when it exceeds this measure, circulation is artificial and no longer contributes in any way to the enrichment of the nation" (p. 409). "In recent years, we have seen examples of artificial circulation in Russia, at St. Petersburg. The stagnation of foreign trade had forced the merchants to adopt a different method of investing their idle capital; no longer being able to use it to import foreign commodities and to export domestic ones, they hoped to profit by buying and reselling commodities available on the market. Enormous quantities of sugar, coffee, hemp, iron, etc., passed rapidly from one merchant to another, and often a commodity changed hands twenty times without leaving the warehouse. A circulation of this type offers merchants all the opportunities of a game of chance. But while it enriches some, it ruins others, and the national wealth gains nothing from it. Similarly in the circulation of money... An artificial circulation of this type, which is only based upon the simple variation of prices, is called *agiotage*" (pp. 410, 411). "Circulation only benefits society in so far as it is indispensable for bringing the goods to the consumer. Every detour, retardation, intermediate exchange which is not absolutely necessary to bring this about, or which does not contribute to diminishing the costs of circulation, harms the national wealth by needlessly raising the prices of commodities" (p. 411).

"Circulation is the more productive the more rapid it is, i.e. the less time it requires to enable the entrepreneur to dispose of the finished product which he offers for sale, and to regain his capital in its original form" (p. 411). "The entrepreneur can only recommence production after he has sold the finished

^a Marx reproduces these and the following passages from Storch in German translation, using many French words and phrases.— Ed.

product and has used the price in purchasing new matières and new salaires. Hence, the more promptly circulation brings about these two effects, the more quickly is he in a position to recommence his production, and the greater the profit his capital yields in a given period of time" (pp. 411-12). "A nation whose capital circulates rapidly enough to return several times a year to him who first set it in motion, is in the same position as the labourer in a favourable climate, who can raise three or four harvests in succession on the same land each year" (pp. 412, 413). "A slow circulation makes the objects of consumption more expensive (1) indirectly, by diminishing the volume of commodities that could exist; (2) directly, because as long as a product is in circulation its value is progressively increased by the interest on the capital employed in its production. The more slowly circulation goes on, the more this interest piles up, needlessly raising the price of the commodity." "Means for the shortening and acceleration of circulation: (1) formation of a special class of workers solely occupied in commerce; (2) ease of transportation; (3) money; (4) credit" (p. 413).//

Simple circulation consisted of a multitude of simultaneous or successive exchanges. Strictly speaking, their unity as circulation existed only from the standpoint of the observer. (Exchange may be a matter of chance, and it more or less has this character where it is confined to the exchange of the surplus, and does not embrace the entire production process.) In the circulation of capital, we have a series of exchange operations, of acts of exchange, each of which constitutes a qualitative moment vis-à-vis the other, a moment in the reproduction and growth of capital. A system of exchanges, exchange of matter, if seen from the angle of use value; a change of form, if seen from the angle of value as such. The product is related to the commodity as use value to exchange value; the commodity is related similarly to money. Here the one series attains its peak. Money is related to the commodity into which it is reconverted, as exchange value to use value, and to an even greater degree the same is true of the relation of money to labour.

[VI-26] In so far as capital in every moment of the process is itself the possibility of transition into its other, next phase, and is thus the possibility of the whole process which expresses the life-act of capital, each of the moments appears as potentially capital—hence commodity capital, money capital—alongside the value which posits itself as capital in the production process. The commodity may represent capital as long as it can be converted into money, i.e. as long as it can purchase wage labour (surplus labour). This from the *aspect of the form* deriving from the circulation of capital. From the material aspect, the commodity remains capital as long as it constitutes raw material (in the strict sense or partly processed), instrument, and means of subsistence for the workers. Each of these forms is potential capital. Money is, on the one hand, realised capital, capital as realised value. From this aspect (considered as the end-point of circulation, where it must also be considered as the point of departure), money is capital $\varkappa \alpha \tau' \dot{e} \xi_0 \chi \dot{\eta} \nu$.^a It is then once again capital, especially in relation to the production process, to the extent that it is exchanged for living labour. On the other hand, when the capitalist exchanges it for commodities (purchases new raw materials, etc.), it appears not as capital but as means of circulation; merely a vanishing mediator by means of which the capitalist exchanges his product for its primary elements.

Circulation is not a merely external operation for capital. Just as it only becomes capital by means of the production process, in which value is perpetuated and increased, so it is reconverted into the pure form of value—in which both the traces of its becoming and its specific being in use value are extinguished—only by means of the first act of circulation. The repetition of this act, i.e. of the life-process [of capital], is only made possible by the second act of circulation, which consists in the exchange of money for the conditions of production and is the introduction to the act of production. Circulation therefore belongs within the concept of capital. Initially, money or accumulated labour appeared as a prerequisite for, and hence preceding, the exchange with free labour. But the apparent independence of the objective moment of capital in relation to labour was cancelled, and objectified labour, which becomes independent in value, appeared in every respect as the product of alien labour, the alienated product of labour itself. In similar fashion, capital now appears first as presupposed to its circulation (capital as money was presupposed to its becoming capital; but capital as the result of value absorbing and assimilating living labour appeared as the point of departure of the *circulation of capital*, not of circulation in general), as if capital existed independently, indifferent to and *without* this process. But the movement of the metamorphoses it has to go through appears now as a condition of the production process itself, just as much as its result.

Capital in its reality thus appears as a series of turnovers in a given *period*. It is no longer merely a *single turnover*, a single circulation, but the positing of turnovers, of the entire process. Its positing of value therefore appears as determined (and value is capital only in so far as it is value which perpetuates and multiplies itself) (1) *qualitatively*: since it cannot renew the phase of production without passing through the phases of circulation;

^a In the true sense.— Ed.

(2) quantitatively: since the quantity of values which it posits depends upon the number of turnovers it performs in a given period; (3) since circulation time thus appears from both aspects as a limiting principle, a barrier to production time and vice versa. Hence capital is essentially *circulating capital*. While appearing as owner and MASTER in the workshop of the production process, it is, from the angle of circulation, dependent and determined by the social nexus, which at the point where we still find ourselves causes capital to enter into simple circulation and figure in it alternately as C over against M and M over against C.

Yet this circulation is a mist veiling an entire world, the world of the interconnections of capital, which affix the property deriving from circulation, from social intercourse, to this intercourse and rob it of the independence of self-sustaining property as its characteristic feature. Two views of this world, as yet lying in the distance, have already opened up to us: [firstly,] at the point where the circulation of capital precipitates from its circle the value which capital posits and circulates in the form of the product, and secondly, at the point where capital draws another product from circulation into its circuit, converting this product itself into one of the moments of its existence. At the second point, it presupposes production, though not its own immediate production. At the first point, it may presuppose either production, if its product is itself the raw material for other production; or consumption, if its product has acquired the final form that makes it suitable for consumption. That much is clear that consumption does not have to enter into its circle directly. The characteristic circulation of capital is, as we shall see later, still circulation between dealers and dealers.⁶ Circulation between dealers and consumers, identical with retail trade, is a second circle, which does not fall within the immediate sphere of circulation of capital. It is a path it traverses after and simultaneously with traversing the first path. The simultaneity of the different paths traversed by capital, like that of its different determinations, only becomes evident when many capitals are presupposed. In the same way, the life-process of man consists in his passing through a succession of ages; at the same time, all ages of man exist alongside one another, distributed to different individuals.

In so far as capital's production process is, at the same time, a technological process—production process pure and simple namely, the production of particular use values by means of particular labour, in short, production carried on in a way determined by this purpose itself; in so far as of all these

production processes, the most fundamental appears to be that by which the body reproduces for itself the necessary exchange of matter, i.e. produces means of subsistence in the physiological sense; in so far as this production process coincides with agriculture, which either directly (as in the case of cotton, flax, etc.) or indirectly, by means of the animals it feeds (silk, wool, etc.), simultaneously supplies a large part of the raw materials for industry (in effect, all that are not supplied by the extractive industries); in so far as reproduction in agriculture in the temperate zone (the homeland of capital) is tied up with the general telluric circulation, i.e. harvests are mostly of an annual nature—in so far as all this is so, the year is generally taken as the period of time with respect to which the sum of turnovers of capital is calculated and measured (except that the year is calculated differently for the different branches of production), just as the natural working day provided such a natural unit as measure of labour time. Accordingly, in the calculation of profit, and even more in that of interest, we see the unity of circulation time and production time-capital-posited as such and acting as its own measuring-rod. Capital itself as capital-in-process-i.e. capital performing a turnover-[VI-27] is regarded as working capital, and the fruits which it is supposed to yield are calculated with respect to its working time-the total circulation time of one turnover. The mystification to which this gives rise is inherent in the nature of capital.

Before we embark upon a more detailed analysis of the arguments outlined above, let us first examine the distinctions between *fixed capital* and *circulating capital* given by the economists. Above, we have already come across a new moment which enters in the calculation of profit as distinct from surplus value.^a Similarly, another new moment must emerge now between profit and interest. Surplus value in relation to *circulating capital* obviously appears as profit, in distinction to *interest* as surplus value in relation to *fixed capital*.

Profit and interest are both forms of surplus value. Profit is contained in *price*, and hence ceases and is realised as soon as capital has reached that point in its circulation at which it is reconverted into money, or passes over from its form as commodity into the form of money. The striking ignorance upon which Proudhon's polemic against interest is based [will be discussed] later on.

^a See present edition, Vol. 28, p. 485.-Ed.

(Yet, lest we forget it, here once more ad vocem^a Proudhon: The problem of surplus value, which is a source of much trouble for all Ricardians and anti-Ricardians, is solved by this bold thinker simply by mystifying it. "Tout travail laisse un surplus", "je le pose en axiome"...^b The basic formula to be looked up in my notebook.⁷ The fact that labour is done in excess of necessary labour is turned by Proudhon into a mystical property of labour. Surplus value cannot be explained by the mere growth of the productive power of labour: for while the latter may increase the quantity of products produced in a definite labour time, it can give no PLUS-VALUE to them. It is only relevant here in as much as it sets free SURPLUS TIME, TIME for labour in excess of necessary labour. The sole extra-economic FACT here is that man does not need all his time for the production of NECESSARIES, that he has free time at his disposal in excess of the labour time necessary for subsistence, and hence can use it also for surplus labour. But there is nothing mystical about this, since his NECESSARIES are small in the same measure as is his labour power⁸ in the primitive condition. And wage labour, in general, makes its appearance only when the productive power has already been developed to such an extent that a significant amount of time has been set free. This setting-free is already an historical product here. Proudhon's ignorance is only EQUALLED BY Bastiat's décroissante rate du profit qui est supposé d'être l'équivalent d'une rate du salair croissante.^c Bastiat gives a dual expression to this NONSENSE, which he borrows from Carey: firstly, the rate of profit falls (i.e. the ratio of surplus value to the capital employed); secondly, prices fall, but value, i.e. the total sum of prices, increases. This merely means that what grows is the gross profit. not the rate of profit.)

Firstly, fixed capital in the sense in which we have used it above. Defined by John St. Mill (Essays on Some Unsettled Questions of Political Economy,) (p. 55) as tied-down capital, capital which is not DISPOSABLE, not AVAILABLE, stuck fast in a particular phase of its overall circulation process. In this sense he correctly says, as does Bailey too in the above quotations,^d that a large part of a country's capital always lies idle.

^a As regards.— Ed.

^b "All labour gives rise to a surplus", "I take it as an axiom."-Ed.

^c Falling rate of profit, supposed to be the equivalent of a rising rate of wages.—*Ed.*

^d This refers to the quotations, in the previous section, from [S. Bailey,] Money and Its Vicissitudes in Value, London, 1837, and J. St. Mill, Essays on Some Unsettled Questions of Political Economy. See present edition, Vol. 28, pp. 503-04, 535-36.— Ed.

"The distinction into fixed and floating capital is more apparent than real. For example, gold is FIXED CAPITAL; FLOATING only as far as it is consumed for GILDING, etc. Ships are fixed capital, ALTHOUGH LITERALLY FLOATING. FOREIGN RAILWAY SHARES ARE ARTICLES OF COMMERCE IN OUR MARKETS; SO MAY OUR RAILWAYS BE IN THE MARKETS OF THE WORLD; AND SO FAR THEY ARE FLOATING CAPITAL, ON A PAR WITH GOLD" (Anderson, *The Recent Commercial Distress, etc.*, London, 1847, p. 4) (Notebook I, 27).⁹

According to Say, [fixed capital is] capital

"so engaged in one kind of production that it can no longer be diverted from it to be employed in another kind of production" (Traité d'économie politique, Vol. II, Paris, 1817, p. 430).^a

The identification of capital with a particular use value, use value for the process of production. The fact that capital as value is *tied* to a particular use value—use value within production—is at any rate an important aspect. It expresses more than does the inability to circulate, which essentially means only that fixed capital is the opposite of circulating capital.

In his Logic of Political Economy ([London, Edinburgh, 1844,] pp. 113-14) (Notebook X, 4),¹⁰ De Quincey says:

"CIRCULATING CAPITAL, IN ITS NORMAL IDEA, MEANS ANY AGENT WHATEVER" (marvellous logician) "USED PRODUCTIVELY WHICH PERISHES IN THE VERY ACT OF BEING USED."

(According to this, coal would be *circulating capital*, and so would be *oil*, but not cotton, etc. It cannot be said that cotton perishes by being transformed into twist or calico, and such transformation means certainly using it productively!)

"Capital is *FIXED*, if the object serves, repeatedly, again and again, for the same operation, AND BY HOW MUCH LARGER HAS BEEN THE RANGE OF ITERATIONS, BY SO MUCH MORE INTENSELY IS THE *TOOL*, ENGINE, OR MACHINERY ENTITLED TO THE DENOMINATION OF FIXED" (pp. 113-14) (Notebook X, 4).

According to this, CIRCULATING CAPITAL would perish, be consumed, in the act of production; fixed capital—which for greater clarity is defined as *TOOL*, *ENGINE*, *OR MACHINERY* (and which therefore excludes, e. g., the IMPROVEMENTS incorporated in the soil)—would serve repeatedly for the same operation. The distinction concerns here only the technological difference in the act of production; it does not concern the form at all. CIRCULATING and FIXED CAPITAL, in the distinctions given here, may well possess features on the strength of which one agent, "any AGENT WHATEVER", is FIXED CAPITAL and the other CIRCULATING, but NEITHER OF THEM [possesses] ANY QUALIFICATION WHICH WOULD ENTITLE IT TO THE "*DENOMINATION*" OF CAPITAL.

^a Marx quotes in French.-Ed.

According to Ramsay ([An Essay on the Distribution of Wealth, Edinburgh, London, 1836,] IX, 83-84)¹¹

"only the approvisionnement^a is CIRCULATING CAPITAL, because the capitalist MUST PART WITH IT IMMEDIATELY and it does not enter into the process of reproduction at all, but is exchanged direct for living labour, for consumption. All other capital (raw material, too) REMAINS IN THE POSSESSION OF ITS OWNER OR EMPLOYER UNTIL THE PRODUCE IS COMPLETED" (l. c. [p. 21]). "CIRCULATING CAPITAL CONSISTS ONLY OF SUBSISTENCE AND OTHER NECESSARIES ADVANCED TO THE WORKMAN, PREVIOUS TO THE COMPLETION OF THE PRODUCE OF HIS LABOUR" (l.c. [p. 23]).

With respect to the *approvisionnement*, he is right in so far as it is the only part of capital which circulates during the production phase itself, and from this aspect it is circulating capital *par excellence*. On the other hand, it is wrong to maintain that FIXED CAPITAL REMAINS IN THE POSSESSION OF ITS OWNER OR EMPLOYER NO longer than or only "UNTIL THE PRODUCE IS COMPLETED". Hence later, too, he defines FIXED CAPITAL AS

"ANY PORTION OF THAT LABOUR (BESTOWED UPON ANY COMMODITY) IN A FORM IN WHICH, THOUGH ASSISTING TO RAISE THE FUTURE COMMODITY, IT DOES NOT MAINTAIN LABOUR" [p. 59].

(But how many COMMODITIES DO NOT MAINTAIN LABOUR! I. e. do not belong to the articles of the worker's consumption. In Ramsay's view, these are all *fixed capital*.)

(If the interest on £100 at the end of the first year or of the first three months is £5, then at the end of the first year, the capital will be 105 or 100 (1 + 0.05); at the end of the 4th year, it will = 100 (1 + 0.05)⁴ = £121. $\pounds^{55}/_{100}$ and $\pounds^{1}/_{1,600} = \pounds121$ 11s. $^{3}/_{5}$ farth. or £121 11s. 0.6 farthing. Therefore it yields £1 11s. $^{6}/_{10}$ farthing over and above 20.)

[VI-28] (In the question posed above,^b it is assumed that on the one hand a capital of 400 turns over only once in a year, while on the other [a capital of 100 turns over] four times, in both cases at 5%. In the first case the capital would yield 5% once a year, i.e. 20 on 400; in the second case, $4 \times 5\%$, likewise 20, on 100 in a year. The velocity of circulation would compensate for the size of the capital; just as in simple money circulation, 100,000 thaler which circulates three times a year is=to 300,000, but so also is 3,000 which circulates 100 times. But if the capital circulates four times a

^a Means of subsistence.-Ed.

^b See this volume, pp. 18-19.- Ed.

year, it is *possible* that the surplus gain itself is added to the capital in the second turnover and turned over with it. In this way the difference of £1 11s. 0.6 farthing would come about. But this difference in no way follows from the presupposition. Only the *abstract* possibility exists. What follows from the presupposition is, rather, that three months are necessary to turn over a capital of £100. Then, if, e.g., the month = 30 days, to turn over a capital of £105—assuming the same turnover ratio, the same relation of the turnover time to the size of the capital—would take not 3 months but * 105 : x=100:90; $x=\frac{90 \times 105}{100}=\frac{9,450}{100}=94^{5}/_{10}$ days = 3 months $4^{1}/_{2}$ days. The first difficulty is thereby completely resolved.)

(The fact that a larger capital with a slower turnover does not produce more surplus value than a smaller capital with a relatively more rapid turnover, in no way means in itself that a smaller capital turns over more rapidly than a larger one. In so far as the larger capital consists of more fixed capital and must seek out more distant markets, this is indeed the case. The size of the market and the velocity of circulation are not necessarily inversely related. This relationship only occurs when the available physical market is no longer the economic market, i.e. when the economic market moves farther and farther away from the place of production. Incidentally, to the extent that this does not stem from the mere distinction between fixed and circulating capital, the moments determining the circulation of the different capitals cannot, as yet, be discussed here at all. It may be observed in passing that in so far as trade posits new points of circulation, i.e. brings different countries into the sphere of commerce, discovers new markets, etc., this is something quite different from the mere circulation costs, which are required to effect a definite number of exchange operations. It is the positing of exchange itself, not of operations of exchange. Creation of markets. This point will have to be considered specially, before we HAVE DONE WITH CIRCULATION.)

Let us now continue our examination of the views on "FIXED" and "CIRCULATING CAPITAL".

"Depending on whether capital is more perishable or less perishable, i.e. must be reproduced more frequently or less frequently in a given period of time, it is called circulating capital or fixed capital. Furthermore, capital circulates, or returns to its employer, in very unequal times. E.g., the wheat bought by a farmer to sow is

* On the other hand, it could be assumed that, with continuity of the production process, the surplus obtained is converted into capital every 3 months.

comparatively a fixed capital to the wheat purchased by a baker to make into loaves" (Ricardo, [On the Principles of Political Economy, and Taxation, 3rd edition, London, 1821, pp. 26-27,] VIII, 19)¹²

Then he also remarks:

"Different proportions of fixed and circulating capital in different trades; different durability of fixed capital itself" (Ricardo, l.c. [p. 27]).

"Two kinds of COMMERCE may employ capital of equal value, but it may be very differently divided with respect to the part which is fixed, and that which is circulating. They may even employ an equal value of fixed capital and of circulating capital; but the durability of the fixed capital may be very unequal. E.g., one may have steam-engines to the value of $f_{10,000}$, the other, ships." (This from the translation of *Ricardo's* book [published] by Say, [Des principes de l'économie politique et de l'impôt, 2nd ed.,] Vol. I, [Paris, 1835,] pp. 29, 30).

What is wrong, from the outset, is that, according to Ricardo, capital is "more or less perishable". Capital as capital, value, is not perishable. Yet the use value in which the value is fixed, in which it exists, is "more or less perishable" and must therefore "be reproduced more frequently or less frequently in a given period of time". Hence the distinction between fixed capital and circulating capital is reduced here to the greater or lesser necessity to reproduce a given capital, in a given period of time. This is one distinction made by Ricardo.

The different degrees of durability or different degrees of fixity of capital, i.e. the different degrees, the relative duration of the relative fixity, is the second distinction. So that fixed capital itself is fixed more or less. The same capital appears in the same business in two different forms, particular modes of existence, as fixed and circulating, hence exists doubly. To be fixed or circulating appears as a particular determinateness of capital, apart from that of being capital. But it necessarily must proceed to this particularity.

Finally, as [regards] the third distinction, "that capital circulates, or returns, in very *unequal times*", Ricardo means by it, as his example of the baker and the farmer shows, merely the difference in the time for which capital in different branches of business, according to their specificity, is *fixed*, *engaged* in the *phase of production* as distinct from that of circulation. *Fixed capital* therefore occurs here as we had it before, as fixedness in each phase; except that the specifically longer or shorter fixedness in the phase of production, in this definite phase, is regarded as positing a characteristic feature, a particularity, of capital.

Money sought to posit itself as *imperishable value*, as eternal value, by relating negatively to circulation, i.e. to exchange with real wealth, perishable commodities, which are dissolved in

transient enjoyments, as Petty very neatly and very naively puts it.^a In capital, the imperishability of value is posited (TO A CERTAIN DEGREE) in that capital, while of course embodying itself in, adopting the form of, perishable commodities, just as constantly changes form, alternately adopting its eternal form as money and its perishable form as commodities. The imperishability is posited as the only thing it can be, perishability that is perishable—process—life. But capital maintains this ability only by constantly sucking in, vampire-like, living labour as its life-blood.

The imperishability—the durability of value in its form as capital—is only posited by reproduction, which itself is dual, reproduction as commodity, reproduction as money and unity of these two reproduction processes. When reproduced as a commodity, capital is fixed in a particular form of use value, and hence is not *universal exchange value*, or indeed realised *value*, as it should be. That it has posited itself as value in the act of reproduction, in the production phase, it only proves through circulation. The greater or lesser perishability of the commodity in which [VI-29] value exists, requires slower or more rapid reproduction of that value, i.e. repetition of the labour process.

The particular nature of the use value in which value exists, or which now appears as the body of capital, appears here as itself determining the form and the action of capital; as giving one capital a particular quality as compared with another; as particularising it. Hence, as we have already seen on repeated occasions, nothing is more mistaken than overlooking the fact that the distinction between use value and exchange value, which in simple circulation, to the extent that it is *realised*, lies outside the economic determination of form, lies outside it in general. We have found, rather, that at the different stages of the development of economic relations exchange value and use value are determined in different relations, and that this determinateness itself appears as a different determination of value as such.

Use value itself plays a role as an economic category. Where precisely it does so, emerges from the development itself. E.g. Ricardo, while believing that bourgeois political economy deals only with exchange value and treats use value merely as exoteric, derives precisely the most important determinations of exchange value from use value, from their mutual relation: for instance, rent, the minimum level of wages, and the distinction between fixed and

^a W. Petty, Several Essays in Political Arithmetick, London, 1699, pp. 178-79 and 195-96.—Ed.

circulating capital, to which precisely he attributes a very important influence on the determination of prices (THROUGH THE DIFFERENT REACTION PRODUCED UPON THEM BY A RISE OR FALL IN THE RATE OF WAGES). Similarly in the relationship of demand and supply, etc.

The same determination appears once in the determination of use value and then in that of exchange value, but at different stages and with different significance. Using is consuming, whether for production or for consumption. Exchange is this act mediated by a social process. The using itself may be posited by, and be a mere consequence of, exchange; on the other hand, exchange may appear simply as a moment of using, etc. From the standpoint of capital (in circulation), exchange appears as the positing of its use value; while, on the other hand, its use (in the act of production) appears as positing for exchange, as the positing of its exchange value.

It is the same with production and consumption. In the bourgeois economy (as in every economy) they are posited in specific distinctions and in specific unities. The point is, precisely, to understand this *differentia specifica*. Mr. Proudhon's or the social sentimentalists' [assertion] that they are *the same* gets one nowhere.^a

The good thing about Ricardo's analysis is that, to begin with, the moment is emphasised of the necessity of *more rapid or slower reproduction*; that, hence, the greater or lesser perishability, the slower or more rapid consumption (in the sense of selfconsumption), is considered with respect to *capital* itself. I.e., the relationship of use value for *capital* itself.

Sismondi, on the contrary, at once introduces a determination which is initially exoteric to capital: direct or indirect consumption by man, i.e. whether the object is a direct or an indirect means of subsistence for him. He associates this with the more rapid or slower consumption of the object itself. The objects which serve directly as means of subsistence are more perishable, because intended for consumption, than those which help to make means of subsistence. The latter type of objects are meant to be durable; their perishability is fate. He says:

"Fixed capital is *consumed slowly*, in an indirect manner, to help to reproduce what man destines for his use; circulating capital never ceases to be directly employed for the use of man. Whenever a thing is consumed, it is consumed for one person *sans retourb*; at the same time, there may be a person for whom its consumption

^a See present edition, Vol. 28, pp. 31 and 339-40.- Ed.

^b Irrevocably.--- Ed.

implies its reproduction" (Sismondi, [Nouveaux principes d'économie politique, 2nd ed., Vol. I, Paris, 1827, p. 95] VI).¹³

He also represents the relationship thus:

"The first transformation of the annual consumption into permanent installations suitable for increasing the productive forces of future labour [is] fixed capital; this first labour is always accomplished by a labour, represented by a wage, exchanged for means of subsistence, which the worker consumes in the process of labour. Fixed capital is consumed gradually" (i.e. is gradually used up). Second transformation: "Circulating capital consists of the seeds to be worked up by labour (raw material) and the worker's consumption" (I.c. [pp. 97-98, 94]).

This is more relevant to the origin [of capital]. Firstly, the *transformation* of fixed capital itself into what is merely a stationary form of circulating capital, *fixed* circulating capital; secondly, the *purpose*: the one is intended to be consumed as means of production, the other as product; or the different ways in which a thing is *consumed*, determined by its role among the conditions of production in the production process.

Cherbuliez simplifies the matter in the sense that circulating capital [is] the consumable, fixed capital the non-consumable, part of capital.^a (The one can be eaten up, the other cannot. A VERY EASY METHOD OF TAKING THE THING.)

Storch, in a passage already cited above^b (34 in the Notebook), vindicates for circulating capital in general the property of capital to circulate. But he refutes himself by arguing^c that

"all fixed capital is originally derived from circulating capital and must constantly be maintained at the expense of the latter".^d

(Hence it derives from circulation, or is itself circulating in its first moment and constantly renews itself by means of circulation; consequently, though *it* does not enter *into circulation*, circulation enters *into it*.) Storch adds further on:

"No fixed capital can bring in revenue except by means of circulating capital" (26, b Notebook).¹⁴

We shall come back to this later.

//"Reproductive consumption is not, properly speaking, an expense, but merely an *advance*, since it is reimbursed to him who grants it." Storch's polemic against Say [Considérations etc.], p. 54 (p. 5b, second notebook on Storch).

^a A. Cherbuliez, Richesse ou pauvreté, Paris, 1841, pp. 16-19.- Ed.

^b See this volume, p. 24.— Ed.

^c H. Storch, Cours d'économie politique, Vol. I, p. 246.- Ed.

d Here and below Marx quotes Storch in French.-Ed.

(The capitalist gives back to the worker a part of his own surplus labour in the form of an *avance*, for which he must reimburse the capitalist not merely with an equivalent, but with surplus labour.)//

(The formula for the calculation of compound interest is: $S = c (1 + i)^n$. (S is the total volume of capital c after the lapse of n years at an interest rate of *i*.)

The formula for the calculation of an ANNUITY is:

x (the annulty) =
$$\frac{c(1+i)^n}{1+(1+i)+(1+i)^2+\ldots+(1+i)^{n-1}}$$
.)

In the preceding analysis, we divided capital up into *constant* value and variable value.^a This is always correct when capital is considered within the production phase, i.e. in its immediate valorisation process. How capital itself, as presupposed value, may alter its value, depending upon whether its reproduction costs rise or fall, or also as a result of a fall in profits, etc., obviously does not belong here, where the general concept of capital is discussed, but in the section dealing with capital as real capital, as the reciprocal effect of many capitals upon each other.

//Because competition appears historically as the dissolution of guild compulsion, government regulation, internal tariffs and the like, within the country, and as the abolition of shutting-off, prohibition or protection, on the world market-in short, because it appears historically as the negation of the limits and barriers peculiar to the production stages preceding capital-and because historically it was quite correctly described and [VI-30] advocated by the Physiocrats as laissez faire, laissez passer, it has accordingly been considered in terms of that, purely negative, its purely historical, aspect. On the other hand, this has led to the even greater stupidity of regarding competition as the clash of the unfettered individuals actuated only by self-interest—as the mutual repulsion and attraction of the free individuals, and hence as the absolute form of existence of free individuality in the sphere of production and exchange. Nothing could be further from the truth.

(1) If free competition dissolved the barriers of earlier production relations and modes of production, one must $d'abord^b$ take into account that what was a barrier to free competition, was

^a See present edition, Vol. 28, pp. 291-323 and 352-53.- Ed.

^b First of all.-Ed.

an immanent limit for earlier modes of production, within which they spontaneously developed and moved. These limits became barriers only after the productive forces and relations of intercourse had attained a level of development sufficient for capital as such to begin to act as the regulating principle of production. The limits it swept away were barriers to its movement, development, realisation. In so doing, it by no means abolished all limits, or all barriers, only the limits that did not correspond to it, that were barriers to it. Within its own limits—much as they may appear, from a higher viewpoint, as barriers to production and be posited as such by capital's own historical development-it feels itself to be free, unconfined, i.e. limited only by itself, only by its own conditions of life. Just as guild industry in its heyday found in the guild organisation absolutely the kind of freedom which it needed, i.e. the production relations which corresponded to it. Indeed, it posited these relations out of itself and developed them as its own immanent conditions, hence not at all as external and restricting barriers. From the historical aspect, the negation of the guild system, etc., by capital through free competition merely means that capital, once it had grown strong enough, tore down, by means of the mode of intercourse adequate to it, the historical barriers which hindered and impeded the movement adequate to it.

Yet competition is far removed from having only this historical significance or from being only this negativity. Free competition is the relation of capital to itself as another capital, i.e. the real behaviour of capital as capital. It is only at this point that the inner laws of capital—which only appear as tendencies in the initial historical stages of its development—are first posited as laws; production based upon capital only posits itself in its adequate forms in so far and to the extent that free competition is developed. For free competition is the free development of the mode of production based upon capital; the free development of its conditions and of its process as constantly reproducing these conditions.

In free competition, it is capital that is set free, not the individuals. As long as production based on capital is the necessary, hence the most appropriate, form for the development of society's productive power, the movement of individuals within the pure conditions of capital appears as their freedom. But then it is also dogmatically affirmed as such by continual references to the barriers which free competition has demolished. Free competition is the real development of capital. By means of it, that which corresponds to the nature of capital, to the mode of production based upon capital, to the concept of capital, is posited as an external necessity for the individual capital. The reciprocal compulsion exerted under free competition by capitals upon one another, upon labour, etc. (the competition of workers among themselves is merely another form of the competition of capitals) is the *free*, and at the same time *real*, development of wealth as capital. This is so much the case that the most profound economic thinkers, e.g. Ricardo, *presuppose* the absolute dominance of free competition as essential for studying and formulating the adequate laws of capital, which simultaneously appear as the vital tendencies dominating it.

On the other hand, free competition is the adequate form of the productive process of capital. The further free competition is developed, the purer do the forms of the movement of capital emerge. What Ricardo, e.g., has thereby admitted, *malgré lui*, is the *historical nature* of capital, and the restricted character of free competition, which is merely the free movement of capitals, i.e. their movement within conditions which are not part of any dissolved earlier stages, but are capital's own conditions. The dominance of capital is the presupposition for free competition, just as the Roman imperial despotism was the presupposition for the free Roman "private law".

As long as capital is weak, it itself still looks for the crutches of past modes of production, or of modes of production which pass away with its rise. As soon as it feels strong enough, it throws the crutches away and moves according to its own laws. As soon as it begins to feel that it itself is, and is known to be, a barrier to development, it takes refuge in forms which, while apparently completing the dominance of capital by curbing free competition, simultaneously proclaim the dissolution of capital and of the mode of production based upon it. What is inherent in the nature of capital is actually externalised, as an outward necessity, only by competition, which is merely the forcing by the many capitals of the immanent determinations of capital upon one another and upon themselves. Hence not a single category of the bourgeois economy, not even the most basic one, e.g. the determination of value, really comes into its own [other than] through free competition, i.e. through the actual process of capital, which appears as the reciprocal effect of all capitals and all other relations of production and commerce determined by capital upon one another.

Hence, on the other hand, the absurdity of regarding free competition as the ultimate development of human freedom, and the negation of free competition as equivalent to the negation of individual freedom and of social production based upon individual freedom. It is merely the kind of free development possible on the limited basis of the domination of capital. This type of individual freedom is therefore, at the same time, the most sweeping abolition of all individual freedom and the complete subjugation of individuality to social conditions which assume the form of objective powers, indeed of overpowering objects—objects independent of the individuals relating to one another.

To bring out the essence of free competition is the only rational answer to its glorification by the prophets of the MIDDLE CLASS and to its anathematising by the socialists. If it is argued that within free competition individuals, in pursuing their purely private interest, realise the common or RATHER the general interest, this means merely that they press upon each other under the conditions of capitalist production and hence their mutual repulsion itself only reproduces the conditions under which this interaction takes place. Incidentally, once the illusory view of competition as the alleged absolute form of free individuality begins to vanish, this is proof that the conditions of competition, i.e. of production based upon capital, are already felt to be and thought of as barriers, and therefore already are barriers, and to a constantly increasing degree. The assertion that free competition is equivalent to the ultimate form of development of the productive forces, and hence of human freedom, boils down to the assertion that the rule of the MIDDLE CLASS is the terminal point of world history-certainly an agreeable thought for the parvenus of the day before yesterday.//

[VI-31] Before continuing our survey of views on fixed and circulating capital, let us for a moment return to something discussed earlier.

For the time being we assume that production time coincides with labour time. The CASE in which there are, within the production phase itself, interruptions conditioned by the technological process will be considered later.

Suppose that the production phase of a capital is 60 working days, 40 of which are necessary labour time. Then, under the law developed earlier, surplus value, or the new value posited by capital, i.e. the alien labour time appropriated, = 60 - 40; = 20. Let this surplus value (=20) be represented by S, and the production

phase—or the labour time used during the production phase—by *p*. In a given period of time, (which we shall call Z)—e.g., 360days-the total value produced can never be greater than the [sum of value produced within the] number of production phases contained in 360. The highest possible coefficient of S-i.e. the maximum of surplus value that capital can produce under the given assumptions—is equal to the number of repetitions of the production of S in 360 days. The maximum number of times this process-the reproduction of capital, or rather, now, the reproduction of its production process-can be repeated is determined by the ratio of the production period to the overall time period within which the former is to be repeated. If the given time=360 days, and the duration of the production phase=60 days, then $\frac{360}{60}$ or $\frac{Z}{p}$, i.e. 6, is the coefficient which shows how many times p is contained in Z, or how many times, given its own immanent limits, the process of reproduction of capital can be repeated in 360 days.

Self-evidently, the maximum quantity of S that can be produced, i.e. of surplus value that can be posited, is determined by the number of processes in which S can be produced in a given time period. $\frac{Z}{p}$ expresses this relation. The quotient of $\frac{Z}{p}$ or q is the largest possible coefficient of S in the time period of 360 days, in general in Z. $\frac{SZ}{p}$ or Sq is the maximum [surplus] value [that can be produced in Z]. If $\frac{Z}{p} = q$, Z = pq, i.e. the entire duration of Z would be production time: the production phase p is repeated as many times as it is contained in Z. The total [surplus] value

produced by capital in a given period of time would then be=to the surplus labour appropriated by it in one production phase \times by the number of times this production phase is contained in the given time.

Hence, in the above example, $= 20 \cdot {}^{360}/_{60} = 20 \times 6 = 120$ days. The magnitude q, i.e. $\frac{Z}{p}$, would express the number of *turnovers* of capital; but since Z = pq, $p = \frac{Z}{q}$, i.e. the duration of one production phase would be equal to the total time divided by the number of turnovers. One production phase of capital would therefore equal one turnover. Turnover time and production time would then be completely identical; hence the number of turnovers would be

determined exclusively by the ratio of one production phase to total time.

However, in this case, circulation time has been assumed as=0. Actually, it has a certain length, which can never become=0. Now assume that for every 60 days' production time or 60 production days, 30 circulation days are required. This circulation time, required for p, can be designated as c. In this case, one turnover of capital, i.e. the total time it requires before it is in a position to repeat the valorisation process, the positing of surplus value, is equal to 30+60,=90 days (=p+c) (1U (turnover)=p+c).

In a period of 360 days, a turnover taking 90 days can be repeated only $\frac{360}{90}$, i.e. 4 times. The surplus value of 20 could then be posited only 4 times; $20 \times 4=80$. In 60 days, the capital produces 20 surplus days; yet it must circulate for 30 days, i.e. it cannot posit any surplus labour, any surplus value, during these 30 days. For the capital this is the same (so far as the result is concerned) as if in 90 days it had only posited a surplus value of 20 days. Formerly, the number of turnovers was determined by $\frac{Z}{p}$; now it is determined by $\frac{Z}{p+c}$, or $\frac{Z}{U}$. Formerly, the maximum [surplus] value was $\frac{SZ}{p}$; the surplus value actually produced now is $\frac{SZ}{p+c}$; $(20 \cdot \frac{360}{60+30} = 20 \cdot \frac{360}{90} = 20 \times 4 = 80)$. The number of

turnovers is, therefore, equal to the total time divided by the sum of the production time and the circulation time; and the total [surplus] value is S multiplied by the number of turnovers. But this formula is not enough yet to express the relations of surplus value, production time and circulation time.

The maximum of [surplus] value creation is expressed by the formula $\frac{SZ}{p}$, the maximum limited by circulation time is given by $\frac{SZ}{p+c}$ (or $\frac{SZ}{U}$). Subtracting the second quantity from the first, we get:

$$\frac{SZ}{p} - \frac{SZ}{p+c} = \frac{SZ(p+c) - SZp}{p(p+c)} = \frac{SZp + SZc - SZp}{p(p+c)} = \frac{SZc}{p(p+c)},$$

The difference is therefore $\frac{SZc}{p(p+c)}$, or $\frac{SZ}{p} \times \frac{c}{p+c}$. The magnitude $\frac{SZ}{p+c}$, or S', as we may represent [surplus] value in the second determination, is expressed by the formula

Mrs _ Waren . Suit-fire = 20×6 - 20×6× - -= 120- 120× = 120-40 = 90] , July 4- 100 mg guight 2. man 2. with , 24 the share of a particle of the star and the same of a second on all 2. En the 41 - the could be a server of the second of the car and a could be a second the second at the second to ship and and a ship and and the second and the s == 5/1 m mp wyp >. hole Ery = >. y. 1/2 2 comments of the yele 1/2 x 1/2 「いたい」 ひと 1(1-1): 1) 5- 2 - 2 ×5. ・1(2-3×5.) 1. 1'= 12: 1(2-c) : 2. 1. 1'= 2" 2- C. an supply and wy in - 3, Couldongt Tayeave 7-6 approx 030 1 2:2= 37 1- 12 - 12 1 - -) (3 - 7 - 2) - 23 - 1 1 = D(1 - a for) := D(1 - a for) . 2 where and the address of the state of the state of the state of the state and a superior of the second second and the -14. 2/9-95) 1 2q(a-15) = 2q(m-a) = 2qr = a chart of the top of the set of the sas. with a press. n - 2 april as Some grade internet Mar have well an بحريد الدجا مريد 16 any. Malale TE x Cuthe 14-1 - a toppen > - Hard - 444 24 al the part of the shi ort i will. 1144. 44 Muy, 7 الم المراجع المراجع المراجع المراجع المراجعة المراجع ال the stand provide the stand and and and and a stand of the stand of th in any in the second the manual and a second of a second of the second of the second of the

Page 32 of Notebook VI with the Outlines of the Critique of Political Economy

 $S' = \frac{SZ}{p} - \left(\frac{SZ}{p} \times \frac{c}{p+c}\right)$. Before we continue the analysis of this formula, others have to be brought in.

If the quotient of $\frac{Z}{p+c}$ is designated as q', then q' expresses the number of times U=(p+c) is contained in Z, the number of turnovers. $\frac{Z}{p+c} = q'$; hence Z=pq'+cq'. In this equation, pq' expresses the total production time and cq' the total circulation time.

Designate the total circulation time as C (so cq'=C). (Z (360)=4×60 (240)+4×30 (120). From what has been presupposed, q'=4. C=cq'=4c; 4 being the number of turnovers. As we saw earlier, the maximum of [surplus] value creation $=\frac{SZ}{p}$, but in that case Z was assumed to be equal to the production time. Yet now the actual production time is Z-cq', as also follows from the equation. Z=pq' (total production time)+cq' (total circulation time, or C). Consequently, Z-C=pq'. As a result, $S \cdot \frac{Z-C}{p}$ is the maximum of [surplus] value creation. For the production time is not 360 days but 360 days -cq', i.e. -4×30 , or -120; hence [the

total surplus value produced is]

$$20 \cdot \left(\frac{360 - 120}{60}\right) = \frac{20 \times 240}{60} = 80.$$

[VI-32] Finally, as regards the formula

$$S' = \frac{SZ}{p} - \left(\frac{SZ}{p} \times \frac{c}{c+p}\right) = \frac{360 \times 20}{60} - \left(\frac{20 \times 360}{60} \times \frac{30}{30+60}\right) =$$

= 120 - (120 \times \frac{30}{90}) = 6 \times 20 - (6 \times 20 \times \frac{3}{9}) = 20 \times 6 - (20 \times 6 \times \frac{1}{3}) or
= 120 - (120 \times \frac{1}{3}) = 120 - 40 = 80,

it means that [surplus] value is equal to the maximum [surplus] value, i.e. to the [surplus] value determined purely by the relation of production time to total time, minus the number which expresses how many times the circulation time is contained in this maximum, and this number is the maximum itself multiplied by the number of times one turnover is contained in c, in the circulation time per turnover, or divided by the number which expresses how many times c is contained in c+p or C in Z.

÷

If c were = 0, S' would be = $\frac{SZ}{p}$, and would thus be at its maximum. S' grows smaller in the same measure as c increases, and hence is inversely related to it, for the factor $\frac{c}{c+p}$ and the number $\frac{SZ}{p} \times \frac{c}{c+p}$, or $\frac{SZ}{p} \times \frac{c}{U}$, which is to be subtracted from $\frac{SZ}{p}$, the maximum [surplus] value, increase in the same measure. $\frac{c}{c+p} = \frac{c}{U} + \frac{c}{U}$ expresses the relation of circulation time to one turnover of capital. If we multiply the numerator and the denominator by q', we get: $\frac{cq'}{(c+p)q'} = \frac{C}{Z} + \frac{c}{(c+p)} = \frac{30}{30+60} = \frac{1}{3}$; $\frac{c}{c+p}$, or $\frac{1}{3}$, expresses the relation of circulation time to total time, since $\frac{360}{3} = 120$. The turnover (c+p) is contained in $c \frac{c}{c+p}$ or $\frac{1}{3}$ (or $\frac{C}{Z}$) [times].

We therefore have three formulas:

(1)
$$S' = \frac{SZ}{p+c} = \frac{SZ}{U}$$

$$S' = \frac{S(Z-C)}{p}$$

(3)
$$S' = \frac{SZ}{p} - \left(\frac{SZ}{p} \times \frac{c}{c+p} = S\left\{\frac{Z}{p} - \left(\frac{Z}{p} \times \frac{c}{c+p}\right)\right\}$$

Hence $Sq:S' = \frac{SZ}{p}: \frac{S(Z-C)}{p};$ or Sq:S' = Z:(Z-C). The

maximum [surplus] value relates to the actual [surplus] value as a given period of time relates to this period minus total circulation

time. Or also Sq: S' = (pq' + cq'):(pq' + cq' - cq') = (p + c): p.

Concerning (3):

$$S' = \frac{SZ}{p} - \left(\frac{SZ}{p} \times \frac{c}{c+p}\right) = S\left\{\frac{Z}{p} - \left(\frac{Z}{p} \times \frac{c}{c+p}\right)\right\} \text{ or, since } \frac{Z}{p} = q,$$
$$S' = S(q - q \cdot \frac{c}{c+p}) = S(q - q \cdot \frac{c}{U}).$$

The total surplus value is therefore equal to the surplus value posited in one production phase, the coefficient of the latter value being the number of times the production time is contained in the total time minus the number of times the circulation time of one turnover is contained in this latter number.

$$S(q-q\frac{c}{U}) = Sq\left(1-\frac{4c}{U}\right) = Sq\left(\frac{U-c}{U}\right) = \frac{Sqp}{U} = \frac{Sz}{p+c},$$

which is the first formula. Hence formula (3) means ... formula (1): The total surplus value is equal to the surplus value produced in one production phase multiplied by the total time, divided by the turnover time, or multiplied by the number of times the sum of production time and circulation time is contained in the total time.

Formula (2): The total [surplus] value is equal to the surplus value multiplied by the total time minus the total circulation time, divided by the duration of one production phase.

(The basic law developed under competition, as distinct from that established with respect to value and surplus value, is that value is determined, not by the labour contained in it, or by the labour time in which it is produced, but by the labour time in which it can be produced, or by the labour time necessary for reproduction. Only in this way is the individual capital in reality placed under the conditions of capital in general, although the original law seems to have been overthrown. But it is only thus that necessary labour time is posited as determined by the movement of capital itself. This is the basic law of competition. Demand, supply, price (production costs) are further determinations of form; price as market price; or general price. Then the positing of a general rate of profit. On the basis of the market price, capitals are then allocated to different branches. Lowering of production costs, etc. In short, here all determinations appear in *inverse order* as compared with their appearance in capital in general. There price is determined by labour; here labour is determined by price, etc., etc.

The action of the individual capitals upon one another has the effect, precisely, of forcing them to behave as *capital*; the apparently independent operation of the individual capitals, and their chaotic collisions, are precisely the positing of their general law. The market acquires yet another meaning here. The action of capitals as individual ones upon each other thus becomes precisely their positing as general ones, and the abolition of the apparent independence and autonomous existence of individual capitals.

This abolition takes place to an even greater extent in credit. And the extreme form to which this abolition proceeds, but which is, at the same time, the *ultimate positing* of capital in its adequate form, is joint-stock capital.)

(Demand, supply, price, production costs, the opposition of profit and interest, the different relations between exchange value and use value, consumption and production.)

So we have seen that the surplus value that capital can posit in a definite period of time is determined by the number of times the valorisation process can be repeated, or the capital can be reproduced, within that period, but that the number of these reproductions is determined by the relation of the duration of the production phase, not to the total time period, but to this total time minus circulation time. Circulation time therefore appears as time during which the [VI-33] ability of capital to reproduce itself, and therefore to reproduce surplus value, is suspended. Hence its productivity—i.e. its production of surplus values—is inversely related to circulation time, and would attain its maximum level if the latter dropped to zero.

Since circulation is the passage of capital through the different, conceptually determined moments of its necessary metamorphosis, of its life process, it is an indispensable condition for capital, one posited by capital's own nature. In so far as this passage takes time, capital cannot *increase* its value during this time, for it is *not*-production time, it is time in which capital does *not* appropriate living labour. Hence, circulation time can never increase the value produced by capital, but can only posit time which posits no value, i.e. can only appear as a limit to the increase of value, its limiting effect being measurable by the ratio it bears to labour time. Circulation time cannot be reckoned as valueproducing time, the latter only being labour time which objectifies itself in value. It is not part of the production costs of value; nor is it part of the production costs of capital; but it is a condition which impedes capital's self-reproduction.

Obviously, the obstacles to the valorisation of capital—i.e. to its appropriation of living labour—do not constitute a moment of its valorisation, of its positing of value. Therefore, it is ludicrous to take the term *production costs* in the original sense here. Or we must set the production costs apart as a particular form from the labour time which objectifies itself in value (as we must set profit apart from surplus value). But even then, circulation time does not form part of the production costs of capital in the same sense as wages, etc., do. It is an ITEM which comes into the reckoning in the settling of accounts between individual capitals, because they share out the surplus value among themselves in certain general proportions.

Circulation time is not time in which capital produces value, but time in which it realises the value produced in the production process. Circulation time does not increase the quantity of value, but posits it in other appropriate determinations of form, converting it from the determination of product into that of commodity, from that of commodity into that of money, etc. The fact that the price, which previously had a notional existence in the commodity, is now really posited, and that the commodity is now actually exchanged for its price, money, does not increase this price, of course.

Circulation time, therefore, does not appear as time which determines value; and the number of turnovers, as far as it is determined by circulation time, does not appear as indicating that capital introduces a new value-determining element, one which belongs to it, sui generis, as distinct from labour. On the contrary, it appears as a limiting, negative principle. Hence the necessary tendency of capital is circulation without circulation time, and this tendency is the basic attribute of credit and the credit CONTRIVANCES of capital. On the other hand, credit is, therefore, also a form in which capital seeks to posit itself as distinct from the individual capitals, or in which the individual capital seeks to posit itself as capital as distinct from its quantitative limit. However, the most that it can achieve in this LINE is, on the one hand, FICTITIOUS capital. On the other hand, credit merely appears as a new element of concentration, of the swallowing-up of capitals by individual centralising capitals.

From one aspect, circulation time is objectified in *money*. The attempt of credit to posit money as a merely formal moment, so that money mediates the change of form without itself being *capital*, i.e. value. This is a form of *circulation without circulation time*. Money is itself a product of circulation. We shall see later how capital creates new products of circulation in credit.

But if, on the one hand, capital strives for *circulation without circulation time*, it seeks, on the other, to attribute the value of *production time* to *circulation time* as such, to attribute *value* to it in the various organs by which the process of circulation time and circulation is mediated; to posit all of them as money, and in a further determination as capital. This is another aspect of credit.

All this springs from the same source. All the requirements of circulation, money, conversion of commodity into money, conversion of money into commodity, etc., may be traced back to *circulation time*, although they adopt various, apparently quite heterogeneous, forms. The machinery designed to reduce circulation time is itself part of it.

Circulation time is that time of capital which may be regarded as the time of its specific movement as capital, as distinct from production time, during which it reproduces itself, exists not as already produced capital which has merely formal transformations to undergo, but as capital-in-process, creative capital, sucking its life-blood from labour.

The opposition of labour time and circulation time comprises the entire doctrine of credit, as this involves, i.a., the problem of CURRENCY, etc. Of course, apart from circulation time being a deduction from the possible production time, real costs of circulation come into evidence later, i.e. it emerges that values which have already been posited in reality, must be expended in circulation. But IN FACT capital only burdens itself with all these costs—deductions from the surplus value already produced—in order to increase the sum of surplus values that can be produced, e.g., in a year, that is, to increase the aliquot part of production time contained in a definite time period—i.e. to reduce circulation time.

True, it also emerges that in practice circulation time does not really interrupt production time (except in crises and DEPRESSIONS OF TRADE). But this is merely because each capital is divided up into portions, with one part in the production phase and the other in the circulation phase. Not the whole of a given capital is active, but, e.g. (depending on the ratio of circulation time to production time), $\frac{1}{3}$, $\frac{1}{x}$ of it, while the other part is involved in circulation. Or it may be that a given capital is doubled (e.g., by means of credit). For this capital-[for] the original capital-it is then the same as if circulation time did not exist at all. But then the capital it has borrowed is in that PLIGHT. And if we abstract from the question of ownership, it is again quite the same as if one capital had been divided into two. Instead of a being divided into two and b being divided into two, a draws b to itself and then divides up into a and b. Illusions concerning this process are widespread among the credit cranks (who are seldom creditors, but RATHER debtors).

We have already indicated^a that the dual and contradictory

^a See the beginning of the previous paragraph.--Ed.

condition of capital, continuity of production and the necessity for circulation time, or, also, continuity of circulation (not circulation time) and the necessity for production time, can only be fulfilled by dividing capital into portions, one of which circulates as finished product, and the other reproduces itself in the production process, and these portions alternate; when the one returns to phase P (production process), the other leaves it.

This process takes place day after day, and also within longer intervals (time dimensions). The whole capital and the total value have been reproduced as soon as both portions have gone through the production process and the circulation process, or also as soon as the second portion re-enters into circulation. Thus the point of departure is also the end point. Hence the turnover depends on the size of the capital, or RATHER, here, still on the total sum of these two portions. Only when it has been reproduced, has the whole turnover been completed; otherwise, only 1/2, 1/3, 1/x of it, depending upon the proportion of the constantly circulating part.

[VI-34] It was further emphasised that each part could be regarded in opposition to the other as fixed or circulating and that they did in fact alternately adopt these roles in relation to each other. The simultaneity of the different phases of the process of capital is only made possible by the fact that capital is divided and rejects portions, each of which is capital, but capital in a different determination.

This change of form and substance is similar to that in an organic body. If, e.g., it is said that the body reproduces itself within 24 hours, it does not do so all at once; rejection in one form and renewal [in] another are spread out in time and take place simultaneously. Incidentally, in the body the bone-structure is fixed capital; it is not renewed in the same time as flesh and blood. Consumption (self-consumption), and hence reproduction, proceed with different degrees of rapidity. (Here we, therefore, already have the *transition to* many capitals.) The important thing here above all is to keep in mind, as yet, only capital as such; for the determinations developed here are determinations which make value in general into capital, constitute the *differentia specifica* of capital as such.

Before going any further, we shall once again draw attention to the important point that circulation time—i.e. the time during which capital is separated from the process in which it absorbs labour into itself, i.e. the labour time of capital as capital—merely transposes *presupposed* value from one determination of form into the other, but it is not an element which *creates* or increases *value*.
By converting a value of 4 days' labour which existed in the form of twist, into a value of 4 days' labour which exists as money, or a symbol recognised as the representative of 4 days' labour in general, 4 general working days, the *presupposed* and *measured* value is translated from one form into the other, but it is not increased. The exchange of equivalents leaves them, *qua* quantities of value, the same *after* the exchange as they were *before* it. If we assume a single capital, or treat the various capitals of a country as one capital (national capital) as distinct from that of other countries, it is clear that the time during which this capital is not active as productive capital, i.e. posits no surplus value, is a deduction from the valorisation time at its disposal.

Such time appears—conceived in this abstract form, still wholly disregarding the costs of circulation itself—as a negation, not of the valorisation time actually posited, but of the *possible* valorisation time, i.e. possible if circulation time were zero. Plainly, the national capital cannot regard the time during which it does not multiply itself as time during which it does. Nor can, e.g., an isolated peasant regard the time in which he cannot harvest or sow, in which in general his labour is interrupted, as time which enriches him. That capital, used as it is, and necessarily so, to considering itself as productive and yielding fruit independently of labour, of its absorption of labour, assumes itself to be fruitful at all times, and reckons its circulation time as time producing value—as production cost—is QUITE ANOTHER THING.

One therefore sees the error when Ramsay, e.g., says

"THAT THE USE OF FIXED CAPITAL MODIFIES TO A CONSIDERABLE EXTENT THE PRINCIPLE THAT VALUE DEPENDS ON QUANTITY OF LABOUR. FOR SOME COMMODITIES ON WHICH THE SAME QUANTITY OF LABOUR HAS BEEN EXPENDED, REQUIRE VERY DIFFERENT PERIODS BEFORE THEY ARE FIT FOR CONSUMPTION. BUT AS DURING THIS TIME THE CAPITAL BRINGS NO RETURN, IN ORDER THAT THE EMPLOYMENT IN QUESTION SHOULD NOT BE LESS LUCRATIVE THAN OTHERS IN WHICH THE PRODUCE IS SOONER READY FOR USE, IT IS NECESSARY THAT THE COMMODITY, WHEN AT LAST BROUGHT TO MARKET, SHOULD BE INCREASED IN VALUE BY ALL THE AMOUNT OF PROFIT WITHHELD."

(It is already presupposed here that capital as such always yields a uniform profit, as a healthy tree yields fruit.)

"THIS SHEWS HOW CAPITAL MAY REGULATE VALUE INDEPENDENTLY OF LABOUR." E.g., wine in the cellar. (Ramsay, [An Essay on the Distribution of Wealth, p. 43,] IX, 84.)¹¹

This is as if circulation time—alongside labour time, or on the same scale as it—produced *value*. Capital, of course, includes both moments. (1) Labour time as the moment which produces value.

(2) Circulation time as the moment which limits labour time and hence the total production of value by capital; a moment necessary because value, or capital, in the form in which it immediately results from the production process, is certainly value, but value which has yet to be posited in its adequate form. The time required for this change of form—i.e. the time which elapses between production and reproduction—is time which depreciates capital. While, on the one hand, the determination of capital as circulating, as capital-in-process, implies *continuity*, it equally implies the *interruption* of continuity.

The economists correctly define circulation, the revolution that capital must go through to kindle itself for new production, as *une série d'échanges*. But by doing so, they admit that this circulation time does not increase the quantity of value, and hence cannot be time positing new value. For a *série d'échanges*, whatever the number of *échanges* it comprises, and whatever the amount of time required to perform these operations, is merely an exchange of equivalents. The positing of values—the extremes mediated—as equal, obviously cannot posit them as unequal. In quantitative terms, they can neither have been increased nor decreased by the exchange.

The surplus value produced during one production phase is determined by the surplus labour set in motion by capital during that phase (the surplus labour appropriated). The sum of surplus values that capital can produce in a certain period of time is determined by the repetition of the production phase during this period; or by the *turnover* of capital. The turnover, however, is equal to the duration of the production phase + the duration of circulation, i.e. equal to the sum of circulation time and production time. The turnover approaches production time the more closely the shorter circulation time is, i.e. the time which elapses between capital sortant de la production et rentrant dans elle.^a

Surplus value is IN FACT determined by the labour time objectified during one production phase. The more often capital is reproduced, the more often the production of surplus value takes place. The number of reproductions=the number of *turnovers*. Hence total surplus value $[S']=S \times nU$ (*n* is the number of turnovers). $S'=S \times nU$; therefore $S = \frac{S'}{nU}$. If the production time required by a capital of £100 in a certain branch of industry equals 3 months, the capital could turn over 4 times a year; and if the S value

^a Leaving production and its re-entry into it.-Ed.

produced each time=5, the total surplus value would=5 (the S produced in one production phase)×4 (the number of turnovers determined by the relation of production time to the year)=20. But since circulation time is, e.g., 1/4 of production time, 1 turnover would=3+1 months, i.e. 4 months, and the capital of 100 could turn over only 3 times a year [; S']=15. Therefore, although the capital posits an S value of £5 in 3 months, [it] is the same for it as if it only posited a [surplus] value of 5 in 4 months, since it can only posit one of 5×3 in a year. It is the same for it as if it produced an S of 5 per 4 months; i.e. as if in 3 months it produced only 15/4 or $3^3/4$, and in the one month of circulation $1^1/4$.

To the extent that the turnover is distinct from the duration posited by the conditions of production itself, it=circulation time. The latter, however, is not determined by labour time. Hence the sum of surplus values posited by capital in a given period of time appears to be determined, not simply by labour time, but by labour time and circulation time, [VI-35] in the proportions given above. But the determination which capital introduces here into the positing of value is, as shown above, a *negative, limiting* one.

If, e.g., a capital of £100 requires 3 months, say 90 days, for production, it could, if circulation time=0, turn over 4 times a year, and all of it would be continuously active as capital, i.e. as positing surplus labour, as value multiplying itself. If 80 of the 90 days represented necessary labour, 10 would represent surplus labour. Assume now that circulation time was $33^{1}/_{3}\%$ of production time or $1/_{3}$ of it; i.e., 1 month to 3. Circulation time would then equal $90/_{3}$; one-third of production time, or 30 days; $c=1/_{3} p$. $(c=\frac{p}{3})$

WELL. The question is: how large a proportion of this capital can now be continuously engaged in production? during the whole year? If the capital of 100 had worked for 90 days, and circulated as a product of 105 for a month, then during this month it could not employ any labour at all.

(Of course, the 90 working days can be 3, 4, 5, $x \times 90$, depending upon the number of workers employed during those 90 days. They would only=90 days if only 1 worker were employed. But for the time being, we are not concerned with this.)

(In all these calculations, it is assumed that surplus value is not re-capitalised, but that the capital continues to work with the same number of workers. Yet it is only with the realisation of the surplus [value] that the entire capital as well is again realised as money.) I.e., for one month, the capital could not be employed at all. (The capital of 100 constantly employs, e.g., 5 workers; contained in it is their surplus labour, and the product which is circulated is never the original capital but that which has absorbed the surplus labour and hence has a surplus value. Strictly speaking, therefore, the circulation of a capital of 100 is to be understood as the circulation of a capital of, e.g., 105, i.e. of the capital together with the profit posited in 1 act of production. But at this point, that *erreur*^a is of no consequence, notably in dealing with the above question.)

Suppose that twist worth £100 has been produced at the end of 3 months, and 1 month passes before I receive the money and can recommence production. Now to set the same number of workers to work during the 1 month when the capital circulates, I must have a surplus capital of £33¹/₃, for if £100 sets a certain amount of labour in motion for 3 months, $1/_3$ of £100 would set it in motion for one month.

At the end of the 4th month, the capital of 100 would RETURN into the production phase, and that of $33^{1}/_{3}$ would enter into the circulation phase. Given the same relation, the latter would take $^{1}/_{3}$ of a month for circulation, and hence would come back into production after 10 days.

The first capital could only re-enter circulation at the end of the 7th month. The 2nd capital, which entered into circulation at the beginning of the 5th month, would return, say, on the 10th day of the 5th month, re-enter circulation on the 10th of the 6th month and return on the 20th of the 6th month. It would then re-enter circulation on the 20th of the 7th month, and return at the end of the 7th month. So the first capital would be resuming its course at precisely the moment when the 2nd would be returning. Beginning of the 8th month and return at etc. Beginning of the 9th etc.

In a word: if the capital were ${}^{1}/{}_{3}$ larger—precisely the amount made up by circulation time—it could give continuous employment to the same number of workers. But it can also continuously maintain itself in the production phase by constantly employing ${}^{1}/{}_{3}$ less labour. Suppose the capitalist began with only 75 of his capital; at the end of the 3rd month production would be completed, and one month would be needed for circulation. During this month, however, he could still carry on production, since he has kept a capital of 25 on hand; and if he needs 75 to

^a Inaccuracy.— Ed.

set a certain amount of labour in motion for 3 months, he needs 25 to set a corresponding amount in motion for 1 month. He would continuously have the same number of men working. Each of his commodities takes 1/12 of a year to sell.

If the sale of his commodities always takes [a time equal to] $\frac{1}{3}$ of production time, so etc. It should be possible to solve this problem by means of a very simple equation, to which we shall come back later. Properly speaking, it does not belong here. But it is important because of the problems of credit later.

Meanwhile thus much is clear. Call production time pt, circulation time ct, and capital C. C cannot be simultaneously in its production phase and in its circulation phase. If it is to continue to produce while it circulates, it must divide itself up into 2 parts, of which one is engaged in the production phase and the other in the circulation phase, the continuity of the process being maintained thus: when part a is posited in the former determinateness, part b is posited in the latter. Let the portion always engaged in production be x. Then x=C-b (where b is the part of capital engaged in circulation). C=b+x. If ct, circulation time, were zero, b would also be zero; and x would be equal to C. b (the part of capital engaged in circulation): C = ct: pt; i.e. the ratio of the part of capital in circulation to total capital is given by that of circulation time to production time.

If a capital of 100 turns over at a gain of 5% every 4 months, with one month's circulation time per 3 months' production time, total surplus value will, as we have seen,^a = $\frac{5 \cdot 12}{4} M$ (month) = $5 \times 3 = 15$; instead of 20, if c=0, for in that case, $S' = \frac{5 \times 12}{3} = 20$. But now 15 is the gain yielded at 5% by a capital of 75 whose circulation time = 0; which turns over 4 times a year; which is always employed. At the end of the 1st quarter, $3^{3}/_{4}$; at the end of the year, 15. (But it would only turn over a total capital of 300, as against 400 if, in the former case, ct=0.)

Consequently, a capital of 100, with circulation time of 1 month per 3 M production time, can continuously EMPLOY productively a capital of 75; a capital of 25 is always in circulation and unproductive. 75:25=3M:1M; or, if we call the part of capital employed in production p, that in circulation c, and the corresponding time periods p' and c', then p:c=p':c'. $(p:c=1:^{1}/_{3}.)$

^a See this volume, pp. 40-47, but there time is reckoned in days, not months.-- Ed.

The ratio of the part of C engaged in production to that in circulation is always $1:^{1}/_{3}$; this $^{1}/_{3}$ is continuously represented by varying component parts. But $p:C=75:100=^{3}/_{4}$; $c=^{1}/_{4}$; $p:C=1:^{4}/_{3}$ and c:C=1:4. The total turnover=4M; $p:U=3M:4M=1:^{4}/_{3}$.

[VI-36] In the circulation of capital, there is a simultaneous change of form and material.^a We must begin here not with money, but with the production process as the presupposition. In production, so far as the material aspect is concerned, the instrument is expended and the raw material is worked up. The result is the product—a newly created use value, which is different from its elemental presuppositions. As regards the material aspect, first a product is created in the production process. This is the first, and an essential material change. On the market, in the exchange with money, the product is ejected from the circulation of capital and falls within the sphere of consumption, becomes an object of consumption, whether for the final satisfaction of an individual need or as the raw material of another capital.

In the exchange of the commodity for money, the material change and the change of form coincide, for in money precisely the content itself belongs to the economic determination of form. And the reconversion of capital into the material conditions of production implies here the reconversion of money into commodity. A definite use value is reproduced, just as is value as such. But just as the material element from the outset, at its entry into circulation, was posited here as a product, so at the end of circulation the commodity is again posited as condition of production. To the extent that money figures here as means of circulation, it is, on the one hand, in fact, merely the mediator between production and consumption, in the échange, where capital rejects value from itself in the form of the product; and, on the other hand, the mediator between production and production, where capital rejects itself in the form of money and draws the commodity into its circulation in the form of condition of production.

From the material aspect of capital, money appears merely as

^a Here the following passage is crossed out in the manuscript: "Firstly, capital exists as money, which at this stage we still can conceive of in the form of undeveloped metallic money. Here form and content are abstractly identical; the material of value and its form are the same; taken in the abstract, since capital as."—*Ed.*

means of circulation; from the formal aspect, it appears as the nominal measure of its valorisation and, during a particular phase, as value-for-itself. Hence capital is C-M-M-C to just the same extent as it is M-C-C-M, and in such a way that both forms of simple circulation are, at the same time, determined further here: $M-M_1$ is money that produces money, and $C-C_1$ is a commodity whose use value is both reproduced and increased. With respect to money circulation, which at this point appears both as entering into the circulation of capital and as determined by it, we will only observe *en passant*^a—since *au fond*^b the issue can only be dealt with after we have considered the many capitals in their action and reaction upon one another—that obviously money is posited here in different determinations.

Up to this point, we have assumed that production time and labour time coincide. However, in, e.g., agriculture, interruptions in labour occur within production itself, prior to the completion of the product. The same labour time may be employed and yet the duration of the production phase may differ, because labour is interrupted. If the only difference is that in one case longer labour is required to finish the product than in the other, NO CASE AT ALL IS CONSTITUTED. For then it is clear that, in conformity with the general law, the product which contains a greater quantity of labour is of correspondingly greater value, and if reproduction in a given period of time is less frequent, the value reproduced is so much the greater. 2×100 is precisely as much as 4×50 . This is as valid for surplus value as for total value.

The unequal duration [of the production process] for different products, although exactly the same quantity of labour time (i.e. accumulated and living labour together) is employed upon them, is the QUESTION. Ostensibly, fixed capital operates here entirely by itself, without the intervention of human labour, like, e.g., the seed committed to the earth's womb. If additional labour is needed, this is to be subtracted. The question is to be posed in its pure form.

If circulation time is the same here, the turnover is less frequent because the production phase lasts longer. Therefore, production time+circulation time=1U is greater than when production time coincides with labour time. The time required here to bring the

^a In passing.— Ed.

^b Basically.— Ed.

product to maturity, the interruptions of labour involved, constitute conditions of production here. Non-labour time is a condition for labour time, necessary to actually posit the latter as production time. Obviously, the question must be discussed later, in connection with the equalisation of the rate of profit. Yet we must clear the ground here.

The slower RETURN—this is the essential point—is due here, not to circulation time, but to the very conditions under which labour becomes productive; it is part of the technological conditions of the production process. What must be absolutely denied, since it is perfectly absurd, is the idea that a natural circumstance which prevents capital in a certain branch of production from exchanging itself in the same time with the same quantity of labour time, as another capital does in another branch of production, can in any way contribute to increasing its value. Value, and hence surplus value too, is not equal to the time the production phase lasts, but to the labour time employed during this production phase, both objectified labour time and living. The latter alone can produce surplus value-and does so in the proportion which it bears to the objectified labour time employed—because it alone vields surplus labour time. //It is clear that other determinations also come into play in the equalisation of the rate of profit. But here we are dealing with the creation of surplus value, not with its distribution.//

Hence, it has been correctly asserted that from this viewpoint, e.g. agriculture is less productive (productivity refers here to the production of values) than other industries. Just as in another respect—in so far as the growth of productivity in it directly diminishes necessary labour time—it is more productive than all other industries. Yet in itself this circumstance can only benefit it where capital and the GENERAL FORM OF PRODUCTION CORRESPONDING to it are already dominant.

This interruption within the production phase already implies that agriculture can never be the sphere with which capital begins, where it originally establishes itself. The interruption contradicts the most fundamental conditions of industrial labour. Hence it is only through its reaction that agriculture is vindicated to capital and farming becomes industrial. Requires a high degree of development of competition, on the one hand, and advanced chemistry, machinery, etc., i.e. manufacturing industry, on the other. Therefore, historically too agriculture never appears in a pure form in the modes of production that precede capital or correspond to the lower stages of its development. Rural sideline industries, e.g., spinning, weaving, etc., must MAKE UP for the limitation on the employment of labour time in this sphere—a limitation resulting from these interruptions.

The non-coincidence of production time and labour time can, in general, only be due to natural conditions which here stand directly in the way of the utilisation of labour, i.e. of the appropriation of surplus labour by capital. Of course, far from constituting ADVANTAGES, these obstacles in capital's way rather involve it, de son point de vue^a, in losses.

Strictly speaking, the whole CASE is only to be mentioned here as an example of fixed capital, capital fixed in a particular phase. The only thing to be noted here is that capital creates no surplus value as long as it employs no living labour. The mere reproduction of the fixed capital employed posits no surplus value, of course.

(In the human body, as in capital, the reproduction of the various constituent parts does not take place in equal periods of time. Blood is renewed more quickly than muscle, muscle more quickly than bone, which in this respect may be considered as the fixed capital of the human body.)

[V1-37] As means by which circulation may be accelerated, Storch lists: (1) the formation of a class of "workers" who are solely occupied with trade; (2) improvement of the means of transport; (3) money; (4) credit. (See above.^b)

This higgledy-piggledy enumeration shows the entire confusion of the political economists. Money and the money circulationwhat we called simple circulation-is the presupposition, condition of both capital itself and of the circulation of capital. Hence, money as it exists, as a relation of commerce belonging to a stage of production antecedent to capital, money as money, in its immediate form, cannot be said to accelerate the circulation of capital, but is, rather, its presupposition. When we speak of capital and its circulation, we are dealing with a stage of social development at which money is not introduced as a discovery, etc., but is a *presupposition*. To the extent that money in its immediate form itself possesses value, is not merely the value of other commodities, the symbol of their value-for if something immediate in itself is to be something else which is likewise immediate, it can only represent the latter thing, be, d'une manière ou d'une autre,^c a symbol-to the extent that money itself possesses

^a From its point of view.— Ed.

^b See this volume, p. 25.— Ed.

^c In one way or another.- Ed.

value, is itself objectified labour in a particular use value, it retards the circulation of capital, rather than accelerates it.

If one considers both aspects in which money appears in the circulation of capital, as means of circulation and as the realised value of capital, it forms part of the circulation costs to the extent that it itself is labour time, employed, on the one hand, to reduce circulation time, and, on the other, to represent a qualitative moment of circulation—the reconversion of capital into itself as value-for-itself. In neither aspect does it increase value. On the one side, it is a form of representing value which involves expenses, costs labour time and hence constitutes a deduction from surplus value. On the other side, it can be regarded as a device that saves circulation time, and hence sets time free for production. But to the extent that money itself, as such a device, costs labour and is a product of labour, it represents *faux frais de la production*^a in relation to capital. It figures among the circulation costs.

The original circulation cost is circulation time itself in opposition to labour time. The real circulation costs are themselves objectified labour time-machinery for reducing the original costs of circulation time. Hence money in its immediate form, as it is appropriate to a stage of production which historically precedes capital, appears to capital as a circulation cost, and capital therefore seeks to convert it into a form adequate to capital itself, and thus to turn it into a [mere] representative of one of the moments of circulation, a representative which costs no labour time and does not itself possess any value. The aim of capital is therefore to abolish money in its traditional, immediate reality, and to convert it into something which is posited, and likewise transcended, solely by capital, into something purely notional. So one cannot argue, as Storch does, that money is in general a means for accelerating the circulation of capital. On the contrary, it must be argued that capital seeks to transform money into a purely notional moment of its circulation, and to elevate it into the adequate form corresponding to capital. The abolition of money in its immediate form appears as a demand of money circulation which has become a moment of capital circulation; because in its immediate, presupposed form, money constitutes a barrier to the circulation of capital.

Circulation without circulation time is the tendency of capital. Hence also the positing of the instruments which only serve to

^a Overhead costs of production.-Ed.

reduce circulation time, in *determinations of form* posited solely by capital, in the same way as the different moments through which capital passes in circulation are qualitative determinations of its own metamorphosis.

The formation of a special trading estate—i.e. a development of the division of labour which has transformed the very business of exchanging into a particular kind of labour—naturally implies that the sum of exchange operations must already have attained a certain level.

(If 100 people spent ${}^{1}/{}_{100}$ of their labour time on exchange, each man would be an exchanger to the extent of ${}^{1}/{}_{100}$. ${}^{100}/{}_{100}$ exchangers would represent ONE SINGLE MAN. To the 100, there could then be one merchant. The separation of trade from production proper, or the fact that exchange itself is represented to the exchangers by a special person, in general presupposes A CERTAIN DEGREE of development of exchange and intercourse. The merchant represents all buyers to the seller, and all sellers to the buyer; so he is not one of the extremes, but rather the middle term, of the exchange; hence he appears as mediator.)

The formation of a merchant estate, which presupposes the formation of money, even if not developed in all its moments, is likewise presupposed by capital and thus cannot be adduced as that which mediates its specific circulation. Since trade is, both historically and conceptually, a *presupposition* for the rise of capital, we shall have to come back to it before we conclude this chapter, since it belongs in the section on the origin of capital or the one preceding it.

The improvement of the means of transport, as far as it means the facilitation of the physical circulation of commodities, does not belong here, where only the determinations of form peculiar to the circulation of capital are considered. The product only becomes a commodity, only emerges from the production phase, when it is put onto the *market*. On the other hand, the means of transport are relevant here in so far as the *time* taken by capital to *return*—i.e. circulation time—is bound to increase with the distance separating the market from the place of production. From this angle, reduction of circulation time with the help of means of transport therefore appears as directly relevant to the analysis of the circulation of capital. Yet, strictly speaking, this belongs in the theory of the market, which itself belongs in the section on capital.

Finally, *credit*. This form of circulation, etc., directly posited by capital and hence deriving specifically from the nature of capital,

Chapter on Capital

this differentia specifica of capital, is lumped in by Storch, etc., together with money, the trading estate, etc., which belong in general to the development of exchange and of production MORE OR LESS based upon it. To state the differentia specifica is here both part of the logical development of the matter in hand and the key to understanding its historical development. Historically, too, we find that in, e.g., England (and similarly in France) the attempts to replace money by paper coincide with the rise of capital, as do, on the other hand, the attempts to give capital, as far as it exists in the form of value, a form posited exclusively by capital itself, and, finally, the attempts to found credit. (E.g., Petty, Boisguillebert.)

Within circulation as the total process, we can distinguish between the greater and the lesser circulation. The former embraces the entire period from the moment when capital emerges from the production process until it returns into it. The latter is continuous and takes place simultaneously with the production process itself. It involves the part of capital which is paid out as wages, exchanged for the labour capacity.⁸

This circulation process of capital, this exchange of equivalents which is posited in form, but actually supersedes itself, which posits itself as merely formal (the transition of value into capital, where the exchange of equivalents turns into its opposite and, on the basis of exchange, exchange becomes purely formal, AND THE MUTUALITY IS ALL ON ONE SIDE), this circulation process of capital is to be developed thus:

The values which are exchanged are always objectified labour time, a *mutually* presupposed quantity of labour present (as a use value) in the form of an object. Value as such is always an effect, never a cause. It expresses the quantity of labour by which an object is produced, and hence that by which—assuming the same level of the productive forces—it can be reproduced.

The capitalist does not directly exchange capital for labour or labour time; he exchanges time contained, worked up in commodities, for time contained, worked up in the living labour capacity. The living labour time which he gets through exchange is not the exchange value of the labour capacity but its use value. Just as a machine is not exchanged or paid for as the cause of effects but as itself an effect; not by relation to its use value in the production process but as a product—a definite quantity of objectified labour. The labour time contained in the labour capacity, i.e. the time necessary to produce the living labour capacity, is the same as is necessary—given the same level of the productive forces—to reproduce it, i.e. to maintain it.

Hence the exchange carried on between capitalist and [VI-38] worker is totally in accordance with the laws of exchange; moreover, it is its ultimate development. For as long as the labour capacity itself is not being exchanged, production is not as yet based upon exchange, and exchange is, rather, merely a narrow circle resting upon non-exchange as its basis, as in all stages preceding bourgeois production. But the use value of the value which the capitalist has acquired in the exchange is itself the element of valorisation and its measure, living labour and labour time. Moreover, the capitalist has acquired more labour time than it costs to reproduce the living worker.

Hence, by acquiring in the exchange the labour capacity as an equivalent, capital has acquired labour time—to the extent that it exceeds the quantity contained in the labour capacity—without giving an equivalent for it; it has appropriated alien labour time without exchange, by means of the form of exchange. The exchange therefore becomes a merely formal one; and, as we have seen, ^a as capital develops further, even the appearance is eliminated that capital was giving in exchange for the labour capacity anything other than the latter's own objectified labour, i.e. giving anything at all for it.

This inversion [Umschlag] is thus due to the fact that the ultimate stage of free exchange is the exchange of the labour capacity as a commodity, as value, for a commodity, for value, that it is acquired as objectified labour, but its use value consists in living labour, i.e. in the positing of exchange value. The inversion is due to the fact that the use value of the labour capacity as value is itself the value-creating element, the substance of value and the substance which increases value. Hence in this exchange the worker gives up his value-creating and value-increasing living labour time in exchange for the equivalent of the labour time objectified in him. He sells himself as an effect. As cause, as activity, he is absorbed by and incarnated in capital. Thus exchange is inverted into its opposite, and the laws of private property-liberty, equality, property-property in one's own labour and the ability to freely dispose of it-are inverted into the propertylessness of the worker and the alienation of his labour, his relation to it as alien property and vice versa.

^a See present edition, Vol. 28, pp. 381-83 .--- Ed.

The circulation of the part of capital posited as wages accompanies the production process, appears as an economic relation of form alongside it, and is simultaneous and INTERWOVEN with it. It is this circulation that posits capital as such; it is the condition of its valorisation process and posits not merely a formal determination of that process, but its substance. It is the continuously circulating part of capital, which does not for a moment enter into the production process itself, and continually accompanies it. It is the part of capital that does not for a moment enter into its reproduction process, which is not the case with the raw material. The approvisionnement of the worker emerges as a product from the production process, as its resultant. But as such it never enters into the production process, because it is FINISHED PRODUCE intended for individual consumption. It enters directly into the worker's consumption, and is directly exchanged to serve that purpose. Hence it is, in distinction from both raw material and instrument of labour, circulating capital κατ'έξοχήν.^a

This is the only moment in the circuit of capital at which consumption directly enters into it. At this point, where the commodity is exchanged for money, it may be exchanged by another capital as raw material for new production. Further, under the presuppositions of capital, it is not the individual consumer but the merchant that confronts capital, and he buys the commodity merely to resell it for money. (This presupposition concerning the trading estate is in general to be developed. It implies that circulation among DEALERS is different from that between DEALERS and consumers.⁶)

Therefore circulating capital appears here directly as capital intended for the individual consumption of the workers; in general, as intended for immediate consumption and therefore existing in the form of finished product. Hence, if, on the one hand, capital appears as the presupposition of the product, the finished product appears, to the same extent, as the presupposition of capital—which in terms of history means that capital did not create the world afresh, but rather found production and products already in existence before it subjugated them to its process. Once in motion, setting out from itself, it continuously presupposes itself in its different forms as consumable product, raw material and instrument of labour, in order to continuously reproduce itself in these forms. They appear first as the conditions presupposed by capital itself, and then as its result. In reproducing itself it produces its own conditions.

^a Par excellence.—*Ed.*

Hence we find that—because of the relation of capital to the living labour capacity, and to the natural conditions of the maintenance of the latter—circulating capital is also determined in respect of use value, as directly entering into individual consumption and subject to be consumed as a product. It has therefore been incorrectly concluded that circulating capital is, in general, *consumable* capital, as though coal, oil, dyes, etc., instruments, etc., soil improvements, etc., factory buildings were not all equally consumed, if by consumption one is to understand the abolition of their use value and their form. But, just as much, none of these are consumed, if individual consumption, consumption in the proper sense, is meant thereby.

In this circulation, capital continuously rejects [part of] itself as objectified labour so that it may assimilate living labour power, the air it needs to live. Now as for the worker's consumption, it reproduces one thing—the worker himself as living labour capacity. Since this reproduction of him is a condition of capital, the consumption of the worker also appears as the reproduction, not directly of capital, but of the circumstances in which alone it is capital. The living labour capacity forms part of the conditions for the existence of capital just as much as raw material and instrument do. Hence capital reproduces itself doubly, in its own form, [and] in the consumption of the worker, but only to the extent that it reproduces him as living labour capacity. Capital, therefore, calls this consumption productive—productive, not in so far as it reproduces the individual, but the individuals as labour capacity.

If Rossi objects to wages being included twice in the calculation, first as the revenue of the worker and then as reproductive consumption of capital,^a his objection is valid only in reference to those who cause wages to enter directly into the production process of capital as value. For the payment of wages is an act of circulation, which takes place simultaneously with and alongside the act of production. Or as Sismondi says in this connection, the worker consumes his wages non-reproductively; but the capitalist consumes them productively,^b in so far as he exchanges them for labour, which reproduces the wages and more than the wages.

This refers to capital itself only considered as an object. But in so far as capital is a relation, notably a relation to the living labour capacity, the worker's consumption reproduces this relation, or

^a P. Rossi, Cours d'économie politique. Année 1836-1837. In: Cours d'économie politique, Brussels, 1843, pp. 369-71.— Ed.

^b S. de Sismondi, Nouveaux principes d'économie politique etc., Vol. I, pp. 87 and 93,— Ed.

capital reproduces itself doubly: as value, by its exchange with labour—as the possibility of recommencing the valorisation process, of once again acting as capital; and as a relation, by means of the worker's consumption, which reproduces him as labour capacity exchangeable for capital, for wages as part of capital.

From this circulation between capital and labour there follows, therefore, the determination of part of capital as constantly circulating. abbrovisionnement; constantly consumed; constantly to be reproduced. Strikingly displayed in this circulation is the difference between capital and money, between the circulation of capital and that of money. Capital pays, e.g., weekly wages; the worker takes his wages to the épicier,^a etc., who directly or indirectly deposits it with the BANKER; and the following week, the factory owner takes it from the banker again, in order again to distribute it among the same workers, etc., and so on. The same sum of money continuously circulates new portions of capital. But the sum of money itself does not determine the portions of capital thus circulated. If the money value of wages rises, the circulating medium will rise too; but the volume of the circulating medium does not determine the rise. If the production costs of money did not fall, no increase in the amount of money would have any effect on the portion of it entering into this circulation. Here money appears as mere means of circulation. Since there is a large number of workers to be paid simultaneously, a certain sum of money is simultaneously necessary, a sum that increases with their number. On the other hand, if the money is turned over quickly, a smaller quantity of it is necessary than in situations in which there are fewer workers, but the machinery of the money circulation is not so well ordered.

This circulation is a prerequisite of the production process and thereby of the circulation [VI-39] process as well. On the other hand, if capital did not return from circulation, this circulation between worker and capital could not begin anew. Hence it is, for its part, conditioned by the fact that capital passes through the different moments of its metamorphosis *outside* the production process. Its failure to do so would not be due to an insufficient supply of *money* as *means of circulation*, but because either capital was not available in the form of products, [i.e.] this part of *circulating* capital was absent; or because capital had not posited itself in the *form of money*, i.e. had not realised itself as capital. Yet

^a Grocer.—Ed.

this too would not be due to the quantity of means of circulation, but to the fact that capital had not posited itself in the *qualitative determination* as money. For it to do so, it need not at all be posited in the form of HARD CASH, in the immediate money form, and whether or not it posited itself in this form would once again depend not on the quantity of money in circulation as means of circulation, but on the exchange of capital for value as such. Again a qualitative, not a quantitative, moment, as we shall argue in more detail when we come to speak of capital as money. (Interest, etc.)

Considered as a whole, circulation therefore appears in three forms:

(1) The total process—the passage of capital through its different moments. Here capital is posited as in flux, as circulating. To the extent that each of the moments constitutes a virtual interruption of the continuity, and can set itself up as an obstacle to the transition into the next phase, capital here likewise appears to be fixed in different relations, and the different modes of this fixity constitute different capitals: commodity capital, money capital, capital as conditions of production.

(2) The lesser circulation between capital and labour capacity. It accompanies the production process and appears as a contract, exchange, a form of intercourse, which is a presupposition for the production process to be set in motion. The part of capital which enters into this circulation—*approvisionnement*—is circulating capital $\kappa\alpha\tau$ 'ėξοχήν.^a Not only is it determined in regard of form, but its use value, i.e. its material determination as a consumable product entering directly into individual consumption, itself constitutes part of its determination of form.

(3) The greater circulation, the movement of capital outside the production phase, the time during which it does so appearing as circulation time in contrast to labour time. From this opposition between capital engaged in the production phase and capital emerging from it, there results the distinction between *fixed* and *fluid capital*. The former is capital which is fixed to the production process and consumed in it; certainly it derives from the greater circulation, but it does not return into it, and in so far as it circulates, it only does so in order to be consumed in, to be confined to, the production process.

^a Par excellence.-- Ed.

The three different forms of circulation of capital give rise to the three distinctions between circulating and fixed capital; they posit one part of capital as circulating $\varkappa\alpha\tau$ 'èξo $\chi\eta\nu$, because it never enters into the production process, but constantly accompanies it; and, thirdly, they yield the distinction between *fluid* and *fixed* capital. Circulating capital in form No. 3 also includes No. 2, since the latter likewise forms a contrast to fixed capital. Yet No. 2 does not include No. 3.

The part of capital that as such belongs to the production process is the part of it which, in its material aspect, serves only as means of production: is the mediator between living labour and the material to be worked up. A part of the fluid capital, e.g., coal, oil, etc., also serves only as means of production. Everything that only serves as a means to maintain in operation a given machine, or another machine that keeps in motion the former. This distinction will have to be examined more closely. D'abord, this does not contradict determination 1, for fixed capital as value also circulates, in the degree in which it is used up. It is precisely in this determination as *fixed* capital-i.e. in the determination in which capital has lost its fluidity and is identified with a definite use value, which deprives it of the ability to be transformed-that developed capital, in as much as we have so far known it as productive capital, presents itself most strikingly, and it is precisely in this apparently inadequate form, and in its increasing ratio to the form of circulating capital in No. 2, that the development of capital as capital is measured. A pretty contradiction. To be developed.

The different kinds of capital, which in political economy come in from without like snow from the sky, appear here as just so many precipitates of the movements to which the nature of capital itself gives rise, or rather of this movement itself in its different determinations.

Circulating capital constantly

"PARTS" from the capitalist in order to return to him in the first form. Fixed capital does not do this (Storch).

"CIRCULATING CAPITAL THAT PORTION OF THE CAPITAL WHICH DOES NOT YIELD PROFIT TILL IT IS PARTED WITH; FIXED ETC. YIELDS SUCH PROFIT, WHILE IT REMAINS IN THE POSSESSION OF THE OWNER" (Malthus). "Circulating capital yields no revenue or profit to its owner, while it remains in his possession. Fixed capital yields profit to him without changing owners, and without requiring circulation" (A. Smith).³

^a H. Storch, Cours d'économie politique, Vol. I, pp. 405 and 420; Th. R. Malthus, Definitions in Political Economy, London, 1827, pp. 237-38; A. Smith, Recherches sur la nature et les causes de la richesse des nations, Paris, 1802, Vol. II, pp. 197-98. Ed.

From this viewpoint, the definition given above cannot be correct, since the departure of capital from its owner (partir de son possesseur) is precisely the alienation of property or possession which occurs in the act of exchange, and since it is the nature of all exchange value and hence of all capital to become value for its owner by being alienated. If fixed capital existed for its owner without the mediation of exchange and of the exchange value it comprises, fixed capital would IN FACT merely be use value, and consequently not capital.

But what underlies the above definition is this: as value fixed capital does circulate (even though merely in a piecemeal fashion, successively, as we shall see). As use value capital, it does not. Fixed capital, considered in its material aspect, as a moment of the production process, never goes beyond its BOUNDARIES; is not alienated by its possessor; remains in his hands. It only circulates with respect to its formal aspect as capital, perennial value. In circulating capital, there is no such distinction between form and content, use value and exchange value. In order to circulate as, to be, exchange value, it must enter into circulation as use value, be alienated as such. Use value for *capital* as such is only value itself. Circulating capital is realised as value for capital only by being alienated. As long as it remains in the capitalist's hands, it only has value in itself; it is not posited; only δυνάμει, not actu.^a Fixed capital, on the contrary, is only realised as value as long as it remains in the hands of the capitalist as use value, or, expressed as a physical relation, as long as it remains in the production process, which can be regarded as the inner organic movement of capital, its relating to itself, as against its animalistic movement, its existence for other purposes. Hence, since fixed *capital* remains in the production process once it has entered into it, it also vanishes in it, is consumed in it. The length of the time taken by this vanishing does not as yet concern us.

From this angle, therefore, what Cherbuliez calls *matières instrumentales*,^b such as coal, wood, oil, tallow, etc., which are completely destroyed in the production process and which possess only *use value* for that process itself, are part of *fixed capital*. But the same materials have a use value outside production too and can also be consumed in other ways, just as buildings, houses, etc., are not necessarily intended for production. They are *fixed capital*

^a Only potentially, not actually.-Ed.

^b Instrumental materials. See A. Cherbuliez, Richesse ou pauvreté, pp. 14-15.-Ed.

not by virtue of the particular mode of their existence, but by virtue of the use made of them. They become fixed capital by entering into the production process. They are *fixed capital* as soon as they are posited as moments of the production process of capital; because then they [VI-40] lose their quality of being potential circulating capital.

Just as the part of capital which enters into the lesser circulation of capital—or capital, so far as it enters into this movement—the circulation between capital and labour capacity, the part of capital circulating as wages-taken in its material aspect, as use valuenever departs from circulation and never enters into the production process of capital, but is always rejected by that process as a product, as the result of a prior process of production, so the part of capital determined as *fixed capital*, on the contrary, never departs as use value, in its material existence, from the production process and never re-enters into circulation. While fixed capital enters into circulation only as value (as part of the value of the finished product), circulating capital enters into the production process only as value, since necessary labour is the reproduction of wages, of the part of the value of capital that circulates as wages. This is, therefore, the first determination of fixed capital; and seen from this angle fixed capital also embraces the matières instrumentales.

Secondly: Fixed capital, however, can only enter into circulation as value to the extent that it vanishes as use value in the production process. It enters as value into the product-i.e. as labour time worked up or preserved in it—to the extent that it vanishes in its independent form as use value. In consequence of its being used it is used up, but in such a way that its value is transferred from its form into that of the product. If it is not used, is not consumed in the production process itself-if the machine is idle, if the iron rusts and the wood rots-its value of course vanishes with its transitory existence as use value. Its circulation as value corresponds to its consumption as use value in the production process. Its total value is fully reproduced, i.e. returns from circulation, only when it has been completely consumed as use value in the production process. As soon as it has been completely resolved in value and, hence, has completely entered into circulation, it has completely disappeared as a use value, and must therefore be replaced as a necessary moment of production by a new use value of the same kind, i.e. it must be reproduced. The necessity of its reproduction, i.e. its reproduction time, is determined by the time in which it is used up, consumed, within the production process.

In the case of circulating capital, the reproduction is determined by circulation time; in the case of fixed capital, the circulation is determined by the time in which it is used up as use value, in its material existence, within the act of production, i.e. by the time within which it must be reproduced. A thousand lbs of twist can be reproduced as soon as it has been sold and the money received for it re-exchanged for cotton, etc., in short for the elements of production of twist. Its reproduction is therefore determined by its circulation time. A machine valued at $f_{1,000}$, which lasts for 5 years, i.e. is only used up after 5 years has passed, and then is merely scrap iron—is used up each year to the extent of, say, $\frac{1}{5}$, if we assume the AVERAGE [rate] of consumption in the production process. Only $\frac{1}{5}$ of its value, therefore, enters into circulation each year, and it is only upon the passage of the 5 years that the whole of it has entered into and returned from circulation. [The rate of] its entry into circulation, therefore, is determined solely by the length of the time during which it is used up, and the time its value takes to enter wholly into circulation and return from it is determined by its overall reproduction time, the time in which it must be reproduced.

Fixed capital enters into the product only as value, whereas the use value of circulating capital has persisted in the product as its substance, and has merely acquired another form. This distinction introduces an essential modification into the turnover time of a total capital divided into fixed and circulating capital. Suppose that the total capital is S; the circulating part of it is c, and the fixed part, f. Let the fixed capital constitute $\frac{1}{s}S$; the circulating capital $\frac{S}{s}$. Let the circulating capital turn over 3 times a year, the fixed capital only twice in 10 years. Within 10 years, f or $\frac{S}{x}$ turns over twice, while in the same 10 years $\frac{S}{y}$ turns over $3 \times 10=30$ times. If S were=to $\frac{S}{\mu}$, i.e. if the capital wholly consisted of circulating capital, its turnover, U, would be=30; and the total capital turned over in 10 years would be= $30 \times \frac{S}{y}$. But the fixed capital turns over only twice in 10 years. Its U'=2, and the total fixed capital turned over = $\frac{2S}{x}$. But $S = \frac{S}{y} + \frac{S}{x}$, and its total turnover time=the sum of the turnover times of these two parts. If the fixed capital turns over twice in 10 years, $\frac{2}{10}$ or $\frac{1}{5}$ of it turns over in one year; while

the circulating capital turns over 3 times in one year. $\frac{S}{5x}$ turns over once a year.

The question boils down to this: assuming that a capital of 1,000 thaler consists of 600 circulating capital and 400 fixed capital, i.e. ${}^{3}/_{5}$ circulating and ${}^{2}/_{5}$ fixed capital, that the fixed capital lasts for 5 years, hence turns over once in 5 years, and that the circulating capital turns over 3 times a year, what is the average turnover number, or turnover time, of the total capital? If it were wholly circulating capital, it would turn over 5×3 , or 15 times; the total capital turned over in the 5 years would be 15,000. However, ${}^{2}/_{5}$ of the capital only turns over once in 5 years. Consequently, of these 400 thaler ${}^{400}/_{5}$, i.e. 80 thaler, turn over in a year. Of the 1,000 thaler 600 turn over 3 times a year, and 80 once a year. That is to say, only 1,880 would turn over in the whole year; in the 5 years, therefore, $5\times1,880=9,400$ will turn over; i.e. 5,600 less than if the capital wholly consisted of circulating capital. If the latter were the case, the total capital would turn over once in ${}^{1}/_{3}$ of a year.^a

[VI-41] If the capital=1,000, with c=600 and turning over twice a year, and f=400 and turning over once a year, then $600 (\sqrt[3]{5} S)$ turns over in half a year; and $\frac{400}{2}$ or $(\frac{2S}{5\times2})$ similarly in half a year. Hence in half a year, 600+200=800 (i.e. $c+\frac{f}{2}$) turns over. Correspondingly, in a whole year 2×800 , or 1,600 thaler, turns over; 1,600 thaler in a year; i.e. 100 in $\frac{12}{16}$ months, and therefore 1,000 in $\frac{120}{16}$, or $7^{1}/_{2}$, months. The entire capital of 1,000 thus turns over in $7^{1}/_{2}$ months, as compared with the 6 months required if it consisted wholly of circulating capital.

 $7^{1}/_{2}:6=1:1^{1}/_{4}$ or $1:^{5}/_{4}$.

Suppose the capital=100, made up of 50 circulating and 50 fixed, with the former turning over twice a year and the latter once. Then 1/2 of 100 turns over once in 6 months, and 1/4 of 100 likewise once in 6 months. Therefore, 3/4 of the capital turns over in 6 months, 3/4 of 100 in 6 months; or 75 in 6 months, and 100 in 8 months. If 2/4 of 100 turns over in 6 months and 1/4 of 100 (1/2 the fixed capital) in the same time, this means that 3/4 of 100 turns over in 6/3 or 2 months, and so 4/4 of 100, or 100, in 6+2, or 8 months.

The total turnover time of capital=6 (the turnover time of the a Here Marx crossed out several lines containing another version of this calculation.—*Ed.*

73

i

^b Thus in the manuscript.-Ed.

entire circulating capital and 1/2 of the fixed capital or 1/4 of the total capital)+6/3, i.e.+ this turnover time divided by the number which expresses the proportion of the remaining fixed capital to the capital turned over in the turnover time of the circulating capital. So in the above example: 3/5 of 100 turns over in 6 months, ditto 1/5 of 100; therefore 4/5 of 100 in 6 months; therefore the remaining 1/5 of 100 in 6/4 months; therefore the total capital in 6+6/4 months=6+11/2; or 71/2, months.^a

Expressed in general terms: The average turnover time=the turnover time of the circulating capital+this turnover time divided by the number of times the remaining part of the fixed capital is contained in the total sum of capital which was circulated in this turnover time.^b

Suppose there are 2 capitals each of 100 thaler. One is entirely circulating capital, the other is half fixed capital. Both operate at a gain of 5%. The one turns over entirely twice a year; in the other, the circulating capital likewise twice, and the fixed capital only once. The total capital turned over in the first case would be 200, and the profit 10; in the second, there would be 1 turnover in 8 months, or 1/2 in 4, i.e. 150 would be turned over in 12 months and its profit would be $7^{1}/_{2}$.

This sort of calculation has tended to harden the common delusion that circulating capital or fixed capital yields gain by means of some MYSTERIOUS INNATE POWER, a delusion manifest even in Malthus's statement that "circulating capital yields gain if its POSSESSORS PART WITH IT, etc."; similarly, in the passages cited above from his *Measure of Value*, etc., namely in the way he describes the accumulation of the profits of fixed capital.^c The greatest confusion and mystification has arisen from the failure of the hitherto economic doctrines to consider the theory of surplus gain in its purity. Instead, they have lumped it together with the theory of real profit, which is all about the way the different capitals share in the general rate of profit. The profit of the capitalists as a class, or the profit of capital *as such*, must be there before it can be distributed, and it is the height of absurdity to wish to explain its origin by its distribution.

It follows from the above that profit diminishes because the turnover time of capital increases in proportion to the increase of the component part of it which is called fixed capital.

^a Here Marx crossed out several lines containing a formula for determining the turnover time of the part of capital—Ed.

^b Here Marx crossed out a formula representing this proposition.-Ed.

^c See present edition, Vol. 28, pp. 487-99 and this volume, p. 69.- Ed.

//The size of capital is assumed to be permanent, but this does not concern us here anyway, since the proposition is valid for capital of whatever size. Capitals differ in size, but the size of each individual capital *is equal to itself*. Hence as long as capital is only considered in its quality as capital, it may be of ANY size. But if we consider 2 capitals in distinction from one another, the difference in their size introduces a relation of qualitative determinations. Their very size becomes a quality distinguishing them from one another. This is an essential aspect showing how the consideration of capital as such differs from that of one capital in relation to another, or from that of capital in its reality—and size is only ONE SINGLE INSTANCE.//

A capital of the same [VI-42] size, 100 in the example above, would turn over completely twice a year, if it consisted entirely of circulating capital. But it is only turned over twice in 16 months, or only 150 thaler is turned over in a year, because half of it is fixed capital. As the number of times a capital is reproduced in a given time declines, or as the quantity of it reproduced in a given time declines, there is also a decline in the production of surplus time or surplus value, since capital in general posits value only to the extent that it posits surplus value. (At least, this is its tendency, its adequate action.)

As we have seen, fixed capital circulates as value only in the degree in which it is used up or consumed as use value in the production process. But the time in which it is thus consumed and must be reproduced in its form as use value depends upon its relative durability. Its durability, or its greater or lesser perishability-i. e. the greater or lesser length of time for which it can continue to repeat its function within the repeated production processes of capital-this determination of its use value, therefore, becomes here a form-determining moment, i. e. a determinant of capital with respect to its formal, not its material, aspect. Hence the necessary reproduction time of fixed capital, just as much as the proportion it constitutes of the whole capital, modify here the turnover time of the total capital and therefore its valorisation. A greater durability of capital (the duration of its necessary reproduction time) and a higher proportion of fixed capital to total capital, therefore, have precisely the same effect on valorisation as a slower turnover, occasioned either by the fact that the market from which capital returns as money is more distant, and hence more time is needed for it to run the course of circulation (e. g., capitals which work in England for the East Indies market return more slowly than those which work for less distant foreign

markets or for the HOME MARKET); or because the production phase itself is interrupted owing to natural conditions, as in agriculture. Ricardo at first emphasised the influence of fixed capital upon the valorisation process; but then he jumbled all these determinations together, as can be seen from the passages cited above.^a

In the first case (fixed capital) [the rate of] the turnover of capital is diminished because fixed capital is only slowly consumed within the production process, or because of the length of time required for its reproduction. In the second case, the diminished [rate of] turnover is due to the lengthening of circulation time (in the first case the fixed capital necessarily circulates always with the same velocity as the product, in so far as it does circulate, enter into circulation, because it does not circulate in its material form of existence but only as value, i. e. as a notional component of the total value of the product), to be more precise, to the lengthening of the circulation time of the second half of the circulation process proper, the reconversion of money. In the third case, the diminished [rate of] turnover is due to the longer time required by capital to emerge from the production process as a product, not, as in the first case, the longer time capital takes to perish in the production process. The first case is peculiar specifically to fixed capital; the other belongs to the category of non-fluid fixed capital, capital fixed in any phase of the total circulation process (FIXED CAPITAL OF A CONSIDERABLE DEGREE OF DURABILITY. OR CIRCULATING CAPITAL RETURNABLE AT DISTANT PERIODS. McCulloch, [The] Principles of Political Economy, [London, 1825, p. 300] Notebook, p. 15).15

Thirdly: Up to this point, we have considered fixed capital only from one angle—in as much as its distinctions are posited in terms of its particular, specific relation to the circulation process proper. Considered from this angle, it shows further distinctions. Firstly, its value returns piecemeal, whereas each portion of circulating capital is exchanged wholly, because in the case of circulating capital the existence of value coincides with that of use value. Secondly, we have hitherto only considered the effect of fixed capital upon the average turnover time of a given capital. But we must also examine the effect it has on its own turnover time. The latter circumstance becomes important where fixed capital appears not as a mere instrument of production within the production process, but as an independent form of capital, e. g., in the form of railways, canals, roads, waterworks, as capital wedded to the soil, etc.

^a See this volume, pp. 32-35.- Ed.

This latter determination is especially important with respect to the proportions in which the total capital of a country is divided up into these two forms [fixed and circulating capital]. Then the way in which fixed capital is renewed and maintained; the economists argue that it can yield revenue only by means of circulating capital, etc. *Au fond*, this boils down to a consideration of the MOMENT in which fixed capital appears not as a particular, independent existence *alongside* and *outside* circulating capital, but as circulating capital transformed into fixed capital.

But what we want to consider first at this point is the relation of fixed capital, not towards the outside, but as given by the fact that it remains locked up in the production process. Fixed capital is posited by its being a particular moment of the production process itself.

//We are not in any way arguing that *fixed capital* is, in every determination, capital which does not serve individual consumption but production alone. A house can just as well be used for production as for consumption; similarly all vehicles: a ship or a wagon can be used both for pleasure trips and as means of transport; a road can be used as means of communication for production proper, as well as for strolling along, etc. We are not at all concerned with *fixed capital* in this second relation; for at this point we are discussing capital only as valorisation process and production process. The second determination will enter when we come to discuss interest. Ricardo can only have this determination in mind when he says:

"Depending on whether capital is more perishable or less perishable, i.e. must be reproduced more frequently or less frequently in a given period of time, it is called circulating capital or fixed capital" (Ricardo, [On the Principles of Political Economy, and Taxation, p. 26] VIII, 19^{a}).¹²

On that basis, a coffee pot would be fixed capital, and the coffee, circulating capital. The economists regard people's social relations of production, and the determinations acquired by things subsumed under these relations, as *natural properties* of the things. This crude materialism is an equally crude idealism, indeed a fetishism which ascribes to things social relations as determinations immanent to them, and thus mystifies them. The difficulty of defining any thing at all as fixed or circulating capital by reference to its natural character has brought the economists here, as an exception, to the idea that things themselves are neither fixed nor

a See this volume, pp. 32-33.- Ed.

circulating capital, hence probably not capital at all, as little as it is the natural property of gold to be money.//

(Lest we forget it, we must add to the points enumerated above the circulation of fixed capital as circulating capital, i.e., the transactions by which it changes its owners.)

"Fixed capital—engaged: capital so engaged in one kind of production that it can no longer be diverted from it to be employed in another kind of production" (Say, [Traité d'économie politique, Vol. II, p. 430,] 21¹⁶).^a

"Fixed capital is consumed in order to help to reproduce what man destines for his use ... consists of permanent installations suitable for increasing the productive forces of future labour" (Sismondi, [Nouveaux principes d'économie politique, Vol. 1, pp. 95, 97-98] VI).^{b 13}

"Fixed capital is the capital which is necessary to maintain the instruments, machines, etc., of labour" (Smith, [Recherches sur la nature et les causes de la richesse des nations], Vol. II, p. 226).

"FLOATING CAPITAL IS CONSUMED, FIXED CAPITAL MERELY USED IN THE GREAT WORK OF PRODUCTION" ([*The*] *Economist*, [No. 219, 6 November 1847, p. 1271] Notebook VI, p. 1).¹⁷

"It will be shown that the first stick or stone he took into his hand to help him in the pursuit of those objects, by performing part of his work, fulfilled exactly the same function as the capitals employed at present by the mercantile nations" (Lauderdale, [Recherches sur la nature et l'origine de la richesse publique, Paris, 1808,] p. 87, Notebook 8, a).^{c 14} "It is one of the characteristic and distinguishing features of the human species thus to supplant labour by capital transformed into machinery" (p. 120) (p. 9, Notebook Lauderdale). "Now it will be seen that the profit of capital always derives either from its supplanting a portion of labour which would otherwise have to be performed by the hand of man; or from its performing a portion of labour which is beyond the reach of the personal exertion of man to accomplish" (p. 119, l. c.).

Lauderdale takes issue with Smith and Locke, [VI-43] whose belief that labour is the source of profit has, according to Lauderdale, the following result:

"If this notion of the profit of capital were strictly correct, it would follow that profit is not an original source of wealth but a derivative one; and capital could not be considered a source of wealth, its profit being only a transfer from the pocket of the labourer into that of the capitalist" (l. c., pp. 116, 117).

"The profit of capital always derives either from its *supplanting* a portion of labour which would otherwise have to be performed by the hand of man; or from its performing a portion of labour which is beyond the reach of the personal exertion of man to accomplish" (p. 119, l. c., [Notebook] p. 9, b).

"It should be noted that if the capitalist, by the use he makes of his money, saves a certain amount of labour to the class of consumers, he does not substitute for it

^a See this volume, p. 30. Marx quotes in French.-Ed.

^b See this volume, pp. 35-36. Marx quotes partly in French.-Ed.

^c This and the following passages from Lauderdale are quoted in French in the manuscript. In one quotation (from p. 116) Marx occasionally uses German words.—*Ed.*

an equal portion of his own; which proves that it is his capital, and not himself, that performs it" (10, Notebook, l. c., p. 132).

"If Adam Smith had not imagined that the effect of a machine was to facilitate labour or, as he expressed himself, to increase the productive power of labour (it is a strange confusion of ideas that has led Dr. Smith to describe the effect of capital as increasing the productive power of labour. According to this logic, one could very well claim that shortening a circuitous road between two given places by half means doubling the velocity of the walker), he would have seen that it was by supplanting labour that the funds paid for the machine yielded profit, and he would have attributed the origin of profit to this very circumstance" ([Notebook,] p. 11; p. 137).

"Capital, whether fixed or circulating, in home trade, far from serving to set labour in motion, or adding to the productive power of labour, is, on the contrary, only useful and profitable in these two situations: either it supplants the necessity of a portion of labour that would otherwise have to be performed by the hand of man, or it performs a certain kind of labour that is beyond the powers of man himself to accomplish."

This, Lauderdale says, is not a purely verbal distinction.

"The idea that capital sets labour in motion, and that it adds to its productive power, gives rise to the opinion that labour is everywhere proportioned to the quantity of existing capital; that the industry of a country always corresponds to the funds employed; from which it follows that the increase of capital is by far the best and unlimited means of augmenting wealth. If, instead, we admitted that capital can have no other useful and profitable employment than that of supplanting or performing a certain kind of labour, we would draw the natural conclusion that the State can derive no advantage from possessing more capital than can be employed in performing or supplanting labour in the production and manufacture of things required by the consumer" (pp. 150-52, [Notebook,] pp. 11, 12).

To prove his proposition that capital is, independently of labour, a source *sui generis* of PROFIT and thus of WEALTH, he points to the surplus profit which the owner of a newly invented machine derives before his *brevet d'invention*^a expires, and competition depresses prices, and then concludes with the words:

"This alteration in the rule of charging does not prevent the profit" (for the use value) "of the machine from being received out of a fund of the same nature as that which it was paid from before the expiration of the patent: this fund is always that part of the revenue of the country which formerly was destined to pay the wages of the labour supplanted by the new invention" (l. c., p. 125, [Notebook,] p. 10, b).

Ravenstone, on the contrary, argues (IX, 32)¹¹ that:

MACHINERY CAN SELDOM BE APPLIED WITH SUCCESS TO ABRIDGE THE LABOURS OF AN INDIVIDUAL; MORE TIME WOULD BE LOST IN ITS CONSTRUCTION THAN COULD BE SAVED BY ITS APPLICATION. IT IS ONLY REALLY USEFUL WHEN IT ACTS ON GREAT MASSES, WHEN A SINGLE MACHINE CAN ASSIST THE LABOURS OF THOUSANDS. IT IS ACCORDINGLY IN THE MOST POPULOUS COUNTRIES WHERE THERE ARE MOST IDLE MEN THAT IT IS ALWAYS MOST

^a Patent.--Ed.

ABUNDANT. IT IS NOT CALLED INTO ACTION BY A SCARCITY OF MEN, BUT BY THE FACILITY WITH WHICH THEY ARE BROUGHT TOGETHER" (l. c.) [Thoughts on the Funding System, and Its Effects, London, 1824, p. 45].

[FIXED CAPITAL AND THE DEVELOPMENT OF THE PRODUCTIVE FORCES OF SOCIETY]

"Division of machines into (1) those applied to produce power; (2) those whose aim is simply the transmission of power and the performance of labour" (Babbage, [Traité sur l'économie des machines et des manufactures, pp. 20-21,] Notebook, p. 10).²¹⁴

"FACTORY signifies the cooperation of different classes of workers, adults and non-adults, skilfully and diligently watching over a system of productive machinery continually kept in operation by a central [source of] power, and excludes any workshop the mechanism of which does not form a continuous system, or which does not depend on a single driving force. Examples of the latter are dyeing works, brass foundries, etc.—This term, in its strictest sense, implies a vast automaton, made up of a large number of mechanical and intellectual organs working together and without interruption, to produce the same object, all these organs being subordinated to a self-powered driving force" (Ure, [Philosophie des manufactures, Vol. I, Brussels, 1836, pp. 18-19] p. 13¹⁴).

The capital which is consumed in the production process proper, or fixed capital, is emphatically *means of production*. In a broader sense, the entire production process and each of its moments, as well as each moment of circulation—so far as its material aspect is considered—is merely means of production for capital, to which value alone exists as an end in itself. Raw material itself, from its material aspect, is means of production for the product, etc.

But to determine the use value of fixed capital by its being consumed in the production process proper is the same as saying that it is used only as a means in this process, and itself exists merely as an agent for the transformation of raw material into product. As such means of production, its use value may consist in its being merely a technological condition for the process to take place (the place in which the production process is carried on), as in the case of buildings, etc., or in its being an immediate condition for the operation of the means of production proper, as all *matières instrumentales* are. Both are, in turn, merely material presuppositions for carrying on the production process in general, or for the application and maintenance of the means of labour. And the means of labour in the strict sense serves only within

^a Marx quotes from Babbage partly in German and partly in French. The following quotation from Ure is in French.— Ed.

production and for production, and has no other use value.

Initially, when we discussed the transition of value into capital, the labour process was simply included into capital, and with respect to its physical condition, the material form in which it existed, capital appeared as the totality of the conditions for this process, and accordingly fell into definite qualitatively different portions: the material of labour (this, not raw material, is the correct and conceptual expression), means of labour and living labour.^a On the one hand, capital, according to the material form in which it existed, was divided up into these three elements; on the other, the moving unity of these elements was the labour process (or the entering of these elements into process with one another), and their inert unity was the product. In this form, the material elements-material of labour, means of labour and living labourappear merely as the essential moments of the labour process itself, which is appropriated by capital. But this material aspect of capital-or its determination as use value and real processdiverged completely from the determination of its form. In this determination itself

(1) the 3 elements in which capital appears prior to the exchange with labour capacity, prior to the actual process, appeared merely as quantitatively different portions of capital itself, as quantities of value, whose unity is formed by capital itself as their sum. The material form, the use value, in which these different portions existed, did not affect the homogeneity of this determination. From the viewpoint of their formal determination, they only appeared as reflecting the fact that quantitatively capital fell into distinct portions.

(2) Within the process itself, the distinction between the element of labour and the other two, as regards form, consisted only in that labour was determined as positing value, and the other two as constant values. Yet as far as their distinctness as use values, the material aspect, was concerned, it was quite extrinsic to the formal determination of capital. Now, however, in the distinction between circulating capital (raw material and product) [VI-44] and *fixed capital* (means of labour), the distinction between the elements as use values is, at the same time, posited as a distinction of capital as capital, in its formal determination. The relationship of the factors to each other, which was only quantitative, now appears as a qualitative distinction of capital itself and as determining its overall movement (turnover). In terms of physical substance, too, the

^a See present edition, Vol. 28, pp. 224-27.- Ed.

material of labour and the product of labour, the neutral precipitate of the labour process, as *raw material* and *product*, are no longer determined as the material and product of labour but as the use value of capital itself in different phases.

As long as the means of labour remains means of labour in the strict sense, as it was—directly, historically—included by capital into its valorisation process, it only undergoes a formal change in that it now appears not merely as means of labour from its material aspect, but at the same time as a particular mode of existence of capital, one determined by the overall process of capital—as *fixed capital*.

Once included into the production process of capital, however, the means of labour passes through a series of metamorphoses until it ends up as the machine, or rather as an automatic system of machinery (system of machinery; automatic merely means the most complete, most adequate form of machinery, and alone transforms machinery into a system). That system is set in motion by an automaton, self-moved motive power; this automaton consists of a large number of mechanical and intellectual organs, with the workers themselves cast in the role of merely conscious members of it. In the machine, and to an even greater degree in machine[ry] as an automatic system, the means of labour is transformed, with respect to its use value, i. e. to its material character, into a form adequate to fixed capital and to capital in general. And the form in which it was included, as immediate means of labour, into the production process of capital is superseded by a form posited by capital itself and corresponding to it.

In no respect does the machine appear as the means of labour of the individual worker. Its differentia specifica is not at all to mediate between the activity of the worker and the object, as is the case with the means of labour. On the contrary, the worker's activity is posited rather as merely mediating the labour of the machine, its action upon the raw material—he watches over it and guards against obstructions. Not as in the case of the instrument, which the worker animates with his own skill and activity as an organ, and whose manipulation is thus dependent upon his virtuosity. On the contrary, the machine, which possesses skill and power in contrast to the worker, is itself the virtuoso. It possesses a soul of its own in the laws of mechanics which determine its operations; and to maintain its continuous self-motion it consumes coal, oil, etc. (matières instrumentales), as the worker consumes foodstuffs. The activity of the worker, restricted to a mere abstraction of activity, is determined and governed in every respect by the movement of the machinery, not vice versa. Science, which compels the inanimate members of the machinery, by means of their design, to operate purposefully as an automaton, does not exist in the worker's consciousness, but acts upon him through the machine as an alien force, as the force of the machine itself.

The appropriation of living labour by objectified labour—of the value-creating power or activity by value-for-itself-an appropriation inherent in the concept of capital, is posited in production based upon machinery as the character of the production process itself, and is also posited in terms of its material elements and its material movement. The production process has ceased to be a labour process in the sense that it is no longer embraced by labour as the unity which dominates it. Now, on the contrary, labour appears merely as a conscious organ, dispersed at many points of the mechanical system in isolated living workers. It is subsumed under the overall process of the machinery itself, and is merely a member of the system, whose unity exists not in living workers but in the living (active) machinery. The latter confronts the isolated, insignificant activity of the worker as a mighty organism. In machinery, objectified labour confronts living labour in the labour process itself as the power which dominates it, a power which, in terms of its form, as the appropriation of living labour, is capital. The incorporation of the labour process into the valorisation process of capital as merely one of its moments is also posited materially by the transformation of the means of labour into machinery, and of living labour into a mere living accessory of this machinery, as the means of its action.

As we have seen,^a it is the necessary tendency of capital to increase the productive power of labour and to bring about the greatest possible negation of necessary labour. This tendency is realised by the transformation of the means of labour into machinery. In machinery, objectified labour physically confronts living labour as the power which dominates it and actively subsumes it under itself—not merely by appropriating living labour, but in the actual production process itself. In fixed capital existing as machinery, the relation of capital as value which appropriates the value-creating activity is posited, at the same time, as the relation of the use value of capital to the use value of the labour capacity. Moreover, the value objectified in the

^a See present edition, Vol. 28, p. 351.- Ed.

machinery appears as a presupposition in comparison to which the value-creating power of the individual labour capacity disappears as being infinitesimally small. With the enormous rates of production posited by machinery, there also disappears in the product every reference to the immediate need of the producer, and thus to immediate use value. The form in which the product is produced, and the conditions in which it is produced, already imply that it is only produced as a bearer of value, and its use value only as the condition for this. Objectified labour itself directly appears in the machine not only in the form of the product, or of the product employed as the means of labour, but in that of productive power itself. The development of the means of labour into machinery is not a matter of chance for capital, but the historical transformation of the traditional means of labour, as handed down from the past, into a form adequate to capital. The accumulation of knowledge and skill, of the general productive forces of the social mind, is thus absorbed in capital as opposed to labour, and hence appears as a property of capital, more precisely, of *fixed capital*, to the extent that it enters into the production process as means of production in the strict sense.

Therefore, machinery appears as the most adequate form of fixed capital; and fixed capital, as far as capital is considered in its relation to itself, as the most adequate form of capital in general. On the other hand, as far as fixed capital is confined to its existence as a particular use value, it does not correspond to the concept of capital, for capital as value is indifferent to every particular form of use value, and can with equal indifference adopt or shed any of them as its incarnation. In this respect, in terms of capital's relation to what is outside it, circulating capital appears as the adequate form of capital as against fixed capital.

Furthermore, to the extent that machinery develops with the accumulation of social knowledge and productive power in general, it is not in the worker but in capital that general social labour is represented. The productive power of society is measured in terms of *fixed capital*, exists in it in the form of objects; and conversely the productive power of capital develops with this general progress, which is appropriated gratis by capital. We need not enter into the development of machinery *en détail* here, but only in general, in so far as in *fixed capital* the *means of labour*, considered in its physical aspect, loses its immediate form and confronts the worker physically as *capital*. Knowledge appears in machinery as alien and external to him, and living labour as subsumed under objectified labour operating independently of

him. The worker appears as superfluous—unless his action is conditioned by the needs [of capital].^a

[VII-I]^b Hence, the full development of capital only takes place—or capital has only posited the mode of production corresponding to it—when the means of labour is not merely formally determined as *fixed capital* but is superseded in its immediate form, and *fixed capital* confronts labour within the production process as machinery. The entire production process then appears no longer as subsumed under the immediate skill of the worker, but as technological application of science. Capital thus tends to impart a scientific character to production, and immediate labour is reduced to a mere moment of this process. Just as we found when discussing the transformation of value into capital, a more detailed analysis of capital shows that, on the one hand, it presupposes a definite given historical development of the productive forces—these including science, too—and, on the other, spurs them on and accelerates their growth.

Hence the quantitative volume and effectiveness (intensity) of the development of capital as fixed capital indicates, in general, the DEGREE to which capital is developed as capital, as power over living labour, and to which it has, in general, subjected to itself the production process. It is also indicative as expressing the degree of accumulation of objectified productive forces and similarly of objectified labour. But if capital gives to itself its adequate form as use value within the production process only when it adopts the form of machinery and other physical forms of existence of fixed capital, e.g., railways, etc. (which we shall take up later), it does not in any way follow that this use value-machinery in itself-is capital, or that its existence as machinery is identical with its existence as capital. Just as little as gold would lose its use value as gold if it ceased to be money. Machinery would not lose its use value through ceasing to be capital. From the fact that machinery is the most appropriate form of use value of fixed capital, it in no way follows that its subsuming under the social relation of capital is the most appropriate and best social production relation for the application of machinery.

In the same measure as labour time—the simple quantity of labour—is posited by capital as the sole determinant of value,

^a Manuscript damaged.—Ed.

^b Marx opens page 1 of the seventh, last, notebook with the heading "Chapter on Capital (Continuation)" and the note "(This notebook [was] begun at the end of February '58)".— Ed.

immediate labour and its quantity disappear as the determining principle of production, of the creation of use values. It is reduced both quantitatively, in that its proportion declines, and qualitatively, in that it, though still indispensable, becomes a subaltern moment in comparison to general scientific work, the technological application of the natural sciences, on the one hand, and also in comparison to the general productive power originating from the organisation of society in overall production, a productive power which appears as a natural gift of social labour (although it is an historical product). Thus capital works to dissolve itself as the form which dominates production.

Thus if, on the one hand, the transformation of the production process from the simple labour process into a scientific process, one forcing the powers of Nature into its service and thus setting them to work in the service of human needs, appears as a property of *fixed capital* as against living labour; if, further, individual labour as such ceases in general to appear as productive, but rather is productive only in collective labours which subjugate the powers of Nature to themselves, and this elevation of immediate into social labour appears to reduce individual labour to helplessness compared to the concentrated collectivity represented in capital, then, on the other hand, the maintenance of labour in one branch of production by *coexisting LABOUR*¹⁸ in another now appears as the property of *circulating capital*.

In the lesser circulation,^a capital advances wages to the worker, who exchanges them for the products necessary for his consumption. The money he has received can effect the exchange only because simultaneously others work alongside him; and it is only because capital has appropriated his labour that it can give him in money a draft upon alien labour. This exchange of his own labour with alien does not appear here to be mediated and conditioned by the simultaneous coexistence of the labour of others, but by the advance which capital makes [to him]. The part of the circulating CAPITAL which is handed over to the worker, and circulating CAPITAL in general, appear to have the property of enabling the worker to undertake during production the exchange of matter necessary for his consumption. It appears not as an exchange of matter between simultaneously working labour powers, but as an exchange of matter effected by capital; a consequence of the existence of circulating capital.

^a See this volume, pp. 63-68.- Ed.

Chapter on Capital

Hence all the powers of labour are transposed into powers of capital. Fixed capital stands for the productive power of labour (which is posited outside labour and appears to exist independently of it, objectively). And in circulating capital, the fact, on the one hand, that the worker has himself posited the conditions for the repetition of his labour, and, on the other hand, that the exchange of this his labour is mediated by the coexisting labour of others, appears in the form that capital makes the advance to him and, on the other hand, posits the contemporaneity of the different branches of labour. (Strictly speaking, the latter two determinations belong in the section on accumulation.) Capital posits itself as the mediator between the different LABOURERS in the form of circulating capital.

Fixed capital, in its determination as means of production, whose most adequate form is machinery, produces value, i. e. increases the value of the product, only in two respects: (1) to the extent that it possesses value, i.e. is itself a product of labour, a certain quantity of labour in objectified form; (2) in so far as it increases the proportion of surplus labour to necessary labour, by enabling labour, through increasing its productive power, to produce a larger quantity of products necessary for the maintenance of the living labour capacity in a shorter time. It is, therefore, an utterly absurd bourgeois phrase to claim that the worker shares with the capitalist because the latter, by means of fixed capital (which, moreover, is itself the product of labour, is alien labour simply appropriated by capital), alleviates or abridges his labour for him. (In fact, by setting him to work with a machine, the capitalist robs his labour of all independence and attractiveness.)

Capital employs the machine, rather, only in so far as it enables the worker to work a larger part of his time for capital, to relate to a larger part of his time as not belonging to him, to work a longer time for another. By this process, the quantity of labour necessary for the production of a certain object is in fact reduced to the minimum, but only in order that a maximum of labour can be valorised in a maximum of such objects. The first aspect is important because capital in this way—quite unintentionally reduces human labour, the expenditure of [human] energy, to a minimum. This will be to the advantage of emancipated labour and is the condition for its emancipation.

What has been said above shows the absurdity of Lauderdale's attempt to make fixed capital into an autonomous source of value, one independent of labour time.¹⁹ It can be so only to the extent that it itself posits objectified labour time and surplus labour time. The employment of machinery itself historically
presupposes [VII-2]—see Ravenstone, above ^a—superfluous hands. Only when there is a superfluity of labour powers, does machinery intervene to replace labour. It is only in the imagination of economists that machinery assists the individual worker. It can only operate with masses of workers, whose concentration vis-à-vis capital is, as we have seen, one of capital's historical presuppositions.^b Machinery is not introduced to make up for a shortage of labour power, but to reduce abundantly available labour power to the necessary volume. Only where labour capacity is available in large quantities is machinery introduced. (This to be reverted to.)

Lauderdale believes to have made a great discovery in asserting that machinery does not increase the productive power of labour, since it rather replaces labour or performs tasks which labour cannot perform on its own. It is inherent in the concept of capital that the increased productive power of labour is posited rather as the aggrandizement of a power outside it and as its own enfeeblement. The means of labour makes the worker independent—posits him as a proprietor. Machinery—as fixed capital posits him as dependent, as appropriated. However, machinery has this effect only to the extent that it is determined as fixed capital; and it is determined as such only by the fact that the worker relates himself to it as a wage labourer, and the active individual in general as a mere labourer.

Hitherto, fixed capital and circulating capital appeared merely as different transitory determinations of capital. Now they have hardened into particular modes of existence of capital, and circulating capital appears alongside fixed capital. There are now 2 particular kinds of capital. In so far as one considers a single capital in a particular branch of production, it appears divided up into these 2 portions, or it falls in definite proportions into these 2 kinds of capital.

The different elements within the production process, originally means of labour and material of labour, and finally product of labour, now appear as circulating capital (the last two) and fixed capital. The differentiation of capital according to its purely material aspect has now been assimilated into the very form of capital and appears as a differentiator of capital.

Fixed capital—notably that whose material existence or use value is machinery—is the form best suited to give some

^a See present edition, Vol. 28, pp. 324-25 and this volume, pp. 79-80.-- Ed.

^b See present edition, Vol. 28, pp. 504-10.- Ed.

semblance of truth to the shallow FALLACIES of those who, like *Lauderdale*, etc., believe that capital as such, divorced from labour, can produce *value*, and thus also *surplus value* (or profit). One may answer them, as was done, e.g., in *Labour Defended*^a that the road-maker may indeed share with the road-user, but the "road" itself cannot do so.²⁰

Circulating capital-assuming that it actually passes through its various phases—causes the decrease or increase, the shortening or lengthening of circulation time, the easier or more arduous course through the various stages of circulation, a diminishing of the surplus value that could be produced in a given period of time if the process were not subject to these interruptions-either because there is a decline in the number of reproductions, or because the quantity of capital continuously engaged in the production process contracts. In neither case is there a reduction in the initially posited value; but, in both cases, a reduction in the rapidity of its growth. Yet, as soon as fixed capital has attained a certain level of development-and this level, as we have already indicated, is the measure of development of large-scale industry in general, and therefore rises in proportion to the development of the productive forces of large-scale industry (fixed capital is itself the objectification of these productive forces, is these forces themselves as a presupposed product)-from this moment onwards, every interruption of the production process directly reduces capital itself, its presupposed value.

The value of fixed capital is only reproduced to the extent that it is used up in the production process. If it is not used, fixed capital loses its use value, without its value passing on to the product. Hence the larger the scale on which fixed capital develops, in the sense in which it is considered here, the more *the continuity of the production process* or the continuous flow of reproduction becomes a compelling external condition of the mode of production based upon capital.

In this respect, too, the appropriation of living labour by capital takes on an immediate reality in machinery: on the one hand, it is the analysis and application of mechanical and chemical laws originating directly from science—that enables the machine to perform the same labour as was previously performed by the worker. However, the development of machinery takes this course only when large-scale industry has already attained a high level of

^a [Hodgskin, Th.,] Labour Defended against the Claims of Capital; or, the Unproductiveness of Capital Proved....-Ed.

development and all the sciences have been forced into the service of capital, and when, on the other hand, the machinery already in existence itself affords great resources. At this point, invention becomes a business, and the application of science to immediate production itself becomes a factor determining and soliciting science.

However, this is not the way in which machinery has come into being on a general basis; and still less is it the way in which it develops in detail. The actual way is that of analysis—through the division of labour, which increasingly transforms the workers' operations into mechanical ones, so that at a certain point the workers can be replaced by a mechanism. (*Ad. ECONOMY OF POWER.*) Therefore, a definite mode of labour appears here to be directly transferred from the worker to capital in the form of the machine, and this transposition devalues his own labour capacity. Hence the workers' struggle against machinery. What was the activity of a live worker now becomes an activity of the machine. Thus the appropriation of labour by capital confronts the worker in a gross-sensuous way; capital as absorbing living labour into itself—"as though it had love in its bosom".^a

The exchange of living labour for objectified, i.e. the positing of social labour in the form of the antithesis of capital and wage labour, is the ultimate development of the value relationship and of production based on value. Its presupposition is and remains the sheer volume of immediate labour time, the quantity of labour employed, as the decisive factor in the production of wealth. But in the degree in which large-scale industry develops, the creation of real wealth becomes less dependent upon labour time and the quantity of labour employed than upon the power of the agents set in motion during labour time. And their power-their POWERFUL EFFECTIVENESS-in turn bears no relation to the immediate labour time which their production costs, but depends, rather, upon the general level of development of science and the progress of technology, or on the application of science to production. (The development of science itself, especially of natural science, and with it of all the other sciences, is, in turn, related to the development of material production.) E.g. agriculture becomes mere application of the science of the exchange of matter-in terms of how that exchange can be regulated to the maximum advantage of the social body as a whole.

Real wealth manifests itself rather-and this is revealed by

^a Goethe, Faust, Part I, "Auerbach's Cellar in Leipzig".- Ed.

large-scale industry—in the immense disproportion between the labour time employed and its product, and similarly in the qualitative disproportion between labour reduced to a pure abstraction and the power of the production process which it oversees. Labour no longer appears so much as included in the production process, but rather man relates himself to that process as its overseer and regulator. (What is true of machinery is equally true of the combination of human activities and the development of human intercourse.) No longer does the worker interpose a modified natural object as an intermediate element between the object and himself; now he interposes the natural process, [VII-3] which he transforms into an industrial one, as an intermediary between himself and inorganic nature, which he makes himself master of. He stands beside the production process, rather than being its main agent.

Once this transformation has taken place, it is neither the immediate labour performed by man himself, nor the time for which he works, but the appropriation of his own general productive power, his comprehension of Nature and domination of it by virtue of his being a social entity-in a word, the development of the social individual-that appears as the cornerstone of production and wealth. The theft of alien labour time, which is the basis of present wealth, appears to be a miserable foundation compared to this newly developed one, the foundation created by large-scale industry itself. As soon as labour in its immediate form has ceased to be the great source of wealth, labour time ceases and must cease to be its measure, and therefore exchange value [must cease to be the measure] of use value. The surplus labour of the masses has ceased to be the condition for the development of general wealth, just as the non-labour of a few has ceased to be the condition for the development of the general powers of the human mind. As a result, production based upon exchange value collapses, and the immediate material production process itself is stripped of its form of indigence and antagonism. Free development of individualities, and hence not the reduction of necessary labour time in order to posit surplus labour, but in general the reduction of the necessary labour of society to a minimum, to which then corresponds the artistic, scientific, etc., development of individuals, made possible by the time thus set free and the means produced for all of them.

By striving to reduce labour time to a minimum, while, on the other hand, positing labour time as the sole measure and source of wealth, capital itself is a contradiction-in-process. It therefore

diminishes labour time in the form of necessary labour time in order to increase it in the form of superfluous labour time; it thus posits superfluous labour time to an increasing degree as a condition-question de vie et de mort^a-for necessary labour time. On the one hand, therefore, it calls into life all the powers of science and Nature, and of social combination and social intercourse, in order to make the creation of wealth (relatively) independent of the labour time employed for that purpose. On the other hand, it wishes the enormous social forces thus created to be measured by labour time and to confine them within the limits necessary to maintain as value the value already created. The productive forces and social relations-two different aspects of the development of the social individual-appear to capital merely as the means, and are merely the means, for it to carry on production on its restricted basis. IN FACT, however, they are the material conditions for exploding that basis.

"A nation is truly rich if 6 instead of 12 hours are worked. WEALTH is not command over surplus labour time" (real wealth) "but DISPOSABLE TIME, in addition to that employed in immediate production, for every individual and for the whole society." ²¹

Nature does not construct machines, locomotives, railways, ELECTRIC TELEGRAPHS, SELF-ACTING MULES, etc. They are products of human industry; natural material transformed into organs of man's will over Nature, or of man's activity in Nature. They are organs of the human mind which are created by the human hand, the objectified power of knowledge. The development of fixed capital shows the degree to which society's general science, KNOWLEDGE, has become an immediate productive force, and hence the degree to which the conditions of the social life process itself have been brought under the control of the GENERAL INTELLECT and remoulded according to it. It shows the degree to which the social productive forces are produced not merely in the form of knowledge but as immediate organs of social praxis, of the actual life process.

There is yet another aspect from which the development of fixed capital indicates the degree of development of wealth in general or of the development of capital. The object of production directly aimed at use value, and similarly directly at exchange value, is the product itself, which is intended for consumption. The part of production

^a A matter of life or death.-Ed.

aimed at the production of fixed capital does not produce immediate objects of enjoyment or immediate exchange values; at least it does not produce immediately realisable exchange values. So it depends upon the level of productivity already attained—upon a mere part of production time being sufficient for immediate production that an increasingly large part of production time is employed in producing means of production.

This presupposes that society can wait, can withdraw a large part of the wealth already created both from immediate enjoyment and from production intended for immediate enjoyment, and employ it for labour which is not immediately productive (within the material production process itself). For it to be able to do so, productivity and relative excess must already have attained a certain level, and indeed a level directly proportionate to the scale on which circulating capital is transformed into fixed capital. Just as the amount of relative surplus labour depends upon the productivity of necessary labour, so the amount of the labour time employed on the production of fixed capital—living labour time as well as objectified—depends upon the productivity of the labour time intended for the direct production of products.

Surplus population (surplus from this standpoint), like surplus broduction, is a condition for this, i.e. the result of the time employed upon immediate production must be relatively in excess of what is immediately required for the reproduction of the capital employed in these branches of industry. The less the immediate yield of *fixed capital*, the less fixed capital engaged in the *immediate* production process, the larger this relative surplus population and surplus production must be; i.e. more relative surplus population and surplus production is required to build railways, canals, waterworks, telegraphs, etc., than to make machinery used in the immediate production process. Hence-and we shall come back to that later-the continual over- and underproduction in modern industry reflecting the continual fluctuations and convulsions in disproportionate—now insufficient, now excessivethe transformation of circulating capital into fixed capital.

//The creation of an abundance of DISPOSABLE TIME apart from necessary labour time, for society in general and for each of its members (i.e. scope for the development of the full productive powers of the individual, hence also of society), this creation of not-labour-time appears under the conditions of capital, and at all earlier stages, as the creation of not-labour-time, free time, for a few. What capital adds is that it increases the surplus labour time of the masses by all the means of art and science, because its wealth consists directly in its appropriation of surplus labour time; for its *direct aim is value*, not use value.

Hence it is INSTRUMENTAL, malgré lui,^a IN CREATING THE MEANS OF SOCIAL DISPOSABLE TIME, of reducing labour time for the whole of society to a declining minimum, and of thus setting free the time of all [members of society] for their own development. But its tendency is always, on the one hand, to create DISPOSABLE TIME, and on the other TO CONVERT IT INTO SURPLUS LABOUR. Yet if it is too successful in the former, it is afflicted with surplus production, and then necessary labour is interrupted, as no SURPLUS LABOUR can be utilised by capital.

The more this contradiction develops, the more obvious it becomes that the growth of the productive forces can no longer be tied to the appropriation of alien SURPLUS LABOUR, and that the working masses must, rather, themselves appropriate their surplus labour. Once they have done so-and DISPOSABLE TIME has thereby ceased to possess an antithetical existence-then, on the one hand, necessary labour time will be measured by the needs of the social individual; and, on the other, society's productive power will develop so rapidly that, although production will now be calculated to provide wealth for all, the DISPOSABLE TIME of all will increase. For real wealth is the developed productive power of all individuals. Then [VII-4] wealth is no longer measured by labour time but by DISPOSABLE TIME. Labour time as the measure of wealth posits wealth itself as based upon poverty, and DISPOSABLE TIME only as existing in and through the opposition to surplus labour time; or the whole time of an individual is posited as labour time, and he is consequently degraded to a mere labourer, subsumed under labour. Hence the most developed machinery now compels the labourer to work for a longer time than the savage does, or than the labourer himself did when he was using the simplest, crudest implements.//

"If the whole labour of a country were only sufficient to RAISE THE SUPPORT OF THE WHOLE POPULATION, THERE WOULD BE NO SURPLUS LABOUR, CONSEQUENTLY NOTHING THAT COULD BE ALLOWED TO ACCUMULATE AS CAPITAL. IF THE PEOPLE RAISE in one year sufficient for the SUPPORT OF 2 YEARS, ONE YEAR'S CONSUMPTION MUST PERISH, OR FOR ONE YEAR MEN MUST CEASE FROM PRODUCTIVE LABOUR. BUT THE POSSESSORS OF SURPLUS PRODUCE OR CAPITAL EMPLOY PEOPLE UPON SOMETHING NOT DIRECTLY AND IMMEDIATELY PRODUCTIVE, e.g. IN THE ERECTION OF MACHINERY. So it goes ON" (The Source and Remedy of the National Difficulties [London, 1821, pp. 4-5]).

//Just as with the development of large-scale industry the basis on which it rests, appropriation of alien labour time, ceases to constitute or to create wealth, so, as this development takes place,

^a Despite itself.-Ed.

immediate labour as such ceases to be the basis of production. That happens because, on the one hand, immediate labour is transformed into a predominantly overseeing and regulating activity; and also because, on the other hand, the product ceases to be the product of isolated immediate labour, and it is rather the *combination* of social activity that appears as the producer.

"As soon as the division of labour has been developed, almost any labour by an isolated individual becomes some part OF A WHOLE, HAVING NO VALUE OR UTILITY OF ITSELF. THERE IS NOTHING ON WHICH THE LABOURER CAN SEIZE [and say:] THIS IS MY PRODUCE, THIS I WILL KEEP TO MYSELF" ([Th. Hodgskin,] Labour Defended, [London, 1825,] 1, 2, XI²² [p. 25]).

In immediate exchange, the isolated immediate labour appears as realised in a particular product or part of a product, and its communal social character—its character as the objectification of general labour, and satisfaction of general need—is only posited by exchange. By contrast, in the production process of large-scale industry, we see, on the one hand, that the productive power of the means of labour developed to an automatic process presupposes the subjection of the natural forces to the social intelligence, and, on the other hand, that the labour of the individual in its immediate existence is posited as superseded individual, i.e., as social, labour. Thus the other basis of this mode of production is abolished.//

Within the production process of capital itself, the labour time employed upon the production of fixed capital relates to that employed upon the production of circulating capital as surplus labour time to necessary labour time. In the degree in which production directed to the satisfaction of immediate needs becomes more productive, a larger part of production can be directed to satisfy the needs of production itself or to the production of means of production. In so far as the production of fixed capital aims directly, in material terms too, neither at the production of immediate use values, nor of values required for the immediate reproduction of capital, i.e. values which in the creation of value itself represent, relatively, use value, but aims at the production of means for the creation of value, hence not at value as an immediate object, but at the creation of value, at the means of valorisation as the immediate object of production-the production of value materially posited in the object of production itself as the purpose of production, of the objectification of productive power, the value-producing power of capital-to that extent capital posits itself as an end-in-itself-and is active as capital—in a higher potency in the production of fixed capital than in that of circulating capital. Therefore, in this respect too, the magnitude which fixed capital already possesses, and which its production constitutes in overall production, is *the measure of the development* of wealth based upon the capitalist mode of production.

"The number of labourers depends on *circulating capital* so far as that number depends on the quantity of *products of co-existing labour*, which labourers are allowed to consume" ([Th. Hodgskin,] *Labour Defended* [p. 20]).

All the passages from various economists cited above refer to fixed capital as the part of capital which is locked up in the production process.

"FLOATING CAPITAL IS CONSUMED; FIXED CAPITAL IS MERELY USED IN THE GREAT PROCESS OF PRODUCTION" ([*The*] *Economist*, [No. 219, 6 November 1847, p. 1271,] VI, 1^{17}).

This is incorrect, and holds good only for the part of circulating capital which is itself consumed by fixed capital, i.e., for the *matières instrumentales*. Only *fixed capital* is consumed "IN THE GREAT PROCESS OF PRODUCTION", taking this to be the immediate production process. And its consumption within the production process is IN FACT its *use*, the *using up* of it.

Furthermore, the greater durability of fixed capital is not to be understood in purely material terms either. The iron and wood which compose the bed in which I sleep, or the stone of which the house is built in which I live, or the marble statue with which a palace is adorned, are as durable as the iron and wood, etc., which are employed in the construction of machinery. But *durability* is a condition for the instrument, for the means of production, not merely for the technical reason that metal, etc., is the main material of all machinery, but because the instrument is to play the same role continually in repeated production processes. Its durability as a means of production is a direct requirement of its use value. The more frequently it has to be renewed, the more expensive it is; the larger is the part of capital which must be uselessly employed on it. Its duration is its existence as a means of production. The longer it lasts, the greater its productive power. With circulating capital, on the contrary, to the extent that it is not transformed into fixed capital, its durability has no relation whatever to the act of production itself and is thus not a conceptually posited moment. That some of the objects thrown into the fonds de consommation are again determined as fixed capital, because they are consumed slowly and may be consumed by many individuals successively, is connected with further determinations (renting instead of selling, interest, etc.) with which we are not yet concerned here.

[VII-5]^a "Since the general introduction of inanimate mechanism into British manufactories, man, with few exceptions, has been treated as a secondary and inferior machine; and far more attention has been given to perfect the raw materials of wood and metals than those of body and mind" (Robert Owen, *Essays on the Formation of the Human Character*, London, 1840, p. 31).

//Real economising—saving—consists in the saving of labour time (the minimum production costs,²³ and their reduction to the minimum). But this saving is identical with the development of the productive power. Hence in no way *renunciation of enjoyment* but development of POWER, of the capacity to produce and hence of both the capacity for and the means of enjoyment. The capacity for enjoyment is a condition for it, and hence the basic means for it, and this capacity is created by the development of an individual disposition, productive power.

The saving of labour time is equivalent to the increase of free time, i.e. time for the full development of the individual, which itself, as the greatest productive force, in turn reacts upon the productive power of labour. From the standpoint of the immediate production process, it can be considered as the production of *fixed capital*, this fixed capital BEING MAN HIMSELF.

Incidentally, it is self-evident that immediate labour time itself cannot remain in abstract antithesis to free time, as it appears to do from the standpoint of bourgeois political economy. Labour cannot become a game, as desired by Fourier,^b whose great merit it remains to have stated that the ULTIMATE OBJECT is the raising of the mode of production itself, not [that] of distribution, to a higher form. Free time-which is both leisure and time for higher activity-has naturally transformed its possessor into another subject; and it is then as this other subject that he enters into the immediate production process. This process is simultaneously discipline, with respect to the developing human being, and application, experimental science, material creative and selfobjectifying science, with respect to the developed man, whose mind is the repository of the accumulated knowledge of society. So far as labour demands practical manual exertion and free motion, as in agriculture, the production process is for both of them, at the same time, exercise.

^a In Marx's hand at the top of this page: "March. 1858".-Ed.

^b Ch. Fourier, Le Nouveau Monde industriel et sociétaire. In: Œuvres complètes, 3rd ed., Vol. 6, Paris, 1848, pp. 245-52.— Ed.

Just as the system of bourgeois economy unfolds to us only gradually, so also does its negation of itself, which is its ultimate result. At this point, we are still concerned with the immediate production process. If we consider bourgeois society in the round, it is always society itself, i.e. man himself in his social relations, that appears as the final result of the social production process. Everything that has a solid form, like the product, etc., appears merely as a moment, a vanishing moment in this movement. Even the immediate production process itself appears here merely as a moment. The conditions and objectifications of that process are themselves, to an equal degree, moments of it, and it is only individuals that appear as its subjects; yet individuals in relations to one another, which they reproduce just as much as they produce them anew. Their own continuous process of movement, in which they renew themselves to just the same extent as they renew the world of wealth which they create.//

(In his Six Lectures delivered at Manchester, 1837, Owen discusses the difference between workers and capitalists which capital creates BY ITS VERY GROWTH and appearance on a wide scale (and it attains this only in large-scale industry, which is connected with the development of fixed capital). However, he says that the development of capital is a necessary condition for the RE-CREATION OF society, and relates of himself:

"It was BY BEING GRADUALLY TRAINED TO CREATE AND CONDUCT SOME OF THESE LARGE" (MANUFACTURING) "ESTABLISHMENTS, THAT YOUR LECTURER" (Owen himself) "was taught to perceive the great errors and DISADVANTAGES of past and present attempts to improve the character and the condition of his fellow-men" (p. [57-]58).

We shall quote here the entire passage, so that we may refer to it on another occasion.²⁴

"The producers of fully developed wealth may be divided into workers in soft and workers in hard materials, under the immediate direction, as a general rule, of masters whose object it is to make pecuniary gain by the labour of those whom they employ. Before the introduction of the chemical and mechanical manufacturing system, operations were carried on upon a confined scale; there were many small masters, each having a few journeymen, who looked forward to becoming also in due time, small masters. These usually fed at the same table, and lived together; and there prevailed a spirit and feeling of equality between them. Since the period when SCIENTIFIC POWER began to be largely applied to the business of manufacture, a gradual change took place in this respect. Almost all manufactures, to be successful, must now be carried on EXTENSIVELY and with large capital; small masters with small capitals have now very little chance of success, especially in the manufacture of the soft materials, such as cotton, wool, flax, etc.; it is now indeed EVIDENT that so long as the present classification of society and mode of conducting business life shall continue, the small masters will be more and more superseded by those who possess large capitals, and that the former comparatively happy equality among producers must give place to the greatest inequality between master and worker that has yet occurred in the history of man. The large capitalist is now elevated to the position of an imperial lord, having the health, life, and death, INDIRECTLY, of his slaves at his will. This power he obtains by combining with other large capitalists engaged in the same interests with himself, and thus does he effectively coerce to his purpose those whom he employs. The large capitalist now wallows in wealth, the right use of which he has not been taught and knows not. He has acquired power by his riches. His riches and his power blind his understanding; and when he most GRIEVOUSLY oppresses, he believes he is conferring favours... His SERVANTS, as they are called, his SLAVES IN FACT, are reduced to the most hopeless degradation; the majority of them, robbed of their health, of their domestic comforts and of the leisure and the healthy open air amusements of former days. Through excessive exhaustion of their powers, brought on by long protracted monotonous employments, they are seduced into habits of intemperance and unfitted for thought or reflection. They can have no physical, intellectual or moral enjoyments, except of the very lowest description; all the real pleasures of life being far removed from them. The existence which a very large portion of the workers endure under the present system is, in short, not worth possessing.

"But for the changes of which these are the results no individuals are BLAMEABLE; they proceed in the REGULAR ORDER OF NATURE, and are preparatory and necessary steps towards the great and important social revolution which is in progress. Without large capitals, large establishments would not have been formed; men could not have been trained to conceive the PRACTICABILITY OF EFFECTING NEW COMBINATIONS, IN ORDER TO SECURE A SUPERIOR CHARACTER TO ALL and the production of more wealth annually than all could consume; and that that wealth also should be of a very superior description to that [VII-6] hitherto generally produced" (l.c., [pp.] 56, 57).

"It is this new chemical and mechanical manufacturing system that is now enlarging the human faculties to prepare them to understand other PRINCIPLES and PRACTICES, to adopt them, and thus to effect the greatest beneficial change in affairs that the world has yet known. And it is this new manufacturing system that now creates the necessity for another and superior classification of society" (l.c., [p.] 58).)

[CIRCULATION AND REPRODUCTION OF FIXED AND CIRCULATING CAPITAL]

We have previously noted that the productive power (fixed capital) only imparts value—because it only possesses value—in so far as it is itself produced, is itself a certain quantity of objectified labour time. But there are also natural agents, such as water, land (especially), mines, etc., which are appropriated, hence possess exchange value and therefore must be included as values in the calculation of the production costs. In a word, landed property (it includes the soil, mines, water) enters the reckoning. But the value of means of production which are not the product of labour does not as yet belong here, since they do not come under the heading of capital itself. For capital, they appear in the first place as a given, historical presupposition, and we leave them as such at this point. Only the form of landed property modified to correspond to capital—or of natural agents as value-determining magnitudes—belongs in the discussion of the system of bourgeois economy. For our analysis of capital nothing is changed, at this point, by considering the soil, etc., as a form of fixed capital.

Since *fixed capital* in the sense of the produced productive power, as agent of production, increases the mass of use values produced in a definite time, fixed capital cannot increase unless there is an increase in the quantity of the raw material which it works up. (This applies to manufacturing industry. In the extractive industries, e.g. fishing, mining, labour consists merely in overcoming the obstacles to the winning and appropriation of raw products or primary products. There, no raw material is worked on for production, but rather the existing raw product is appropriated. In agriculture, on the other hand, the raw material is the soil itself; the circulating capital is the seed, etc.) Hence the employment of fixed capital on a larger scale presupposes an enlargement of the part of circulating capital which consists of raw materials, and consequently a growth of capital in general. It also presupposes a (relative) decline in the portion of capital exchanged for living labour.

In *fixed capital*, capital exists, physically too, not merely as objectified labour intended to serve as means of new labour, but as value whose use value is the production of new values. The existence of fixed capital is therefore $\varkappa \alpha \tau^2 \xi_{0} \chi \eta \nu^a$ its existence as productive capital. *Hinc*^b the level of development already attained by the mode of production based on capital—or the extent to which capital itself is already presupposed, has presupposed itself, as the condition for its own production—is measured by the existing volume of fixed capital. Not only by its quantity, but by its quality as well.

Finally: In fixed capital, the social productive power of labour is posited as a property inherent in capital; the SCIENTIFIC POWER as well as the combination of social forces within the production process, and finally the skill translated from immediate labour into machines, into lifeless productive power. In circulating capital, on the other hand, it

^a Above all.—Ed.

^b Hence.—*Ed.*

is the exchange of labours, of the various branches of industry, their inter-meshing and formation of a system, the coexistence of productive labour, that appears as the *property of capital*.

//The determinations of raw material, product and instrument of production vary in accordance with the determination adopted by the use values in the production process itself. What may be regarded as mere raw material is itself the product of labour. (The description of mere raw material certainly does not apply to agricultural products, all of which are reproduced, and not only reproduced in their original form, but modified in their natural being itself in conformity with human needs. Quote from Hodges, etc. The products of purely extractive industries, e.g. coal, metals, are themselves results of labour, which is required not merely to bring them up to the surface, but also, as with the metals, to give them the form in which they can serve as the raw materials of industry. But they are not reproduced, for as yet we do not know how to make metals.)

The product of one industry is the raw material of another, *et* vice versa. The instrument of production itself is the product of one industry and serves as instrument of production in another. The waste product of one industry is the raw material of another. In agriculture, a part of the product (seed, livestock, etc.) itself figures as the raw material of that very industry, and therefore, like fixed capital, never emerges from the production process. The part of agricultural produce set aside for consumption by livestock can be regarded as a *matière instrumentale*. But the seed is reproduced in the production process, while the instrument as such is consumed in it. Since the seed and the working animals always remain in the production process, can not both be regarded as fixed capital? No, since otherwise all raw material would have to be regarded thus. As such, raw material is always engaged in the production process.

Finally, the products entering into direct consumption reemerge from it as raw materials for production, e.g. fertiliser in the process of nature, etc., paper made of rags, etc. Yet, secondly, their consumption reproduces the individual himself in a particular mode of existence, not merely in his immediate vitality, and in particular social relations. So that the final appropriation by individuals, which takes place in the process of consumption, reproduces them in the original relations in which they figure in the production process and in mutual intercourse; it reproduces them in their social existence, and thus reproduces their social existence itself—society—which appears as the subject of this great overall process to the same extent as it appears as its result. //

Fourthly^a:

We must now examine the other relations of fixed capital and circulating capital.

We said above that in *circulating capital* the social relation of the different labours to one another is posited as the property of capital, just as the social productive power of labour is in fixed capital.

"The circulating capital of a nation consists of money, means of subsistence, raw materials, and *l'ouvrage fait*^b" (A. Smith, [Recherches sur la nature et les causes de la richesse des nations,] Vol. II, p. 218).

As regards money, Smith cannot decide whether he should call it circulating or fixed capital. If it is constantly employed only as the instrument of circulation, which is itself a moment of the total reproduction process, it is *fixed capital*—as instrument of circulation. Yet its use value then consists solely in circulating; never, then, does it enter either into the production process proper or into individual consumption. It is the part of capital which is permanently fixed in the circulating capital. From the other angle, since it is fixed as instrument, it is *fixed capital*.

In so far as the relation to individual consumption is a criterion for distinguishing between *fixed capital and circulating capital*, this distinction is already given by the fact that *fixed capital* does not enter into circulation as use value. (In agriculture, a part of the seed enters [VII-7] as use value into circulation, since the seed multiplies itself.) The fact that fixed capital does not enter into circulation as use value implies that it does not become an object of individual consumption.

"Fixed capital" serves reiteratedly, again and again, for the same operation, "AND BY HOW MUCH LARGER HAS BEEN THE RANGE OF THESE ITERATIONS, BY SO MUCH [THE] MORE INTENSELY IS THE TOOL, ENGINE, OR MACHINERY, ENTITLED TO THE DENOMINATION OF FIXED" (DE Quincey, [*The Logic of Political Economy*, p. 114,] X, 4^{10}).

Assume a capital of £10,000, composed of 5,000 fixed capital and 5,000 circulating capital; the latter turns over once a year, the former once in 5 years. This means that 5,000, or $1/_2$ the total capital, turns over once a year. During the same time, $1/_5$ of the fixed capital, or £1,000, turns over; in 1 year, therefore, £6,000,

^a Cf. this volume, pp. 71,76.-Ed.

^b Work completed.— Ed.

or ${}^{3}/{}_{5}$ of the total capital, turns over. Hence ${}^{1}/{}_{5}$ of the total capital turns over in ${}^{12}/{}_{3}$ months and the whole capital in $\frac{12\times5}{3}$ months, i.e. in ${}^{60}/{}_{3}=20$ months=1 year 8 months.

The total capital of $\pounds 10,000$ has turned over in 20 months, although it takes 5 years to replace the fixed capital. That turnover time, however, only holds for the repetition of the production process and hence for the creation of surplus value; not for the reproduction of the capital itself. If capital recommences the process—returns from circulation into the form of fixed capital—less frequently, it returns the more frequently into the form of circulating capital. But this does not replace the capital itself.

The same is true of circulating capital. If a capital of 100 returns 4 times a year and, as a result, yields 20%, while a capital of 400 circulates only once and yields an equal amount [in absolute terms], the former capital is, in the outcome, still 100 at the end of the year, and the latter still 400, although the former has acted in the production of use values, and in the positing of surplus value, as a capital four times its size. Here we see the velocity of turnover compensate for the size of the capital—striking proof that it is only the quantity of surplus labour set in motion, and of labour in general, not the size of capital in itself, that determines the creation of value and hence of surplus value. The capital of 100 has successively set in motion as much labour during the year as one of 400, and thus has produced the same quantity of surplus value.

But the point here is this: In the above example the circulating capital of 5,000 first returns in the [first] half of the first year,^a then at the end of the second [half]; in the [first] half of the second year; in the second half of the second year (the first 4 months) $\pounds 3,333^2/_6$ of it is returned, and the rest will have been replaced by the end of that half year.

But only $\frac{1}{5}$ of the fixed capital was returned in the first year and $\frac{1}{5}$ in the second. At the end of the first year, the owner of the capital has £6,000 in hand, at the end of the second, 7,000; and at the end of the third, fourth and fifth years, 8,000, 9,000 and 10,000 respectively. Only at the end of the fifth year is he once again in possession of the total capital with which he began the production process, although *his capital has been operative in the*

^a According to the original assumption, it should first return at the end of the first year. In this paragraph and in one passage further on, Marx seems to assume that the circulating capital turns over twice a year.—Ed.

production of surplus value as if the whole of it were turned over in 20 months. So the total capital itself is reproduced only in 5 years.

The first determination of the turnover is important for the relation in which capital is valorised; but the second introduces a new relation, which is not present at all in the case of circulating capital. Since circulating capital enters into circulation in its entirety and returns from it in its entirety, it is reproduced as capital as often as it is realised as surplus value or as surplus capital. On the other hand, since fixed capital never enters into circulation as use value, and enters into it as value only in the degree in which it is consumed as use value, it is by no means reproduced immediately the surplus value determined by the average turnover time of the total capital is posited.

The circulating capital must be turned over 10 times in the 5 years which elapse before the fixed capital is reproduced, i.e. the turnover period of the circulating capital must pass 10 times whilst that of fixed capital passes once; and the total average turnover of the capital—20 months—must be repeated 3 times before the fixed capital has been reproduced. Hence, the larger the part of capital consisting of fixed capital—i.e. the greater the extent to which capital is active in the mode of production corresponding to it, with an extensive application of produced productive power—and the more durable the fixed capital, i.e. the longer its reproduction time, the more its use value corresponds to its determination with so much the greater frequency must the part of capital determined as circulating repeat the period of its turnover, and the longer the total time capital takes to run the course of its total circulation.

HENCE continuity of production becomes an extreme necessity for capital with the development of the portion of it determined as fixed capital. For circulating capital, interruptions, unless they are so long as to ruin its use value, are merely interruptions in the creation of surplus value. For fixed capital, however, an interruption constitutes a destruction of its original value itself, so FAR as in the meantime its use value is inevitably destroyed relatively unproductively, i.e. without replacing itself as value. So it is only with the development of fixed capital that the continuity of the production process corresponding to the concept of capital is posited as the conditio sine qua [non] for its maintenance; and therefore, similarly, the continuity and continual growth of consumption.

This is No. I [the first distinction between fixed and circulating capital]. But in respect of form No. II is even more important. The total time in terms of which we measured the RETURN of capital was the year, as the unit of time in which we measured labour was the day. We did so firstly because the year is more or less the

natural reproduction time or duration of the production phase for most vegetable raw materials used in industry. The turnover of circulating capital was thus determined by the number of turnovers it completed in a year as the total time. IN FACT, circulating capital begins its reproduction at the end of each turnover, and if the number of turnovers during the year has a bearing on the total value, the particular fates experienced by circulating capital, during each turnover, do appear to determine the conditions under which it recommences its reproduction, but each of these fates constitutes, in itself, a complete life-act of circulating capital. As soon as capital has been reconverted into money, it can e.g. be transformed into conditions of production different from the initial ones, throw itself from one branch of production into another, with the result that its *reproduction*, *materially considered, will not be repeated in the same form*.

The introduction of fixed capital alters this, and neither the turnover time of capital nor the unit by reference to which the number of turnovers is measured, the year, appears any longer as the measure of time for the movement of capital. This unit is now determined, rather, by the reproduction time required for the fixed capital and hence by the total circulation time it takes to enter into circulation as value and return from it in the totality of its value. During all this time the reproduction of fixed a capital must take place in the same form materially too, and the number of its necessary turnovers, i.e. the number of turnovers necessary for the reproduction of the original capital, is distributed over a longer or shorter period of years. A longer total period is therefore posited as the unit in terms of which its turnovers are measured, and their repetition is now linked to this unit not merely externally but by necessity. According to Babbage,^b the average reproduction of machinery in England takes 5 years; hence, the real, probably 10 years. There can be no doubt at all that the cycle through which industry has been passing in plus ou moins^c ten-year periods since the large-scale development of fixed capital, is linked with the total reproduction phase of capital determined in this way. We shall find other determining factors too, but this is one of them. There were good and bad times for industry and for the harvests (in agriculture) in the past, too. But the several-year-long industrial cycle divided up into characteristic periods, epochs, is unique to large-scale industry.

^a The original has "circulating".- Ed.

^b Traité sur l'économie des machines et des manufactures, pp. 375-76. Ed.

c Roughly .--- Ed.

[VII-8] Here we come to distinction No. III, which appears for the first time.

Circulating capital was precipitated from the production process in the form of the product, the newly created use value, and entered wholly into circulation. Once reconverted into money, the value of the product (the entire necessary and surplus labour time objectified in it) was fully realised, and thereby both the surplus value was realised and all the conditions of reproduction fulfilled. With the realisation of the price of the commodity, all these conditions were fulfilled and the process could be recommenced. However, this is true only of that part of circulating capital which enters into the large circulation. As to the other portion of it, which continuously accompanies the process of production itself. The circulation of that part of it which is transformed into wages, whether or not these wages themselves are replaced by a use value entering into circulation naturally depends upon whether labour is employed in the production of fixed capital or of circulating capital.

Fixed capital, on the other hand, does not itself circulate as use value, but only enters-to the extent that it is used up as use value in the production process—as value into the manufactured raw material (in manufacture and agriculture) or into the raw product directly extracted [from the earth] (as in mining). Hence fixed capital in its developed form only returns over a cycle of years, which comprises a series of turnovers of circulating capital. It is not AT ONCE exchanged in the form of the product for money, so that its reproduction process coincides with the turnover of circulating capital. It enters into the price of the product only piecemeal, and therefore returns as value only piecemeal. It returns piece by piece over longer periods, whereas circulating capital circulates wholly in shorter ones. To the extent that fixed capital exists as such, [it] does not return, because it does not enter into circulation. To the extent that it does enter into circulation, it no longer exists as fixed capital, but constitutes a notional component of the value component of circulating capital. In general, it only returns in so far as it is directly or indirectly converted into the product, and therefore into circulating capital. Because it is not an immediate use value for consumption, it does not enter into circulation as use value.

This difference in the form of RETURN of fixed and circulating capital will later appear significant as the distinction between selling and renting, ANNUITY, interest and profit, *loyer*^a in its different forms and profit. Their failure to understand this *merely*

^a Rent.—Ed.

formal distinction led Proudhon and his gang to the most confused conclusions, as we shall see.

In its remarks on the recent crisis,²⁵ The Economist reduces the whole distinction between fixed and circulating capital to that between the

"RESALE OF ARTICLES WITHIN A SHORT PERIOD AND AT A PROFIT" (The Economist, No. 754, 6 February 1858 [p. 137]) and "PRODUCTION OF A REVENUE LARGE ENOUGH TO PROVIDE FOR EXPENSES, RISK, WEAR AND TEAR, AND THE MARKET RATE OF INTEREST".

//Risk, which plays a role in the economists' determination of profit—it can obviously play none in the case of surplus gain, since the creation of surplus value is not increased as a result of it, and it is impossible that capital may run risks in the *realisation* of this surplus value—is the danger that capital may not traverse the different phases of circulation, or that it remains fixed in one of them.

We have seen a that surplus gain forms part of the production costs, if not of capital, then certainly of the product. The necessity for capital to realise this surplus gain or part of it, is doubly an external compulsion to it. As soon as interest and profit become separated, hence the industrial capitalist must pay interest, a portion of the surplus gain constitutes production costs from the viewpoint of capital, i.e. forms part of its outlays. On the other hand, to protect itself against the danger of depreciation to which it is exposed in the metamorphoses of the overall process, it gives itself a kind of AVERAGE insurance. A part of the surplus gain appears to it merely as compensation for the risk it runs to make more money; a risk that the advanced value itself may be lost. In this form, the surplus gain appears to capital as having to be realised to ensure its reproduction. Of course, neither of these factors determines surplus value, but they do cause its positing to appear as an external necessity for capital, not merely as the satisfaction of its tendency towards enrichment.//

The quicker RETURN resulting from the sale of the entire article, and the RETURN, only once a year, of part of the fixed capital, have been discussed above. As regards profit—we are not concerned with merchant's profit here—every part of the circulating capital as emerging and returning from the production process, i.e. in so far as objectified labour (the value of the advances), necessary labour (the value of wages) and surplus labour are contained in it,

a See present edition, Vol. 28, pp. 241-45.- Ed.

yields profit as soon as it passes through circulation, because the realisation of the product is also the realisation of the surplus labour contained in it. However, it is neither circulating nor fixed capital that creates profit, but the appropriation of alien labour mediated by both, therefore *au fond* only that part of circulating capital which enters into the small circulation. And this profit is in fact realised only by capital's entering into circulation, hence only by capital in its form as circulating capital, never in that of fixed capital. And what *The Economist* means here by fixed capital—so far as its revenues are concerned—is the form of fixed capital in which it does not enter directly into the production process as machinery, but exists in RAILWAYS, BUILDINGS, AGRICULTURAL IMPROVEMENTS, DRAININGS, etc.

//We are not concerned here with the illusory view that all parts of capital yield profit evenly.^a This illusion stems from the division of surplus value into average portions, without reference to the proportions in which capital is divided up into circulating and fixed, or to the part of capital which is converted into living labour. That was, to some extent, also Ricardo's illusion, and in determining value as such he therefore discusses the effect of the proportions of fixed and circulating capital right at the beginning. And the reverend PARSON Malthus speaks with STUPID ingenuousness of the profits accruing to fixed capital, as though capital grew organically by virtue of some natural power. //

In this case, the realisation of the value and surplus value contained in the fixed capital appears in the form of an ANNUITY, with the interest representing surplus value, and the ANNUITY itself the piecemeal RETURN of the value advanced. So what we have here, IN FACT, is not fixed capital entering into circulation as value by virtue of its constituting part of the product (though this *is* the case with AGRICULTURAL IMPROVEMENTS), but fixed capital being sold in the form of its use value. It is not sold here in one go, but as an ANNUITY.

It is now quite clear, *d'abord*, that some forms of fixed capital initially figure as circulating capital, and only become fixed capital when they are fixed in the production process. E.g., the circulating products of the owner of a machine-building factory are machines, just as the product of a cotton-weaver is calico, and they enter into circulation for him in precisely the same way. To him, they are circulating capital; to the manufacturer who uses them in the

^a See Th. R. Malthus, *Principles of Political Economy*, 2nd ed., London, 1836, p. 268.-Ed.

production process, they are fixed capital; because they are product to the former, and instrument of production only to the latter. Similarly, for the BUILDING-TRADE, even houses are circulating capital, in spite of their immovability; but they are fixed capital for one [VII-9] who buys them in order to rent them out, or to use them for production as workshops. How fixed capital itself circulates as use value, i.e. is sold, changes hands, will be discussed further on.

However, the point of view that capital is sold as capitalwhether as money or in the form of fixed capital-obviously does not belong here, where we are considering circulation as the movement of capital in which it posits itself in its different, conceptually determined moments. Productive capital becomes product, commodity, money, and is reconverted into the conditions of production. In each of these forms it remains capital and becomes capital only by being realised as such. As long as it remains in one of the phases, it is fixed as commodity capital, money capital, or industrial capital. But each of these phases constitutes only one moment of its movement, and in the form in which it rejects itself in order to pass from one phase into another it ceases to be capital. If it rejects itself as a commodity and becomes money, or vice versa, it does not exist as capital in the rejected form but in the newly adopted one. Of course, the rejected form can in turn become the form of another capital, or it can be directly the form of a consumable product. Yet this does not concern us, nor does it concern capital itself, in so far as we are discussing its circuit, revolving as it does within itself. Rather, it rejects each of the forms as its being-not-capital, in order to assume them later again. Yet if capital is loaned out as money, land, a house, etc., it becomes a commodity as capital; or the commodity which is put into circulation is *capital as capital*. This is to be discussed further in the next section.

What is paid when the commodity is converted into money—to the extent that its price concerns the part of the fixed capital turned into value—is the part necessary for the partial reproduction of the fixed capital, the part used up and worn out in the production process. So what the buyer pays for is the use or wear of fixed capital, in so far as it is itself value, objectified labour. Since this wear occurs gradually, he only pays for part of it in the product, while he replaces, in the price he pays for the product, the entire value of the fractional part of raw material contained in that product. The consumed, worn-out fractional part of fixed capital is not only paid for successively; it is paid for simultaneously by a large number of buyers, piecemeal, in the proportion in which they buy products.

Since in the first half of its circulation capital appears as C and the buyer as M, capital's aim being value, and that of the buyer being use (whether, in turn, productive [does not] concern us here, where we only have to consider the formal aspect, as it appears vis-à-vis capital in its circulation), the buyer's relation to the product is, in general, that of the consumer. Hence the buyer indirectly pays in all commodities successively and in a piecemeal fashion for the use and wear of the fixed capital, although it does not enter into circulation as a use value.

However, there are forms of fixed capital in which he pays for its use value directly—as in the case of means of communication, transport, etc. In all these cases, fixed capital IN FACT never emerges from the production process, e.g. railways, etc. Yet, while it serves some within the production process as means of communication necessary to bring the product to market, and [as] means of circulation for the producers themselves, it may serve others as a means of consumption, as a use value, e.g. the traveller taking a pleasure trip, etc.

Regarded as a means of production, it differs here from machinery, etc., in that it is consumed simultaneously by different capitals as a common condition for their production and circulation. (We are not as yet discussing consumption as such.) It does not appear as comprised within one particular production process, but as a blood-vessel linking together a large number of such production processes carried on by particular capitals, which only consume it piecemeal. Over against all these particular capitals and their particular production processes, fixed capital is therefore determined here as the product of a particular branch of production distinct from them, a branch in which it, in contrast to machinery, cannot be sold by one producer as circulating capital and obtained by another as fixed capital, but can only be sold in the form of fixed capital itself. Then its piecemeal RETURN, concealed in the commodity, becomes apparent.

Yet as itself a product which is sold (for the industrialist, the machine which he uses is not a product), it then simultaneously includes the surplus value, therefore the RETURN of interest and profit, s'il y a^a Since it can be consumed in the same common and successive form, can be use value for immediate consumption, its sale—not as an instrument of production but as a commodity in

^a If there is any.-Ed.

general—appears in the same form. But as far as it is sold as an instrument of production—a machine is sold simply as a commodity, and becomes an instrument of production only in the industrial process—i.e. as far as its sale coincides directly with its consumption in the general social production process, this is a determination which does not belong in the discussion of the simple circulation of capital. In simple circulation, fixed capital, as far as it is involved as an agent of production, appears as a presupposition of the production process, not as its result. Hence it can only be a matter of replacing its value, a value in which no surplus value is included for the person who employs it. On the contrary, he has paid surplus value to the producer of the machine. But a railway or buildings rented out for production at one and the same time constitute instruments of production and are realised as a product, as capital, by the person who sells them.

Since every moment that appears as a presupposition of production is at the same time its result—in that production reproduces its own prerequisites—the original division of capital within the production process now appears as the falling-asunder of the production process into 3 production processes, in which different portions of capital—now also appearing as distinct capitals—operate. (Here we can still speak of a single capital operating, since we are considering capital as such, and this method of consideration makes it simpler to discuss the proportions of these different types of capital.)

The capital is annually reproduced in different and varying portions as raw material, product and means of production; in short, as fixed capital and circulating capital. In each of these production processes there appears as a presupposition at least that part of the circulating capital which is to be exchanged for the labour capacity and for the maintenance and consumption of the machinery or the instrument, and of the means of production.

In purely extractive industry, e.g. mining, the mine itself exists as the material of labour, but not as raw material passing on into the product. In manufacturing industry, on the other hand, the raw material must, in all forms, possess a particular existence. In agriculture, the seed, fertiliser, livestock, etc., can be regarded as raw materials and, equally, as *matières instrumentales*. Agriculture constitutes a form of production *sui generis*, because the mechanical and chemical process is combined with the organic, and the natural reproduction process is merely controlled and directed. Similarly, the extractive industries (of which mining is the principal one) form an industry *sui generis*, because no reproduction process takes place in them, at least none subject to our control or known to us. (Fishing, hunting, etc., may involve a reproduction process; similarly forestry. So these are not necessarily purely extractive industries.)

Now, in so far as the means of production, fixed capital, as itself [VII-10] produced by capital and hence including objectified surplus time, can only be disposed of by its producer as circulating capital, e.g. the machine by the machine-builder, before it becomes fixed capital, i.e. in so far as it only enters into circulation as a use value, its circulation contains no new determination whatever. But in so far as it can only be realised, like e.g. railways, while simultaneously serving as an instrument of production, or only in the degree in which it is consumed as such, it shares with fixed capital in general the feature that its value only returns piecemeal; but in addition, there is the fact that in this RETURN of value is included the RETURN of its surplus value, the surplus labour objectified in it. It then has a special form of RETURN.

Now, the important point is that the production of capital thus appears as the production of circulating capital and fixed capital in definite portions, so that capital itself produces its dual type of circulation as fixed capital and circulating capital.

Before we SETTLE this last point, there are a few collateral matters.

"FLOATING CAPITAL IS CONSUMED, FIXED CAPITAL MERELY USED, IN THE GREAT WORK OF PRODUCTION" (*The Economist*, [No. 219, 6 November 1847, p. 1271,] VI, p. 1^{17}).

The difference between *consumption* and *use* is merely a matter of rapid or gradual destruction. We need not dwell on this point any further.

"FLOATING CAPITAL ASSUMES AN INFINITE VARIETY OF FORMS, FIXED CAPITAL HAS ONLY ONE" (The Economist, [loc. cit.,] VI, p. 1).

As far as the production process of capital itself is concerned, this "INFINITE VARIETY OF FORMS" is much more correctly reduced by A. Smith to a mere change of form.

Fixed capital is used by its master "as long as it remains in the same shape". I.e. it persists in the production process, as use value, in a particular material form. Circulating capital, on the contrary, (A. Smith, [Recherches sur la nature et les causes de la richesse des nations,] Vol. II, pp. 197, 198) "constantly goes from his hand in one shape" (as a product) "to return to him in another" (as a condition of production) "and only yields profit by means of such CIRCULATION and successive échanges".

Here, Smith is not speaking of the "INFINITE VARIETY OF FORMS" in which circulating capital appears. Considered materially, "fixed capital" also adopts an "INFINITE VARIETY OF FORMS"; he is speaking of the metamorphoses through which circulating capital passes precisely as use value, and this "INFINITE VARIETY OF FORMS" is therefore reducible to the qualitative distinctions between the different phases of circulation. Circulating capital, considered in a definite production process, always returns in the same form of raw materials and money for wages. Its material form at the end of the process is the same as it was at its beginning. Incidentally, elsewhere *The Economist* itself reduces the "INFINITE VARIETY OF FORMS" to the conceptually determined change of form peculiar to circulation:

"The commodity is entirely consumed IN THE SHAPE IN WHICH IT IS PRODUCED" (i.e. enters into circulation as use value and is precipitated from it) "and REPLACED IN HIS HANDS IN A NEW SHAPE" (as raw material and wages), "READY TO REPEAT A SIMILAR OPERATION" (much rather, the same) (l.c., VI, p. 1).

Smith also explicitly states that fixed capital "needs no circulation" ([op. cit.,] Vol. II, pp. 197, 198).

In the case of *fixed capital*, value is locked up in a particular use value; in that of circulating capital, value adopts the form of various use values, and also the form independent of any particular use value (as money), just as much as it discards them. Hence a continuous change of its material and form takes place.

"Circulating capital furnishes him" (the entrepreneur) "with the materials and the wages for the labourers and puts industry in action" (A. Smith, Vol. II, p. 226).

"Every fixed capital originally derives from, and requires to be continually supported by, a circulating capital" (l.c., p. 207).^a

"So great a part of the circulating capital being continually withdrawn from it in order to be placed in the other two branches of the general stock of society, this capital in turn needs to be renewed by continual supplies, without which it would soon be reduced to nought. These supplies are drawn from 3 principal sources: the produce of the land, of mines, and of fisheries" (l.c., p. 208).

//We have already analysed one of the distinctions emphasised by *The Economist*:

"EVERY PRODUCTION THE WHOLE COST OF WHICH IS RETURNED TO THE PRODUCER OUT OF THE CURRENT INCOME OF THE COUNTRY IS FLOATING CAPITAL; but every PRODUCTION for which ONLY AN ANNUAL SUM IS PAID FOR THE USE, IS—FIXED CAPITAL" (Notebook VI, p. 1). "In the first case the producer depends wholly upon the CURRENT INCOME of the country" (l.c. [The Economist, No. 219, 6 November 1847, p. 1271]).

^a Marx quotes this and the following passage from Smith in French.--Ed.

We have seen^a that only part of the fixed capital returns within the time determined by the circulating capital, the time which serves as the unit by reference to which the number of the latter's turnovers is measured, because it is the natural unit for the reproduction of most means of subsistence and raw materials, just as, and because, it appears as the natural period in the life process (cosmic process) of the Earth. This unit is the year, whose length, as calculated for the ordinary purposes of society, differs more or less, but insignificantly, from its natural length. The more closely the material being of fixed capital corresponds to its concept, i.e. the more adequate its material mode of existence is to that concept, the more likely its turnover time is to comprise a cycle of years.

Since circulating capital is wholly exchanged, first for money and secondly for the elements composing that capital, it presupposes the production of a counter-value equal to its entire value (which includes surplus value). One cannot say that it enters wholly into consumption or is able to do so, for it must, just as much, again serve in part as raw material or as an element for fixed capital, in short as itself an element for production-a counter-production. One part of the use value rejected by capital as a product, as the result of the production process, becomes an object of consumption and thus falls out of the circulation of capital in general; another part enters into another capital as a condition of production. This is posited in the very circulation of capital as such, since in the first half of circulation it pushes itself off from itself as a commodity, i.e. as a use value, that is to say—considered in relation to itself in this form—releases itself from its own circulation as a use value, an article of consumption. And in the second half of its circulation, it is exchanged as money for a commodity as a condition of production. Hence, as itself a circulating use value, it posits its material existence both as an article of consumption and as a new element of production or, rather, an element of reproduction. In both cases, however, its counter-value must be wholly available, i.e. it must be wholly produced, during the year. E.g. the quantity of manufactured products which can be exchanged over a year for agricultural products is determined by the volume of raw products produced in that year, reckoned from harvest to harvest. Since we are dealing here with capital as such, capital in the process of formation—the plurality of capitals does not yet exist for us—all

^a See this volume, pp. 104-05.-Ed.

we have outside capital is nothing but capital itself and simple circulation. From this circulation, capital absorbs into itself value in the two-fold form as money and commodity; and into this circulation, it throws value in the two-fold form as money and commodity.

When an industrial nation whose production is based on capital, e.g. England, exchanges with, say, the Chinese, and absorbs value in the form of money and commodity from their production process; or rather if it draws them into the sphere of circulation of its capital, it is immediately obvious that this does not oblige the Chinese themselves to produce as capitalists. Within a society itself, e.g. English society, the mode of production of capital develops in one branch of industry, while in others, e.g. agriculture, [VII-11] pre-capitalist modes of production are still more or less dominant.

Nevertheless, it is (1) the necessary tendency of capital at every point to subject the mode of production to itself, to its domination. Within a particular national society, this necessarily results from the transformation by capital of all labour into wage labour. (2) With respect to foreign markets, capital enforces this propagation of its mode of production by means of international competition. Competition is in general the means by which capital establishes its mode of production.

This much is clear: Quite regardless of what stands on either side of the successive exchanges, each time in the opposite determination, whether a capital again or capital itself as another capital, both determinations are already posited by the circulation of capital itself, even before we consider this two-fold movement. In the first phase, capital expels itself as use value, as commodity from the movement of capital, and is exchanged for money. The commodity expelled from the circulation of capital is no longer the commodity as a moment of self-perpetuating value, as the presence of value. It is its presence as use value, its being for consumption. Capital is converted from the form of commodity into that of money only in that in the usual circulation an exchanger confronts it as a consumer and converts M into C; in that he [carries out] this conversion in its material aspect, so that he relates himself to the use value as use value, his attitude to it being that of a consumer; only in this way is the use value replaced for capital as value. Capital, therefore, produces articles of consumption, but expels them in this form from itself, from its circulation. There is no other relation as far as the determinations hitherto developed are concerned.

The commodity, which as such is expelled from the circulation of capital, loses its determination of value and takes on that of use value in consumption as distinct from production. However, in the second phase of circulation, capital exchanges money for a commodity, and its transformation into a commodity now itself appears as a moment of the positing of value, since the commodity as such is taken into the circulation process of capital. If in the first phase capital presupposes consumption, in the second phase it presupposes production, production for production. For in this phase, value in the form of the commodity is taken into the circulation of capital from outside, or a process opposite to that effected in the first phase takes place. The commodity as use value for capital itself can only be the commodity as element, use value for capital's production process.

The process is a doubled one: In the first phase, capital a exchanges its product as C for the M of capital b; in the second, capital b exchanges itself as C for the M of capital a. Or in the first phase, capital b exchanges itself as M for the C of capital a; and in the second, capital a as M for the C of capital b. I.e. capital is simultaneously posited as M and C in each of the two circulation phases; but in two different capitals, which are always in the opposite phases of their circulation process. In the simple circulation process, the acts of exchange C-M or M-C appear as directly coinciding or as directly falling apart. Circulation is not merely the succession of the two forms of exchange, but is simultaneously each of them distributed to two different sides.

But we are not yet dealing here with exchange between many capitals. This belongs in the theory of competition or also in that of the circulation of capitals (credit). What does concern us here is, on the one side, the presupposition of consumption, of the commodity being ejected as use value from the movement of value, and [on the other] the presupposition of production for production, of value being posited in the form of use value as a condition for the reproduction of capital, a condition external to its circulation. What concerns us is that both these aspects result from the consideration of the simple form of circulation of capital.

This much is clear: The whole of the circulating capital is exchanged as C for M in the first phase, and as M for C in the second. Hence, taking the year as the unit of time by reference to which its evolutions are considered, the transformations of circulating capital are limited by the fact that the raw materials, etc., are reproduced annually (the commodity for which it is exchanged as money must be produced, simultaneous production must correspond to it); and also by the fact that an annual revenue (the part of M which is exchanged for the commodity as use value) must be constantly produced, if the product precipitated by capital as use value is to be consumed. As such revenue there only exists that of the capitalists themselves and that of the workers, since we have not yet introduced any more developed relations. Incidentally, analysis of the exchange between capital and revenue, another form of the relation between production and consumption, is not as yet relevant.

On the other hand, since fixed capital is exchanged only to the extent that it enters as value into circulating capital, and since it is therefore only partly realised in the course of the year, it presupposes the existence of only part of the counter-value, and hence the production of only part of this counter-value in the course of the year. It is paid for only in proportion to its consumption. So far it is clear—and this already follows above from the difference in the industrial cycle introduced by fixed capital—that fixed capital engages the production of a large revenue, it anticipates future labour as its counter-value. Hence the anticipation of future fruits of labour is by no means a consequence of the national debt, etc., in short, it is not an invention of the credit system. It has its roots in the specific mode of valorisation, turnover and reproduction of fixed capital.//

Since the point for us here is to state the pure determinations of form, without introducing anything irrelevant, the above discussion clearly indicates that analysis of the different forms in which circulating capital and fixed capital yield revenue-or of revenue in general-does not, as yet, belong here at all. Here we should only deal with the different modes in which they return and affect the total turnover of capital, its reproduction movement in general. But the occasional observations above are important because, apart from dismissing the economists' higgledy-piggledy arguments irrelevant to the discussion of the simple distinction between fixed and circulating capital, they have shown us that the differences in the way they yield revenue, etc., stem from the formal distinction in the reproduction of fixed and circulating capital. We are still dealing merely with the simple RETURN of value. How this becomes the RETURN of revenue, and how that in turn gives rise to a difference in the determination of revenue, will only be seen later.

We have not yet spoken about the maintenance costs, the frais d'entretien, of fixed capital. They are partly composed of the matières instrumentales which it consumes in order to operate. They come under the heading of fixed capital in the first sense in which we considered it within the production process.^a These are circulating capital, and may just as well serve for consumption. They become fixed capital only to the extent that they are consumed in the production process. But unlike fixed capital proper, they do not possess a materiality which is determined purely by the form in which they exist. The other part of these frais d'entretien consists of the labour necessary for repairs.

[VII-12] Adam Smith's proposition that every fixed capital originally derives from, and requires to be continually supported by, a circulating capital.

"All fixed capital is originally derived from circulating capital and must constantly be maintained at the expense of the latter. No fixed capital can yield revenue except at the expense of a circulating capital" (Storch, [Cours d'économie politique, Vol. I, p. 246] 26a⁵).^b

As regards Storch's remark about revenue—a determination which does not belong here—it is clear that fixed capital only returns as value to the extent that it perishes in portions as use value, as fixed capital, and enters as value into circulating capital. So far as its *value* is concerned, it can, therefore, only return in the form of a circulating capital. And as a use value it does not circulate at all.

Further, since it itself only possesses use value for production, it can, likewise, return as value for individual use, for consumption, only in the form of circulating capital. Soil improvements can enter chemically direct into the reproduction process, and so be converted direct into use values. But in that case they are consumed in the form in which they exist as fixed capital. In general, a capital can only yield revenue in the form in which it enters into and returns from circulation, since the production of revenue in direct use values, use values not mediated by circulation, contradicts the nature of capital. Therefore, since fixed capital only returns as value in the form of circulating capital, it is only in this form that it can yield revenue. In general, revenue is merely the part of surplus value intended for immediate consumption. Its RETURNS therefore depend

^a See this volume, pp. 70-71.-Ed.

^b See this volume, pp. 36, 113. Marx quotes from Storch in French.-Ed.

upon the mode in which value itself RETURNS. HENCE the different forms in which fixed capital and circulating capital yield revenue. Similarly, since fixed capital as such never enters into circulation as use value, and so is never precipitated from the valorisation process as use value, it never serves for immediate consumption.

As regards Smith, his view is made clearer to us by his saying that circulating capital must be annually replaced and constantly renewed by being constantly drawn from the sea, the land and the mines.^a Here circulating capital becomes something purely material to him; it is brought up in nets, mined, harvested. It is constituted by movable primary products, which are made movable by being detached, isolated, from their connection with the earth; or which are separated from their element in their ready-made isolation, like fish, etc.

Moreover, considered in purely material terms, if Smith presupposes the production of capital and does not go back to the beginnings of the world, it is equally certain that every circulating capital just as much *provient originairement d'un capital fixe.*^b Without nets, man cannot catch fish; without a plough, he cannot till the soil; and without a hammer, etc., he cannot open up a mine. Even if he merely uses a stone as his hammer, etc., CERTAINLY this stone is not circulating capital, not capital at all, but means of labour. As soon as it becomes necessary for man to carry on production, he resolves to utilise a part of the existing natural objects directly as means of labour, and subsumes them under his activity, as Hegel has correctly put it, without any further process of mediation.²⁶

All capital, circulating as well as fixed, derives, not merely *originairement* but *continuellement*, from the appropriation of alien labour. However, as we have seen,^c this process presupposes constant small circulation, the exchange of wages for the labour capacity, or the provision of means of subsistence. The production process of capital implies that *all capital returns only in the form of circulating capital*; consequently the renewal of fixed capital depends upon part of circulating capital becoming fixed, i.e. upon part of the produced raw materials being employed, and part of the labour being consumed (and therefore part of the means of subsistence being exchanged for living labour), in order to produce fixed capital. E.g. in agriculture, part of the product is consumed by the labour

^a See this volume, p. 113.-Ed.

^b Derives originally from a fixed capital.-Ed.

^c See this volume, pp. 63-68.-Ed.

employed in building irrigation works; or part of the corn is exchanged for guano, chemical substances, etc., which are incorporated into the soil but which, IN FACT, are without use value except to the extent that they are exposed to its chemical process.

A part of the circulating capital possesses use value only for the reproduction of fixed capital, and is only produced to serve the purposes of fixed capital (even if this production merely stands for the labour time needed to transfer it from one place to another). Fixed capital itself, however, can only be renewed as capital by becoming a value component of circulating capital, and by its elements thus being reproduced by the transformation of circulating capital into fixed. The production of circulating capital presupposes fixed capital to just the same extent as the production of fixed capital presupposes circulating capital. Or, the reproduction of fixed capital requires (1) that its value should RETURN in the form of circulating capital, for only thus can it be re-exchanged for its conditions of production; (2) that part of the living labour and raw material should be employed to produce instruments of production, direct or indirect, rather than exchangeable products. Circulating capital enters by relation to its use value into fixed capital in precisely the same way as labour does, while fixed capital enters by relation to its value into circulating capital, and into use value as MOVEMENT (where it is direct machinery), as movement in repose, as form.

//In connection with our above propositions concerning free labour, in particular, that pauperism is latent in it,^a the following passages should be cited from Sir Fr. Morton Eden, Bt: The State of the Poor: or, an History of the Labouring Classes in England from the Conquest etc., 3 vols, 4°. London, 1797.²⁷ In Volume I, Book I, Ch. I, we have the following:

"Our zone requires labour for the satisfaction of wants, and *therefore* at least *a* portion of society must work *indefatigably*, others are occupied in the arts, etc., and a few command the produce of industry even though they do not work. But these proprietors owe this solely to *civilisation and order*. They are peculiarly the creatures of *civil institutions*, for these have recognised that one [may] acquire the fruits of labour by other means than labour; the MEN OF INDEPENDENT FORTUNE owe their property almost entirely to the labour of others, not to their own abilities, which are not superior at all. It is not the possession of land, or money, but the COMMAND OF LABOUR that distinguishes the rich from the poorer part of the community" [op. cit., pp. 1-2].

^a See present edition, Vol. 28, pp. 522-29.- Ed.

Chapter on Capital

With the emancipation of the peasants, *Poverty* as such arises—in feudal times, the peasant's being fettered to the soil, or at least to a given locality, spared the legislature from the need to concern itself with vAGRANTS, the poor, etc. Eden believes that the various commercial guilds, etc., supported their own poor [ibid., pp. 57, 60]. He says:

"WITHOUT THE MOST DISTANT IDEA, THEN, OF DISPARAGING THE NUMBERLESS BENEFITS DERIVED FOR THE COUNTRY FROM MANUFACTURES AND COMMERCE, THE RESULT OF THIS INVESTIGATION SEEMS TO LEAD TO THIS INEVITABLE CONCLUSION THAT MANUFACTURES AND COMMERCE" //i.e. the sphere of production in which capital first establishes its dominance// "ARE THE TRUE PARENTS OF OUR NATIONAL POOR" [ibid., p. 61].

He also states that from the time of Henry VII onwards (the CLEARING of superfluous MOUTHS from the land by the conversion of arable land into pasture begins at that time and continues for over 150 years, [or so] at least [do] the complaints and legislative interference; a period, therefore, when the number of hands placed at the disposal of industry kept growing) wages in industry were no longer laid down [by the law], but only those in agriculture. 11 Henry VII [ibid., pp. 73-75].

//Wage labour is not yet fully posited with the emergence of free labour. The labourers still have a basis in the feudal relations; there are still too few of them, and capital is therefore as yet unable as capital to reduce them to the minimum. Hence the statutory wage regulations. As long as the wages of labour are still regulated by statute, it cannot be said either that capital as capital has subsumed production under itself, or that wage labour has attained the mode of existence adequate to it.//

The Act referred to mentions linen-weavers, building-craftsmen and shipwrights. It also [VII-13] lays down the hours of work:

"As many day-labourers waste half the day in late coming, early departing, sleeping long at afternoon, long sitting at their breakfast, dinner, and supper, etc., etc.," the hours of work shall be as follows: "between March 15 and September 15, from 5 of the clock in the morning, half an hour for BREAKFAST, and hour and a half for DINNER and sleeping, and half an hour FOR NOON MEAT, and work till between 7 and 8 at night. In winter, work throughout the light hours, but no midday sleep, which shall be granted only from May 15 until August 15" [ibid., pp. 75-76].

//In 1514, the wages of labour were again regulated, almost in the same way as in the previous case. The hours of work, too, were once again stipulated. Those unwilling to work UPON APPLICATION, were put into prison [ibid., pp. 81-82].

So, the free workers were still subject to forced labour at a stipulated wage. Initially, they have to be forced to work on the terms set by capital. The propertyless man is more inclined to

121

become a vagabond, a robber and a beggar than a worker. It is only under the developed mode of production of capital that becoming a worker is the self-evident thing for him to do. In the preliminary stage of capital, there is coercion by the State to convert the propertyless into *workers* on terms favourable to capital, terms that at this stage have not yet been forced upon the workers by their competition among themselves.//

(Savage means of coercion applied to this end under Henry VIII *i.a.*) (The dissolution of the *monasteries* by Henry VIII²⁸ likewise set many hands free.) (Under Edward VI, the severity of the laws against ABLE-BODIED LABOURERS unwilling to work was further intensified [ibid., pp. 83-100]. 1 Edw, VI, [Ch.] 3:

"Whoever is able to work, but refuses to labour and lives idle for 3 days, shall be branded with red-hot iron on the breast with the letter v—and shall be adjudged the slave for 2 years of the person who should inform against such idler, etc." "If he runs away from his master for 14 days, he shall become his slave for life and be branded on forehead or cheek with the letter i, and if he runs away a second time and shall be convicted thereof by 2 sufficient witnesses, he shall be taken as a felon and suffer pains of death" [ibid., p. 101].

(The first mention of vagrants or sturdy rogues was in 1376; that of paupers in 1388.)

(A similarly cruel law was passed in 1572 under Elizabeth.) [Ibid., pp. 42-43, 61-62, 127.]

Circulating capital and fixed capital appeared in the previous determination as alternating forms of the same capital in the different phases of its turnover. Now that fixed capital has been developed to its highest form, they are simultaneously posited as 2 different modes of existence of capital. They become such because they return in different ways. Circulating capital which returns slowly has this feature in common with fixed capital. But what distinguishes it from fixed capital is that its use value itself—its material existence—enters into circulation and is simultaneously eliminated from it, cast beyond the limits of the turnover process. Fixed capital, on the other hand, as developed so far, only enters into circulation as value; and as long as it remains in circulation as a use value, too, as e.g. a machine in the stage of circulation, it is fixed capital only δυνάμει.^a

However, this distinction between fixed capital and circulating

^a Potentially.-- Ed.

Chapter on Capital

capital, based immediately upon the relation of the material existence of capital, or its existence as use value, to circulation, must, in reproduction, simultaneously be posited as the reproduction of capital in the dual form of fixed capital and circulating capital. To the extent that the reproduction of capital in each of its forms posits not merely objectified labour time but surplus labour time as well, i.e. not merely reproduces its value but posits a surplus value too, there is no difference between the production of fixed capital and that of circulating capital in this respect. Hence, in the case of a manufacturer of instruments or machines-in all the forms in which fixed capital at first appears as circulating capital, with respect to its material existence, in its existence as use value, before it is fixed as fixed capital, i.e. before it is consumed (for it is precisely its consumption that attaches it to the production phase and distinguishes it as fixed capital)-there is no difference at all in the form of valorisation of capital. whether it is reproduced as fixed capital or as circulating capital. In economic terms, therefore, no new determination is thereby introduced.

However, when fixed capital as such, and not merely in the determination of circulating capital, is thrown into circulation by its producer, and hence the piecemeal use of it is sold, whether for production or consumption—in the conversion of C into M which takes place in the first section of the circulation of capital, it is immaterial to this capital itself whether the commodity re-enters into the circulation sphere of another productive capital, or whether it serves the purpose of direct consumption, the commodity being always determined as a use value in relation to this capital, whenever the capital rejects it from itself, exchanges it for M—the mode of RETURN for the producer of fixed capital must differ from that for the producer of circulating capital. The surplus value produced by the former can return to him only piecemeal and successively, with the value itself. This is to be examined in the following section.

Finally, although circulating capital and fixed capital now appear as 2 different types of capital, circulating capital is posited by the consumption, the using-up, of fixed capital. Fixed capital for its part is merely circulating capital converted into this particular form. All capital converted into objectified productive power—all fixed capital—is fixed in this form, and is, therefore, use value torn as use value both from consumption and from circulation. When a machine or a railway is built, the fact that wood, iron, coal and living labour (hence, indirectly, also the

123
products consumed by the workers) are transformed into this particular use value, would not render them fixed capital unless there were also the other determinations analysed above. When circulating capital is converted into fixed capital, a part of the use values in the form of which capital circulated, as well as, indirectly, the part of capital exchanged for living labour, are converted into capital whose counter-value is only produced over a longer cycle. This capital enters into circulation as value only piecemeal and successively, and can only be realised by being used up in production.

The conversion of circulating capital into fixed capital presupposes relative surplus capital, since it is capital employed not for direct production but for the production of new means of production. Fixed capital itself can in turn serve as a direct instrument of production—as a means within the immediate production process. In this case, its value enters into the product and is replaced by the successive RETURN of products. Or fixed capital does not enter into the immediate production process, but appears as a general condition for the various production processes, e.g. as buildings, railways, etc., and its value can only be replaced by circulating capital, to whose production it has indirectly contributed.

A more detailed discussion of the proportions of production of fixed capital and circulating capital really belongs in a later section. If valuable machinery were employed to make a small amount of products, it would not be operating as a productive force, but would render the product infinitely more costly than if it had been produced without the aid of the machinery. Machinery produces surplus value, not because it itself possesses value-for this is simply replaced—but only because it increases relative surplus time, or diminishes necessary labour time. Hence, in the proportion in which the volume of machinery employed increases, the amount of products must increase and the living labour employed must relatively decline. The smaller the value of the fixed capital in relation to its effectiveness, the more does it correspond to its purpose. All non-necessary fixed capital appears as faux frais de production,^a just as do all unnecessary circulation costs. If capital could possess machinery without expending labour on it, capital would raise the productive power of labour and diminish necessary labour, without having to buy labour. Hence, the value

^a Overhead costs of production.-Ed.

of fixed capital is never an end in itself in the production of capital.

[VII-14] Therefore, circulating capital is converted into fixed capital, and fixed capital is reproduced in circulating capital, both processes only taking place in so far as capital appropriates living labour.

"Every saving in fixed capital means an increase in the net revenue of society" (A. Smith [Recherches etc., Vol. II, p. 226]).

The final and last distinction put forward by economists is that between mobile and immobile; not in the sense that the former enters into the movement of circulation and the latter does not: but in the sense that one form is physically fixed, immobile, in the same way as a distinction is made between movable and immovable property. E.g. IMPROVEMENTS SUNK IN THE SOIL, water conduits, buildings, and to a large extent even machinery itself, since it must be physically fixed in order to operate; railways; in short, every form in which the product of industry is anchored to the surface of the earth. Au fond, this adds nothing to the determination of fixed capital; but its determination does imply that the more its use value, its material existence, corresponds to its determination of form, the more eminently it is fixed capital. Immovable use value, e.g. houses, railways, etc., is, therefore, the most tangible form of fixed capital. True, it is able to circulate just the same, in the sense in which immovable property circulates in general, as title; but not as use value; not in the physical sense. Initially, the growth of movable property, its increase as against immovable property, is evidence of the ASCENDANT MOVEMENT OF CAPITAL as against landed property. But once the mode of production of capital has been assumed, the degree in which capital has subjected the conditions of production to itself is shown by the extent to which capital is converted into immovable property. In this way it strikes roots in the soil itself, and what seemed to be the solid presuppositionsgiven by Nature itself-of landed property now themselves appear as merely posited by industry.

(Originally, membership of the community and, through that, a relation to the soil as property, are the basic presuppositions for the reproduction of both the individual and the community. Among the pastoral peoples, the land appears merely as a prerequisite for their nomadic life, hence there is no question of appropriating it. When permanent dwelling-places emerge with land cultivation the land is initially common property, and even

ł

where things advance to private property, the individual's relation to it appears as posited by his relation to the community. He appears merely to hold it in fief from the community; etc., etc. Its transformation into mere exchangeable value---its mobilisation----is brought about by capital and the complete subordination of the state organism to it. Hence, even where the land has become private property, it is exchange value only in a restricted sense. Exchange value originates in the isolated natural product separated from the earth and individualised by means of industry (or simple appropriation). This is the stage, too, at which individual labour makes its first appearance. In general, exchange does not initially arise within the original communities, but on their borders; where the communities come to an end. To exchange the land which constitutes their territory, to sell it to alien communities, would of course be treason. Only by and by can exchange be extended from its original sphere, that of movable property, to that of immovable property. It is only by expanding the former that capital gradually takes hold of the latter. Money is the principal agent in this process.)

A. Smith initially distinguishes circulating capital and fixed capital according to their determination in the *production process.*^a Only at a later point does he introduce the following proposition:

"A capital may be employed in different ways to yield profit: (1) as circulating capital, (2) as fixed capital" [ibid., p. 197].

Obviously, that second proposition is, as such, not relevant to the analysis of this distinction, since fixed capital and circulating capital must first be assumed as 2 types of capital before we can go on to argue how capital in both forms may be employed to yield profit.

"The total capital of the undertaker of every work is necessarily divided between his fixed and his circulating capital. Given the same sum, the greater the one part, the smaller will be the other" (A. Smith, [ibid.,] Vol. II, p. 226).

Since capitals (1) are divided up in unequal portions between fixed capital and circulating capital; (2) [have] a phase of production which either is or is not subject to interruption and since they return from markets which are more distant or less distant, and so [have] unequal circulation times, it follows that the surplus value which they produce in a given period of time, e.g.

a See this volume, pp. 112-13.-Ed.

annually, must be unequal, as the number of reproduction processes which they perform in that period is unequal. The value they create appears to be determined not merely by the labour they employ within the immediate production process, but also by the DEGREE in which this EXPLOITATION OF LABOUR can be repeated in a given period of time.

Finally, therefore: While in the analysis of the simple production process, capital as valorising itself appears solely in relation to wage labour, and circulation lies outside it, in the reproduction process of capital, circulation is absorbed into capital, and indeed both moments of the circulation C-M-M-C are (as a system of exchanges which it has to pass through, and in which it experiences a qualitative transformation each time it is exchanged). The circulation appears to be absorbed in capital in the form M-C-C-M, in so far as the process sets out from capital that is in the form of money and hence returns to that form. Capital now comprises both circuits, and no longer as mere change of form, or mere change of materials which is external to its form, but both as included into the very determination of value.

The production process as containing within itself the conditions for its renewal is the reproduction process, the latter's velocity being determined by the various relations analysed above, all of which stem from the distinctions characteristic of the circuit itself. Within the framework of the reproduction of capital, there simultaneously takes place the reproduction of the use values in which it is realised—or generally the continuous renewal and reproduction by human labour of use values, which are both consumed by man and perishable by nature. From the viewpoint of capital, the change of materials and alteration of form, subordinated to human needs by human labour, appear as the reproduction of capital itself. *Au fond* it is the constant reproduction of labour itself.

"Values comprising capital perpetuate themselves by means of reproduction: the products which compose a capital are consumed, just like any others; but their value, while being destroyed by consumption, reproduces itself in other materials or in the same" a (Say [*Traité d'économie politique*, Vol. II, p. 185], 14¹⁶).

Exchange and a system of exchanges, and what is thereby implied, the conversion into money as an independent value, appear both as a condition for, and a barrier to, the reproduction of capital. Under the conditions of capital, production itself is in

^a Marx quotes in French.--Ed.

every respect subjected to exchange. These exchange operations, circulation as such, produce no surplus value, but they are conditions for its realisation. They are conditions for the production of capital itself, in so far as its form as capital is only posited to the extent that it passes through them. The reproduction of capital is at the same time the production of definite formal conditions; of definite [VII-15] modes of the relation in which personified objectified labour is posited. Circulation is therefore not merely the exchange of the product for the conditions of productionhence, e.g. of harvested wheat for seed, new labour, etc. In every form of production, the labourer must exchange his product for the conditions of production if he is to be able to repeat production. The peasant producing for immediate use also converts part of the product into seed, instrument of labour, draught animals, fertiliser, etc., and recommences his labour. The conversion into money is necessary for the reproduction of capital as such, and the reproduction of capital is necessarily production of surplus value.

//With respect to the reproduction phase (circulation time in particular) it should also be noted that limits are set to it by the use value itself. Wheat must be reproduced within a year. Perishable things, like milk, etc., must be reproduced more frequently. Meat, since the animal lives, i.e. withstands the passage of time, need not be reproduced so frequently; but the dead meat available in the market must be reproduced in the form of money in a very short period of time, or else it goes bad. The reproduction of value partly coincides with that of use value, and partly does not.//

Although what we previously called the constant part of capital is merely maintained by labour in one production process as value, it must be constantly reproduced by labour in another, because what appears in one production process as the presupposed material and instrument is a product in the other, and this renewal, reproduction, must take place constantly and simultaneously.

We come now to the third section.

Section Three

CAPITAL AS BEARING FRUIT. INTEREST. PROFIT. (PRODUCTION COSTS, ETC.)

Capital is now posited as the unity of production and circulation; and the surplus value which it produces in a certain period of time, e. g. a year, is $=\frac{SZ}{p+c}=\frac{SZ}{U}$, or $=S\left(\frac{Z}{p}-\frac{Z}{p}\times\frac{c}{p+c}\right)$.^a

Capital is now realised not merely as value which reproduces and therefore perpetuates itself, but also as value which posits value. By absorbing living labour time, on the one hand, and by its own movement of circulation (in which the movement of exchange is posited as capital's own movement, as the immanent process of objectified labour), capital relates itself to itself as positing new value, producing value. Its relation to surplus value is that of the basis to what is based upon it. Its movement consists in that, while producing itself, it at the same time behaves as basis towards itself as that which is based upon it; as presupposed value to itself as surplus value, or to surplus value as posited by it.

In a definite period of time which is posited as the unit by reference to which the number of its turnovers is measured, because it is the natural measure of its reproduction in agriculture, capital produces a definite surplus value, which is determined not only by the surplus value posited by capital in one production process, but also by the number of times the process is repeated, or capital is reproduced, within that period. Because of the incorporation of circulation, capital's movement outside the immediate production process, into its reproduction process, surplus value no longer *appears* as posited by the simple,

129

^a Here S means surplus value, Z—period of time, p—production phase, c—phase of circulation, U—turnover.—Ed.

immediate relation of capital to living labour. This relation appears, rather, as merely one moment of its overall movement.

Capital setting out from itself as the active subject, the subject of the process—and in the turnover the immediate production process does in fact appear to be determined by the movement of capital as capital independently of its relation to labour—relates to itself as to self-multiplying value, i.e. it behaves towards surplus value as posited by and based upon capital; it relates itself as the source of production to itself as the product; as the producing value to itself as the value produced. It therefore no longer measures the newly produced value in terms of its real measure, the ratio of surplus labour to necessary labour, but in terms of capital itself as its presupposition. In a definite period of time, a capital of a definite value produces a definite surplus value.

Surplus value thus measured in terms of the value of the preposited capital, capital thus being posited as self-valorising value, is *profit*. Viewed *sub specie capitalis*, not *sub specie aeternitatis*,^a surplus value is profit; and capital distinguishes itself within itself as capital, the producing and reproducing value, from itself as profit, the newly produced value. The product of capital is *profit*. The magnitude surplus value is therefore measured by reference to the value magnitude of the capital, and the *rate of profit* is consequently determined by the ratio between the value of the profit and that of the capital.

A very large part of what belongs here has been discussed above.^b But what has been anticipated must be placed here.

In so far as the newly posited value, which is of the same nature as capital, is itself re-absorbed into the production process, in turn maintains itself as capital, capital itself has increased and now operates as a capital of greater value. After capital set profit as the newly produced value apart from itself as the preposited self-valorising value and posited profit as the measure of its valorisation, capital again cancels that separation and posits profit in its identity with itself as capital, which, having increased by the amount of the profit, now recommences the same process on a larger scale. By describing its circle it augments itself as the subject of that circle, and thus describes ever larger circles, moving in a spiral.

The general laws we have so far developed can be briefly

^a "Sub specie aeternitatis"—"under the aspect of eternity" (Spinoza, *Ethics*, Part II, Proposition 44, Corollary 2; Part V, Propositions 22-36).— Ed.

^b See present edition, Vol. 28, pp. 291-328.- Ed.

summarised thus: Actual surplus value is determined by the ratio of surplus labour to necessary labour; or by the ratio between the portion of capital, of objectified labour, which is exchanged for living labour, and the portion of objectified labour by which it is replaced. On the other hand, surplus value in the form of profit is measured in terms of the total value of the capital preposited to the production process. Hence—assuming the same surplus value, the same ratio of surplus labour to necessary labour-the rate of profit depends on the ratio between the part of capital exchanged for living labour and the part of it existing in the form of raw material and means of production. So, as the portion exchanged for living labour declines, there is a corresponding decline in the rate of profit. In the same degree, therefore, in which capital as capital takes up more space in the production process relative to immediate labour, i.e. the greater the increase in relative surplus value—in the value-creating power of capital—the more the rate of profit declines.

We have seen that the size of the preposited capital, the capital preposited to reproduction, is specifically expressed in the growth of fixed capital as the produced productive power, objectified labour endowed with an illusory life of its own. The total size of the value of the producing capital will be expressed in every portion of it as a smaller proportion of capital exchanged for living labour, as compared to the part of capital existing as constant value. Take manufacturing industry as an example. In the same proportion as fixed capital (machinery, etc.) increases, there must be an increase in the part of capital existing in the form of raw materials and a decline in the part of it exchanged for living labour.

Hence the rate of profit falls in proportion to the value magnitude of the capital preposited to production—and of the part of capital working in production as capital. The broader the existence already attained by capital, the smaller is the ratio of the value newly [VII-16] produced to that preposited (the value which is reproduced). Therefore, *if we assume equal surplus value, i.e. an equal ratio of surplus labour to necessary labour,* the profit may still be unequal; and, indeed, must be unequal, in relation to the size of the capitals. The rate of profit may fall, although the actual surplus value rises. The rate of profit may rise, although the actual surplus value falls.

In fact, capital may grow, and profit may grow in the same proportion, if the part of capital preposited as value and existing in the form of raw materials and fixed capital increases in

the same proportion as the part of capital exchanged for living labour. Yet this proportionality presupposes growth of capital without growth and development of the productive power of labour, an assumption that cannot possibly be made. It contradicts the law of development of capital and especially that of the development of fixed capital. Such progress can only take place at stages of development at which the mode of production of capital is not yet adequate to it, or in spheres of production in which capital has arrogated dominance to itself as yet merely in form, e.g. in agriculture. In that sphere, the natural fertility of the soil may have the same effect as an increase of fixed capital-i.e. the relative surplus labour time may increase-without reducing the quantity of necessary labour time. (E.g. in the UNITED STATES.) The GROSS PROFIT, i.e. the surplus value considered outside its formal relation, not as a proportion, but as a simple quantity of value without reference to another quantity, will on average grow not in step with the rate of profit, but in step with the size of the capital.

While the rate of profit will therefore be inversely related to the value of capital, the sum of profit will be directly proportional to it. However, this proposition, too, only holds for a limited level of development of the productive power of capital or labour. A capital of 100 operating at a profit of 10% yields a smaller sum of profit than a capital of 1,000 operating at a [rate of] profit of 2%. In the first case the sum is 10, in the second it is 20, i.e. the gross **PROFIT** on the large capital is twice that on the capital which is $\frac{1}{10}$ its size, although the rate of profit on the smaller capital is 5 times that on the larger capital. But if the profit on the larger capital were only 1%, the sum of profit would be 10, the same as that for the capital which is $\frac{1}{10}$ its size, because the rate of profit would have declined in the same proportion as the size of the capital [had increased]. If the rate of profit on the capital of 1,000 were only $\frac{1}{2}\%$, the sum of profit would be only half as great as that of the capital $\frac{1}{10}$ its size, only 5, because the rate of profit would be $^{1}/_{20}$ th.

Therefore, expressed in general terms:

If the rate of profit of the larger capital declines, but not in proportion to its size, the GROSS PROFIT increases even though the rate of profit declines. If the rate of profit declines in proportion to its size, the GROSS PROFIT remains the same as that on the smaller capital; it remains stationary. If the decline in the rate of profit is proportionately greater than the increase in the size of the capital, the GROSS PROFIT on the larger capital, as compared with the smaller, declines just as much as the rate of profit does. In every respect, this is the most important law of modern political economy, and the most essential one for comprehending the most complex relationships. It is the most important law from the historical viewpoint. Hitherto, despite its simplicity, it has never been grasped and still less has it been consciously formulated.

This decline in the rate of profit is synonymous with: (1) the productive power already produced and the material basis which it constitutes for new production; this presupposes, at the same time, an enormous development of SCIENTIFIC POWERS; (2) the decline of the part of the capital already produced which must be exchanged for immediate labour, i.e. the decline of the quantity of immediate labour necessary for the reproduction of an immense value, which is embodied in a large mass of products, a large mass of low-priced products, because the total sum of prices=the capital reproduced+profit; (3) [great] dimensions of capital in general, and also of the portion of it which is not fixed capital; hence the development of intercourse on a vast scale, a great number of exchange operations, a large market, and the all-round nature of simultaneous labour; means of communication, etc., the existence of the consumption fund necessary to effect this gigantic process (the workers eat, need housing, etc.). This being so, it becomes evident that the material productive power already available, already elaborated, existing in the form of fixed capital, as well as the SCIENTIFIC POWER, population, etc., in short, all the prerequisites of wealth, all the conditions for the maximum reproduction of wealth, i.e. for the rich development of the social individual-that the development of the productive forces, brought about by capital itself in its historical development, at a certain point abolishes the self-valorisation of capital, rather than posits it.

Beyond a certain point, the development of the productive forces becomes a barrier to capital, and consequently the relation of capital becomes a barrier to the development of the productive forces of labour. Once this point has been reached, capital, i.e. wage labour, enters into the same relation to the development of social wealth and the productive forces as the guild system, serfdom and slavery did, and is, as a fetter, necessarily cast off. The last form of servility assumed by human activity, that of wage labour on the one hand and of capital on the other, is thereby shed, and this shedding is itself the result of the mode of production corresponding to capital. It is precisely the production process of capital that gives rise to the material and spiritual conditions for the negation of wage labour and capital, which are themselves the negation of earlier forms of unfree social production.

The growing discordance between the productive development of society and the relations of production hitherto characteristic of it, is expressed in acute contradictions, crises, convulsions. The violent destruction of capital as the condition for its selfpreservation, and not because of external circumstances, is the most striking form in which it is advised to be gone and to give room to a higher state of social production. It is not merely the growth of scientific POWER but the measure in which it has already been posited as fixed capital; the extent, the breadth, in which it has been realised and has taken possession of the totality of production. It is, also, the development of population, etc., in short, of all the moments of production; for the productive power of labour, just as the employment of machinery, depends on the population number; the growth of population is in and for itself both the presupposition for, and the result of, the growth of the quantity of use values to be reproduced, and therefore also to be consumed.

Since this decline of profit is synonymous with a decline in the ratio of immediate labour to the amount of objectified labour which it reproduces and posits anew, capital will try everything to make up for the smallness of the proportion of living labour to the size of capital in general, and hence for the smallness of the proportion which surplus value, if expressed as profit, bears to the preposited capital. It will seek to do so by reducing the allotment made to necessary labour and by still more expanding the quantity of surplus labour with regard to the whole labour employed. Hence the highest development of productive power together with the createst expansion of existing wealth will coincide with depreciation of capital, degradation of the labourer, and a most straightened exhaustion of his vital powers.

These contradictions lead to explosions, cataclysms, crises, in which by momentaneous suspension of labour and annihilation of a great portion of capital the latter is violently reduced to the point where it can go on [VII-17] fully employing its productive powers without committing suicide. Yet, these regularly recurring catastrophes lead to their repetition on a higher scale, and finally to its violent overthrow.

In the developed movement of capital, this process is slowed down by moments other than crises; e.g. the continuous depreciation of a part of the existing capital; the conversion of a large part of capital into fixed capital which does not serve as an agent of direct production; the unproductive dissipation of a large part of capital, etc. (Capital, productively employed, is always replaced in a double way; as we have seen, the positing of value by productive capital presupposes a counter-value. The unproductive consumption of capital replaces it on the one hand, and annihilates it on the other.) //The same law is expressed simply—but this form of expression is to be considered later, in the population theory—as the relation of the growth of population, notably of the working part of it, to the capital already preposited.//

(The fact, further, that the fall in the rate of profit can be checked by the elimination of existing deductions from profit, e.g. a fall in taxes, a reduction in rent, etc., does not, for all its practical significance, really belong here, since these are themselves portions of profit under another name and appropriated by persons other than the capitalists themselves.) //That the same law manifests itself differently in the relation of the multitude of capitals to one another, i.e. in competition, also belongs in another section. It may also be postulated as the law of accumulation of capitals, as e.g. by Fullarton. We shall take this up in the next section.//

//It is important to draw attention to the fact that this law is not simply concerned with the development of productive POWER $\delta \nu \nu \dot{\alpha} \mu \epsilon \iota$, but at the same time with the extent to which this PRODUCTIVE POWER operates as capital, i.e. the extent to which it is realised above all as fixed capital, on the one hand, and as population, on the other.//

(The fall [in the rate of profit] may also be checked by the creation of new branches of production in which more immediate labour is needed in proportion to capital, or in which the productive power of labour, i.e. the productive power of capital, is not yet developed.) (Similarly, monopolies.)

"PROFIT IS A TERM SIGNIFYING THE INCREASE OF CAPITAL OR WEALTH; SO FAILING TO FIND THE LAWS WHICH GOVERN THE RATE OF PROFIT, IS FAILING TO FIND THE LAWS OF THE FORMATION OF CAPITAL" (W. Atkinson, *Principles of Political Economy etc.*, Lond., 1840, p. 55).

But he has failed in understanding even what the rate of profit is.

A. Smith attributed the fall in the rate of profit as capital grows to the competition of capitals among themselves.^a Ricardo objected to this^b that while competition may certainly reduce the profits in the different branches of business to an average level, even up the

^a A. Smith, An Inquiry into the Nature and Causes of the Wealth of Nations, Book 1, Ch. 9.— Ed.

^b D. Ricardo, On the Principles of Political Economy, and Taxation, Ch. 21.-Ed.

rate of profit, it cannot depress this average rate itself. A. Smith's proposition is correct to the extent that it is only in competition the action of capital on capital—that the immanent laws of capital, its TENDENCIES, are realised. But it is incorrect in the sense in which he understands it—namely that competition imposes on capital laws external to capital, laws brought in from outside, which are not capital's own laws. Competition can permanently depress the rate of profit in all branches of industry, i.e. the average rate of profit, only if, and only to the extent that, a general and permanent fall in the rate of profit operating as a law is conceivable also *prior to* and regardless of competition. Competition executes the inner laws of capital; it turns them into coercive laws in relation to the individual capital, but it does not invent them. It realises them. To wish to explain them simply by competition means to admit that one does not understand them.

Ricardo for his part says:

"No accumulation of capitals can *permanently* depress profits, unless some equally permanent cause rises wages" ([Des principes de l'économie politique et de l'impôt] p. 92, t. II, Paris, 1835, traduit de Constancio).

He finds this cause in the growing, relatively growing unproductiveness of agriculture, "the growing difficulty of increasing the quantity of means of subsistence", i.e. in the growth of the share of the wages of labour. Not that he sees labour as really receiving more, but as receiving the product of more labour; in a word, necessary labour makes up a greater share of the labour required for the production of agricultural products. The fall in the rate of profit is therefore accompanied, in Ricardo, by a nominal growth of wages and a real growth of rent. His is a one-sided analysis because it only conceives of one single CASE-the rate of profit may just as much fall in consequence of a momentary rise in wages, etc.-and because it elevates to a universal law an historical relationship characteristic of a period of 50 years but inverted during the next 50 years, and because, in general, it is based upon the historical disproportion between the development of industry and agriculture. In and for itself, it was odd of Ricardo, Malthus, etc., to postulate universal, eternal laws for physiological chemistry at a time when as yet it scarcely existed. This analysis of Ricardo's has therefore been attacked from all sides, mainly because of an instinctive feeling that it was wrong and unsatisfactory, but mostly on account of its true rather than its false aspect.

"A. SMITH THOUGHT THAT ACCUMULATION OR INCREASE OF STOCK IN GENERAL LOWERED THE RATE OF PROFITS IN GENERAL, ON THE SAME PRINCIPLE WHICH MAKES THE INCREASE OF STOCK IN ANY PARTICULAR TRADE LOWER THE PROFITS OF THAT TRADE. BUT SUCH INCREASE OF STOCK IN A PARTICULAR TRADE MEANS AN INCREASE MORE IN PROPORTION THAN STOCK IS AT THE SAME TIME INCREASED IN OTHER TRADES: IT IS RELATIVE" (p. 9, An Inquiry into those Principles respecting the Nature of Demand and the Necessity of Consumption, lately advocated by Mr. Malthus, London, 1821).

"COMPETITION AMONG THE INDUSTRIAL CAPITALISTS can LEVEL the profits rising especially high above the level, but it cannot LOWER THIS ORDINARY LEVEL" (Ramsay [An Essay on the Distribution of Wealth, pp. 179-80], IX, 88¹¹).

(Ramsay and other economists justly distinguish between the growth of productivity in the branches of industry supplying the constituents of fixed capital, and naturally of wAGES, and growth in other industries, e.g. the luxury-goods industries. The latter industries cannot diminish necessary labour time. However, this can be achieved by exchanging their products for agricultural products of foreign nations, the effect then being the same as if productivity had been raised in agriculture. Hence the importance of free trade in corn for the industrial capitalists.)

Ricardo says (On the Principles of Political Economy, and Taxation, 3rd English edition, London, 1821):

"THE FARMER AND MANUFACTURER CAN NO MORE LIVE WITHOUT PROFITS, THAN THE LABOURER WITHOUT WAGES" (l.c., p. 123). "The natural tendency of profits is to fall; for, in the progress of society and wealth, the ADDITIONAL [quantity of] FOOD requires more and more labour. This tendency, this gravitation of profit, is checked at repeated intervals by the improvements in machinery, connected with the production of NECESSARIES, as well as by discoveries in the science of agriculture which diminish the production costs" (l.c., pp. 120-21).

Ricardo immediately lumps together profit and surplus value; he never made this distinction at all. But while [the rate of] surplus value is determined by the ratio of the surplus labour employed by capital to necessary labour, the rate of profit is merely the ratio of the surplus value to the total value of the capital preposited to production. Hence its proportion falls and rises with the ratio of the part of capital exchanged for living labour to that existing as material and fixed capital. Under all circumstances, surplus value considered as profit must express a proportion of the gain that is smaller than the actual proportion of surplus value. For under all circumstances it [profit] is measured in terms of the total capital, and this is always greater than the capital employed in wages and exchanged for living labour.

Since Ricardo thus simply lumps together surplus value and [VII-18] profit, and since surplus value can only diminish constantly, diminish *tendentially*, if there is a decline in the ratio of surplus labour to necessary labour, i.e. to the labour required for the reproduction of the labour capacity, and this is only possible

given a decline in the productive power of labour, Ricardo assumes that the productive power of labour, while increasing in industry with the accumulation of capital, does decline in agriculture. From the sphere of political economy he flees into organic chemistry. We have proved that this is a necessary tendency without referring to rent at all, just as we had no need to refer, e.g., to rising demand for labour, etc.

How rent is connected with profit is to be discussed when we come to consider rent itself; does not belong here. But modern chemistry has shown that Ricardo's physiological postulate, presented as a universal law, is false. Now Ricardo's pupils, to the extent that they do not merely echo him, have, like modern political economy in general, quietly dropped what they found disagreeable in their master's doctrine. To DROP THE PROBLEM IS THEIR GENERAL METHOD OF SOLVING IT.

Other economists, e.g. Wakefield, take refuge in discussing the *FIELD OF EMPLOYMENT* for the growing capital.^a This belongs in the analysis of competition and is evidence, rather, of a preoccupation with the difficulty for capital to realise a growing volume of profit, which amounts to a denial of the immanent tendency of the rate of profit to fall. And the necessity for capital to seek a constantly expanding FIELD OF EMPLOYMENT is itself a consequence. One cannot list Wakefield and suchlike with those who first raised the question. (To some extent, they merely reproduce A. Smith's view.)

Finally, there are the harmonists among the most recent economists, headed by the American Carey, whose most obtrusive companion was the Frenchman Bastiat. (In passing, it may be noted as a fine irony of history that the Continental FREE-TRADERS parrot Mr. Bastiat, who for his part draws his wisdom from Carey the protectionist.) They admit the FACT that the rate of profit tends to fall in the degree in which productive capital increases. But they explain it simplement and bonnement^b by an increase in the value of the share of labour, i.e. in the proportion the worker receives of the total product; capital, for its part, benefits by the growth of the gross profits. In this way, the unpleasant oppositions and antagonisms within which classical political economy moves, and which Ricardo emphasises with scientific remorselessness, are presented as well-to-do harmonies. Carey's analysis at least has a semblance of being one, and in general he does his own thinking. His analysis concerns a law which we need not discuss until we get

^a E. G. Wakefield, A View of the Art of Colonization, London, 1849, pp. 76, 79 and 91.-Ed.

^b Simply and plainly.— Ed.

to the theory of competition, and it is only then that we shall deal with him.

But Bastiat's insipidity, which expresses platitudes as paradoxes, polishes them *en facettes*, and conceals the most complete poverty of thought under a façade of formal logic, can be disposed of at once. //At this point we can insert something about the antithesis between Carey and Bastiat from Notebook III.^a// In *Gratuité du crédit. Discussion entre M. Fr. Bastiat et M. Proudhon*, Paris, 1850 (it may be noted in passing that Proudhon cuts a highly ridiculous figure in this polemic, in which he conceals his incapacity for dialectical reasoning under a cloak of rhetorical pretension) Bastiat says in Letter VIII (in which, incidentally, the noble gentleman *tout bonnement* and *tout simplement* transforms, with his reconciling dialectic, the gain accruing from the simple division of labour to the road-*maker* just as much as to the road-user, into a gain accruing to the "road" itself, i.e. to capital):

"In the degree in which capitals (and with them their products) are augmented, the absolute part which returns to capital is augmented, and its proportional part diminished. In the degree in which capitals (and with them their products) are augmented, both the proportional part and the absolute part accruing to labour are augmented. Since the absolute part accruing to capital rises, even though it only draws successively 1/2, 1/3, 1/4, 1/5 of the total product, labour, which successively gets 1/2, 2/3, 3/4, 4/5, obviously draws from the distribution an ever greater part, both proportionately and absolutely." b

Δc	ъn	illustration	he	rives	this
AS	an	inusiration	ne	gives	unis:

	Total product	Part accruing to capital	Part accruing to labour	
1st period	1,000	1/2 or 500	$^{1}/_{2}$ or 500	
2nd "	1,800	$^{1}/_{3}$ or 600	² / ₃ or 1,200	
3rd "	2,800	$^{1}/_{4}$ or 700	$^{3}/_{4}$ or 2,100	
4th "	4,000	$^{1}/_{5}$ or 800	$\frac{4}{5}$ or 3,200	
			(Pp. 130,	131)

The same trick is repeated on p.288 in the form of an increasing GROSS PROFIT accompanied by a falling rate of profit but an increasing mass of products sold at lower prices, and on that occasion he speaks with great importance of

"the law of an infinitely decreasing series which never reaches zero, a law well known to mathematicians" (p. 288). "One sees here" (charlatan) "that the

^a See present edition, Vol. 28, pp. 5-16.- Ed.

^b Marx quotes this and the following passage, and also the table, in French.— Ed.

multiplier decreases continually, because the multiplicand constantly increases" (l.c., p. 288).

Ricardo had a presentiment of his Bastiat. While stressing that, despite the decline in the rate of profit, profit grows as a sum with the growth of capital—here he anticipates all of Bastiat's wisdom—he does not fail to observe that this progression "is only true for a certain time". He says, literally:

"However the rate of the PROFITS OF STOCK may diminish in consequence of the accumulation of capital on the land, and the rise of wages" (and by this, notabene, Ricardo understands a rise in the production costs of the agricultural products indispensable for the maintenance of the labour capacity) "the aggregate amount of PROFITS still must increase. Thus supposing that, with repeated accumulations of \pounds 100,000, the rate of profit should fall from 20 to 19, to 18, to 17%, we should expect that the whole AMOUNT OF PROFITS RECEIVED BY THE SUCCESSIVE OWNERS OF CAPITAL WOULD BE ALWAYS PROGRESSIVE; that it would be greater when the capital was £200,000, than when 100,000; still greater when 300,000; and so on, increasing, though at a diminishing rate, wiTH EVERY INCREASE OF CAPITAL. This progression however is only true for a certain time: thus 19% on £200,000 is more than 20 on 100,000; 18% on 300,000 is more than 19% on 200,000; but after capital has accumulated TO A LARGE AMOUNT, and PROFITS have fallen, the further accumulation diminishes the sum of profits. Thus suppose the accumulation should be 1,000,000, and the PROFITS 7%. The whole amount of profits will be £70,000; now if an addition of $\pounds 100,000$ be made to the million, and profits should fall to 6%, [VII-19] £66,000 or a diminution of £4,000 will be received by the owners of STOCK, although the AMOUNT OF CAPITAL will be increased from 1,000,000 to 1,100,000" (l.c., pp. 124, 125).

Of course, this does not prevent Mr. Bastiat from carrying out the schoolboyish operation of making an increasing multiplicand to increase in such a way that, when combined with a declining multiplier, it should yield an increasing product, as little as the laws of production prevented Dr. Price from framing his compound interest calculation.²⁹ Since the rate of profit declines, it does so relatively to wages, which consequently must grow both proportionally and absolutely. That is Bastiat's conclusion.

(Ricardo was aware of the tendency of the rate of profit to fall with the increase of capital; and since he confused profit with surplus value, he could account for the fall in profit only by making wages rise. Yet since he also realised that wages actually declined rather than increased, he caused their value, i.e. the quantity of necessary labour, to increase, but did not cause their use value to do the same. In fact, with him, it is rent alone that increases. The harmonising Bastiat, however, discovers that, as capitals accumulate, wages increase both proportionally and absolutely.)

He assumes what he has to prove, i.e. that the decline in the rate of profit is identical with the increase in the rate of wages,

and then "illustrates" his assumption with a numerical example which seems to have greatly tickled him.^a If the decline in the rate of profit expresses nothing but a decline in the proportion in which the total capital requires living labour for its reproduction, that is another story. Mr Bastiat overlooks the little circumstance that, in his presupposition, even though the rate of profit on capital declines, capital itself, the capital preposited to production. increases. Even Mr. Bastiat could have surmised that the value of capital cannot increase, unless capital appropriates surplus labour. The lamentations, constant in French history, about excessive harvests could have shown to him that the mere augmentation of the quantity of products does not increase value. Then it would merely be a matter of finding out whether the fall in the rate of profit was synonymous with the growth of the rate of necessary labour in relation to surplus labour; or, rather, whether it was not synonymous with the fall in the overall rate of the living labour employed in relation to the capital reproduced.

Mr. Bastiat therefore distributes the product simply between capitalist and worker, instead of allocating it between raw material, instrument of production, and labour, and asking himself in what proportional parts its value is exchanged for these different elements. Obviously, the part of the product exchanged for raw material and instrument of production does not concern the workers. What they share with capital, as wages and profit, is nothing but the newly added living labour itself. Yet what particularly worries Bastiat is the question of who shall consume the increased product. Since the capitalist only consumes a relatively small part, must not the worker consume a relatively large one? Particularly in France, whose total production yields too much to consume only in Mr. Bastiat's imagination, he could see that capital is sponged on by a host of parasites, who under one title or another draw so much of the total production to themselves as to rule out the possibility of any undue affluence for the worker. It is clear, by the way, that with large-scale production the total amount of labour employed may increase even though the ratio of the labour employed to capital declines, and that, therefore, there is nothing to prevent a situation in which, with the growth of capital, a growing population of workers requires a larger mass of products. Moreover, since in Bastiat's harmonising brain all cats are grey (see above what he says about

^a Crossed out in the manuscript: "In any case, if the rate of profit declines, it must decline in relation to something, and this something is capital itself."—*Ed.*

wages^a), he confuses the decline of interest with the increase of wages. The former implies, rather, an increase in industrial profit; and has no bearing at all on the workers, but only affects the proportion in which the various species of capitalists share in the total profit.

Retournons à nos moutons.^b The product of capital is therefore profit. By relating itself to itself as profit, it relates itself to itself as the source of production of value, and the rate of profit expresses the proportion in which it has increased its own value. But the capitalist is not merely capital. He must live, and since he does not live by labour, he must live on profit, i.e. on the alien labour which he appropriates. As a source of wealth, capital is posited thus. Since it has incorporated productivity as one of its immanent properties, capital treats profit as revenue. It can consume part of that revenue (apparently all of it, but this will be seen to be wrong), without ceasing to be capital. After consuming this fruit, it can yield fruit afresh. It can represent consuming wealth, without ceasing to represent the general form of wealth, an impossibility for money in simple circulation. Money had to refrain from enjoyment in order to remain the general form of wealth; or, if it consumed itself through exchange for real wealth, enjoyments, it ceases to be the general form of wealth.

Thus profit, like wages, appears as a form pertaining to distribution. But since capital can only grow by reconverting profit into capital—into surplus capital—profit is equally a form pertaining to the production of capital. In just the same way, the wage is a mere relation of production from the standpoint of capital, but a relation of distribution from that of the worker.

It is seen here that the relations of distribution are themselves produced by the relations of production, and represent them d'un*autre point de vue.*^c It is further seen that the relation of production to consumption is posited by production itself. The absurd view taken by all bourgeois economists, e.g. J. St. Mill, who regards the bourgeois relations of production as eternal, but their forms of distribution as historical ^d; it is evident that he understands neither the former nor the latter.

^a See present edition, Vol. 28, pp. 11-15, 180-82 and 248.-- Ed.

^b Let us return to our subject.— Ed.

^c From another point of view.-Ed.

^d J. St. Mill, Principles of Political Economy, Vol. 1, London, 1848, pp. 25, 26, 239, 240.— Ed.

With respect to simple exchange, Sismondi correctly remarks:

"An échange always presupposes 2 values; their fates may be different; yet the *quality of capital and revenue* does not go with the object exchanged, but is attached to the person who owns it" (Sismondi, [Nouveaux principes d'économie politique, Vol. I, p. 90] VI¹³).

Therefore, revenue cannot be explained in terms of simple exchange relations. Whether a value acquired through exchange possesses the quality of representing capital or revenue is determined by relations which lie beyond simple exchange. Hence it is stupid to wish to reduce these more complicated forms to those simple exchange relations, as the harmonising FREETRADERS do. Considered from the standpoint of simple *échange*, and taking accumulation to be merely the accumulation of money (exchange value), the profit and revenue of capital are impossible.

"If the rich spent their accumulated wealth on luxury goods—and they can only obtain commodities through *échange*—their funds would soon be exhausted... But in the *ordre social*, wealth has acquired the ability to reproduce itself by means of *alien labour*. Wealth, like labour, and *by means of labour*, yields an annual fruit, which can annually be *destroyed* without the rich thereby becoming poorer. This fruit is the revenue which springs from capital" (Sismondi, IV) [ibid., pp. 81-82].

If profit therefore appears as the result of capital, it also appears, on the other hand, as the *presupposition for the formation of capital.* And so the circular movement is posited anew, in which the result appears as the presupposition.

"Thus part of the revenue was converted into capital, into a permanent self-multiplying value which no longer perished. This value detached itself from the commodity which had produced it; like a metaphysical, insubstantial quality it always remained in the possession of the same *cultivateur*" (capitalist) "for whom it took on different forms" (Sismondi, VI) [ibid., p. 89].

[VII-20] When capital is posited as positing profit, as a source of wealth independent of labour, each part of the capital is supposed to be equally productive. Just as surplus value in profit is measured by reference to the total value of capital, it appears to have been produced to an equal extent by its different components. Hence, the circulating part of capital (the part consisting of raw materials and approvisionnement) does not yield a higher profit than the component which constitutes fixed capital; indeed profit refers evenly to these components according to their size.

Since the profit of capital is realised only in the price which is paid for it, for the use value it produces, profit is therefore determined by the excess of the price obtained over the price covering the outlays. Moreover, since this realisation only takes place in the act of

i

exchange, the profit accruing to the individual capital is not necessarily limited by its surplus value, by the surplus labour contained in it, but depends on the excess of the price it obtains in the act of exchange. It may be exchanged for more than its equivalent, and then the profit it yields is greater than its surplus value. This can only be the case if the other party to the exchange does not obtain an equivalent. The total surplus value, and similarly the total profit, which is merely the surplus value itself calculated in a different way, can neither grow nor diminish as a result of this operation; what is modified here is not the total surplus value itself, but only its allocation among the different capitals. However, this does not belong here, but in the analysis of the multitude of capitals.

The value of the capital preposited in production appears over against profit as advances-production costs, which must be replaced in the product. What is left after the part of the price which replaces them has been deducted, constitutes profit. Since surplus labour—which comprises profit and interest, these being merely portions of it-does not cost capital anything, and hence is not part of the value advanced by it-not part of the value which it possessed before the production process and the valorisation of the product-this surplus labour, which is included in the production costs³⁰ of the product and constitutes the source of surplus value, and hence also of profit, does not figure under the production costs of capital. These are only equal to the values actually advanced by it, not to the surplus value appropriated in production and realised in circulation. Consequently, the production costs from the standpoint of capital are not the actual production costs, precisely because surplus labour does not cost it anything. The excess of the price of the product over the price of the production costs constitutes the profit of capital.

Hence, capital can make a profit even if its actual production costs—i.e. the whole of the surplus labour it sets to work—have not been realised. Profit, the excess over the advances made by capital, may be smaller than surplus value, the excess of living labour obtained by capital through exchange over the objectified labour which it has exchanged for the labour capacity. However, through the separation of interest from profit—something which we shall discuss presently—a part of the surplus value is posited as a production cost even for productive capital.

The confusion of the production costs from the standpoint of capital with the quantity of labour objectified in the product of capital, including surplus labour, has given rise to the assertion that "profit is not included in the NATURAL PRICE", and that it is "absurd to call the excess or profit A PART OF THE EXPENDITURE" (Torrens, [An Essay on the Production of Wealth, London, 1821, pp. 51-52,] IX, 30^{11}).

This leads then to a great deal of confusion. Either profit is seen not as merely being realised in the act of exchange but as originating from it (which, under all circumstances, can only be the case relatively, when one party to the exchange does not obtain his equivalent) or else the magic power is ascribed to capital of creating something out of nothing. As the value posited in the production process realises its price by means of exchange, the price of the product appears as determined IN FACT by the sum of money which expresses an equivalent for the total quantity of labour contained in the raw material, the machinery, the wages and the unpaid surplus labour. Here price therefore still appears merely as an altered form of value; value expressed in money; but the magnitude of this price is presupposed in the production process of capital. Capital thereby appears as price-determining; so that price is determined by the advances made by capital+the surplus labour it has realised in the product. We shall see later how, on the contrary, price appears as profit-determining. And if at this point the total actual production costs appear as pricedetermining, price will later appear as determining the production costs. To impose the immanent laws of capital upon it as an external necessity, competition apparently completely inverts all of them. distorts them.

Just to repeat: The profit of capital does not depend upon its size; but rather, given the same size, upon the relative magnitude of its components (the constant and the variable part); then upon the productivity of labour (which, however, expresses itself in that first proportion, since if productivity were lower, the same capital could not work up the same quantity of material in the same time with the same amount of living labour); upon the turnover time, which is determined by the different proportions between fixed and circulating capital, the different durability of the fixed capital, etc., etc. (see above^a). The inequality of profit in different branches of industry for capitals of the same size, i.e. the inequality of the rate of profit, is a condition and presupposition for the equalisations brought about by competition.

In so far as capital obtains, purchases, raw material, instrument and labour by means of exchange, its elements themselves are

^a See this volume, pp. 102-12.-Ed.

already there in the form of prices, already posited as prices, preposited to capital. The way the market price of its product compares with the prices of its elements then becomes decisive for it. But this belongs in the chapter on competition.

So the surplus value posited by capital in a given turnover time assumes the form of *profit*, in so far as it is measured by reference to the total value of the capital preposited to production; whereas surplus value is measured directly by the surplus labour time which capital gains in its exchange with living labour. Profit is merely another, more developed—in the sense of capital—form of surplus value. Surplus value here is regarded rather as exchanged in the production process for capital itself, not for labour. Capital therefore appears as capital, as preposited value which, through the mediation of its own process, is related to itself as posited, produced value, and the value posited by it is called *profit*.

The 2 immediate laws manifested to us by this conversion of surplus value into the form of profit are:

(1) Surplus value expressed as profit always appears as a smaller proportion than that actually constituted by surplus value in its immediate reality. For instead of being measured in relation to a part of the capital, that exchanged for living labour (a ratio which is manifested as that of surplus to necessary labour), it is measured in relation to the total. Whatever the surplus value posited by a capital a, and whatever the proportion in a of c and v, the constant and the variable part of capital, the surplus value s must appear smaller if measured in terms of c+v than if measured in terms of its real measure, v. Profit, or the rate of profit—if profit is not considered as an absolute sum but, as is usually the case, as a proportion (the rate of profit is profit expressed as the proportion in which capital has posited surplus value)-[VII-21] never expresses the actual rate of exploitation of labour by capital but always a much smaller proportion, and that proportion is the more misleading the larger the capital is. The rate of profit could express the actual rate of surplus value only if the whole capital were converted into wages; if the whole capital were exchanged for living labour, i.e. only existed as approvisionnement. Then not only would it not exist in the form of already produced raw material (as is the case in the extractive industries), so that the raw material would=0; but the means of production, whether in the form of instruments or developed fixed capital, would also=0. The latter CASE cannot possibly occur on the basis of the mode of production corresponding to capital. If a=c+v, whatever the magnitude of s it follows that

$$\left[\frac{s}{c+v} < \frac{s}{v}\right]$$

(2) The 2nd great law is that in the degree in which capital has already appropriated living labour in the form of objectified labour; in the degree, therefore, in which labour has already been capitalised and thus increasingly operates in the production process in the form of fixed capital; or in the degree in which the productive power of labour increases; the rate of profit declines. The growth of the productive power of labour is synonymous with (a) the growth of relative surplus value or the relative surplus labour time which the worker gives to capital; (b) the diminution of the labour time necessary for the reproduction of the labour capacity; (c) the decrease of the part of capital exchanged in general for living labour relative to those parts of it which participate in the production process as objectified labour and preposited value. The rate of profit is thus inversely related to the growth of relative surplus value or relative surplus labour, to the development of the productive forces, and to the size of the capital employed in production as [constant] capital. In other words, the second law is the tendency of the rate of profit to fall with the development of capital, both of its productive power and of the extent to which it has already posited itself as objectified value; the extent to which labour as well as productive power have been capitalised.

Other factors which can affect the rate of profit, which can depress it for longer or shorter periods, do not yet come into consideration. It is quite correct to say that, if the production process is considered as a whole, the capital acting as material and as fixed capital is not merely objectified labour but also must be newly reproduced by labour, and reproduced constantly. Therefore, its existence, on any particular scale, presupposes a certain magnitude of the working population, a large population, which in and for itself is a prerequisite for any productive power; but this reproduction everywhere presupposes the operation of fixed capital and raw material and scientific power, both as such and as appropriated by production and already realised in it. This point is only to be developed in more detail when we come to discuss accumulation.

It is further clear that, although the part of capital exchanged for living labour declines relative to total capital, the total quantity of living labour employed may increase or remain the same if capital grows in the same or in a greater proportion. Hence the population may continuously grow in the proportion in which necessary labour declines. If capital a expends $^{1}/_{2}$ in c and $^{1}/_{2}$ in v, and capital a' expends $^{3}/_{4}$ in c and $^{1}/_{4}$ in v, then capital a' could employ $^{2}/_{4}$ v on $^{6}/_{4}$ c. But if it was originally= $^{3}/_{4}$ c+ $^{1}/_{4}$ v, it is now = $^{6}/_{4}$ c+ $^{2}/_{4}$ v, or it has increased by $^{4}/_{4}$, i.e. it has doubled. However, this relationship too is only to be investigated more closely in the theory of accumulation and population. In general, at this stage we must not be diverted from our subject by the conclusions following from the laws stated above or by any speculations on that matter.

Hence, the rate of profit is determined not only by the ratio of surplus labour to necessary labour, or by the ratio in which objectified labour is exchanged for living labour, but in general by the ratio of living labour employed to objectified labour; the ratio of the portion of capital exchanged in general for living labour to the part which participates in the production process as objectified labour. And that portion declines in the same proportion as surplus labour increases relative to necessary labour.

(Since the worker must reproduce the part of capital exchanged for his labour capacity just as much as he must reproduce the other parts of capital, the proportion in which the capitalist gains in his exchange with the labour capacity appears as determined by the ratio of surplus labour to necessary labour. Originally, necessary labour appears merely to replace the capitalist's outlays for him. But since—as is shown in reproduction—he lays out nothing but labour itself, the relation of surplus value can be simply expressed as the relation of surplus labour to necessary labour.)

//With respect to fixed capital, and durability as a condition of it which does not enter from without, the following should also be noted: To the extent that the instrument of production is itself value, objectified labour, *it contributes nothing as a productive force.* If a machine whose production costs 100 working days only replaced 100 working days, it would in no way increase the productive power of labour and in no way diminish the cost of the product. The more durable the machine, the greater is the number of times the same quantity of product can be produced with its aid; or the greater the number of times circulating capital can be renewed, or its reproduction repeated; and the smaller is the proportion of value necessary to replace the *déchet*, the weak and TEAR of the machine; i.e. the greater is the reduction in the price of the product and its previous [jemalig] production cost. However, we cannot as yet bring the price relation into our analysis. The reduction of price as a condition for conquering the market can only be discussed in connection with competition.

Hence the question must be posed differently. Suppose that the instrument of production could be obtained by capital without cost, for nothing. What would be the consequence? The same as if the circulation costs were zero. I.e. the labour necessary to maintain the labour capacity would be reduced, and so surplus labour, i.e. surplus value, [would be increased] without its costing capital the slightest amount. Such an increase in productive power, a kind of machinery which does not cost capital anything, is the division of labour and the combination of labour within the production process. But it presupposes labours on a large scale, i.e. the development of capital and wage labour.

Another productive force which costs it nothing is SCIENTIFIC POWER. (It is self-evident that capital must always pay a certain duty for the support of parsons, schoolmasters, and men of learning, whether the SCIENTIFIC POWER they develop is great or small.) However, capital can only appropriate it by the employment of machinery (partly also in chemical processes). The growth of population is also a productive force which costs capital nothing.

In short, all the social forces which develop with the growth of population and the historical development of society cost it nothing. But to the extent that they themselves require a substratum produced by labour, i.e. existing in the form of objectified labour, in order to be employed in the immediate production process, and hence are themselves values, capital can appropriate them only by giving an equivalent in exchange for them.

WELL. Fixed capital whose employment is more costly than that of living labour, [VII-22] i.e. which requires more living labour for its production or maintenance than the amount of labour it replaces, would be a NUISANCE. Such as costs nothing at all and merely needs to be appropriated by the capitalist, would possess maximum value for capital. The simple proposition that machinery possesses maximum value for capital if its value=0, implies that every reduction in its cost is a gain for the capitalist. While, on the one hand, it is the tendency of capital to increase the total value of fixed capital, it is, at the same time, [its tendency] to diminish the value of every fractional part of it.

Once fixed capital enters into circulation as value, it ceases to operate as use value in the production process. Its use value consists precisely in that it increases the productive power of labour, reduces necessary labour, augments relative surplus labour and thus surplus value. Once it enters into circulation, its value is merely replaced, not increased. On the other hand, the product, circulating capital, is the bearer of surplus value, which is only realised when the product emerges from the production process into circulation.

If the machine were of infinite durability, if it were not itself composed of perishable material that has to be reproduced (quite apart from the invention of more efficient machines, which rob it of its character as a machine), if it were a perpetuum mobile, it would most completely correspond to its concept. Its value would not need to be replaced, since it would subsist in an indestructible materiality. Since fixed capital is employed only in so far as its value is smaller than that which it posits, the surplus value realised in circulating capital would—even though fixed capital itself never entered [in a single act] as value into circulation—nevertheless soon replace the advances and once the cost of the fixed capital to the capitalist, and that of the surplus labour which he appropriates, were=0, the fixed capital would operate as positing value. It would continue to operate as a productive force of labour, and at the same time be money in the third sense, constant valuefor-itself.

Assume a capital of $\pounds 1,000$. Let 1/5 be machinery, and let the sum of surplus value be 50. The value of the machinery therefore equals 200. After 4 turnovers, the machinery would be paid for. Then, apart from continuing to possess $\pounds 200$ worth of objectified labour in the machinery, the capitalist would, from the fifth turnover onwards, be in the same position as if he was gaining 50 with a capital which cost him only 800, i.e. his gain would be $6^{1}/_{4}\%$ instead of 5%.

As soon as fixed capital enters into circulation as value, it ceases to be use value for the valorisation process of capital; or it enters into circulation only when that process ceases. Therefore, the more durable fixed capital is, [i.e.] the less it needs to be repaired, to be entirely or partly reproduced, [i.e.] the longer its circulation time—the more does it operate as a productive force of labour, as capital, i.e. as objectified labour which posits living surplus labour. The durability of fixed capital, identical with the duration of the circulation time of its value or of the time required for its reproduction, emerges as its value-moment from its very concept. (That this durability in and for itself, in merely *material* terms, is implicit in the concept of the means of production, needs no explanation.)// The rate of surplus value is simply determined by the ratio of surplus labour to necessary labour; the rate of profit is determined by the ratio, not merely of surplus labour to necessary labour, but of the part of capital exchanged for living labour to the total capital that enters into production.

Concretely expressed, profit, in the form in which we are still considering it, i.e. as the profit of capital as such, not that gained by an individual capital at the expense of another, but as the profit of the capitalist class, can never be greater than the sum of surplus value. As a sum, it is the sum of surplus value, but this very sum of value as a proportion of the total value of capital, not of the part of it whose value actually increases, i.e. is exchanged for living labour. In its immediate form, profit is merely the sum of surplus value expressed as a proportion of the total value of capital.

The transformation of surplus value into the form of profit, this method of calculation of surplus value by capital, much as it is based on an illusion as to the nature of surplus value, or rather disguises it, is necessary from the standpoint of capital.

//It is easy to imagine that the machine as such posits value, since it operates as a productive force of labour. However, if the machine needed no labour, it could of course increase use value, but the exchange value which it produced would never be greater than its own production costs, its own value, the labour objectified in it. It produces value not because it replaces labour, but only in so far as it is a means of increasing surplus labour, and it is only surplus labour itself—and hence labour in general—that is both the measure and the substance of the surplus value posited with the help of the machine.//

The reduction of necessary labour relative to surplus labour is expressed, if we consider the day of an individual worker, in the appropriation of a larger part of the working day by capital. Here the living labour which is employed remains the same. Assume that, because of an increase in productive power, resulting, e.g., from the employment of machinery, 3 of 6 workers who each worked 6 days a week are made superfluous. If the 6 workers themselves possessed the machinery, they would now work for only half a day each. Now 3 continue to work for the whole day each day of the week. If capital continued to employ the 6, they would each work for only half a day, but perform no surplus labour. Assume that necessary labour previously amounted to 10 hours and surplus labour to 2 hours daily; in this case, the total surplus labour performed by the 6 workers was previously equal to 2×6 hours daily, i.e. to one whole day, and hence over the whole week to 6 days, or 72 hours. Each worked one day a week gratis. It would be the same as if the 6th worker had worked for the whole week gratis. The 5 workers represent necessary labour; and if their number could be reduced to 4, and the one worker work for nothing, as before, relative surplus value would have grown. Previously, its ratio was 1:6; now it would be 1:5. Hence, the former law, stipulating an increase in the number of surplus working hours, now assumes the form of a stipulation to reduce the number of necessary workers. If it were possible for the same capital to employ the 6 workers at this new rate, surplus value would increase not merely relatively but absolutely as well. The surplus labour time would amount to $14^2/_5$ hours. $2^2/_5$ hours each worked by 5.

As far as absolute surplus value is concerned, it appears to be determined by the absolute extension of the working day beyond the necessary labour time. Necessary labour time works merely for use value, for subsistence. The surplus working day is labour for exchange value, for wealth. It is the first moment of industrial labour. The natural limit is set—assuming that the conditions for labour are available, i.e. raw material and instrument of labour; or one of the two, according to whether labour is merely extractive or form-giving, i.e. whether it merely isolates the use value from the body of the Earth or forms it-the natural limit is set by the number of simultaneous working days or of living labour capacities, i.e. by the magnitude of the working population. At this stage, the difference between production based on capital and earlier stages of production is still a merely formal one. Kidnapping, slavery, trading in slaves and compelling them to labour, [VII-23] increase in the number of these labouring machines, machines producing SURPLUS PRODUCE, is here directly posited by force. In the case of capital, it is mediated by exchange.

Here use values increase in the same simple proportion as exchange values, and therefore this form of surplus labour appears in the modes of production of slavery, serfdom, etc., which are mainly and predominantly concerned with use value, and also in that of capital, which is directly orientated towards exchange value and only indirectly towards use value. This use value may be purely fantastic, as, e.g., in the construction of Egyptian pyramids, in short the religious luxury-works which the bulk of the nation were compelled to perform in Egypt, India, etc., or it may take the form of immediately useful objects, as, e.g., among the ancient Etruscans.

The second form of surplus value, as relative surplus value,

appears as a development of the productive power of the workers, in relation to the working day—as a reduction of necessary labour time, and in relation to population—as a reduction of the necessary working population (this is the antithetical form). In this form [of surplus value], the industrial and distinctively historical character of the mode of production based upon capital is, by contrast, immediately apparent.

To the first form corresponds the forcible transformation of the greater part of the population into wage labourers, and the discipline which transforms their existence into that of mere labourers. E.g., over a period of 150 years, from the time of Henry VII onwards, written in blood in the annals of English legislation is a series of coercive measures which were applied to transform into free wage labourers the mass of the population who had become propertyless and free. The abolition of the institution of retainers, the confiscation of the Church estates, the abolition of the guilds and the confiscation of their property, the forcible eviction of the population from the land by the conversion of arable into pastures, ENCLOSURES OF COMMONS, etc., had posited the labourers as mere labour capacity. But, of COURSE, at this stage they preferred vagabondage, beggary, etc., to wage labour, and had first to be forcibly broken in to it. A similar process took place with the introduction of large-scale industry, of factories in which production was carried on with machinery. Cf. Owen.^a

Only at a certain stage of the development of capital does the exchange between capital and labour IN FACT become a formally free one. It can be said that, in England, wage labour was fully realised in a formal sense only at the end of the 18th century, with the abolition of the LAW OF APPRENTICESHIP.³¹

The tendency of capital is, of COURSE, to link absolute surplus value with relative; hence the greatest possible extension of the working day and the maximum number of simultaneous working days, accompanied by the reduction to the minimum, on the one hand, of necessary labour time and, on the other, of the necessary number of workers. This contradictory demand, whose development will be seen to manifest itself in different forms as overproduction, overpopulation, etc., asserts itself in the form of a process in which the contradictory determinations alternate in time. A necessary consequence of this is the greatest possible diversification of the use value of labour—or of the branches of production. Thus the production of capital, while on the one hand constantly and necessarily developing the intensity [of

^a See this volume, pp. 98-99.- Ed.

the] productive power of labour, on the other hand produces a limitless variety of branches of labour, i.e., therefore, the greatest possible wealth of forms and content of production, subjecting to it all aspects of Nature.

Since the increase in productive power is, in large-scale production, the spontaneous product of the division and combination of labour, savings on certain outlays—conditions for the labour process—which remain the same or are reduced in case of communal operation, such as heating, etc., factory buildings, etc., it does not cost capital anything; it acquires this increased productive power of labour gratis.

If productive power increased simultaneously in the production of the various conditions of production-raw material, means of production and means of subsistence—and in [the branches of production] determined [by them], its increase would not bring about any change in the relation between the different components of capital. If the productive power of labour increased simultaneously in, e.g., the production of flax, weaving-looms and weaving itself (through division of labour), the greater quantity woven in a day would be matched by the greater quantity of raw material, etc. When labour becomes more productive in the extractive industries, e.g. mining, there is no need for an increased supply of raw material, since no raw material is worked up [in these industries]. To increase the productivity of agriculture, it is not even necessary that the number of INSTRUMENTS should be raised. but merely that they should be concentrated and that labour, which was previously performed by hundreds of people working individually, should be carried on communally. But what is needed for all forms of surplus labour is growth of population: of the working population for the first form; of the population in general for the second, since it requires the development of science, etc. Population therefore appears here as the basic source of wealth.

But in the form in which we consider capital initially, the raw material and instrument appear to originate from circulation, not as produced by capital itself; and in reality the individual capital does obtain the conditions for its production from circulation, although these are themselves produced by capital, but by another capital. The consequence of this is, on the one hand, the necessary tendency of capital to seek to dominate the whole range of production; its tendency to posit the production of the materials of labour or of the raw materials and also of the instruments as likewise produced by capital, even if by another capital-the propagandistic tendency of capital.

Secondly, however, it is clear that if the objective conditions of production obtained by capital from circulation remain the same in value, i.e. the same quantity of labour is objectified in the same quantity of use value, a smaller part of capital may be expended on living labour, i.e. the proportion of the component parts of capital changes. Suppose that $^{2}/_{5}$ of a capital of 100 is raw material, $^{1}/_{5}$ is instrument, and $^{2}/_{5}$ is labour. Suppose, too, that in consequence of a doubling of the productive power (resulting from division of labour), the same quantity of labour employing the same instrument could work up double the amount of raw material. The capital would then have to increase by 40, i.e. a capital of 140 would have to work, of which 80 would be raw material, 20 instrument, and 40 labour.

The proportion of labour would now be 40:140 (previously 40:100); previously it was 4:10, now only 4:14.

Or, if the capital remained the same, 100', 3/5 would now be raw material, 1/5 instrument and 1/5 labour. The gain would be 20, as before. But surplus labour would now be 100%, whereas previously it was 50%. The capitalist now needs only 20 labour for 60 raw material and 20 instrument. 80. | 20. | 100. |

A capital of 80 yields him a profit of 20. Hence, if the capital employed the total amount of labour at this stage of production, it would have to grow to 160, composed of 80 raw material, 40 instrument and 40 labour. This would yield a surplus value of 40. At the stage initially assumed, where a capital of 100 yields a surplus value of only 20, a capital of 160 would yield a surplus value of only 32, i.e. 8 less, and the capital would have to grow to 200 in order to produce the same surplus value of 40.

The following cases are to be distinguished between:

(1) Labour (*the intensity, speed of labour*) increases, but this does not necessitate greater advances in material or instrument of labour. E.g., owing to an increase in skills, better combination and division of labour, etc., the same 100 workers with instruments of the same value catch more fish, or till the soil better, or extract more ore or coal from the mines, or beat out more foil from the same quantity of gold, or waste less raw material, i.e. produce more with the same value-quantity of raw material. If, in this case, their products themselves enter into their consumption, their necessary labour time will diminish; they will do more work at the same [VII-24] maintenance costs. Or a smaller part of their labour is necessary to reproduce their labour capacity. The necessary part

of labour time is reduced relatively to the surplus labour time; and although the value of the product remains the same, 100 working days, the portion accruing to capital, surplus value, is increased. If total surplus labour was previously 1/10, i.e. 10 working days, and if now it is $\frac{1}{5}$, surplus labour time has increased by 10 days. The workers now work 80 days for themselves and 20 for the capitalist, while in the first case they worked 90 for themselves and only 10 for the capitalist. (This method of calculation, in terms of working days, and with labour time as the sole substance of value, is so openly manifest where relations of bondage exist. In the case of capital, it is concealed by the veil of money.) A greater portion of the newly produced value accrues to capital. But the relations between the different components of the invariable capital remain. by assumption, the same. I.e., although the capitalist employs a larger volume of surplus labour, because he pays less in wages, he does not employ more capital in raw materials and instruments. He exchanges a smaller part of objectified labour for the same quantity of living labour, or the same quantity of objectified labour for a greater quantity of living labour. This is only possible in the extractive industries; in the manufacturing industries, in so far as the raw material is used more economically; further, in agriculture, in which the material is increased by chemical processes; and in the transport industries.

(2) Productivity increases not merely within a particular branch of production but, at the same time, in [the industries which produce] its prerequisites; in this CASE an intensification of labour or a rise in the quantity of products it turns out in a given time necessitates an increase in the quantity of raw material or instrument or both. (The raw material need not cost anything, e.g. rushes for wickerwork; wood which costs nothing, etc.) In this case, the proportion [between the parts] of capital would remain the same. I.e., the increased productivity of labour does not make capital expend any greater value in raw material or instrument.

(3) The increased productivity of labour necessitates the expenditure of a larger part of capital on raw material and instrument. If it is merely due to the division of labour, etc., that a given number of workers have become more productive, the instrument remains the same; only the raw material must increase, since in the same period of time the same number of men work up a greater quantity of raw material, and, by assumption, the greater productivity derives only from an increase in the workers' skill, division and combination of labour, etc. In this case, the part of capital exchanged for living labour falls (it remains the same if absolute labour time alone increases, and it diminishes if relative labour time increases) relative to the other components of capital, which remain the same, and it does so not only by the amount of its own fall, but just as much by the amount of the increase in relative labour time.

Let us consider this:

	Raw Instrument material		Labour	\$
Working days	180	90	80	10
	411 ³ /7	90	70	20

In the first case, 10 of the 90 working days are surplus working days; surplus labour is $12^{1}/_{2}$ %. In the second case, the proportion of raw material has risen to the same extent as has the proportion of surplus labour, compared with the first case $[180:411^{3}/_{7}=^{1}/_{8}:^{2}/_{7}]$.

If an increase in surplus value presupposes, in all cases, an increase in population, the present case also presupposes accumulation or the entry of a larger capital into production. (In the final analysis this also implies a larger working population employed in the production of raw materials.) In the first case, the total part of capital expended on labour constitutes $\frac{1}{4}$ of the total capital, and its ratio to the constant part of capital is 1:3. In the second case, the total part expended on labour is less than $\frac{1}{6}$ of the total capital, and its ratio to the constant part of capital is not even 1:5. Although an increase in productive power resulting from the division and combination of labour is therefore based upon an absolute increase of the labour power employed, it is necessarily linked with a reduction in it relative to the capital which sets it in motion. And if in the first form, that of absolute surplus labour, the quantity of labour employed must increase in the same proportion as the capital employed, in the second case it increases in a lesser proportion, its growth being inversely related to that of productive power.

If the productivity of the soil were doubled by applying the latter method in agricultural labour, so that the same quantity of labour yielded 1 QUARTER of wheat instead of 1/2, necessary labour would decline by 1/2, and capital could employ twice as many labourers with the same wages. (This expressed only in terms of corn.) But suppose he [the farmer] would not need any additional labourers for the cultivation of his land. In that case, he will employ the same amount of labour with half the previous wages. A part of his capital, that previously expended in money, is set free. The labour time employed has remained the same in proportion to the capital employed, but the surplus part of labour

time has risen relative to the necessary part. If necessary labour was previously ${}^{3}/_{4}$ of the total working day, or 9 hours, it is now ${}^{3}/_{8}$ of it, or ${}^{4}1/_{2}$ hours. The surplus value was 3 hours in the first case; in the second, it= $7^{1}/_{2}$.

The process is as follows: With a given working population and duration of the working day, i.e. the duration of the working day multiplied by the number of simultaneous working days, surplus labour can only be increased relatively, by raising the productive power of labour, the possibility of which is already posited by the presupposed growth of the population and TRAINING TO LABOUR (this also posits a certain amount of free time for non-working population, population which does not work directly; hence development of mental capacities, etc.; mental appropriation of nature). Given a certain level of development of the productive forces, surplus labour can only be increased absolutely, by turning a larger part of the population into workers, with a consequent increase in the number of simultaneous working days. The first process relatively reduces the relative working population, although it remains the same in absolute terms; the second increases it. Both tendencies are necessary tendencies of capital. The unity of these contradictory tendencies, hence the living contradiction, is only given with machinery, which we shall discuss presently. The second form obviously permits of only a small proportion of non-working to working population. The first form, since the quantity of living labour required under it increases more slowly than the quantity of capital employed, permits of a larger proportion of non-working to working population.

In the process by which capital becomes capital, its different component parts appear in a particular relationship to one another, with capital obtaining the raw material and instrument, the prerequisites of the product, from circulation and relating to them as to its given presuppositions. On closer inspection, it is true, this relationship disappears, for all the moments appear as equally produced by capital, since otherwise it would not have subjected to itself the totality of the conditions of its production. Yet for the individual capital, its components always remain in the same relationship. A part of it may therefore always be considered as constant value, and it is only the part laid out in labour that varies. These components do not develop evenly, but, as will be seen in the analysis of competition, it is the tendency of capital to distribute productive power evenly.

[VII-25] Since the increasing productivity of labour would cause capital to come up against a barrier in the form of the

non-increasing volume of raw material and machinery, it is the normal course of industrial development that, the more production is production of raw materials for industry, raw material both for the material of labour and [for] the instrument, and the more the material of labour approximates to mere raw material, the more likely it is that the large-scale introduction of [wage] labour and the employment of machinery will begin precisely in these branches. E.g., in spinning earlier than in weaving, in weaving earlier than in printing, etc. Earliest of all in the production of metals, which are the main raw material for the instruments of labour themselves. If the raw product proper which supplies the raw material of industry at the nethermost stage cannot be rapidly increased itself, recourse is had to a substitute whose output can be increased more rapidly. (Cotton for linen, wool and silk.) The same thing happens as regards means of subsistence, when the potato is substituted for grain. In the latter case, productivity is raised by producing an inferior article, one with a lower content of blood-forming substances and hence requiring cheaper organic conditions for its reproduction. This, the latter, belongs in the analysis of wages. We must not forget Rumford³² when discussing the minimum of wages.

We now come to the third CASE of relative surplus labour, as it is manifested in the employment of machinery.

//In the course of our presentation, it has become evident that value, which appeared as an abstraction, is possible only as such an abstraction as soon as money is posited. On the other hand, money circulation leads to capital, and hence can only be completely developed on the basis of capital; and in general, it is only on the basis of capital that circulation can draw within its sphere all the moments of production. Hence, in the course of analysis, not only does the historical character of forms which belong to a definite historical epoch, e.g. capital, become evident, but determinations like value, which appear to be purely abstract, show the historical basis from which they have been abstracted, and on which alone they therefore can appear in this abstraction. And such determinations as plus ou moins^a belong to all epochs, e.g. money, show the historical modification which they undergo. The economic concept of value does not occur among the ancients. Value as distinct from pretium^b was a purely legal category, invoked against fraud, etc. The concept of value wholly belongs to the latest political

^a More or less.-Ed.

^b Price.—*Ed.*
economy, because that concept is the most abstract expression of capital itself and of the production based upon it. In the concept of value, the secret of capital is betrayed.//

What distinguishes surplus labour based on machinery is the diminution of necessary labour time, which is used in such a way that fewer simultaneous working days, fewer workers are employed. The second moment is that the increase in productive power itself must be paid for by capital, that it is not obtained gratis. The means by which this increase in productive power is brought about is itself objectified immediate labour time, value; and to get hold of it, capital must exchange a part of its value for it. It is easy to derive the advent of machinery from competition and the law of the reduction of the production costs which it imposes. But here it is a matter of deriving it from the relation of capital to living labour, without bringing in other capital.

Suppose a capitalist previously employed 100 workers in cotton spinning at an annual cost of $\pounds 2,400$. Now he replaces 50 workers by a machine worth \pounds 1,200. If the machine were likewise completely used up in a year and had to be replaced at the beginning of the second year, he would obviously gain nothing; nor would he be able to sell his products more cheaply. The remaining 50 workers would perform the same amount of work as the 100 did previously; the surplus labour time of each individual worker would increase in the same proportion as the number of workers declined, and hence [total surplus labour time] would remain the same. If it was previously=200 hours a day, i.e. 2 hours on each of the 100 working days, it would now be likewise=200 hours, i.e. 4 hours on each of the 50 working days. The amount of surplus time per worker would increase; for capital things would remain unchanged, since it would now have to exchange 50 working days (necessary and surplus time together) for the machine. The 50 objectified working days which it exchanged for the machinery would merely give it an equivalent, and hence no surplus time, as though it had merely exchanged 50 objectified working days for 50 living. However, this would be made up for by the surplus labour time of the remaining 50 workers. Divested of the form of exchange, it would be the same as if the capitalist set 50 workers to work whose entire day's labour constituted necessary labour, while at the same time employing another 50 workers whose working day compensated him for this "loss".

But suppose the machine only cost £960, i.e. only 40 days' labour, and each of the remaining workers continued to perform

4 hours surplus labour time, hence 200 hours or 16 days 8 hours $(16^2/_3 \text{ days})$. The capitalist would then have saved £240 in outlays. But whereas previously he gained 16 days 8 hours on an outlay of 2,400, he would now gain the same 200 working hours on an 200 to 2.400=1:12; in comparison. outlay of only 960. $200:2,160=20:216=1:10^{4}/_{5}$. His gain, expressed in working days, would in the first case be 16 days 8 hours per 100 working days; in the second, the same amount per 90; in the first, 200 on the 1,200 hours of labour worked daily; in the second, 200 on 1,080. $200:1,200=1:6; 200:1,080=1:5^{2}/_{5}$. In the first case, the surplus time of the individual worker= $\frac{1}{6}$ working day=2 hours. In the second, it is 2⁶/₂₇ hours per 1 working day. One should add that, if machinery is employed, the part of capital which was previously employed in instruments must be deducted from the extra cost occasioned by the machinery.

[ADDENDA TO THE CHAPTERS ON MONEY AND ON CAPITAL]

//"The money circulating in a country is a certain portion of the capital of the country, absolutely withdrawn from productive purposes, in order to facilitate or increase the productiveness of the remainder. A certain amount of wealth is, therefore, as necessary, in order to adopt gold as a circulating medium, as it is to make a machine, in order to facilitate any other production" (The Economist, Vol. V, [No. 193, 8 May 1847,] p. 520).//

//"What is the practice? A manufacturer receives from his BANKER £500 in notes on Saturday for WAGES; these he distributes among his workers. On the same day, the majority of the notes are carried to the SHOPKEEPERS, and by them returned to their various BANKERS" (l.c., [No. 195, 22 May 1847,] p. 575).//

//"A COTTON SPINNER, who with a capital of £100,000 laid out £95,000 for HIS MILL AND MACHINERY, WOULD SOON FIND HE WANTED MEANS TO BUY COTTON AND PAY WAGES. HIS TRADE WOULD BE HAMPERED AND HIS FINANCES DERANGED. AND YET MEN EXPECT THAT A NATION WHICH HAS RECKLESSLY SUNK THE BULK OF ITS AVAILABLE MEANS IN RAILWAYS, shall nevertheless be able to CONDUCT THE INFINITE OPERATIONS OF MANUFACTURE AND COMMERCE" (l.c., [No. 219, 6 November 1847] p. 1271).//

"MONEY ... AN ADEQUATE EQUIVALENT FOR ANY THING ALIENABLE" (J. Steuart, [An Inquiry into the Principles of Political Oeconomy,] (p. 13),³³ Vol. I, Dublin, 1770, p. 32).

//"In old times ... TO MAKE MANKIND LABOUR BEYOND THEIR WANTS, TO MAKE ONE PART OF A STATE WORK, TO MAINTAIN THE OTHER GRATUITOUSLY, could only be brought about by slavery... IF MANKIND BE NOT FORCED TO LABOUR, THEY WILL ONLY LABOUR FOR THEMSELVES; AND IF THEY HAVE FEW WANTS, THERE WILL BE LITTLE LABOUR. BUT WHEN STATES COME TO BE FORMED AND HAVE OCCASION FOR IDLE HANDS TO DEFEND THEM AGAINST THE VIOLENCE OF THEIR ENEMIES, FOOD AT ANY RATE MUST BE PROCURED [VII-26] FOR THOSE WHO DO NOT LABOUR; AND AS, BY THE SUPPOSITION, THE WANTS OF THE LABOURERS ARE SMALL, A METHOD MUST BE FOUND TO INCREASE THEIR LABOUR ABOVE THE PROPORTION OF THEIR WANTS. FOR THIS PURPOSE SLAVERY WAS CALCULATED... HERE THEN WAS A VIOLENT METHOD OF MAKING MEN LABORIOUS IN RAISING FOOD; ... MEN WERE THEN FORCED TO LABOUR BECAUSE THEY WERE SLAVES TO OTHERS; MEN ARE NOW FORCED TO LABOUR BECAUSE THEY ARE SLAVES TO THEIR OWN WANTS" (Steuart, Vol. I, pp. 38-40). "IT IS THE INFINITE VARIETY OF WANTS, AND OF THE KINDS OF COMMODITIES NECESSARY TO THEIR GRATIFICATION, WHICH ALONE RENDERS THE PASSION FOR WEALTH INDEFINITE AND INSATIABLE" (Wakefield in a commentary to Ad. Smith['s An Inquiry into the Nature and Causes of the Wealth of Nations], p. 64 note).//

"MACHINES I CONSIDER AS A METHOD OF AUGMENTING (VIRTUALLY) THE NUMBER OF THE INDUSTRIOUS, WITHOUT THE EXPENSE OF FEEDING AN ADDITIONAL NUMBER" (Steuart, Vol. I, p. 123).

("WHEN MANUFACTURERS GET TOGETHER IN BODIES, THEY DEPEND NOT DIRECTLY UPON CONSUMERS, BUT UPON MERCHANTS") (Steuart, vol. I, p. 153).

("THE ABUSIVE AGRICULTURE IS NO *TRADE*, BECAUSE IT APPLIES NO *ALIENATION*, BUT IS PURELY A METHOD OF SUBSISTING") (l.c., p. 156).

("TRADE IS AN OPERATION, BY WHICH THE WEALTH, OR WORK, EITHER OF INDIVIDUALS, OR OF SOCIETIES, MAY BE EXCHANGED, BY A SET OF MEN CALLED *MERCHANTS*, FOR AN EQUIVALENT, PROPER FOR SUPPLYING EVERY WANT, WITHOUT ANY INTERRUPTION TO INDUSTRY, OR ANY CHECK UPON CONSUMPTION" (Steuart, I, p. 166).)

("WHILE WANTS CONTINUE SIMPLE AND FEW, A WORKMAN FINDS TIME ENOUGH TO DISTRIBUTE ALL HIS WORK; WHEN WANTS BECOME MORE MULTIPLIED, MEN MUST WORK HARDER; *TIME BECOMES PRECIOUS*; HENCE TRADE IS INTRODUCED. The MERCHANT as mediator between the WORKMAN and the CONSUMER") (I.C., p. 171).

("MONEY the COMMON PRICE of all things") (l.c., p. 177).

"Money is represented by the merchant. To the CONSUMERS, he represents the whole body of MANUFACTURERS; to the latter, the whole body of CONSUMERS; and to both CLASSES HIS CREDIT SUPPLIES THE USE OF MONEY. He represents WANTS, MANUFACTURERS and MONEY BY TURNS" (l.c., pp. 177, 178).

(In Vol. I, pp. 181-83, q.v., Steuart considers profit as *PROFIT UPON* ALIENATION, fluctuating with DEMAND, and contrasts it with *REAL VALUE*, which he defines in a very confused fashion (in doing so he thinks of the production costs) as the quantity of objectified labour (WHAT A WORKMAN CAN PERFORM IN A DAY, etc.), NECESSARY EXPENSE of the WORKMEN, and price of the raw material.)

(With Steuart, the categories are still very changeable, not yet fixed as with A. Smith. We have just seen *REAL VALUE* presented as identical with the production costs, for alongside the labour of the wORKMEN and the VALUE of the material, WAGES still figure confusedly as a particular component. Elsewhere he understands by the *INTRINSIC VALUE* of a commodity the value of its raw material or the raw material itself, while by *USEFUL VALUE* he understands the labour time expended on the commodity.

[&]quot;The former is something real in itself, e.g. the silver in wrought silver plate. The *intrinsic worth* of a silk, woollen or linen manufacture is less than the primitive value employed, because it is rendered almost unserviceable for any other use but that for which the manufacture is intended; the *useful value*, on the other hand, must be estimated according to the labour it has cost to produce it. The labour employed in the modification represents a portion of a man's time, which having been usefully employed, has given a form to some substance which has rendered it useful, ornamental, or in short, fit for man, mediately or immediately" (l.c., Vol. I, pp. 361, 362).)

//The real use value is the form which is given to the substance. But this form is itself merely labour in repose.//

"When we suppose a common standard in the price of any thing, we must suppose the alienation of it to be frequent or familiar. In countries where simplicity reigns, it is scarcely possible to determine any standard for the price of articles of first necessity ... in such a state of society, the articles of food and necessaries are hardly found in commerce: no person purchases them; because the principal occupation of everybody is to procure them for himself... Sale alone can determine prices, and frequent sale can only fix a standard. Now the frequent sale of articles of the first necessity marks a distribution of inhabitants in labourers and free hands" etc. (l.c., Vol. I, pp. 395, 396).)

(The theory of the determination of price by the volume of the circulating medium was first postulated by Locke; repeated in *The Spectator* of 19 October, 1711; developed and elegantly formulated by Hume and Montesquieu³⁴; in its basic premisses formally carried to an extreme by Ricardo; and, with all its absurdities, applied in practice to banking, etc., by Loyd, Colonel Torrens, etc.) *Steuart* polemises against it, and his analysis essentially anticipates pretty well all that was later asserted by Bosanquet, Tooke and Wilson. (Notebook, p. 26.³³) [Steuart, op. cit., Vol. I, pp. 399-404.]

(By way of historical illustration he says, among other things:

"It is a FACT that at the time when Greece and Rome ABOUNDED IN WEALTH, WHEN EVERY RARITY AND THE WORK OF CHOICEST ARTISTS WAS CARRIED TO AN EXCESSIVE PRICE, AN OX WAS BOUGHT FOR A MERE TRIFLE, AND GRAIN WAS CHEAPER PERHAPS THAN EVER IT WAS IN SCOTLAND ... DEMAND IS PROPORTIONED, NOT TO THE NUMBER OF THOSE WHO CONSUME, BUT OF THOSE WHO BUY: NOW THOSE WHO CONSUME, ARE ALL THE INHABITANTS, BUT THOSE WHO BUY, ARE ONLY THE FEW INDUSTRIOUS WHO ARE FREE ... Slavery in Greece and Rome: THOSE WHO WERE FED by the labour of their own SLAVES, [by that of] the slaves of the State, or by GRAIN gratuitously distributed to the people, HAD NO OCCASION TO GO TO THE MARKET; THEY DID NOT ENTER INTO COMPETITION WITH THE BUYERS... The FEW MANUFACTURERS THEN KNOWN, MADE WANTS IN GENERAL LESS EXTENSIVE; CONSEQUENTLY, THE NUMBER OF THE INDUSTRIOUS FREE WAS SMALL, AND THEY WERE THE ONLY PERSONS WHO COULD HAVE OCCASION TO PURCHASE FOOD AND NECESSARIES; CONSEQUENTLY, THE COMPETITION OF THE BUYERS MUST HAVE BEEN SMALL IN PROPORTION, AND PRICES LOW; further, the MARKETS were SUPPLIED partly from the SURPLUS PRODUCED on the LANDS of the GREAT MEN, LABOURED BY SLAVES; WHO BEING FED FROM THE LANDS, THE SURPLUS COST IN A MANNER NOTHING TO THE PROPRIETORS; and as the number of those who had occasion to buy was very small, THIS SURPLUS WAS SOLD CHEAP. Besides, the GRAIN DISTRIBUTED TO THE PEOPLE gratis must necessarily have kept the market DOWN, etc. By contrast, A FINE MULLET or an ARTIST, etc., were the object of great competition, with prices consequently rising extraordinarily high. The LUXURY OF THOSE TIMES, THOUGH EXCESSIVE, WAS CONFINED TO A FEW, AND AS MONEY, IN GENERAL, CIRCULATED BUT SLOWLY THROUGH THE HANDS OF THE MULTITUDE, IT WAS CONSTANTLY STAGNATING IN THOSE OF THE RICH, WHO FOUND NO MEASURE, BUT THEIR OWN CAPRICE, IN REGULATING THE PRICES OF WHAT THEY WISHED TO POSSESS.") ([Pp.] 26, 27, Notebook [on] Steuart (op. cit., Vol. I, pp. 403-05].)

"MONEY OF ACCOUNT is no more than an ARBITRARY SCALE OF EQUAL PARTS, INVENTED FOR MEASURING THE RESPECTIVE VALUE OF THINGS VENDIBLE. MONEY OF ACCOUNT is something quite different from MONEY-COIN, WHICH IS PRICE, and could exist even if there were no substance in the world which could be a PROPORTIONAL EQUIVALENT for every commodity" (Vol. II, p. 102). "MONEY OF ACCOUNT performs the same office with regard to the value of things that [degrees,] minutes, seconds, etc., do with regard to angles or as SCALES do to GEOGRAPHICAL MAPS, etc. In all these INVENTIONS, there is always SOME DENOMINATION TAKEN FOR THE UNIT" (l.c.). "THE USEFULNESS OF ALL THOSE INSTITUTIONS BEING SOLELY CONFINED TO THE MARKING OF *PROPORTION*. JUST SO THE UNIT IN MONEY CAN HAVE NO INVARIABLE DETERMINATE PROPORTION TO ANY PART OF VALUE, I.E. IT CANNOT BE FIXED TO ANY PARTICULAR QUANTITY OF GOLD, SILVER OF ANY OTHER COMMODITY WHATSOEVER. THE UNIT ONCE FIXED, WE CAN, BY [VII-27] MULTIPLYING IT, ASCEND TO THE GREATEST VALUE", etc. (p. 103). "SO MONEY A SCALE FOR MEASURING VALUE" (p. 102).

"THE VALUE OF COMMODITIES, THEREFORE, DEPENDING UPON A GENERAL COMBINA-TION OF CIRCUMSTANCES RELATIVE TO THEMSELVES AND [TO] THE FANCIES OF MEN, THEIR VALUE OUGHT TO BE CONSIDERED AS CHANGING ONLY WITH RESPECT TO ONE ANOTHER: CONSEQUENTLY, ANY THING WHICH TROUBLES OR PERPLEXES THE ASCERTAINING THOSE CHANGES OF PROPORTION BY THE MEANS OF A GENERAL, DETERMINATE AND INVARIABLE SCALE, MUST BE HURTFUL TO TRADE AND A CLOG UPON ALIENATION" (D. 104). "It is absolutely essential to distinguish between PRICE (i.e. COIN) CONSIDERED AS A MEASURE AND price CONSIDERED AS AN EQUIVALENT FOR VALUE. The METALS do not discharge both functions equally well... MONEY IS AN IDEAL SCALE OF EOUAL PARTS. IF IT BE DEMANDED, WHAT OUGHT TO BE THE STANDARD OF VALUE OF ONE PART? I ANSWER, BY PUTTING ANOTHER OUESTION: WHAT IS THE STANDARD LENGTH OF A DEGREE, A MINUTE, A SECOND? IT HAS NONE-BUT SO SOON AS ONE PART BECOMES DETERMINED, BY THE NATURE OF A SCALE, ALL THE REST MUST FOLLOW IN PROPORTION" (p. 105). "Examples of this ideal money are the bank money of Amsterdam, and the MONEY in Angola, on the African coast. The BANK MONEY STANDS INVARIABLE LIKE A ROCK IN THE SEA. ACCORDING TO THIS IDEAL STANDARD ARE THE PRICES OF ALL THINGS REGULATED" (pp. 106, 107).

In Custodi's collection of Italian economists, Parte Antica, Tomo III, (Geminiano) Montanari's Della Moneta, written ABOUT 1683, says the following about the "invention" of money:

"Intercourse between nations has spread across the whole globe to such an extent that one could say all the world has virtually become a single city in which a permanent fair of all commodities is taking place, so that everyone, without leaving his home, can, by means of money, obtain and enjoy everything produced by the earth, the animals and human industry. A marvellous invention!" (P. 40.) "It is also a feature of measures to enter into such a relation with the thing measured that in a certain way the latter becomes the measure of the former, so that, just as motion is the measure of time, time becomes the measure of motion itself; and so it comes about that not only is money the measure of our desires, but, conversely, the desires are the measure of money itself and of value" (pp. 41, 42). "Obviously, the larger the quantity of money circulating in commerce within the confines of a province in proportion to the quantity of saleable things there, the more expensive those things will become—if one can call a thing expensive because it is worth a great deal of gold in a country in which gold is abundant, rather than considering the gold itself to be cheap in this case, since so much gold is equated to another thing which is elsewhere considered to be cheaper" (p. 48).^a

^a Marx quotes in Italian.-Ed.

"A hundred years ago, the AMASSING OF GOLD AND SILVER, AS A KIND OF WEALTH par excellence, was the CHIEF FEATURE IN THE COMMERCIAL POLICY OF NATIONS (Wm. Gouge, A Short History of Paper Money and Banking in the United States, Philadelphia, 1833, [Part I,] p. 67).

(Barter in the United States (see Gouge, Notebook VIII,³³ pp. 81 et sqq.):

"In Pennsylvania, as well as in the other colonies, a considerable TRAFFIC WAS CARRIED ON BY BARTER ... in Maryland, as late as 1732, an act was PASSED MAKING TOBACCO A LEGAL TENDER AT ONE PENNY A POUND, AND INDIAN CORN AT 20 D. A BUSHEL" (p. 5) (PART II). But soon "THEIR TRADE WITH THE WEST INDIES, AND A CLANDESTINE COMMERCE with the SPANISH MADE SILVER SO PLENTIFUL that, in 1652 A MINT WAS ESTABLISHED IN NEW ENGLAND FOR COINING SHILLINGS, SIXPENCES AND THREE-PENNY PIECES (p. 5) (l.c.). "Virginia, in 1645, prohibited DEALINGS BY BARTER, and established the SPANISH PIECE OF 8 TO 6 SH. AS THE STANDARD CURRENCY of the COLONY" (the Spanish dollar). "The other colonies AFFIXED different DENOMINA-TIONS to the dollar... The MONEY IN ACCOUNT was everywhere the same nominally as in England. The country's COIN was chiefly Spanish and Portuguese", etc. [pp. 5-6] Cf. p. 81, Notebook VIII. (P. 6. By an Act of QUEEN Anne an attempt was made to put an end to this confusion.)

Tuckett: A History of the Past and Present State of the Labouring Population etc., 2 vols, London, 1846.

"Woollen manufacture: At the time of Elizabeth, the CLOTHIER OCCUPIED THE PLACE OF THE MILLOWNER OR MANUFACTURER; HE WAS THE CAPITALIST WHO BOUGHT THE WOOL, AND DELIVERED IT TO THE WEAVER, IN PORTIONS OF ABOUT 12 POUNDS, TO BE MADE INTO CLOTH. It the beginning, the MANUFACTURE [was] CONFINED TO CITIES and CORPORATE and MARKET-TOWNS, THE INHABITANTS OF THE VILLAGES MAKING LITTLE MORE THAN [sufficed] FOR THE USE OF THEIR FAMILIES. Later IN NON-CORPORATE TOWNS FAVOURED BY LOCAL ADVANTAGES and also IN COUNTRY PLACES BY FARMERS, GRAZIERS and HUSBANDMEN, WHO COMMENCED MAKING CLOTH FOR SALE, AS WELL AS FOR DOMESTIC USE. (The coarser types.) In 1551 a statute was passed that limited the number of LOOMS and APPRENTICES that could be kept by CLOTHIERS AND WEAVERS RESIDING OUT OF CITIES; and that no COUNTRY WEAVER SHOULD HAVE A TUCKING MILL, NOR ANY TUCKER A LOOM. Under a law of the same year, all WEAVERS of BROAD CLOTH had to undergo an APPRENTICESHIP of 7 years. Nevertheless, VILLAGE MANUFACTURE, AS AN OBJECT OF MERCANTILE PROFIT, TOOK FIRM ROOT. 5 and 6 Edward VI (22) A STATUTE which prohibited the USE OF MACHINERY. The FLEMINGS and DUTCH therefore retained superiority in this manufacture until the end of the 17th century. In 1668, the DUTCH LOOM introduced from Holland" ([Vol. I,] pp. 136-41). "As a result of the introduction of machinery, one person in 1800 could do as much WORK as 46 in 1785. In 1800, the CAPITAL INVESTED IN MILLS, MACHINERY, etc., APPROPRIATED for the WOOLLEN TRADE was not LESS than 6 MILLIONS POUNDS STERLING, and the total number of PERSONS OF ALL AGES employed in this branch of industry in England was 1,500,000" (pp. 142-43).

The productive power of labour had therefore increased by 4,600%. But, firstly, in relation to the fixed capital alone this

figure was only about $\frac{1}{6}$; in relation to the total capital (raw material, etc.) perhaps only $\frac{1}{20}$.

"There is scarcely a manufacture [which has gained] such advantage from the IMPROVEMENTS IN SCIENCE as the art of dyeing cloth, by the application of the LAWS OF CHEMISTRY" (l.c., pp. 143-44).

SILK MANUFACTURE. Till the beginning of the 18th century, "the ART OF SILK-THROWING at its most proficient in Italy, where MACHINERY OF A PARTICULAR DESCRIPTION [was] ADOPTED for this purpose. In 1715, John Lombe, one of 3 brothers who were in business as THROWSTERS and SILK-MERCHANTS, travelled to Italy, and managed to obtain a model in one of the MILLS. A SILK MILL, with the IMPROVED MACHINERY, [was] set up by Lombe and his brothers in Derby in 1719. This MILL CONTAINED 26,586 WHEELS, ALL TURNED BY ONE WATER WHEEL. PARLIAMENT granted $\pounds 14,000$ to him FOR THROWING OPEN THE SECRET TO THE TRADE. This MILL came nearer TO THE IDEA OF A MODERN FACTORY THAN ANY PREVIOUS ESTABLISHMENT of the kind. The machine had 97,746 WHEELS, MOVEMENTS, AND INDIVIDUAL PARTS [V11-28] WORKING DAY AND NIGHT, which all obtained their MOTION FROM ONE LARGE WATER WHEEL AND WERE GOVERNED BY ONE REGULATOR: and IT EMPLOYED 300 PERSONS TO ATTEND AND SUPPLY IT WITH WORK" ([pp.] 133-34).

(No SPIRIT OF INVENTION was ever manifested in the English SILK TRADE; first introduced by the weavers of Antwerp, who had fled after the SACKING OF THE TOWN by the Duke of Parma; then different branches were introduced by FRENCH REFUGEES in 1685-92 [pp. 132, 135, 136].)

In 1740, 1,700 tons of iron was produced by 59 blast furnaces; in 1827, 690,000 tons by 284 furnaces. Hence the number of blast furnaces increased $1:4^{48}/_{59}$, not even five-fold; the tons increased $1:405^{15}/_{17}$. (For the relationship over a number of years see l.c. [p. 157,] Notebook,¹¹ p. 12.)

Glass manufacturing provides the best illustration of how the progress of science depends upon manufacturing. On the other hand, e.g. the invention of the quadrant originated in the needs of navigation; Parliament offered a premium to stimulate inventions [ibid., pp. 171-79].

8 COTTON machines, which in 1825 cost £5,000 were sold in 1833 for £300. (On cotton spinning, see l.c., [p. 204,] p. 13, Notebook.)

"A first-rate cotton spinning factory cannot be built, filled with machinery, and fitted with gas-works and steam-engine. Under £100,000. A steamengine of one hundred horse power will turn 50,000 spindles, which will produce 62,500 miles of fine cotton-thread per day. In such a factory 1,000 persons will spin as much thread as 250,000 persons could without machinery. McCulloch estimates the number in Britain at 130,000" (1.c., p. 218).

"WHERE THERE ARE NO REGULAR ROADS, THERE CAN HARDLY BE SAID TO BE A COMMUNITY; THE PEOPLE COULD HAVE NOTHING IN COMMON" (Tuckett, l.c., [Vol. I,] p. 270).

"Of the produce of the EARTH, USEFUL TO MEN, $\frac{99}{100}$ are the produce of MEN" (l.c., [Vol. II,] p. 348).

"WHEN SLAVERY OR LIFE-APPRENTICESHIP WAS ABOLISHED, THE LABOURER BECAME HIS OWN MASTER and was left to his own RESOURCES. But, if unprovided with sufficient work, etc., MEN WILL NOT STARVE WHILST THEY CAN BEG OR STEAL; CONSEQUENTLY THE FIRST CHARACTER THE POOR ASSUMED WAS THAT OF THIEVES AND MENDICANTS" (I.C., VOI. II, p. 637, NOTE).

"ONE REMARKABLE DISTINCTION OF THE PRESENT STATE OF SOCIETY, SINCE ELizabeth, is that her Poor Act was expressly an Act FOR THE ENFORCEMENT OF INDUSTRY, INTENDED TO MEET THE MASS OF VAGRANCY THAT GREW OUT OF THE SUPPRESSION OF THE MONASTERIES AND THE TRANSITION FROM SLAVERY TO FREE LABOUR. As an example of that, the Act of 5 Elizabeth, DIRECTING HOUSEHOLDERS USING HALF A PLOUGH OF LAND IN TILLAGE, TO REQUIRE ANY PERSON THEY MIGHT FIND UNEMPLOYED, TO BECOME THEIR APPRENTICE IN HUSBANDRY, OR IN ANY ART OR MYSTERY: and if unwilling, TO BRING him BEFORE A JUSTICE, WHO WAS ALMOST COMPELLED TO COMMIT HIM TO WARD UNTIL HE CONSENTED TO BE BOUND. At the time of Elizabeth, of every 100 men it was necessary to employ 85 for the production of FOOD. AT PRESENT, not A LACK OF INDUSTRY, BUT OF PROFITABLE EMPLOYMENT... THE GREAT DIFFICULTY THEN WAS TO OVERCOME THE PROPENSITY OF IDLENESS AND VAGABONDAGE, NOT TO PROCURE THEM REMUNERATIVE OCCUPATION. DURING THIS REIGN THERE WERE SEVERAL ACTS OF THE LEGISLATURE TO ENFORCE THE IDLE TO LABOUR" (I.C., Vol. II, pp. 643, 644).

"FIXED CAPITAL, WHEN ONCE FORMED, CEASES TO AFFECT THE DEMAND FOR LABOUR, BUT DURING ITS FORMATION IT GIVES EMPLOYMENT TO JUST AS MANY HANDS AS AN EQUAL AMOUNT WOULD EMPLOY, EITHER OF CIRCULATING CAPITAL OR OF REVENUE" (John Barton, Observations on the Circumstances which influence the condition of the labouring classes of society, London, 1817, p. 56).

"The COMMUNITY consists of 2 classes of persons, the one which CONSUMES and REPRODUCES; the other, which CONSUMES WITHOUT REPRODUCTION. If the whole of society consisted of PRODUCERS, it would be of little consequence at what price they exchanged their commodities amongst each other; BUT THOSE WHO ARE ONLY CONSUMERS FORM TOO NUMEROUS A CLASS TO BE OVERLOOKED. THEIR POWERS OF DEMANDING ARISE FROM RENTS, MORTGAGES, ANNUITIES, PROFESSIONS and SERVICES OF VARIOUS DESCRIPTIONS RENDERED TO THE COMMUNITY. THE HIGHER THE PRICE AT WHICH THE CLASS OF CONSUMERS CAN BE MADE TO BUY, THE GREATER WILL BE THE PROFIT OF THE PRODUCERS UPON THE MASS OF COMMODITIES WHICH THEY SELL TO THEM. Among these purely consuming classes, the government holds THE MOST PROMINENT STATION" (W. Blake, Observations on the Effects produced by the expenditure of government during the restriction of cash payments, London, 1823, pp. 42, 43).

In order to show that capital loaned to the State is not necessarily capital which was previously EMPLOYED productively, Blake argues that—and here we are concerned only with his admission that a part of capital is always DORMANT—

"the error lies in supposing, (1) that the WHOLE CAPITAL of the COUNTRY [is] FULLY EMPLOYED; (2) THAT THERE IS IMMEDIATE EMPLOYMENT FOR SUCCESSIVE ACCUMU-LATIONS OF CAPITAL AS IT ACCRUES FROM SAVING. I BELIEVE THERE ARE AT ALL TIMES SOME PORTIONS OF CAPITAL DEVOTED TO UNDERTAKINGS THAT YIELD VERY SLOW RETURNS AND SLENDER PROFITS, AND SOME PORTIONS LYING WHOLLY DORMANT IN THE FORM OF GOODS, FOR WHICH THERE IS NO SUFFICIENT DEMAND... NOW, IF THESE DORMANT PORTIONS AND SAVINGS COULD BE TRANSFERRED INTO THE HANDS OF GOVERNMENT IN EXCHANGE FOR ITS ANNUITIES, THEY WOULD BECOME SOURCES OF NEW DEMAND, WITHOUT ENCROACHING UPON EXISTING CAPITAL" (I.C., pp. 54, 55).

"WHATEVER AMOUNT OF PRODUCE IS WITHDRAWN FROM MARKET BY THE DEMAND OF THE SAVING CAPITALIST, IS POURED BACK AGAIN, WITH ADDITION, IN THE GOODS THAT HE REPRODUCES. The government, on the contrary, takes it away for consumption without reproduction. Whenever SAVINGS are made from REVENUE, it is clear that the person ENTITLED TO ENJOY THE PORTION SAVED IS SATISFIED WITHOUT CONSUMING IT. IT PROVES THAT THE INDUSTRY OF THE COUNTRY IS CAPABLE OF RAISING MORE PRODUCE THAN THE WANTS OF THE COMMUNITY REQUIRE. IF THE QUANTITY SAVED IS EMPLOYED AS CAPITAL IN REPRODUCING A VALUE EQUIVALENT TO ITSELF, TOGETHER WITH A PROFIT, THIS NEW CREATION, WHEN ADDED TO THE GENERAL FUND, CAN BE DRAWN OUT BY THAT PERSON ALONE WHO MADE THE SAVINGS, I.E. BY THE VERY PERSON WHO HAS ALREADY SHOWN HIS DISINCLINATION TO CONSUME... IF EVERYONE CONSUMES WHAT HE HAS A RIGHT TO CONSUME, THERE MUST OF NECESSITY BE A MARKET. WHOEVER SAVES FROM HIS REVENUE, FOREGOES THIS RIGHT, AND HIS SHARE REMAINS UNDISPOSED OF. SHOULD THIS SPIRIT OF ECONOMY BE GENERAL, THE MARKET IS NECESSARILY OVERSTOCKED, AND IT MUST DEPEND UPON THE DEGREE in which this SURPLUS ACCUMULATES, WHETHER IT CAN FIND NEW EMPLOYMENTS AS CAPITAL" ([pp.] 56, 57).

(Cf. this work in general in the section on accumulation.)

(Cf. Notebook, p. 68 and p. 70,¹¹ where it is shown that the rate of profits and wages rose because of the *prices*, in consequence of wartime demand, without any respect "to the QUALITY of LAND TAKEN LAST INTO CULTIVATION".)

"During the Revolutionary War, the market rate of [VII-29] interest rose to 7, 8, 9 and even 10%, although during the whole time LANDS OF THE LOWEST QUALITY WERE CULTIVATED" (l.c., pp. 64-66). "The rise of interest to 6, 8, 10 and even 12% proves the rise of profit. The depreciation of money, supposing IT TO EXIST, could not alter anything in the relation of capital and interest. If £200 were now only worth £100, £10 interest would now only be worth £5. What AFFECTED the VALUE of the PRINCIPAL, WOLLD EQUALLY AFFECT THE VALUE OF PROFITS. IT COULD NOT ALTER THE RELATION BETWEEN THE TWO" (p. 73).

"Ricardo's argument that the price of WAGES cannot occasion a rise in the price of commodities, does not apply to a society *in which A LARGE CLASS ARE NOT PRODUCERS*" (l.c.). "MORE THAN THE JUST SHARE IS OBTAINED BY THE PRODUCERS AT THE EXPENSE OF THAT PORTION, WHICH OF RIGHT BELONGS TO THE CLASS WHO ARE ONLY CONSUMERS" ([p.] 74).

This is, of course, important, since capital is not exchanged for capital alone, but for revenue as well, and every capital can itself be consumed as revenue. Nevertheless, it has no bearing on the determination of profit in general. Profit, under the different forms of PROFIT, INTEREST, RENT, PENSIONS, taxes, etc. (just as EVEN part of the wages), may be distributed under different names and to different classes of the population. They can never distribute more among themselves than the total surplus value or the total surplus produce. The ratio in which they distribute it is, of course, important economically, but it has no bearing on the matter in hand. "If the circulation of commodities of 400 MILLIONS required A CURRENCY of 40 MILLIONS, and this proportion of $1/_{10}$ was the DUE LEVEL, then, if the value of the commodities to be circulated increased to 450 millions, FROM NATURAL CAUSES, THE CURRENCY, IN ORDER TO CONTINUE AT ITS LEVEL, would have to increase to 45 millions, or the 40 MILLIONS MUST BE MADE TO CIRCULATE with such INCREASED RAPIDITY, BY BANKING OR OTHER IMPROVEMENTS, AS TO PERFORM THE FUNCTIONS OF 45 MILLIONS... SUCH AN AUGMENTATION, OR SUCH RAPIDITY, is the CONSEQUENCE and not the CAUSE of the INCREASE OF PRICES" (W. Blake, l.c., p. 80 et sqq. Cf. Notebook, p. 70).

"The UPPER and MIDDLE CLASS in Rome obtained great wealth BY ASIATIC CONQUEST, BUT NOT BEING CREATED BY COMMERCE OR MANUFACTURES, IT RESEMBLED THAT OBTAINED BY SPAIN FROM HER AMERICAN COLONIES" (Mackinnon, *History of Civilisation*, London, 1846, Vol. I, p. 66).

"In the 15th century, Harrison ASSERTS" (see also Eden ^a), "the FARMERS were scarcely ABLE TO PAY THEIR RENTS without SELLING A COW, OR A HORSE, OR SOME OF THEIR PRODUCE, although they paid at most $\pounds 4$ for a FARM... THE FARMER IN THESE TIMES CONSUMED THE CHIEF PART OF THE PRODUCE TO BE RAISED, HIS SERVANTS TAKING THEIR SEATS WITH HIM AT HIS TABLE... THE PRINCIPAL MATERIALS FOR CLOTHING WERE NOT BOUGHT, BUT WERE OBTAINED BY THE INDUSTRY OF EACH FAMILY. THE INSTRUMENTS OF HUSBANDRY WERE SO SIMPLE THAT MANY OF THEM WERE MADE, OR AT LEAST KEPT IN REPAIR BY THE FARMER HIMSELF. EVERY YEOMAN WAS EXPECTED TO KNOW HOW TO MAKE YOKES OR BOWS, AND PLOUGH CEAR; SUCH WORK EMPLOYED THEIR WINTER EVENINGS" (Tuckett, I.c., Vol. II, pp. 324, 325).

Interest and profit:

"Where an individual employs his own SAVINGS productively, [he obtains] the remuneration for HIS TIME AND SKILL—AGENCY FOR SUPERINTENDENCE (the profit further includes [an allowance for] the risk TO WHICH HIS CAPITAL MAY HAVE BEEN EXPOSED IN HIS PARTICULAR BUSINESS); and the remuneration for the PRODUCTIVE EMPLOYMENT OF HIS SAVINGS, INTEREST. The whole of this remuneration is the gross profit. Where an individual employs the SAVINGS to another, he obtains] the AGENCY ONLY. Where an individual lends his SAVINGS to another, [he obtains] only the INTEREST or the NET PROFIT" (Westminster Review, JANUARY 1826, pp. 107, 108).

Therefore, here interest=net profit=remuneration for the productive employments of savings; profit proper is the remuneration for the agency for superintendence during his productive employment.

The same philistine says:

"EVERY IMPROVEMENT IN THE ARTS OF PRODUCTION that DOES not DISTURB THE PROPORTIONS between the PORTIONS OF CAPITAL dedicated and not dedicated to the PAYMENT FOR WAGES, IS ATTENDED WITH AN INCREASE OF EMPLOYMENT TO THE LABOURING CLASSES; every FRESH APPLICATION OF MACHINERY AND HORSE-LABOUR IS ATTENDED WITH AN INCREASE OF PRODUCE and consequently of capital; TO WHATEVER EXTENT IT MAY DIMINISH THE RATIO WHICH THAT PART OF THE NATIONAL CAPITAL FORMING THE FUND FOR THE PAYMENT OF WAGES BEARS TO THAT WHICH IS OTHERWISE EMPLOYED, its tendency is, NOT TO DIMINISH BUT TO INCREASE THE ABSOLUTE

^a F. M. Eden, The State of the Poor; or, an history of the labouring classes in England etc., Vol. I, London, 1797, pp. 119-20.— Ed.

AMOUNT OF THAT FUND and HENCE TO INCREASE THE QUANTITY OF EMPLOYMENT" (l.c., p. 123).

[MONEY AS MEASURE OF VALUES]

From the determination of money as measure, as well as, secondly, from the fundamental law that the quantity of the circulating medium, assuming a certain velocity of circulation, is determined by the prices of the commodities and by the quantity of the commodities, which circulate at certain prices, or by the total price, the aggregate volume of commodities-which is itself, in turn, determined by 2 factors: (1) the level of commodity prices, and (2) the quantity of commodities circulating at certain prices-and, thirdly, from the law that money as means of circulation becomes coin, a merely evanescent moment, a mere token of the values which it exchanges, there follow more detailed determinations, which we shall only develop where and in so far as they coincide with more complicated economic relations, credit circulation, rate of exchange, etc. It is necessary to avoid all detail and, when it must be introduced, to do so only where it loses its elementary character.

D'abord,^a money circulation, as the most superficial (in the sense that it is driven out onto the surface) and most abstract form of the whole production process, is, in itself, utterly devoid of content, except in so far as its own formal distinctions, notably the simple determinations discussed in Section II,^b constitute its content. It is clear that simple money circulation, considered in itself, does not lead back into itself, but consists of a multitude of indifferent and fortuitously juxtaposed movements. E.g. the mint may be regarded as the point from which money circulation sets out, but there is no law of REFLUX to the mint, except for depreciation by WEAR and TEAR, which makes necessary the melting-down and NEW ISSUE OF COINS. This only concerns the physical aspect, and by no means constitutes a moment of circulation itself.

Within circulation itself, the point of return may be different from the point of departure; to the extent that they do coincide, money circulation appears merely as a manifestation of a circulation which lies behind it and determines it, e.g. if we examine the money circulation between the factory-owner, the worker, the SHOPKEEPER and the banker. Furthermore, all of the

^a To begin with.--Ed.

^b See present edition, Vol. 28, pp. 51-170.- Ed.

factors which concern the quantity of commodities thrown into circulation, the rise and fall of prices, the velocity of circulation, the volume of simultaneous payments, etc., lie *outside* simple money circulation. They are relationships which are expressed in it; it gives, so to speak, the names to them; but they cannot be explained by its own differentiation. Different metals serve as money, which have different, varying value relations to one another. Thus the problem of the DOUBLE STANDARD, etc., comes in, a problem that assumes world-historical forms. But it assumes these forms, and the DOUBLE STANDARD itself comes in, only owing to foreign trade. Hence, if its analysis is to yield any useful results, far more highly developed relations must be examined than the simple monetary relation.

Money as the measure of value is not expressed in quantities of bullion but in coins of account, arbitrary names for fractional parts of a definite quantity of the money substance. These names can be changed, relation of the coin to its metallic substance can be changed, while the name remains the same. Hence debasement, which plays a great role in the history of states. Further, the currencies of different countries. But this question is only of interest in connection with the rate of exchange.

[VII-30] Money is *measure* only because it materialises labour time in a definite substance, hence is itself value, and, specifically, because this definite material is regarded as the generally objective material of value, as the material of labour time as such in distinction from its merely particular incarnations. Hence, because it is an equivalent. Yet, since in its function as measure, money is a merely notional point of comparison, and only needs to exist ideally-for the commodities are translated into their general mode of existence as value only notionally; since, further, in this quality as measure, it figures only as coin of account, and I say that a commodity is worth so many shillings, francs, etc., when I translate it into money; this has given rise to the confusing notion of an *ideal measure*, a notion developed by Steuart^a and freshed up in England at different periods, quite recently too, as a discovery of deep significance. That notion implies that the names pound, shilling, guinea, dollar, etc., which are current as units of account, are not definite denominations of definite quantities of gold, silver, etc., but merely arbitrary points of comparison which themselves express no value, no definite quantity of objectified labour time.

^a See this volume, pp. 164-65.

Hence the whole claptrap about fixing the price of gold and silver—understanding by price the name given to [their] fractional parts. An ounce of gold is at present divided into $\pounds 3$ 17s. 10d. This is called fixing the price; it is, as Locke correctly remarks,^a merely a fixing of the names of fractional parts of gold, silver, etc. Expressed in terms of itself, gold or silver is, of course, equal to itself. An ounce is an ounce, whether I call it $\pounds 3$ or $\pounds 20$.

In short, this *ideal measure*, in Steuart's sense, means this: If I say that commodity a is worth £12, commodity b £6 and commodity c £3, their proportion to one another=12:6:3. Their prices merely express the ratios in which they are exchanged for one another. 2b exchanges for 1a, and $1^{1}/_{2}b$ for 3c. But instead of expressing the relation of a, b and c in real money, which itself possesses value, is value, could I not just as well replace the £, which expresses a definite quantity of gold, with any arbitrarily chosen name devoid of content (this is called *ideal* here), e.g. mackerel. A=12 mackerels, b=6M, c=3M. The word M is here merely a name, without any relation at all to its specific content.

Steuart's example of the degree, the minute and the second proves nothing; for although the degree, the minute and the second have a varying magnitude, they are not mere names, but always express the fractional part of a definite spatial magnitude or period of time. So they do have a specific substance. The fact that money in its determination as measure functions merely as notional money, is here converted into the proposition that money is any arbitrary notion, a mere name, the name for the numerical value relation, the name for a mere relation of numbers. Yet then the correct thing to do would be to use no names at all and only express the relation of numbers. For it all boils down to this: I get 6a for 12b, and 3b for 6c; these relations may also be expressed thus: a=12x, b=6x, c=3x, where x itself is merely a name for the relation of a to b and of b to c. But the simple, undenominated relation of numbers would not do. For a:b=12:6=2:1, and b:c=6:3=2:1. Therefore, c=1/2. Therefore, b=1/2, therefore b=c. Therefore, a=2 and b=2; therefore, a=b.

Suppose I take any list of prices current, e.g. potash, per cwt., 35s.; cocoa, per lb., 60s.; IRON BARS, per ton, 145s.; etc.^b To have the relation of these commodities to one another, I may not merely forget the silver in the shilling: the mere numbers 35, 60, 145, etc., are sufficient to determine the mutual value relations of

^a Ibid., pp. 184-85.— Ed.

^b Marx quotes the prices from different issues of *The Economist* for the period 6 February to 6 March 1858.—*Ed.*

potash, COCOA, iron bars. Numbers without any name at all are now sufficient; and not merely may I give their unit, the 1, any name I like, without reference to any value; I need not give it any name whatsoever. Steuart insists that I must give it some name, but that this name, as a merely arbitrary one, as itself merely a *MARKING OF PROPORTION*, CANNOT BE FIXED TO ANY PARTICULAR QUANTITY OF GOLD, SILVER OR ANY OTHER COMMODITY.

Whatever the measure in question, as soon as it serves as the point of comparison, i.e. as soon as the different things to be compared are posited in a numerical relation to the measure as unit, and are now related to one another, the nature of the measure becomes irrelevant and disappears in the act of comparison itself. The measuring unit has become merely a numerical unit; the quality of that unit, e.g. that it itself represents a definite length, or a definite period of time, or an angle of a certain degree, etc., has disappeared. But it is only when the different things are presupposed as already measured that the measuring unit MARKS ONLY [THE] PROPORTION BETWEEN THEM, e.g., in our case, the proportion of their values. The unit of account not merely has different names in different countries; it is the nomen for different fractional parts of, e.g., an ounce of gold. Yet they are all reduced to the same weight unit of gold or silver by means of the rate of exchange.

Hence, if I assume the different commodity magnitudes to equal, e.g., as above, 35s., 60s., and 145s., then, since the unit in which all of them are represented is now assumed to be the same, i.e. since they have been made commensurable, it is quite irrelevant to their comparison that the shilling is a definite quantity of silver, the name for a definite amount of silver. But they only become comparable with one another as mere numerical magnitudes, as numbers of any unit with the same name, and only begin to express proportions in relation to one another, when each individual commodity is measured in terms of that which serves as unit, as measure. And I can measure them in terms of each other, can make them commensurable, only in so far as they have a common element. This element is the labour time contained in both.

Consequently, the measuring unit must be a certain quantity of a commodity in which a quantity of labour is objectified. Since the same quantity of labour is not always expressed in e.g., the same quantity of gold, the value of this measuring unit itself is variable. But to the extent that money is considered only as a measure, this variability is no hindrance. Even in barter, as soon as it has reached a certain stage of development as barter, hence is a normal operation which is repeated, and not merely an isolated act of exchange, some other commodity appears as the measuring unit, e.g. cattle in Homer.^a In the case of the savage Papuan of the coast,

who "to have a FOREIGN ARTICLE BARTERS 1 or 2 of his children, and if they are not at hand, borrows those of his neighbour, promising to give his own in Exchange, when they come to hand, his request being rarely refused," 35

no measure of exchange exists. The sole aspect of exchange that exists for him is that he can appropriate a thing belonging to another only by alienating a thing belonging to himself. This alienation itself is regulated for him only by his FANCY. ON THE ONE SIDE, and the extent of his MOVABLE property, on the other.

In The Economist, 13 March 1858 [p. 290], we read the following in a letter to the Editor:

"As the substitution in France of gold for silver in the coinage (which has been the principal means hitherto of absorbing the new discoveries of gold) must be approaching its completion, particularly as less coinage will be wanted for a stagnant trade and reduced prices, we may expect ere long that our fixed price of ${}_{\ell}3$ 175. $10^{I}/_{2}$ D. an ounce will attract the gold here." ^b

Now, what does this OUR "FIXED PRICE OF AN OUNCE" OF GOLD mean? NOTHING ELSE BUT THAT A CERTAIN ALIQUOT PART OF AN OUNCE IS CALLED A PENNY, A CERTAIN MULTIPLE OF THIS PENNY-WEIGHT OF COLD A SHILLING, AND A CERTAIN MULTIPLE OF THIS SHILLING-WEIGHT OF GOLD A POUND? Does the gentleman imagine that [VII-31] in other countries a gold gulden, louis d'or, etc., do not, likewise, denote a certain quantity of gold, i.e. that a certain quantity [of gold] does not have a fixed name? and that this is a privilege of England? or a special feature of it? Does he believe that in England an ounce of gold expressed in money is more than an ounce of gold and that in other countries it is less? We would be curious to know what this worthy fellow imagines the rate of exchange to be.

What misleads Steuart is this: The prices of commodities express nothing but the ratios in which they are exchangeable for one another, the *proportions* in which they exchange for one another. Given these proportions, I can give the unit any name I like, because the undenominated abstract number would suffice for the purpose, and instead of saying that this commodity=6 stivers and that=3, etc., I could say that this=6 units and that=3. I would not need to give the unit any name at all. Since now it is only a matter

ł

^a See present edition, Vol. 28, pp. 110 and 127.- Ed.

^b H. Stansfeld, "Will the Low Rate of Interest Last? To the editor of *The Economist*".— Ed.

of the numerical relation, [I] can give the unit any name I like.

But here it is already presupposed that these proportions have been given, that the commodities have prior to this become commensurable magnitudes. Once magnitudes have been posited as commensurable, the relations between them become simple numerical relations. Money appears precisely as measure, and a definite quantity of the commodity in which it is represented [appears] as the measuring unit employed to determine the *proportions*, to express the commodities as commensurable AND TO HANDLE them accordingly. The real common element is labour time, which is relatively objectified in them. But labour time itself is posited as general. The process by which values within the money system are determined by labour time does not come within the consideration of money itself and falls outside circulation; it stands behind circulation as its motivating basis and presupposition.

The question could only be this: Instead of saying this commodity is=to an ounce of gold, why do we not say directly that it is=to x labour time objectified in the ounce of gold? Why is labour time, the substance and measure of value, not also the measure of prices; or, in other words, why are price and value different things in general? The Proudhonist school believe to be doing something great in demanding that this identity should be posited and that the price of commodities should be expressed in labour time. The coincidence of price and value implies the equality of demand and supply, the simple exchange of equivalents (hence not of capital for labour), etc. In short, formulated in economic terms, it is immediately obvious that this demand is the negation of the entire groundwork of production relations based on exchange value. Yet, if we assume this basis to have been abolished, the problem itself is eliminated, for it only exists on and with this basis. To say that the commodity, in its immediate existence as use value, is not value, not the adequate form of value, is the same as saying that it is value if transposed into a different objective form or if equated to another object; or that value possesses its adequate form in a specific object as distinct from other objects. As values commodities are objectified labour; hence adequate value must itself appear in the form of a definite object, as a definite form of objectified labour.

Steuart supports his drivel about the ideal standard with 2 historical examples. The first of these, the bank money of Amsterdam, shows precisely the opposite, since it means nothing but the reduction of the circulating coinage to its bullion content (metallic content). The second example has been echoed by all of

the more recent writers belonging to the same trend. E.g., Urguhart adduces the example of the Berbers, among whom an ideal BAR, an iron bar, a purely imaginary iron bar, serves as a standard which neither rises nor falls.^a If, e.g., the real iron bar falls [in value] by, say, 50%,^b the [ideal] bar is worth 2 iron bars; if the real bar rises again by 100% [of its value after the fall], [the ideal bar is worth] only one [real bar]. Mr. Urguhart also claims to have observed that neither commercial nor industrial crises, nor still less monetary crises, occur among the Berbers, and attributes this to the magical effects of this IDEAL STANDARD OF VALUE. This "ideal" imaginary standard is merely an imaginary real value, a fancy, which does not attain any objective reality because the monetary system has not developed its further determinations-a development which is dependent upon quite different conditions. It is the same as if one wished, in the mythology, to assign a superior position to those religions whose deities have not been worked out as visual images, but remain confined to the sphere of concepts, i.e. attain at most a verbal but not an artistic existence.

The BAR is based upon a real iron bar, which was later converted into an object of fantasy and fixed as such. An ounce of gold expressed in English coin of account= $\pounds 3$ 17s. $10^{1/2}$ d. Well. Well. Well. Suppose that the price of a pound of silk had been exactly the same, but had later fallen, as e.g. Milanese raw silk stood at $\pounds 1$ 8s. per lb. in London on 12 March [18]58.^c

The ideal bar is the mental image of a quantity of iron, an iron bar, whose value is invariable with respect to (1) all other commodities; (2) the labour time contained in it. Of course, this iron bar is purely imaginary, only not quite as fixed and "STANDING LIRE A ROCK IN THE SEA", as Steuart^d and, nearly 100 years later, Urquhart believe. The only thing about the iron bar which is fixed is its name; in one case, the real iron bar comprises 2 ideal ones, in the other, only 1. This is expressed in such a way that the same, invariable, ideal bar at one time=2, and at another=1 real [bar]. If this is granted, only the relation of the real iron bar has changed, the ideal one has not. BUT IN FACT, in one case the ideal iron bar is double its length compared with the other case, and only its name is unchanged. On the one occasion, e.g. 100 lbs of iron is called A BAR, on the other occasion 200 [lbs].

^a [D. Urquhart,] "Currency", The Free Press, No. 22, 25 November 1857, pp. 545 and 546.— Ed.

^b Marx has "100%".—*Ed.*

^c The Economist, No. 759, 13 March 1858, p. 300.- Ed.

^d J. Steuart, An Inquiry into the Principles of Political Oeconomy, Vol. II, p. 107.

Suppose that money was issued which represented labour time, F.I. hour tickets; some baptismal name could be arbitrarily bestowed upon them in turn, e.g. one pound; 1/200 of an hour would be 1s., 1/240 of an hour 1d. Gold and silver, like all other commodities, depending on the production time they cost, would express different MULTIPLES or fractional parts of pounds, shillings, pence; and an ounce of gold might just as well=£8 6s. 3d. as £3 17s. $10^{1}/2^{d}$. These numbers would always express the proportion in which a certain quantity of labour is contained in the ounce. Instead of saying that £3 17s. $10^{1}/2^{d}$, equal to one ounce of gold, now costs only $1/2^{lb}$. of silk, we can imagine that the ounce now=£7 15s. 9d., or that £3 17s. $10^{1}/2^{d}$. is now only equal to half an ounce, because that money is now only half its value.

Comparing prices in England in, e.g., the 15th century with those in the 18th, we might find that two commodities had precisely the same nominal money value, e.g., $\pounds 1$ stg. Here the pound sterling is the standard, but in the first case it expresses 4 or 5 times as much value as in the second, and we could say that if the value of this commodity in the 15th century was= $\frac{1}{4}$ ounce, in the 18th century it was=1 ounce of gold, because in the 18th century 1 ounce of gold expresses the same labour time as $\frac{1}{4}$ ounce did in the 15th century. It might therefore be said that the measure, the pound, had remained the same, but in one case it was equal to four times as much gold as in the other. This is the ideal standard. People of the 15th century, if they had lived until the 18th, could have made the same comparison as we have done, and could have said that 1 ounce of gold, now worth $\pounds 1$ stg., was previously worth only $\frac{1}{4}$. Now 4 pounds of gold is worth no more than 1 was, e.g., in the 15th century. If this pound was previously called the livre, I can imagine that a livre then was=4 pounds of gold, while now it is only=1; that the value of gold has changed, but the measure of value, the livre, has remained unchanged. IN FACT, a livre originally signified in France and England 1 pound of silver, and now only 1/x. Hence it can be said that the name livre, the standard, has always remained nominally the same, but silver has, by contrast, changed its [VII-32] value. A Frenchman who had lived from the time of Charlemagne up to the present day could say that the livre of silver had always remained the standard of value, unchanged, but that, while it was once worth 1 pound of silver, it had, because of a diversity of circumstances, eventually come to be worth only 1/r of half an ounce. The yard, although the same, is of different length in different countries. It is, IN FACT, the same as if, e.g., the product of a day's labour, the gold that can be mined in one working day, were given the name livre, and this livre always remained the same, although expressing very different quantities of gold at different periods.^a

When we compare the pound sterling of the 15th century with that of the 18th century, how in fact do we do it? The two are the same quantity of metal (each=20s.), but of different value; for then the metal was worth 4 times as much as it is now. Hence, we say that then the livre=4 times the amount of metal it contains today. And one could imagine that the livre had remained unchanged, but was=4 real gold livres then as compared with only 1 now. That would be only relatively correct, not in terms of the quantity of metal contained in the livre, but in terms of its value; and this value itself is, in turn, expressed quantitatively in the form that $\frac{1}{4}$ livre of gold then=1 livre of gold now. Well: the livre is identical. but then it was=4 REAL librae of gold (by relation to the current value), and is only=1 now. If gold falls in value, and its fall or rise relative to other articles is expressed in their price, instead of saying that an object which previously cost $\pounds 1$ of gold now costs 2. it could be said that it still costs a pound but a pound is now worth 2 real gold livres, etc.; hence $\pounds 1$ comprises 2 real gold livres, etc. Instead of saying: I sold this commodity yesterday for $\pounds 1$, I am selling it today for £4, I can say that I sell it for £1, but vesterday for a $\underline{\ell}$ of 1 real $\underline{\ell}$, and today for $\underline{\ell}1$ of 4 real pounds.

All other prices are determined automatically, as soon as the relation of the real BAR to the imaginary one has been established; and this is simply the comparison between the past value of the BAR and its present value. It is the same as if we were to do all our calculations in the \pounds sterling of the 15th century, FOR INSTANCE. What the historian must do who traces the same kind of coinage, the same name of account for a coin of the same metallic content through the centuries, when he reckons it in present-day money, having to equate it with a greater or smaller quantity of gold depending on the coin's changing value in different centuries—this precisely is done by the Berber or Negro. It is the striving of the semi-civilised to maintain as value, too, the monetary unit, the quantity of metal which serves as measure; to uphold this value as a fixed measure as well. At the same time, however, the shrewdness of knowing that the real value of the BAR has changed.

^a Here Marx crossed out the following passage: "In the 18th century the ounce of gold was only 1/4 of the value it was in the 15th century, i.e. 4 ounces of gold, in terms of value, is 1 ounce 3 centuries earlier. If the name "ounce" were taken as the unit of account, one could say that the ounce in the 15th century was worth 4 real ounces, in the 18th only one."—*Ed.*

Since this Berber has few commodities to measure, and tradition is still fresh among the uncivilised, this complicated method of calculation is not so difficult as it appears to be.

1 ounce is= $\pounds 3$ 17s. 10¹/₂d., i.e. not quite= $\pounds 4$. For the sake of convenience let us assume it is exactly= $\pounds 4$. Then ¹/₄ of an ounce of gold is given the name of pound, and serves under this name as coin of account. But this pound changes its value; partly it does so relatively, in relation to the value of other commodities whose value alters, and partly in so far as it is itself the product of more or less labour time. The one thing constant about it is its name, and the quantity, the fractional part of the ounce, the weight-part of gold whose baptismal name it is; i.e. the weight-part of gold contained in a PIECE OF MONEY CALLED ONE POUND.

The savage seeks to uphold it as unchanging value, and so it is the quantity of metal it contains that changes for him. If the value of gold falls by 50%," in his view the pound is still the measure of value, but a f_{L} of $^{2}/_{4}$ ounce of gold, etc. He sees the pound as always equal to an amount of gold (iron) which has the same value. But since this value changes, the pound is equal now to a greater and now to a smaller quantity of real gold or iron, according as more or less of them must be given in exchange for other commodities. He compares the present value with the previous which functions for him as the STANDARD and lives on only in his imagination. Consequently, rather than reckoning in terms of $\frac{1}{4}$ ounce of gold whose value varies, he reckons in terms of the value $\frac{1}{4}$ ounce of gold possessed previously, i.e. by reference to an imaginary, unchanging value of 1/4 ounce, which, however, is expressed in varying quantities. On the one hand, he seeks to uphold the measure of value as constant in value; on the other, he is shrewd enough not to come to any harm in applying this roundabout method of calculation. In assimilating the measuring of values with money, a procedure imposed on them from without, the semi-savages first displace it and then, out of this displacement, find their bearings again. But it is utterly absurd to regard that fortuitous displacement as an organic historical form or, still worse, to set it up as something superior in opposition to more developed relations. These savages, too, proceed from a quantity, the iron bar; but they uphold as a unit of account the value it traditionally possessed, etc.

The whole problem acquired its significance in modern political economy chiefly because of 2 circumstances:

^a Marx has "100%".— Ed.

(1) It has happened at different times—in England, e.g. during the Revolutionary War—that the price of gold bullion rose above that of coined gold. This historical phenomenon appeared to be irrefutable proof that the names possessed by definite fractional weight-parts of gold (of the precious metal)—pound, shilling, pence, etc.—by some inexplicable process conduct themselves independently towards the substance whose names they are. Otherwise, how could an ounce of gold be worth more than the same ounce coined into £3 17s. 10 $^{1}/_{2}$ d.? Or how could an ounce of gold be worth more than 4 livres of gold, if livre is merely the name for $^{1}/_{4}$ ounce?

Closer investigation, however, revealed that this was due to one of two causes. Either, the coins which circulated under the name of pound were IN FACT no longer of the normal metallic content; F.I., 5 circulating pounds IN FACT weighed only one ounce of gold (of the same fineness). Since a coin that ostensibly represented 1/4 ounce of gold (or thereabouts) in fact only represented 1/5, it was quite understandable that the ounce=5 such circulating \pounds 's; hence that the value of the BULLION PRICE rose above the MINT PRICE, as \pounds 1 IN FACT no longer represented, no longer denominated, 1/4 but only 1/5 ounce of gold; was now only the name for 1/5 ounce.

Or the same happened when, even though the metallic content of the gold coins in circulation had not fallen below the normal measure, they circulated simultaneously with depreciated paper money, and it was prohibited to melt them down and export them. In this case, the 1/4 ounce of gold circulating in the form of a \pounds shared in the depreciation of the notes, a fate from which gold in bullion was exempt.* It was the same FACT again: [VII-33] the name of account "pound" had ceased to be the name for 1/4ounce, was the name for a smaller quantity. The ounce was therefore equal to, e.g., 5 such pounds. This meant, then, that the BULLION PRICE had risen above the MINT PRICE.

So it was these or analogous historical phenomena, all just as simple to explain and all belonging to the same series, that first gave rise to the discussion of the *ideal measure*, or the view that money as measure should be merely a point of comparison and not a definite quantity. Hundreds of volumes have been written on this CASE in England over the last 150 years.

In itself, there is nothing strange about a rise in the value of a definite kind of coin above that of its bullion content, since the

^{*} Within a given country, seignorage may raise the mint price above the bullion price.

making (shaping) of coin involves the addition of new labour. But the value of a particular kind of coin may rise above its bullion content for other reasons too. Yet this is without any economic interest whatsoever, and has not given rise to any economic investigations. All it means is that for definite purposes gold or silver was requisite precisely in this form, say of BRITISH POUNDS OR OF SPANISH DOLLARS. The Bank directors naturally had a particular interest in proving that it was not a fall in the value of the notes, but a rise in that of gold. The latter problem can only be dealt with later.

(2) But the theory of the IDEAL MEASURE OF VALUE was first put forward at the beginning of the 18th century, and was raised again in the second decade of the 19th century, in connection with matters in which money figured not as measure, or as means of exchange, but as an invariable equivalent, as value-for-itself (money in its third determination) and hence as the universal material of contracts. On both occasions, the point at issue was whether or not State and other debts contracted in a depreciated money should be paid back and honoured in money of full value. The question was merely one between the creditors of the State and the mass of the nation. This question as such does not concern us here. Those who demanded a readjustment of claims, on the one hand, and of obligations, on the other, strayed into the wrong field by asking whether the STANDARD OF MONEY should be altered or not. In this connection, such CRUDE theories were advanced about the STANDARD OF MONEY, the fixing of the price of gold, etc.

("ALTERING THE STANDARD [is] LIKE ALTERING THE NATIONAL MEASURES OR WEIGHTS." Steuart [An Inquiry into the Principles of Political Oeconomy, Vol. II, Dublin, 1770, p. 110].

It is immediately obvious that a nation's stock of grain is not altered by the volume of the bushel being, e.g., doubled or reduced by half. But such a change would be of great importance to, e.g., tenant farmers who had to discharge corn rents in a definite number of bushels, i.e. if the size of the measure had been doubled, and they had to supply the same number of bushels as before.)

In this case, it was the creditors of the State who clung to the name pound, in abstraction from the fractional weight-part of gold which it expressed, and hence to the "ideal standard"—for IN FACT this is merely the name of account of the weight-part of the metal which serves as measure. Singularly enough, however, it was

precisely their opponents that put forward this theory of the "ideal STANDARD", and the creditors themselves that opposed it. Instead of simply demanding a READJUSTMENT, or that the creditors of the State should only be paid back the quantity of gold which they had in fact advanced, they demanded that the STANDARD should be lowered in proportion to the depreciation; that is, e.g., if the fsterling had fallen to $\frac{1}{5}$ ounce of gold, the name pound should in future be borne by this $\frac{1}{5}$ ounce, or the pound should perhaps be coined into 21 shillings instead of into 20. This lowering of the STANDARD was called raising the value of money, since the ounce would now be equal to $\pounds 5$ instead of, as previously, to $\pounds 4$. So they did not argue that those who had advanced, e.g., one ounce of gold in 5 depreciated pounds should now get back only 4 pounds of full value. They said, rather, that the creditors should get back £5, but that in future the pound should express $\frac{1}{20}$ ounce less than it did before.

When they put forward this demand in England after the RESUMPTION OF CASH PAYMENTS, the coin of account had regained its previous metallic value. In this connection other CRUDE theories about money as the measure of value were also advanced, and on the pretext that those theories were false, which was easy to demonstrate, the interests of the creditors of the State were smuggled through.

The first conflict of this kind was that between Locke and Lowndes. From 1688 to 1695, the loans of the State were contracted in depreciated money—depreciated because all the full-weight money had been melted down, leaving only light money in circulation. The guinea had risen to 30 shillings. Lowndes (Master of the Mint?) wanted to have the \pounds sterling reduced by 20%; Locke insisted on maintaining the old standard of Elizabeth. In 1695,^a the remelting, the GENERAL RECOINAGE. Locke carried the day: debts contracted when the guinea passed current for 10 or 14 shillings were discharged at the RATE of 20 shillings. This was equally advantageous to the State and the landed proprietors.

"Lowndes put the question upon the wrong footing. First he maintained that his SCHEME implied no DEBASEMENT of the former STANDARD. Then he ascribed the rise of the price of BULLION to the intrinsic value of silver, and not to the LIGHTNESS OF [the] COIN with which it was bought. He always supposed that the STAMP, and not the substance, made the CURRENCY. Locke, for his part, only wondered whether or not Lowndes' scheme implied a DEASEMENT but he did not analyse the interests of those who are engaged in PERMANENT CONTRACTS. MR.

^a 1696.—Ed.

LOWNDES'S GREAT ARGUMENT FOR REDUCING THE STANDARD WAS, THAT SILVER BULLION WAS RISEN TO 6S. 5D. PER OUNCE (I.E. THAT IT MIGHT HAVE BEEN BOUGHT WITH 77 PENCE OF SHILLINGS OF $1/_{77}$ PART OF A POUND TROY), and therefore he was of the opinion that the POUND TROY SHOULD BE COINED INTO 77 shillings, which was a DIMINUTION of the value of the f sterling by 20% or $1/_5$. Locke answered him that the 77d. WERE PAID IN CLIPPED MONEY, and that they were not in weight above 62 PENCE STANDARD COIN. But ought a man who had borrowed f1,000 sterling in THIS CLIPPED MONEY to be obliged to pay back f1,000 IN STANDARD WEIGHT? Both Lowndes and Locke examined only very slightly the influence of changes in the STANDARD upon the relationship between debtors and creditors... In those days, the credit system was still little developed in England... THE LANDED INTEREST AND THE INTEREST AND HAD BEEN RUINED BY A PIRATICAL WAR... RESTORING THE STANDARD WAS THE MOST FAVOURABLE, BOTH FOR THE LANDED INTEREST AND THE EXCHEQUER; AND SO IT WAS GONE INTO" (Steuart, L.C., Vol. II, pp. 178, 179).

Steuart remarks about the whole TRANSACTION ironically:

"By this RAISING OF THE STANDARD, the government gained considerably upon the score of taxes, and the creditors upon their capital and interest; and the nation, which was the PRINCIPAL LOSER, was quite PLEASED, because *its* standard" (i.e. the measure of its *own* value) "was not DEBASED; thus ALL THE THREE PARTIES WERE SATISFIED" (l.c., Vol. II, p. 156).

Cf., in John Locke, Works, 4 vols, 7th edition, London, 1768, the essay Some Considerations of the [Consequences of the] Lowering of Interest, and Raising the Value of Money (1691) and also Further Considerations concerning raising the value of Money, wherein Mr. Lowndes's arguments for it, in his late Report concerning "An Essay for the amendment of the silver coins" are particularly examined, both in Vol. II. The first treatise says, among other things:

[VII-34] "THE RAISING OF MONEY, about which so much nonsense is talked now, is EITHER RAISING [the] VALUE OF OUR MONEY, and you cannot do that; or RAISING THE DENOMINATION OF OUR COIN" (p. 53). "Call, e.g., a crown what formerly was called $\frac{1}{2}$ a crown. The value remains determined by the metallic content. IF THE ABATING 1/20 of the quantity of the silver of any coin does not lessen its value, The abating 19/20 of the quantity of the silver of any coin will not abate its VALUE. So according to this theory, A SINGLE THREEPENCE, OR A SINGLE FARTHING, BEING CALLED A CROWN, WILL BUY AS MUCH SPICE OR SILK, OR ANY OTHER COMMODITY, AS A CROWNPIECE WHICH CONTAINS 20 OR 60 TIMES AS MUCH SILVER" (p. 54). "The RAISING OF MONEY is therefore nothing but GIVING A LESS QUANTITY OF SILVER THE STAMP AND DENOMINATION OF A GREATER" (l.c.). "The STAMP of the mint was a guarantee to the PUBLIC that under SUCH A DENOMINATION so much silver was contained" (p. 57). "IT IS SILVER, AND NOT NAMES, THAT PAYS DEBTS AND PURCHASES COMMODITIES" (p. 58). "The mint stamp suffices as a guarantee of the weight and fineness of the piece of money, but lets the GOLD MONEY SO COINED FIND ITS OWN RATE, like other commodities" (p. 66). In general, by the RAISING OF MONEY you can only make "MORE MONEY IN TALE", but not more "MONEY IN WEIGHT AND WORTH" (p. 73).

[In the second essay:]

"Silver is a standard quite different from all others. The yard, or quart men measure by, may rest in the buyer's or seller's, or a third person's hands, IT MATTERS NOT WHOSE IT IS. But silver is not only the measure of BARGAINS, IT IS THE THING BARGAINED FOR, and in commerce passes from the buyer to the seller, AS BEING IN SUCH A QUANTITY EQUIVALENT TO THE THING SOLD; AND SO IT NOT ONLY *MEASURES* THE VALUE OF THE COMMODITY IT IS APPLIED TO, BUT IS GIVEN IN EXCHANGE FOR IT, AS OF EQUAL VALUE. BUT THIS IT DOES ONLY BY ITS QUANTITY, AND NOTHING ELSE" (p. 92). "THE RAISING BEING BUT GIVING OF NAMES AT PLEASURE TO ALIQUOT PARTS OF ANY PIECE, VIZ. THAT NOW THE SIXTIETH PART OF AN OUNCE SHALL BE CALLED A PENNY, MAY BE DONE WITH WHAT INCREASE YOU PLEASE" (118). "THE PRIVILEGE THAT BULLION HAS, TO BE EXPORTED FREELY, WILL GIVE IT A LITTLE ADVANCE IN PRICE ABOVE OUR COIN, LET THE DENOMINATION OF THAT BE RAISED, OR FALLEN AS YOU PLEASE, WHILST THERE IS NEED OF ITS EXPORTATION, AND THE EXPORTATION OF OUR COIN IS PROHIBITED BY LAW" (pp. 119, 120).

In his conflict with Locke, Lowndes had argued that the rise in the price of BULLION was due to the fact that there had been a rise in its value and hence a fall in the value of the coin of account (i.e. because the value of BULLION had risen, the value of a fractional part of it, that called \pounds , had fallen). The same position was adopted by the LITTLE-SHILLING-MEN—Attwood and the other members of the Birmingham School, from 1819 onwards.³⁶ (Cobbett ^a had put the question on the right basis: NON-ADJUSTMENT OF NATIONAL DEBTS, RENTS, etc.; but spoiled everything by his incorrect theory altogether rejecting paper money. Oddly enough, he arrived at this conclusion proceeding from the same incorrect premiss—that price was determined by the quantity of the means of circulation—as led Ricardo to draw the opposite conclusion.) Their whole wisdom is comprised in the following phrases:

"In his quarrel with the Birmingham CHAMBER OF COMMERCE Sir R. Peel asks: "WHAT WILL YOUR POUND NOTE REPRESENT?" (The Currency Question. The Gemini Letters, London, 1844, pp. 266) (i.e. the pound note if not redeemable in gold). "What is to be understood by the PRESENT STANDARD OF VALUE?... £3 17s. $10^{1}/_{2}d$., does it denote one ounce of gold or its value? If the ounce itself, why not call things by their names, and say OUNCES, PENNYWEIGHTS, AND GRAINS instead of POUNDS, SHILLINGS and PENCE? This would bring us back TO A DIRECT SYSTEM OF BARTER" (p. 269).

(Not QUITE But what would Mr. Attwood have gained if people said "ounce" instead of £3 17s. $10^{1}/_{2}$ d., and "so many PENNYWEIGHT" instead of "shilling"? That for the sake of convenience in calculation names are given to the fractional parts—which shows, besides, that the metal is here given a social determination alien to it—in what sense is this evidence either for or against Attwood's theory?)

"Or does it denote the value? If an ounce= $\pounds 3$ 17s. $10^{1/2}d$, why is gold at different periods $\pounds 5$ 4s. and then again $\pounds 3$ 17s. 9d.? ... the EXPRESSION POUND HAS

^a W. Cobbett, Paper against Gold.-Ed.

REFERENCE TO VALUE, BUT NOT A FIXED STANDARD VALUE... LABOUR IS THE PARENT OF COST, AND GIVES THE RELATIVE VALUE TO GOLD OR IRON."

(And this is IN FACT why the value of one ounce and of £3 17s. $10^{1/2}$ d. are both variable.)

"WHATEVER DENOMINATION OF WORDS ARE USED TO EXPRESS THE DAILY OR WEEKLY LABOUR OF A MAN, SUCH WORDS EXPRESS THE COST OF THE COMMODITY PRODUCED" (p. 270). "The word one pound is the *ideal unit*" (p. 272).

This last proposition is significant because it shows how the theory of the "IDEAL UNIT" boils down to the demand for a money which should represent labour directly. "POUND" would then be the expression for, e.g., 12 days' labour. It is demanded that the determination of value should not give rise to that of money as a distinct determination, or that labour's being the measure of values should not lead to the labour objectified in a particular commodity being made the measure of other values. The important thing is that this demand is here made from the standpoint of the bourgeois economy (thus, among others, by Gray, who really carries the matter to the extreme, and of whom we shall speak presently) and not from that of the negation of the bourgeois economy, as was the case with, e.g., Bray. The Proudhonists (see, e. g., Mr. Darimon^a) have in fact managed to postulate the demand, both as one corresponding to the presentday relations of production, and as a great innovation, a demand totally revolutionising these relations. They can afford to do so because, like the crapauds^b they are, they of course need know nothing whatsoever of what has been written or thought on the other side of the Channel. AT ALL EVENTS, the simple fact that the demand was first put forward more than 50 years ago by a group of bourgeois economists in England, shows in itself how far the socialists who pretend thereby to be advancing something new and anti-bourgeois have strayed onto the wrong track. On the demand itself, see above.^c (Here we can only bring in a few points from Gray. As for the rest, we can only go into the details of this matter when we come to discuss banking.)

[MONEY AS MEANS OF CIRCULATION AND AS INDEPENDENT VALUE]

As regards money as an equivalent that remains equal to itself, i. e. as value as such, and hence as the material of all contracts, it

^a See present edition, Vol. 28, pp. 51-72.- Ed.

^b Philistines (literally: toads).- Ed.

^c See present edition, Vol. 28, pp. 60-93.-Ed.

is obvious that changes in the value of the material in which it is represented (directly, as in gold or silver, or indirectly, as a draft upon a specific quantity of gold, silver, etc., in the form of notes) must give rise to great revolutions between the different classes of a State. This is not to be examined here, since the relations in question can only be discussed given a knowledge of the different economic relations. [VII-35] Only so much by way of illustration.

In the 16th and 17th centuries, as is well known, the depreciation of gold and silver, resulting from the discovery of America, lowered the standing of the working class and of the landed proprietors, and raised that of the capitalists (especially the industrial capitalists). In the Roman Republic, the plebeians became the slaves of the patricians because of the APPRECIATION of copper.^a

"Since the largest sums had to be paid in copper, one had to accumulate this metal either IN MASSES or as shapeless fragments which could be given and accepted by weight. Copper in this state was called *aes grave*.^b Metal MONEY was weighed." //Initially, the copper circulating among the Romans bore no stamp; later it bore the stamp of foreign mints. *Servius rex ovium bounque effigie primus aes signavit*^c (Pliny, *Historia Naturalis*, Book 18, Ch. 3).//

"After the patricians had accumulated a mass of this dull and rough metal, they sought to get rid of it either by buying from the plebeians all the lands which the latter agreed to sell to them or by lending it out at long term. They were forced to sell cheap a value which was an inconvenience to them, and which they had acquired without cost. The competition between all those who wished to get rid of it was bound to result in a considerable decline in the price of copper in Rome in a short time. At the beginning of the 4th century after the foundation of Rome, the ratio of copper to silver=1:960, as can be seen from the *lex Menenia* (302 A.U.C.⁴)....

"At the same time, this metal, so depreciated in Rome, was one of the most sought-after articles in trade (since the Greeks made works of art out of bronze, etc.).... The exchange of the precious metals for copper in Rome yielded enormous profits, and so lucrative a trade daily stimulated fresh imports....

"Gradually, the patricians replaced in their hoards the piles of old copper, so inconvenient to store and so unpleasant to see, with ingots of gold and silver, aurum infectum and argentum infectum. After the defeat of Pyrrhus and especially after the conquests in Asia ... the aes grave completely disappeared and the needs of circulation necessitated the introduction of the Greek drachma, under the name of victoriatus, weighing $1^{1}/_{2}$ scruples of silver, like the Attic drachma; in the 7th century after the foundation of Rome the lex Clodia made it into Roman coin. Usually, it exchanged for one pound of copper or the as of 12 ounces.

^a The passages from Garnier's *Histoire de la monnaie* that follow are reproduced by Marx partly in French, and partly in German translation or rendering.—*Ed.*

^b Heavy copper (measured by weight).—Ed.

^c Servius was the first king who stamped the copper with the images of sheep and oxen. - Ed.

d From the founding of the city (of Rome).-Ed.

"So, owing to export, the ratio of silver to copper was now 192:1, i. e. the advantage of silver had declined to 1/5 of what it was at the time of the greatest depreciation of copper. Nevertheless, copper was still cheaper in Rome than in Greece and Asia.

"This great revolution in the exchange value of the material of money, as it proceeded, brought about the cruellest deterioration in the lot of the unfortunate plebeians who, having borrowed the copper when it was depreciated, and spent or used it in accordance with the value it possessed at the time, were now indebted, according to the letter of their contracts, for $5 \times$ the sum they had actually borrowed. They had no means of buying themselves free from servitude.... Who had borrowed 3,000 as when this sum was=300 oxen or 900 scruples of silver could now obtain that amount only for 4,500 scruples of silver, since by then the as was represented by $11/_2$ scruples of this metal.... If the plebeian had returned $1/_5$ of the copper which he had obtained, he would in reality have discharged his debt, for $1/_5$ now [possessed] the same value as 1 at the time when the contract had been made. The value of copper relative to that of silver had risen five-fold....

"The plebeians demanded a revision of their debts, a new assessment of the sums due, and amendments in the title of their original obligations. True, the creditors did not demand restitution of the capital, but as a result of the excessive appreciation of the money, the very payment of interest originally stipulated at 12%, had become unbearable, as onerous as if it had been set at 60% of the principal. The debtors obtained a law subtracting the accumulated interest from the capital, but gained nothing by it....

"The senators would not relinquish the means by which they held the people in the most abject dependence. The owners of almost all the landed property, armed with legal titles authorising them to throw their debtors into irons and subject them to corporal punishment, they crushed the rebellions and raged against the most unruly ones. The house of every patrician was a prison. Finally, wars were provoked, which provided pay to the debtor, with a suspension of obligations, and opened up new sources of wealth and power to the creditor.

"This was the internal situation of Rome at the time of the defeat of Pyrrhus, the seizure of Taranto, and the important victories over the Samnites, Lucanians and other South Italic peoples, etc. The first Roman silver coin, the *libella*, was issued in 483 or 485 [after the foundation of Rome]; it was called the libella because, being of small weight, it was the *libra* of 12 ounces of copper" (Germain Garnier, *Histoire de la monnaie etc.*, 2 vols, Paris, 1819, Vol. II, [21-24] pp. 15 et sqq.).

//Assignats.³⁷

"NATIONAL PROPERTY. Assignat OF 100 FRANCS" LEGAL TENDER. They differed from all other NOTES IN NOT EVEN PROFESSING TO REPRESENT ANY SPECIFIED THING. The words "NATIONAL PROPERTY" signified that their value could be obtained by purchasing with them the CONFISCATED PROPERTY at the regular auctions of such property. But there was no reason why that value should have been called 100 francs. It depended on the COMPARATIVE QUANTITY of the PROPERTY SO PURCHASABLE, and the number of assignats issued (Nassau W. Senior, Three Lectures on the Cost of Obtaining Money etc., London, 1830, pp. 78, 79).

"The *livre of account*, introduced by Charlemagne, and almost never represented by a real equivalent coin, retained its name, as well as its divisions into sous and deniers, up to the end of the 18th century. By contrast, there was infinite variation in the name, form, weight and value of real money, not only at every change of government, but under the same government. True, the value of the livre of account was also subjected to enormous reductions, but this was always done forcibly" (Garnier, l.c., Vol. I, p. 76 [77]).

All coins of the ancients were originally weights (ibid.).

"MONEY IS IN THE FIRST PLACE THE UNIVERSALLY MARKETABLE COMMODITY, OR THAT IN WHICH EVERY ONE DEALS FOR THE PURPOSE OF PROCURING OTHER COM-MODITIES" (Bailey, Money and Its Vicissitudes etc., London, 1837, p. 1). "IT IS THE GREAT MEDIAL COMMODITY" (I.c., p. 2). It is the GENERAL COMMODITY OF CONTRACTS, OR THAT IN WHICH THE MAJORITY OF BARGAINS ABOUT PROPERTY, TO BE COMPLETED AT A FUTURE TIME, ARE MADE (p. 3). Finally, it is the "MEASURE OF VALUE... NOW, AS ALL ARTICLES ARE EXCHANGED FOR MONEY, THE MUTUAL VALUES OF A AND B ARE AS NECESSARILY SHOWN BY THEIR VALUES IN MONEY OR THEIR PRICES... [VII-36] AS THE COMPARATIVE WEIGHTS OF SUBSTANCES ARE SEEN BY THEIR WEIGHTS IN RELATION TO WATER, OR THEIR SPECIFIC GRAVITIES" (p. 4).

"THE FIRST ESSENTIAL REQUISITE IS THAT MONEY SHOULD BE UNIFORM IN ITS PHYSICAL QUALITIES, SO THAT EQUAL QUANTITIES OF IT SHOULD BE SO FAR IDENTICAL AS TO PRESENT NO GROUND FOR PREFERRING ONE TO THE OTHER. For example, GRAIN and CATTLE are not suitable for this purpose, if only because EQUAL quantities OF GRAIN AND EQUAL NUMBERS OF CATTLE ARE NOT ALWAYS ALIKE IN THE QUALITIES FOR WHICH THEY ARE PREFERRED" (pp. 5-6).

"Hence STEADINESS OF VALUE IS DESIRABLE in money as the MEDIAL COMMODITY AND A COMMODITY OF CONTRACT: It IS QUITE UNESSENTIAL TO IT IN ITS CAPACITY OF THE MEASURE OF VALUE" (p. 9). "MONEY MAY CONTINUALLY VARY IN VALUE, AND YET BE AS GOOD A MEASURE OF VALUE AS IF IT REMAINED PERFECTLY STATIONARY. SUPPOSE, for example, IT IS REDUCED IN VALUE and the reduction in value implies A REDUCTION OF VALUE IN RELATION TO SOME ONE OR MORE COMMODITIES; SUPPOSE IT IS REDUCED IN VALUE IN RELATION TO CORN AND LABOUR. BEFORE THE REDUCTION, A GUINEA WOULD PURCHASE THREE BUSHELS OF WHEAT, OR SIX DAYS' LABOUR: SUBSEQUENTLY, IT WOULD PURCHASE ONLY TWO BUSHELS OF WHEAT OR 4 DAYS' LABOUR. In both cases, THE RELATIONS OF WHEAT AND LABOUR TO MONEY BEING GIVEN. THEIR MUTUAL RELATIONS CAN BE INFERRED: IN OTHER WORDS, WE CAN ASCERTAIN THAT A BUSHEL OF WHEAT IS WORTH 2 DAYS' LABOUR. THIS, WHICH IS ALL THAT MEASURING VALUE IMPLIES, IS AS READILY DONE AFTER THE REDUCTION AS BEFORE. THE EXCELLENCE OF ANY THING AS A MEASURE OF VALUE IS ALTOGETHER INDEPENDENT OF ITS OWN VARIABLENESS IN VALUE.... One confuses INVARIABLENESS OF VALUE WITH INVARIABLENESS IN FINENESS AND WEIGHT THE COMMAND OF QUANTITY BEING THAT WHICH CONSTITUTES VALUE, A DEFINITE QUANTITY OF A SUBSTANCE OF SOME UNIFORM COMMODITY MUST BE USED AS A UNIT TO MEASURE VALUE; AND IT IS THIS DEFINITE QUANTITY OF A SUBSTANCE OF UNIFORM QUALITY WHICH MUST BE INVARIABLE" (p[p. 9-]11).

All pecuniary contracts are concerned with the *quantity* of gold and silver to be loaned, not with their value (p. [100-] 103). "If a person insists that it is a contract for a definite *value*, HE IS BOUND TO SHOW IN RELATION TO WHAT COMMODITY: THUS, HE WOULD BE MAINTAINING THAT A PECUNIARY CONTRACT DOES NOT RELATE TO A QUANTITY OF MONEY AS EXPRESSED ON THE FACE OF IT, BUT TO A QUANTITY OF SOME COMMODITY OF WHICH NO MENTION IS MADE" (p. 104).

"It is not necessary to confine this to contracts where actual *money* is lent. It is true FOR ALL STIPULATIONS FOR THE FUTURE PAYMENTS OF MONEY, WHETHER FOR ARTICLES OF ANY KIND SOLD ON CREDIT, OR FOR SERVICES, OR AS RENT OF LAND OR HOUSES; they are PRECISELY IN THE SAME CONDITION AS PURE LOANS OF THE MEDIAL COMMODITY. IF A SELLS A TON OF IRON TO B FOR 10 POUNDS, AT 12 MONTHS' CREDIT, IT IS JUST THE SAME IN EFFECT AS LENDING THE TEN POUNDS FOR A YEAR, and the interests of both parties to the contract will be AFFECTED in the same manner BY CHANGES IN THE CURRENCY" (pp. 110, 111). The naming of specific and invariable fractional parts of the money substance which are to serve as the measuring unit is confused with fixing the *price* of money. This confusion is characteristic of, among others, Mr. Adam Müller, the highfalutin Romantic political economist. He says, among other things:

"Everybody realises how important it is to determine the price of coins correctly, especially in a country like England, where the government with generous liberality coins money gratuitously" (i. e. at the expense of the country and to the profit of the Bank of England BULLION DEALERS), "where no seigniorage is levied, etc., and consequently if the government were to fix the mint price considerably above the market price, if instead of paying f_3 17s. 10 $\frac{1}{2}$ d. for an ounce of gold as at present, it fixed the mint price of an ounce of gold at f_3 19s., all gold would flow into the mint and the silver obtained there would be exchanged for the cheaper gold on the market and, as a result, again brought to the mint, thus throwing the monetary system into disorder" (*Die Elemente der Staatskunst*, Part II, Berlin, 1809, pp. 280, 281).

So Mr. Müller is unaware of the fact that pence and shilling here are merely names for fractional parts of a gold coin. Because pieces of silver and copper—which, *notabene*, are not stamped according to the ratio of silver and copper to gold, but are issued merely as tokens representing portions of gold of the same name, and hence have only to be taken in payments in very small amounts—circulate under the names "shillings" and "pence", he imagines that an ounce of gold is divided into pieces of gold, silver and copper (hence a triple STANDARD OF VALUE). But a few lines further, he recalls that in England there is not even a double standard, still less a triple one. Mr. Müller's hazy notions of "common" economic relations is the real foundation of his "higher" conception.

From the general law that the total price of the commodities in circulation determines the volume of the circulating medium, assuming a definite velocity of circulation, it follows that, at a definite stage in the growth of values thrown into circulation, the more precious metal—the metal of greater specific value, i. e., which contains more labour time in a smaller quantity of itself—supersedes the less precious metal as the dominant means of circulation. Hence, copper, silver, gold, one ousts the other as the dominant means of circulation. The same aggregate sum of prices can, e. g., be circulated with 14 times less gold coins than silver coins. The dominance of copper coins, and still more of iron coins, as the means of circulation implies a low level of circulation. In just the same way, the more powerful but more valuable means of transport and communication replace the less valuable, as the volume of commodities in circulation and of circulation in general increases.

On the other hand, the petty retail trade of everyday life, of course, requires acts of exchange which are on a diminutive scale-the smaller the poorer the country and the lower the level of circulation in general are. It is in this retail trade, in which very small quantities of commodities, and hence very small values, are circulated, that money appears in the strictest sense of the word only as an evanescent means of circulation and is not fixed as realised price. To serve the needs of this trade a subsidiary means of circulation is therefore introduced which is merely the token of the fractional parts of the dominant means of circulation. They are silver and copper chips which are, consequently, not coined according to the proportion of the value of their substance to the value of, e. g., gold. Here money appears merely as a token, even though itself still in a relatively valuable substance. Gold, e.g., would have to be divided into exceedingly small fractions to correspond as an equivalent to the division of commodities which is required by this retail trade.

Therefore, these subsidiary means of circulation need, under law, to be taken in payment only in small amounts; so they can never assert themselves as the realisation of price. [V11-37] E. g., in England, copper to the amount of 6d., and silver to the amount of 20s. The higher the degree of development of circulation in general, and the greater the sum of prices of the commodities entering into circulation, the more is the wholesale exchange of commodities separated from their retail exchange, and the more do they require different kinds of coin for circulation. The velocity of circulation of the chips is inversely related to the magnitude of their value.

"In the EARLY STAGE OF SOCIETY, WHEN NATIONS ARE POOR, AND THEIR PAYMENTS TRIFLING, COPPER HAS FREQUENTLY BEEN KNOWN TO ANSWER ALL THE PURPOSES OF CURRENCY; and IT IS COINED INTO PIECES OF VERY LOW DENOMINATIONS IN ORDER TO FACILITATE THE INCONSIDERABLE EXCHANGES WHICH THEN TAKE PLACE. Thus in the EARLY AGE of the ROMAN REPUBLIC and Scotland" (David Buchanan, Observations on the Subjects Treated of in Dr. Smith's Inquiry etc., Edinburgh, 1814, p. 3). "THE GENERAL WEALTH OF A COUNTRY IS VERY ACCURATELY MEASURED BY THE

"THE GENERAL WEALTH OF A COUNTRY IS VERY ACCURATELY MEASURED BY THE NATURE OF ITS PAYMENTS AND THE STATE OF ITS COIN; AND THE DECIDED PREVALENCE OF A COARSE METAL IN ITS CURRENCY, JOINED TO THE USE OF COINS OF VERY LOW DENOMINATIONS, MARKS A RUDE STATE OF SOCIETY" (p. 4). "Later the BUSINESS of the CURRENCY divides itself into 2 DISTINCT DEPARTMENTS: THE DUTY OF EFFECTING THE MAIN PAYMENTS being reserved for the MORE PRECIOUS METALS, while the INFERIOR METALS are RETAINED FOR MORE TRIVIAL EXCHANGES, and are thus merely SUBSER-VIENT TO THE MAIN CURRENCY. Between the first INTRODUCTION of a precious metal into the CURRENCY of a country, and its exclusive USE in the MAIN PAYMENTS, there is a wide interval; and the PAYMENTS of the RETAIL TRADE must, in the meantime, have become so CONSIDERABLE, in consequence of the INCREASE OF WEALTH, that they COULD, in part at least, BE CONVENIENTLY MANAGED BY THE NEW and MORE VALUABLE COIN; SINCE NO COIN CAN BE USED FOR THE MAIN PAYMENTS" (this is wrong, as is seen in the case of banknotes) "WHICH IS NOT SUITED, at the same time, TO THE TRANSACTIONS OF THE RETAIL TRADE, because every TRADE ultimately derives THE RETURN OF ITS CAPITAL from the CONSUMER....

On the Continent silver has held its ground everywhere in the MAIN PAYMENTS.... In Britain, the quantity of silver in circulation does not exceed what is necessary for the SMALLER PAYMENTS.... In point of fact, FEW PAYMENTS to the amount of 20s. are made in silver. Before the REIGN OF William III, SILVER WAS BROUGHT IN LARGE BAGS TO THE TREASURY IN PAYMENT OF THE NATIONAL REVENUE. At this period the great change took place.... The exclusive INTRODUCTION of gold into the MAIN PAYMENTS OF ENGLAND WAS A CLEAR PROOF that the RETURNS of the RETAIL TRADE were by this time chiefly made in gold; this possible without a SINGLE PAYMENT ever EXCEEDING or even EQUALLING ANY OF THE GOLD COINS; BECAUSE, IN THE GENERAL ABUNDANCE OF GOLD, AND SCARCITY OF SILVER, GOLD COINS would naturally be OFFERED FOR SMALL SUMS and A BALANCE OF SILVER DEMANDED IN RETURN; as a result of which gold, BY THUS ASSISTING in the RETAIL TRADE, and ECONOMISING THE USE OF SILVER, even for the SMALL PAYMENTS, WOULD PREVENT ITS ACCUMULATION BY THE RETAIL TRADER.... The substitution of gold for silver in the MAIN PAYMENTS in England" (1695) "coincided with the substitution of silver for copper in Sweden....

"It is clear that the COIN USED FOR THE LARGER PAYMENTS CAN ONLY PASS CURRENT AT ITS INTRINSIC WORTH But intrinsic worth is not necessary to a SUBSIDIARY CURRENCY.... In Rome, as long as COPPER was the PREVAILING COIN, it was CURRENT ONLY FOR ITS INTRINSIC VALUE.... Silver was introduced 5 years before the commencement of the First Punic War, and superseded copper in the main payments only gradually.... Gold was introduced 62 years after silver; BUT IT NEVER SEEMS TO HAVE EXCLUDED SILVER FROM THE MAIN PAYMENTS In India, copper is not a SUBSIDIARY CURRENCY; therefore, passes current for its INTRINSIC WORTH. The RUPEE, A SILVER COIN of 2s. 3d., is the MONEY OF ACCOUNT; IN RELATION to which, the MOHOUR, A GOLD COIN, and the PICE, A COPPER COIN, ARE ALLOWED TO FIND THEIR VALUE IN THE MARKET; the NUMBER OF PICE CURRENTLY EXCHANGED FOR A RUPEE constantly VARIES with the weight and value of the COIN; while here 24 HALFPENCE always=1s. without regard to their weight. In India, the RETAIL DEALER must still accept CONSIDERABLE QUANTITIES OF COPPER in return for his GOODS; and he CANNOT AFFORD TO TAKE IT, therefore, BUT for its intrinsic worth. In the CURRENCIES of Europe, copper PASSES for whatever value is fixed on it, without examination either of its weight or FINENESS" (pp. 4-18).

"In ENGLAND, an excess of copper coin was issued in 1798, BY PRIVATE TRADERS; and although COPPER is LEGAL PAYMENT for no more than 6d., the surplus found its way to the RETAIL TRADERS, who sought to put it back into circulation; but it ultimately returned to them. When this CURRENCY was stopped, COPPER had accumulated with the RETAIL TRADERS, in sums of £20, £30 and even £50, which they were finally obliged to dispose of for their INTRINSIC worth" (p. 31).

In the SUBSIDIARY CURRENCY the means of circulation as such, as a mere evanescent medium, assumes a special existence, alongside the means of circulation which simultaneously is an equivalent, realises prices, and is accumulated as independent value. Here, therefore, purely a token. Hence it can only be issued in the quantity that is absolutely necessary for the petty RETAIL TRADE, and consequently it can never be accumulated. That quantity must be determined by the aggregate of the prices it circulates divided by its velocity. Since the amount of the circulating medium, of a certain value, is determined by the prices, it follows that if a greater quantity were artificially thrown into circulation than that required by circulation itself, and could not flow off (which is not the case here, because as a means of circulation it is above its INTRINSIC WORTH), it would be depreciated—not because the quantity determines the prices, but because the prices determine the quantity, so that only a definite quantity of it, to a definite value, can remain in circulation.

Hence, if there are no openings through which circulation can throw out the excessive quantity, if the circulating medium cannot change from its form as means of circulation into that of value-for-itself, the value of the means of circulation must fall. But unless there are artificial hindrances, prohibition of the meltingdown of coin, of its export, etc., this can only take place if the circulating medium is merely a token, does not itself possess a real value which corresponds to its nominal value, and hence cannot pass over from the form of circulating medium into that of commodity in general, divesting itself of the stamp it bears; if it is imprisoned in its existence as coin.

On the other hand, it follows that the token, the money chip, can circulate at the nominal value of the money which it represents—without in fact possessing any value of its own—only in so far as it represents the means of circulation in the quantity in which that means would have circulated itself. But the condition then is, simultaneously, that it itself either is available only in so small a quantity that it circulates only in the subsidiary form, i.e. never ceases for a moment to be means of circulation (in which situation it constantly serves partly to effect the exchange of small quantities of commodities, and partly merely for the exchange of the real means of circulation), and hence can never be accumulated; or else it must not possess any value at all, so that its nominal value can never be compared with its intrinsic value. In the latter case it is posited as a mere token, which indicates a value as existing outside it. In the former case, the occasion never arises for a comparison to be made between its intrinsic value and its nominal value.

[VII-38] That is why debasements of money become manifest immediately, while a total abolition of its value has no negative effect. Otherwise it would look paradoxical that money could be replaced with valueless paper, while the least diminution of its metallic content depreciates it.

In general, there is a contradiction in the dual determination of money in circulation, i.e. as mere means of circulation, in which role it is an evanescent mediator; and simultaneously as the realisation of prices, in which form it is accumulated and converted into its third determination as money. As means of circulation, it is worn out, and therefore does not comprise the metallic content which makes it a fixed quantity of objectified labour. Hence its correspondence to its value is always more or less illusory. Here an example should be given.

It is important, already at this point in the chapter on money, to introduce the determination of quantity, but deduced in a way that is the very opposite to that in the usual doctrine. Money can be replaced, because its quantity is determined by the prices which it circulates. To the extent that it itself has value-as in the case of the subsidiary means of circulation-its quantity must be so determined that it can never be accumulated as an equivalent and in fact always figures only as an auxiliary wheel of the actual means of circulation. But if it is to replace the latter itself, it must have no value at all, i.e. its value must exist outside it. The VARIATIONS in circulation are determined by the AMOUNT and NUMBER OF TRANSACTIONS ([The] Econ[omist]^a). The circulation may increase because of an increase in the AMOUNT of commodities, prices remaining the same; because of a rise in prices, the AMOUNT of commodities remaining the same; because of a combination of the two factors.

The proposition that the prices regulate the QUANTITY OF CURRENCY and not vice versa, or, in other words, THAT TRADE REGULATES CURRENCY (the quantity of the means of circulation), AND CURRENCY DOES NOT REGULATE TRADE, implies, OF COURSE, AS OUR DEDUCTION HAS SHOWN, THAT PRICE IS ONLY VALUE TRANSLATED INTO ANOTHER LANGUAGE. Value, more specifically value determined by labour time, is the presupposition. Hence it is clear that this law is not equally applicable to price FLUCTUATIONS at all epochs; e.g., to those in the ancient world, e.g. in Rome, where the circulating medium does not itself spring from circulation, from EXCHANGE, but originates from looting, plunder, etc.

"No country can consistently have more than one STANDARD; MORE THAN ONE STANDARD FOR THE *MEASURE OF VALUE*; for this STANDARD must be UNIFORM and UNCHANGING. No article has a uniform and unchanging value in relation to

^a "On the Use and Functions of Bank Notes.—Circulation.—The Bank Act of 1844", The Economist, No. 226, 25 December 1847.—Ed.

another; IT ONLY HAS SUCH WITH ITSELF. One piece of gold is always of the same value as another of exactly the same fineness, the same weight and in the same place; BUT THIS CANNOT BE SAID OF GOLD AND ANY OTHER ARTICLE, e.g. silver" ([The] Econ[omist], Vol. I, [No. 37, 11 May 1844,] p. 771). "The POUND is nothing but A DENOMINATION IN ACCOUNT, WHICH HAS REFERENCE TO A GIVEN and FIXED QUANTITY OF GOLD OF STANDARD QUALITY" (ibid.). "To speak OF MAKING an ounce of gold worth £5 instead of £3 17s. $10^{1/9}$ d. is merely to say that it ought henceforth to be minted into 5 SOVEREIGNS instead of into 3429/480 SOVEREIGNS. We would not thereby alter the value of gold, but merely the weight and consequently the value of the pound or SOVEREIGN. An ounce of gold would continue to have the same value relative to wheat and all other commodities; but since a pound, though bearing the same name as before, would represent a smaller part of an ounce of gold, it would represent a CORRESPONDINGLY less quantity of wheat and other commodities. Just exactly as if we were to say that a quarter of wheat should no longer be divided into 8, but into 12 BUSHELS; we could not thereby alter the value of wheat but [only] diminish the QUANTITY contained in a BUSHEL and consequently diminish its value" (l.c., p. 772).

"Whatever temporary or permanent CHANGE may take place [in the value of gold], its *price* will always be expressed in the same AMOUNT OF MONEY: one ounce of gold will continue to be f_3 17s. 10¹/₂d. OF OUR MONEY. The change in its value is indicated by the greater or lesser quantity of other commodities which it can buy" (l.c., [*The Economist*, No. 42, 15 June 1844,] p. 890).

The *ideal bar*^a may be compared, e.g., with the *ideal milrea* in Brazil (similarly with the POUND in England at the time of the depreciation of bank notes, etc.). What is fixed here is the name *milrea*; what fluctuates is the quantity of gold or silver which it expresses.

In Buenos Aires, the CURRENCY is an INCONVERTIBLE paper money (paper dollars); this dollar was originally=4s. 6d., now about $3^{1}/_{4}d.$, and HAS BEEN AS LOW AS $1^{1}/_{2}d.$ A yard of CLOTH was previously worth 2 dollars, now nominally 28 dollars in consequence of the depreciation of the paper [*The Economist*, No. 57, 28 September 1844, p. 1253].

"In Scotland, the *Medium of exchange*", not to be confused with the STANDARD of value, "of the amount of f_1 and upwards, may be said to be exclusively paper, and cold does not circulate at all; yet cold is as much the standard of value as if nothing else circulated, because the paper is convertible into the same fixed quantity of that metal; and it circulates only on the faith of being so convertible" ([*The Economist*, No. 58, 5 October 1844,] p. 1275).

"GUINEAS are HOARDED IN TIMES OF DISTRUST" (Thornton, [An Enquiry into the Nature and Effects of the Paper Credit of Great Britain, London, 1802,] p. 48).

The HOARDING PRINCIPLE, in which money functions as independent value, is necessary as a moment—leaving aside the striking forms in which it appears—of exchange based on money circulation. For, as A. Smith says,^b besides one's own commodity everyone needs

^a See present edition, Vol. 28, pp. 80 and 128.-Ed.

^b A. Smith, An Inquiry into the Nature and Causes of the Wealth of Nations, Vol. I, London, 1835, p. 85.—Ed.
the MEDIAL QUANTITY, a definite proportion, of the "general commodity".

"THE MAN IN TRADE HAS PROPERTY IN TRADE" (l.c. [Thornton], p. 21).//

"EQUAL CAPITALS, OR, in other words, EQUAL QUANTITIES OF ACCUMULATED LABOUR, WILL OFTEN PUT IN MOTION DIFFERENT QUANTITIES OF IMMEDIATE LABOUR; but this changes nothing in substance" (Torrens, An Essay on the Production of Wealth, London, 1821, pp. 29-30). "In the EARLY PERIOD OF SOCIETY, it is the TOTAL QUANTITY OF LABOUR, ACCUMULATED and IMMEDIATE, EXPENDED ON PRODUCTION, that determines the relative value of commodities. But as soon as STOCK has ACCUMULATED, and there emerges a class of capitalists distinct from that of labourers, WHEN THE PERSON WHO UNDERTAKES ANY BRANCH OF INDUSTRY DOES NOT PERFORM HIS OWN WORK, BUT ADVANCES SUBSISTENCE and MATERIALS TO OTHERS, THEN IT IS THE AMOUNT OF CAPITAL, OR THE QUANTITY OF ACCUMULATED LABOUR EXPENDED IN PRODUCTION, that determines the EXCHANGEABLE POWER OF COMMODITIES" (pp. 33-34). "As long as 2 capitals are equal, their products are of equal value, HOWEVER WE MAY VARY THE QUANTITY OF IMMEDIATE LABOUR WHICH THEY PUT IN MOTION, OR WHICH THEIR PRODUCTS MAY REQUIRE. If they are unequal, their PRODUCTS are OF UNEQUAL VALUE, THOUGH THE TOTAL QUANTITY OF LABOUR EXPENDED UPON EACH SHOULD BE PRECISELY EQUAL" (p. 39). "Therefore after the separation of CAPITALISTS and LABOURERS, it is the AMOUNT OF CAPITAL, the QUANTITY OF ACCUMULATED LABOUR, and not, as before this separation, the SUM OF ACCUMULATED and IMMEDIATE LABOUR, EXPENDED ON PRODUCTION, that determines the exchange value" (l.c., [pp. 39-40]).

Mr. Torrens' confused approach is correct compared to the ABSTRACT WAY of the RICARDIANS. In itself, fundamentally wrong. Firstly, the determination of value by pure labour time takes place only on the basis of production [VII-39] of capital, hence on that of the separation of the 2 classes. The equalisation of *prices* IN CONSEQUENCE OF THE SAME AVERAGE RATE OF PROFIT—(and EVEN this is to be taken *cum grano salis*^a)—has *nothing* to do with the determination of value, but rather *presupposes* value. The passage is important for showing the confusion of the RICARDIANS.

The rate of surplus value as profit is determined (1) by the volume of surplus value itself; (2) by the ratio of living labour to ACCUMULATED labour (the ratio of the CAPITAL EXPENDED in wages TO THE CAPITAL EMPLOYED AS SUCH). The two factors which determine (1) and (2) must be examined specially. E.g., the law of rent pertains to (1). For the time being, necessary labour as such is assumed, i.e. that the worker always receives only the necessary minimum of wages. This assumption is, of course, necessary in order to establish the laws of profit, to the extent that they are not determined by the rise and fall of wages or by the influence of landed property. All the *solid* assumptions themselves become

^a With a grain of salt.— Ed.

fluid in the course of the analysis. But it is only by fixing them at the outset that one can undertake the analysis without confounding everything. Besides, it is practically sure, that, for instance, however the standard of necessary labour may differ at various epochs and in various countries, or how[ever] much, in consequence of the changing prices of raw produce, its ratio, or in consequence of the demand and supply of labour its amount and ratio may change, at any given epoch the standard is to be considered and acted upon as a fixed one by capital. To consider those changes themselves belongs altogether to the chapter treating of wageslabour.

"EXCHANGEABLE VALUE IS DETERMINED, NOT BY THE ABSOLUTE, BUT BY THE RELATIVE COST OF PRODUCTION. IF THE COST OF PRODUCING GOLD REMAINED THE SAME, WHILE THE COST OF PRODUCING ALL OTHER THINGS SHOULD BE DOUBLED, THEN WOULD GOLD HAVE A LESS POWER OF PURCHASING ALL OTHER THINGS THAN BEFORE; AND ITS EXCHANGEABLE VALUE WOULD FALL 1/2; and this diminution in its exchange value would be precisely the same, in effect, as if the COST OF PRODUCING ALL OTHER THINGS REMAINED UNALTERED, WHILE THAT OF PRODUCING GOLD HAD BEEN REDUCED 1/2" (Torrens, l.c., pp. 56-57).

This is important for prices, but not at all for the determination of value; a mere tautology. To say that the value of a commodity is determined by the quantity of labour which it contains is to say that it exchanges for the same quantity of labour embodied in any other form of use value. Hence it is clear that, if the labour time necessary for the production of object *a* DOUBLES, only 1/2 of it is now=to its former equivalent *b*. Since equivalence is determined by the equality of labour time or of the quantity of labour, difference in value is of course determined by inequality of these, or labour time is the measure of value.

"In 1826 the VARIOUS MACHINERY USED IN MANUFACTURING COTTON enabled 1 man to PERFORM THE WORK OF 150. Now assuming that only 280,000 men are employed in it, half a century ago 42,000,000 men would have had to be in it" (Hodgskin, [Popular Political Economy, London, 1827,] p. 72).

"The relative value of the precious metals to other commodities determines how much of them must be given for other things; and the number of sales to be made, within a given period, determines, as far as money is the instrument for effecting sales, the quantity of money required" (l.c., p. 188).

"ABUNDANT REASON TO BELIEVE THAT THE PRACTICE OF COINING ORIGINATED WITH INDIVIDUALS and was CARRIED ON BY THEM BEFORE IT WAS SEIZED ON AND MONOPOLISED BY GOVERNMENTS. Such was for a LONG time the practice in RUSSIA" (see Storch^a) (l.c., p. 195, note).

^a H. Storch, Cours d'économie politique, Vol. II, p. 128.- Ed.

Hodgskin takes a different view from that of the romantic Müller^a:

"THE MINT STAMPS ONLY WHAT INDIVIDUALS BRING, MOST INJUDICIOUSLY CHARGING THEM NOTHING FOR THE LABOUR OF COINING; AND TAXING THE NATION FOR THE BENEFIT OF THOSE WHO DEAL IN MONEY" (*Popular Political Economy, etc.*, London, 1827, p. 194).

[MACHINERY AND PROFIT]

After all these digressions on money—and we shall have occasionally to take up the subject again before ENDING THIS CHAPTER—we return to the *point de départ* (see. p. 25^b).

Here is an example of how in manufacturing industry, too, the improvement of machinery, and the increase in productive power effected by it, creates (relatively) *raw material*, rather than necessitating an absolute increase in it:

"The FACTORY SYSTEM in the LINEN TRADE is very new. Prior to 1828, the great bulk of the linen yarn in Ireland and England was spun BY HAND. About that time, FLAX-SPINNING MACHINERY was so much improved, particularly by the perseverance of Mr. Peter Fairbairn of Leeds, that it came into very GENERAL USE. From that time SPINNING MILLS very extensively erected at Belfast and other parts of the North of Ireland, as well as in DIFFERENT PARTS in Yorkshire, Lancashire, and in Scotland, for the spinning of fine yarns, and in the course of a few years hand spinning was abandoned. FINE TOW YARN is now manufactured from what was 20 years ago thrown away as refuse" ([*The Economist.*] No. 366, 31 August 1850, [p. 954]).

Whenever machinery is employed—let us first consider the CASE in its immediate form, i.e. that a capitalist, instead of expending a part of his capital on immediate labour, puts it into machinery—a part of capital is taken away from the variable and self-multiplying portion of capital, i.e. from the portion which exchanges with living labour, in order to be added to the constant part, whose value is merely reproduced or is maintained in the product. Yet this is done to MAKE THE REMAINING PORTION MORE PRODUCTIVE.

First case: The value of the machinery is equal to the value of the labour capacity which it replaces. In this case, the newly produced value would diminish, not increase, if the surplus time worked by the remaining labour capacity did not increase in the same proportion as its amount diminished. If 50 of 100 workers are dismissed and replaced by machinery, the remaining 50 must produce as much surplus labour time as did the 100 previously employed. If the 100 worked a total of 1,200 hours a day, of which 200 hours was surplus labour time, the same amount of

^a See this volume, p. 190.—Ed.

^b Ibid., pp. 158-61.— Ed.

surplus labour time must now be produced by the 50; i.e. 4 hours daily [by each of them], whereas the former only produced 2. In this case, the surplus labour time remains $50 \times 4=200$, the same as before $(100 \times 2=200)$, although the absolute labour time has diminished. Since capital is concerned only with the production of surplus labour, nothing changes for it in this case. The volume of raw material worked up would remain the same, and hence the outlay on it; the outlay on the instrument of labour would increase, and that on labour decline. The value of the total product would be the same, because it would equal the same sum of objectified and surplus labour time.

Such a CASE would hold no incentive for capital at all. What it gained in surplus labour time on the one hand, it would lose in that part of capital which would enter into production as objectified labour, i.e. as invariable value. Yet we must bear in mind that the machinery replaces less efficient instruments of production, which possessed a certain value, i.e. had been obtained in exchange for a certain sum of money. In the case of the capitalist who starts a new business, if not in that of the one already established in business, the part of the capital which was employed in instruments of lower productivity does not enter into the cost of the machinery.

[VII-40] Hence if, e.g., with the introduction of machinery to the value of £1,200 (50 labour capacities) an earlier outlay of, say, £240 on instruments of production falls away, the extra outlay of capital would amount to only £960, the price of 40 workers for a year. If in this case the remaining 50 workers produce between them exactly as much surplus labour as the 100 did before, so 200 hours of surplus labour are now produced with a capital of 2,160, as compared with the previous capital of 2,400. The number of workers has been halved; absolute surplus labour has remained the same, 200 hours of labour as before; the capital laid out in the material of labour has also remained the same; but the ratio of surplus labour to the invariable part of capital has increased absolutely.^a

Since the capital laid out in raw material has remained the same, and that laid out in machinery has increased, but not in the same proportion by which the capital laid out in labour has diminished, it means that *the total outlay of capital has decreased*; surplus labour has remained the same, i.e. it has increased relative to capital, and not merely in the proportion by which surplus labour time must

^a Here Marx crossed out an unfinished calculation of the relation between the volume of surplus labour and the constant and variable parts of capital.—*Ed.*

increase to remain the same with half as many workers, but to a greater extent, i.e., by the extent to which the [outlay] on the former means of production is deducted from the costs of the new ones.

The introduction of machinery—or, more generally, an increase in productive power which makes objectified labour the substratum of this productive power itself, and therefore involves costs; when, therefore, part of the capital previously laid out on labour is laid out as a component of the capital that enters into the production process as lasting value—the introduction of machinery can only take place if the proportion of surplus labour time not merely remains the same, and hence increases in relation to the living labour employed, but increases in a greater proportion than the ratio of the value of the machinery to the value of the workers displaced.

This may occur either because the entire outlay made for the previous instrument of production must be deducted, in which case the total sum of the capital laid out diminishes, and although the ratio of the total sum of labour employed to the constant part of capital has declined, the surplus labour time has remained the same, and has, therefore, increased not merely in relation to the capital expended on labour, i.e., in relation to necessary labour time, but in relation to the total capital, the total value of the capital, because this value has diminished.

Or it may be that the value of the machinery is the same as that previously laid out on the living labour which has now become superfluous, but the ratio of surplus labour yielded by the part of capital still employed has increased, so that the 50 workers perform not merely as much surplus labour as the 100 did previously, but more. Suppose, e.g., that each now performs $4^{1}/_{4}$ hours [surplus labour] instead of 4. In this case, however, a larger part of capital is required for raw material, etc., in short, a larger total capital is needed.

Suppose that a capitalist who previously employed 100 workers at an annual cost of $\pounds 2,400$, discharges 50 and substitutes for them a machine costing $\pounds 1,200$. This machine—although it costs him as much as the 50 workers did before—is the product of fewer workers, because he pays to the capitalist from whom he buys it not only the necessary labour but the surplus labour, too. Or, if he had his own men make the machine, he could employ a smaller number of workers and have them perform only the necessary labour.

The introduction of machinery, therefore, leads to an increase

in surplus labour and an absolute decline in necessary labour time. It may be accompanied by either an absolute decrease or an increase in the capital employed.

Surplus value as posited by capital itself, and measured by its numerical ratio to the total value of the capital, is *profit*. Living labour as appropriated and absorbed by capital appears as capital's own life-power, its self-reproducing power, modified, moreover, by the motion of capital itself, circulation, and the time required for that motion, circulation time. Only thus is capital posited as self-perpetuating and self-multiplying value, by its being distinguished as preposited value from itself as posited value.

Since capital enters into production wholly, and as capital its different components are distinct from one another only in form, being sums of value evenly, the positing of value appears to be evenly immanent to them. Moreover, since the part of capital which is exchanged for labour operates productively only in so far as the other parts of capital are posited too-and since the ratio of this productivity depends on the value magnitude, etc., and the different determinations of these components relative to each other (as fixed capital,³ etc.), so the positing of surplus value, of profit, appears to be evenly determined by all parts of capital. Since, on the one hand, the conditions of labour are posited as objective components of capital, and, on the other, labour itself is posited as an activity incorporated in it, the entire labour process appears as the process of capital itself, and the positing of surplus value as its product, whose magnitude, therefore, is not measured by the surplus labour which capital forces labour to perform, but appears as [deriving from] the increased productivity which capital imparts to labour.

The real product of capital is profit. To that extent, capital is now posited as the source of wealth. But in so far as it produces use values, these are *determined by value*: "value constitutes the product" (Say^a). Consequently, it produces for consumption. In so far as it is perpetuated by the constant renewal of labour, it appears as the permanent value presupposed for production, which depends upon its being maintained. In so far as it is constantly exchanged for new labour, it appears as the wages fund.

Obviously, the worker cannot produce without the objective

^a Cours complet d'économie politique pratique, Vol. I, Brussels, 1836, p. 243. Marx quotes in French.-Ed.

conditions of labour. [VII-41] These are now separated from him in the form of capital and independently confront him. He can relate himself to them as conditions of labour only in so far as his labour itself has previously been appropriated by capital. From the standpoint of capital, the objective conditions of labour do not appear as necessary for the worker. What is essential to it is that they should exist independently over against him, that he should be separated from them, that they should be owned by the capitalist, and that this separation could only be abolished by his giving up his productive power to capital, in return for which capital should maintain him as abstract labour capacity, i.e., precisely as a mere capacity to reproduce wealth as a force dominating that capacity and confronting it in the form of capital.

Hence all parts of capital yield profit simultaneously, both the circulating part (laid out in wages and raw material, etc.) and that laid out in fixed capital. Capital can now reproduce itself either in the form of circulating capital or in that of fixed capital. Since, as we saw above, in our analysis of circulation,^a the value of capital returns in different forms, depending upon whether it is preposited in either the one or the other form, and since, from the standpoint of capital which produces profit, it is not merely value which returns but the value of capital and profit, value as value itself and as self-valorising value, capital is obviously posited in either of these forms as, in different ways, profit-bearing.

The circulating capital enters into circulation wholly, with its use value serving as the bearer of its exchange value, and is thus exchanged for money. I.e., therefore, it is sold, sold entirely, although each time only a part of it enters into circulation. But in a single turnover it is entirely passed over into consumption as a product (whether this consumption is individual or productive), and is fully reproduced as value. This value includes the surplus value, which now appears as profit. Circulating capital is alienated as use value in order to be realised as exchange value. So this is *selling at a profit.*

By contrast, we have seen that the fixed capital only returns piecemeal, in the course of a number of years, a number of cycles of the circulating capital, and it does so only in the degree in which it is consumed (we saw this happen in the immediate act of production), enters as exchange value into circulation and returns as such value from it.^b However, both the entry of exchange value into circulation and its return from it are now posited as the entry

^a See this volume, pp. 102-28.— Ed.

^b Ibid., pp. 109-10, 117-20.— Ed.

and return not merely of the value of capital, but simultaneously of profit as well, so that a fractional part of profit corresponds to the fractional part of capital.

"The capitalist expects an equal profit on all parts of the capital which he advances" (Malthus, Principles of Political Economy, 2nd ed., London, 1836, p. 268). "WHERE WEALTH AND VALUE ARE PERHAPS THE MOST NEARLY CONNECTED, IS IN

THE NECESSITY OF THE LATTER TO THE PRODUCTION OF THE FORMER" (ibid., p. 301).

//"The FIXED CAPITAL (IN COTTON FACTORIES) usually=4:1 to the circulating; so that if a MANUFACTURER has £50,000, he will expend £40,000 in erecting his MILL, and FILLING IT WITH MACHINERY, and devote only £10,000 to the PURCHASE OF RAW MATERIAL (COTTON, COALS, etc.) and the PAYMENT OF WAGES" (Nassau W. Senior, Letters on the Factory Act etc., [London] 1837, pp. 11-12).

"THE FIXED CAPITAL IS SUBJECT TO INCESSANT DETERIORATION, not only from WEAR AND TEAR, but also from CONSTANT MECHANICAL IMPROVEMENTS..." (ibid.).

"Under the present law, NO MILL in which PERSONS under 18 years of age are employed CAN BE WORKED MORE THAN $11^{1}/_{2}$ HOURS a DAY, i.e. 12 HOURS for 5 days and 9 on Saturday. Now, the following analysis will show THAT IN A MILL SO WORKED, THE WHOLE NET PROFIT IS DERIVED FROM THE LAST HOUR. Suppose a MANUFACTURER to invest $f_{100,000} - f_{80,000}$ in his mill and machinery, and \pounds 20,000 in RAW MATERIAL and WAGES. The ANNUAL RETURN of that MILL, SUPPOSING THE CAPITAL TO BE TURNED ONCE A YEAR, AND GROSS PROFITS TO BE 15%, ought to be GOODS WORTH $\pounds 115,000$, produced by the constant conversion and reconversion of the $\pounds 20,000$ circulating capital, from money into goods and from goods into MONEY" (IN FACT, the CONVERSION and RECONVERSION of surplus labour first into commodity and then again into necessary labour, etc.) "IN PERIODS OF RATHER MORE THAN 2 MONTHS. OF these \pounds 115,000 each of the 23 half hours OF WORK PRODUCES $\frac{5}{115}$, or $\frac{1}{23}$. Of the $\frac{23}{23}$ CONSTITUTING THE WHOLE £115,000, 20/23, i.e., £100,000 out of the 115,000 simply replace the capital; 1/23 (or 5,000 OUT OF THE 115,000), MAKES UP FOR THE DETERIORATION of the MILL and MACHINERY. The REMAINING $\frac{2}{98}$, i.e. the last 2 of the 23 half hours of every DAY, PRODUCE THE NET PROFIT OF 10%. If therefore (PRICES REMAINING THE SAME) the FACTORY could be kept AT WORK 13 hours instead of 11¹/₂, BY AN ADDITION OF About £2,600 to the circulating capital, the net profit would be more than DOUBLED.'

(I.e., the 2,600 would be employed without using proportionately more fixed capital and without any payment of labour AT ALL. The GROSS and NET PROFIT is=to the material which is worked up gratis for the capitalist, and then an extra hour is of course=to 100%, if surplus labour, as Mr. Shit wrongly assumes, is only=to $\frac{1}{12}$ of the day, or only $\frac{2}{23}$, as Senior says.)

"On the other hand, if the hours of working were reduced by 1 hour per DAY (PRICES REMAINING THE SAME), NET PROFIT WOULD BE DESTROYED; if they were reduced by $1^{1}/_{2}$ hours, GROSS PROFIT would be destroyed too. The CIRCULATING CAPITAL WOULD BE REPLACED, BUT THERE WOULD BE NO FUND TO COMPENSATE THE PROGRESSIVE DETERIORATION OF THE FIXED CAPITAL" ([ibid.,] pp. 12-13).

(Incorrect as Mr. Senior's data are, the example he gives is very important for our theory.)

"The ratio of FIXED to CIRCULATING CAPITAL grows constantly owing to 2 causes: (1) the TENDENCY OF MECHANICAL IMPROVEMENT TO THROW ON MACHINERY MORE AND MORE OF THE WORK OF PRODUCTION; (2) the IMPROVEMENT of the MEANS OF TRANSPORT, and the CONSEQUENT DIMINUTION OF THE STOCK OF RAW MATERIAL IN THE MANUFACTURER'S HANDS WAITING FOR USE. FORMERLY, WHEN COALS AND COTTON CAME BY WATER, THE UNCERTAINTY AND IRREGULARITY OF SUPPLY FORCED HIM TO KEEP ON HAND 2 OR 3 MONTHS' CONSUMPTION. NOW, A RAILWAY BRINGS IT TO HIM WEEK BY WEEK, OR RATHER DAY BY DAY, FROM THE PORT OR THE MINE. UNDER SUCH CIRCUMSTANCES, I FULLY ANTICIPATE THAT, IN A VERY FEW YEARS, THE FIXED CAPITAL, INSTEAD OF ITS PRESENT PROPORTION, WILL BE AS 6 OR 7 OR EVEN 10 TO 1 TO THE CIRCULATING: AND, CONSEQUENTLY, THAT THE MOTIVES TO LONG HOURS OF WORK WILL BECOME GREATER. AS THE ONLY MEANS BY WHICH A LARGE PROPORTION OF FIXED CAPITAL CAN BE MADE PROFITABLE. 'WHEN A LABOURER,' SAID Mr. Ashworth TO ME, 'LAYS DOWN HIS SPADE, HE RENDERS USELESS, FOR THAT PERIOD, A CAPITAL WORTH 18d. WHEN ONE OF OUR PEOPLE LEAVES THE MILL, HE RENDERS USELESS A CAPITAL THAT HAS cost £100,000" ([ibid.,] pp. 13-14).

(This is striking proof that, under the domination of capital, the employment of machinery does not reduce work, but rather lengthens it. What it reduces is necessary labour, not the labour necessary for the capitalist. Since fixed capital is devalued as long as it is not employed in production, its growth is linked with the tendency to make work *perpetual*. With respect to the other point emphasised by Senior, [VII-42] the decline in the ratio of circulating capital to fixed would be as great as he assumes if prices remained constant. But if, e.g., COTTON has fallen below its AVERAGE PRICE, the manufacturer will purchase as large a stock of it as his floating capital permits, and vice versa. On the other hand, in respect of coal, whose output is regular and not subject to any special circumstances which might warrant expectations of an extraordinary increase in demand, Senior's remark is correct.

We have seen a that transport, and hence means of communication, do not determine circulation, in so far as they are concerned with the bringing of the product to market or its conversion into a commodity. For, seen from this angle, they are themselves included in the production phase. But they do determine circulation in so far as they determine (1) the return [of capital]; (2) the reconversion of capital from the form of money into that of conditions of production. The more rapid and uninterrupted the supply of materials and *matières instrumentales*, the smaller stocks of them the capitalist needs to buy. He can therefore turn the same circulating capital into this form, or reproduce it, the more frequently, instead of having to keep it on hand as dormant capital. On the other hand, as Sismondi remarked, it also has the

^a See present edition, Vol. 28, pp. 447-59.- Ed.

effect that the retail trader, the SHOPKEEPER, can renew his stock the more quickly, and hence is less obliged to keep goods in stock, because he can renew his supply any moment.

All this shows how, with the development of production, accumulation in the sense of HOARDING relatively declines; it only increases in the form of fixed capital, whereas continuous simultaneous labour (production) increases in regularity, in intensity, and in volume, too. To an increasing extent, the velocity of the means of transport, along with their universality, converts (with the exception of AGRICULTURE) the necessity for ANTECEDENT LABOUR, AS FAR AS CIRCULATING CAPITAL IS CONCERNED, into that for the simultaneous operation of interdependent, differentiated branches of production. (This observation is important for the section on accumulation).//

"Our cotton factories at their commencement were kept going the whole 24 hours. The difficulty of cleaning and repairing the machinery, and the divided responsibility, arising from the necessity of employing a double staff of overlookers, book-keepers, etc., have nearly put an end to this practice; but until Hobhouse's Act reduced them to 69, our factories generally worked from 70 to 80 hours per week" ([Senior,] op. cit., p. 15).

"According to Baines, A FIRST-RATE COTTON-SPINNING FACTORY CANNOT BE BUILT, FILLED with machinery, and FITTED with STEAM ENGINES and GAS WORKS, under \pounds 100,000. A STEAM ENGINE OF 100 HORSE-POWER WILL TURN 50,000 SPINDLES, WHICH WILL PRODUCE 62,500 MILES OF FINE COTTON THREAD PER DAY. IN SUCH A FACTORY, 1,000 PERSONS WILL SPIN AS MUCH THREAD AS 250,000 PERSONS COULD WITHOUT MACHINERY" (S. Laing, National Distress etc., London, 1844, p. 75).

"WHEN PROFITS FALL, CIRCULATING CAPITAL IS DISPOSED TO BECOME TO SOME EXTENT FIXED CAPITAL. If interest is 5%, CAPITAL would not be USED IN MAKING NEW ROADS, CANALS OR RAILWAYS, until these WORKS YIELD A CORRESPONDING LARGE percentage; BUT WHEN INTEREST IS ONLY 4 OR 3%, CAPITAL WOULD BE ADVANCED FOR SUCH IMPROVEMENTS, IF IT OBTAINED ONLY A PROPORTIONAL LOWER PERCENTAGE. JOINT-STOCK COMPANIES, TO ACCOMPLISH GREAT IMPROVEMENTS, ARE THE NATURAL OFFSPRING OF A FALLING RATE OF PROFIT. IT ALSO INDUCES INDIVIDUALS TO FIX THEIR CAPITALS IN THE FORM OF BUILDINGS AND MACHINERY" (Th. Hopkins, Great Britain for the Last Forty Years etc., London, 1834, p. 232).

"McCulloch computes the NUMBERS and INCOMES of those ENGAGED IN the COTTON MANUFACTURE as:

MATERIALS OF MACHINES	£6,667,000
Profit, superintendence, coal and	
ат £30 еасн	£3,333,000
111,000 JOINERS, ENGINEERS, MACHINE MAKERS, etc.,	
EACH A YEAR	£20,000,000
833,000 weavers, spinners, bleachers, etc., at $\pounds 24$	

944,000

£30,000,000

"Of the $6^{2}/_{3}$ millions, 2 millions are supposed to go for coal, iron, and other materials, for machinery and other outgoings, which would give employment, at £30 a year each, to 66,666, making a total of people employed of 1,010,666; to these are to be added $1/_{2}$ the number of children, aged, etc., dependent on those who work, or an additional 505,330; so a total, supported on wages, of 1,515,996 persons. To these are to be added those who are supported, directly or indirectly, by the $4^{2}/_{3}$ millions of profit", etc. (Hopkins, ibid., pp. 336-37).

According to this calculation, therefore, 833,000 are directly engaged in production; 177,666 in the production of the MACHINERY and the matières instrumentales, which are only required because of the employment of machinery. But the latter are reckoned at $\pounds 30$ per head; hence, to reduce their number into LABOUR OF THE SAME QUALITY as that performed by the 833,000, they are to be reckoned AT £24 per HEAD; according to this, £5,333,000 would employ ABOUT 222,208 workers, which would mean 1 worker employed in the production of machinery and matières instrumentales to ABOUT 3³/4 employed in the production of COTTON fabric. More than 1 to 4 but let us say 1:4. If now the 4 workers still employed worked only as much as 5 did previously, i.e. if each worked 1/4 surplus labour time more, there would be no [increase of] profit for capital. The remaining 4 must provide more surplus labour than 5 did previously; or the number of workers employed in the production of the machinery must be less than the number of workers displaced by it. Machinery is only **PROFITABLE** to capital to the extent that it increases the surplus labour time of the workers working with it (not in so far as it reduces labour time; only in so far as it raises the ratio of surplus labour time to necessary, so that the latter not merely decreases relatively, while the number of simultaneous working days remains the same, but decreases absolutely).

An increase in absolute [surplus] labour time implies the same or an increasing number of simultaneous working days; ditto an increase in productive power due to the division of labour, etc. In both cases, the aggregate labour time remains the same or increases. With the employment of machinery, relative surplus labour time increases not merely in relation to necessary labour time and hence to aggregate labour time; as well, its ratio to necessary labour time increases, while there is a decrease in aggregate labour, i.e. in the number of simultaneous working days (in proportion to surplus labour time).

A Glasgow factory-owner gave J. C. Symons, for his Arts and Artisans at Home and Abroad (Edinburgh, 1839), the following data (we reproduce several of his tables here to have examples at hand illustrating the proportion of fixed CAPITAL, CIRCULATING capital, the part of capital laid out in wAGES, etc.):

[VII-43] Glasgow:

"EXPENSE OF ERECTING A POWER-LOOM FACTORY OF	
500 looms, calculated to weave a good fabric	
OF CALICO, OR SHIRTING, SUCH AS IS GENERALLY	
MADE IN GLASGOW, WOULD BE ABOUT	£18,000
ANNUAL PRODUCE, SAY 150,000 PIECES OF 24 YARDS,	
AT 6 SHILLINGS	£45,000
WHICH COST AS UNDER:	
INTEREST ON SUNK CAPITAL, AND FOR DEPRECIA-	
TION OF THE VALUE of the MACHINERY	1,800
STEAM-POWER, OIL, TALLOW, etc., KEEPING UP	
MACHINERY, UTENSILS, etc	2,000
YARNS AND FLAX	32,000
Wages to workmen	7,500
Suppose profit	1,700
	45,000"
	(p. 233).
	VF, 400).

Hence, if we take 5% INTEREST ON MACHINERY, GROSS PROFIT is 1,700+900=2,600. But the capital expended in wages amounts to only £7,500. The proportion of profit to wages therefore $=26:75=5^{1}/_{5}:15$, therefore $34^{2}/_{3}\%$.

	"PROBABLE EXPENSE OF ERECTING A SPINNING COTTON-
	MILL with HAND MULES, CALCULATED TO PRO-
£23,000	duce No. 40 of a fair average quality
	If patent self-actors, $\pounds 2,000$ additional.
	PRODUCE ANNUALLY TO THE PRESENT PRICES OF COT-
	TONS AND THE RATES AT WHICH YARNS COULD BE
£25,000	SOLD
	Cost of which as follows:
	INTEREST OF SUNK CAPITAL, ALLOWANCE FOR
	DEPRECIATION OF VALUE OF MACHINERY
2,300	10%
14,000	Cotton
	Steam-power, oil, tallow, gas, and general
	EXPENSE OF KEEPING UP UTENSILS and
1,800	MACHINERY IN REPAIR
5,400	WAGES TO WORKERS
1,500	Profit
£25,000"	
(p. 234).	

207

(Floating capital of £7,000 is thus assumed, since 1,500 is 5% on 30,000.)

"The produce of the mill taken at 10,000 lb. weekly" (ibid., p. 234).

Hence, profit here=1,150+1,500=2,650; 2,650:5,400 (wages) =1:2 $^{2}/_{53}$ =49 $^{8}/_{108}$ %.

"Cost of a cotton spinning mill of 10,000 thros-	
TLES, CALCULATED TO PRODUCE A FAIR QUALITY OF	
No. 24	£20,000
TAKING PRESENT VALUE OF PRODUCE, THE AMOUNT	
WOULD ANNUALLY BE COSTING	£23,000
INTEREST ON SUNK CAPITAL, DEPRECIATION OF VALUE	
OF MACHINERY at 10%	2,000
COTTON	13,300
STEAM-POWER, TALLOW, OIL, GAS, KEEPING MACHINERY	
IN REPAIR, ETC	2,500
WAGES TO WORKERS	3,800
Profit	1,400

23,000"

(p. 235).

Hence GROSS PROFIT=2,400; WAGES 3,800; 2,400:3,800=24:38= $=12:19=63^{3}/_{19}\%$.

In the first case, $34^{2}/_{3}\%$; in the second, $49^{8}/_{108}\%$; and in the last, $63^{3}/_{19}\%$. In the first case, wages constitute $^{1}/_{6}$ of the total price of the product; in the second, more than $^{1}/_{5}$; in the last, less than $^{1}/_{6}$. But in the first case, the proportion of wages to the value of the capital employed= $1:4^{8}/_{15}$; in the second, $1:5^{15}/_{27}$; and in the third, $1:7^{7}/_{19}$. In the same measure as the ratio of the part of capital laid out in wages to that laid out in machinery and circulating capital (this equals, TOGETHER, in the first case, 34,000; in the second, 30,000; in the third, 28,000) declines, the profit on the part laid out in wages must, of course, increase if the percentage of profit is to remain the same.

The absolute decrease of the aggregate labour employed, i.e. of the working day multiplied by the number of simultaneous working days, relative to surplus labour can appear in either of two ways. Either in the form specified first, i.e., that a part of the workers previously employed are dismissed because of the use of fixed capital (machinery). Or, that the introduction of machinery diminishes the *increase* in the number of working days employed, although productivity grows, and (of COURSE) does so in a greater proportion, too, than it is decreased in consequence of the "*value*" of the newly introduced machinery. To the extent that fixed capital possesses *value*, it does not augment but reduces the productivity of labour.

"The surplus hands would enable the manufacturers to lessen the rate of wages; but the certainty that any considerable reduction would be followed by immediate immense losses from turnouts, extended stoppages, and various other impediments which would be thrown in their way, makes them prefer the slower process of mechanical improvement, by which, though they may triple production, they require no new men" (Gaskell, *Artisans and Machinery*, London, 1836, p. 314).

"When the improvements not quite displace the workman, they will render one man capable of producing, or rather superintending, the production of [a]quantity now requiring 10 or 20 labourers (ibid., p. 315).

"MACHINES HAVE BEEN INVENTED WHICH ENABLE ONE MAN TO PRODUCE AS MUCH YARN AS 250, OR 300 EVEN, COULD HAVE PRODUCED 70 YEARS AGO, WHICH ENABLE 1 MAN AND 1 BOY TO PRINT AS MANY GOODS AS A HUNDRED MEN AND A HUNDRED BOYS COULD HAVE PRINTED FORMERLY. The 150,000 WORKMEN IN THE SPINNING MILLS produce as much yarn as 40 millions could have produced with the ONE-THREAD WHEEL" (ibid., p. 316).

[VII-44] "The IMMEDIATE MARKET FOR CAPITAL, OF FIELD FOR CAPITAL, MAY BE SAID TO BE LABOUR. THE AMOUNT OF CAPITAL WHICH CAN BE INVESTED AT A GIVEN MOMENT, IN A GIVEN COUNTRY, OR THE WORLD, SO AS TO RETURN NOT LESS THAN A GIVEN RATE OF PROFITS, SEEMS PRINCIPALLY TO DEPEND ON THE QUANTITY OF LABOUR, WHICH IT IS POSSIBLE, BY LAYING OUT THAT CAPITAL, TO INDUCE THE THEN EXISTING NUMBER OF HUMAN BEINGS TO PERFORM" (An Inquiry into those Principles respecting the Nature of Demand etc., London, 1821, p. 20) (written by a RICARDIAN in opposition to Malthus's Principles etc.).

[ALIENATION]

The FACT that, with the development of the productive forces of labour, there must be an increase in the reified conditions of labour, in reified labour, relative to living labour-strictly speaking, this is a tautology, since the growth of the productive power of labour can mean only that less immediate labour is required to create a larger product, and that, therefore, social wealth is increasingly expressed in the conditions of labour created by labour itself-this fact does not, from the standpoint of capital, appear in the form that the one moment of social activity, reified labour, becomes the ever huger body of the other moment, of subjective, living labour. Rather-and this is important in the context of wage labour-it appears in the form that the objective conditions of labour take on an ever more colossal degree of independence, represented by their VERY EXTENT, over against living labour; and that social wealth in huger portions confronts labour as an alien and dominating force. The emphasis is not laid upon labour's being objectified, but upon its being alienated, given up, sold; it is laid upon the fact that the enormous objectified power

ł.

which social labour has set up over against itself as one of its moments belongs, not to the worker, but to the personified conditions of production, i.e. to capital.

To the extent that, from the standpoint of capital and wage labour, the creation of this objective body of activity takes place in opposition to the immediate labour capacity—to the extent that this process of objectification IN FACT appears from the standpoint of capital as one of appropriation of alien labour—this distortion and inversion is a *real*, not a *merely thought* one, not one which exists only in the imagination of the workers and the capitalists. Yet it is obvious that this process of inversion is merely an *historical* necessity, merely a necessity for the development of the productive forces from a definite historical point of departure, or basis. In no way is it an *absolute* necessity of production; it is, rather, a transitory one, and the result and (immanent) aim of this process is to transcend this basis itself and this form of the process.

The bourgeois economists are so wrapped up in the notions of a definite historical stage of social development that the necessity for the *objectification* of the social powers of labour appears to them to be inseparable from the necessity for their alienation over against living labour. But as soon as the immediate character of living labour is transcended, i.e., its character as merely individual, or as only internally or only externally general, with the positing of the activity of individuals as immediately general or social activity, this form of alienation is stripped from the reified moments of production. Then they are posited as [social] property, as the organic social body in which the individuals reproduce themselves as individuals, but as social individuals. The conditions enabling them to be such in the reproduction of their life, their productive life-process, are only posited by the historical economic process itself: both the objective and the subjective conditions, which are merely two different forms of the same conditions.

The propertylessness of the worker and the property of objectified labour in living labour, or the appropriation of alien labour by capital—both merely expressing the same relation at two opposite poles—are basic conditions of the bourgeois mode of production, by no means indifferent accidental features of it. These modes of distribution are the production relations themselves, only *sub specie distributionis.*^a Hence nothing could be more absurd than the statement by, e.g., J. St. Mill that

^a From the viewpoint of distribution.- Ed.

"THE LAWS AND CONDITIONS OF THE PRODUCTION OF WEALTH PARTAKE OF THE CHARACTER OF PHYSICAL TRUTHS.... IT IS NOT SO WITH THE DISTRIBUTION OF WEALTH. THAT IS A MATTER OF HUMAN INSTITUTION SOLELY" (*Principles of Political Economy*, 2nd ed., London, 1848, Vol. I, pp. 239, 240).

The "LAWS and CONDITIONS" of the production of wealth and the LAWS of the "DISTRIBUTION of wealth" are the same laws under different forms, and both change, undergo the same historical process; they are, in general, merely moments of an historical process.

No extraordinary intellectual powers are needed to comprehend that, if the initial situation assumed is that of free labour arising from the dissolution of serfdom, or wage labour, the only way in which machines can originate is in opposition to living labour, as property alien to it and a hostile power opposed to it, i.e., they must confront labour as capital. On the other hand, it is equally simple to understand that machines will not cease to be agents of social production when they become, e.g., the property of the associated workers. But in the first case, their distribution, i.e. the fact that they do not belong to the worker, is just as much a condition of the mode of production based upon wage labour. In the second, the changed mode of distribution would set out from a changed, new basis of production, one which has arisen solely as a result of the historical process.

[VARIA]

In the figurative language of the Peruvians, gold is "THE TEARS WEPT BY THE SUN" ([W. H.] Prescott [History of the Conquest of Peru, 4th ed., Vol. I, London, 1850, p. 92]).

"Without the USE of the TOOLS or the machinery FAMILIAR TO THE EUROPEAN, FACH INDIVIDUAL" (in Peru) "COULD HAVE DONE BUT LITTLE; BUT ACTING IN LARGE MASSES and UNDER A COMMON DIRECTION, THEY WERE ENABLED BY INDEFATIGABLE PERSEVERANCE TO ACHIEVE RESULTS" etc. (l.c. [p. 127]).

//The money used by the Mexicans (to a greater extent with BARTER and oriental landed property) [was]

"A REGULATED CURRENCY OF DIFFERENT VALUES. THIS CONSISTED OF TRANSPARENT QUILLS OF GOLD DUST; OF BITS OF TIN, CUT IN THE FORM OF A T; and OF BAGS OF CACAO, CONTAINING A SPECIFIED NUMBER OF GRAINS. 'O blessed money which furnishes mankind with a sweet and nutritious beverage and protects its innocent possessors from the infernal disease of avarice, since it cannot be long hoarded, nor hidden underground.' SAYS Peter Martyr (*De orbe novo*), (Prescott, [p. 123]).^a

^a Marx quotes in Latin.-Ed.

"Eschwege (1823) estimates the total value of the DIAMOND WORKINGS in 80 years AT A SUM HARDLY EXCEEDING 18 MONTHS' PRODUCE OF SUGAR OR COFFEE IN BRAZIL" ([H.]] Merivale [Lectures on Colonization and Colonies, Vol. I, London, 1841, p. 52]). "The FIRST" (BRITISH) "SETTLERS" (IN NORTH AMERICA) "CULTIVATED THE CLEARED GROUND ABOUT THEIR VILLAGES IN COMMON.... This CUSTOM PREVAILS until 1619 in Virginia" etc. (ibid., pp. 91-92). (Notebook, p. 52.³⁸)

("The Cortes addressed the following petition to Philip II in 1593: 'The Cortes of Valladolid of the year '48 requested Your Majesty not to permit the further importation into this kingdom of candles, glassware, jewellery, knives and similar articles coming from abroad, which, though they are of no use in human life, have to be exchanged for gold, as though the Spaniards were Indians' (Sempéré, [Considérations sur les causes de la grandeur et de la décadence de la monarchie espagnole, Vol. 1, Paris, 1826, pp. 275-76]).)^a

"IN DENSELY PEOPLED COLONIES THE LABOURER, ALTHOUGH FREE, IS NATURALLY DEPENDENT ON THE CAPITALIST; IN THINLY PEOPLED ONES THE WANT OF THIS NATURAL DEPENDENCE MUST BE SUPPLIED BY ARTIFICIAL RESTRICTIONS" (Merivale, Lectures on Colonization etc., Vol. II, London, 1842, p. 314).//

[VII-45] Roman Money: the aes grave^b was a pound of copper (emere per aes et libram^c). This was the as.* In 485 A.U.C.^d silver denarii=10 as (initially, 40 of these denarii to the pound; in 510 [A.U.C.] 75 denarii to the pound; the denarius was still=10 as, but 10 as of 4 ounces). In 513 the as was reduced to 2 ounces; the denarius still=10 as, now represented only $\frac{1}{84}$ of a pound of silver. This figure, $\frac{1}{84}$, applied until the end of the Republic, but in 537 the denarius was rated at 16 as of one ounce, and in 665 only at 16 as of half an ounce... In the year 485 of the Republic the silver denarius=1 franc 63 [centimes]; in 510=87 centimes; between 513 and 707=78 centimes. From Galba to the Antonines, 1 franc^e (Dureau de la Malle, [Economic politique des Romains] Vol. 1, [pp. 15, 16, 448, 450]).

At the time of the first silver denarius, the ratio between 1 pound of silver and 1 pound of copper=400:1. At the beginning of the Second Punic War³⁹ it was 112:1 (l.c., Vol. 1, pp. 76-77, 81-82).

"The Greek colonies in Southern Italy drew silver from Greece and Asia, direct or via Tyre and Carthage, and minted silver coins from the sixth and fifth centuries B.C. onwards. Despite this proximity, the Romans proscribed the use of gold and silver for political reasons. The people and the Senate felt that so facile a means of circulation would be conducive to concentration, an increase in the number of slaves, and the decay of the ancient customs and of agriculture" (l.c., pp. 64, 65).

"According to Varro, the slave was an instrumentum vocale, the animal an instrumentum semi-mutum, and the plough an instrumentum mutum" (l.c., pp. 253, 254).

* as or libra=12 ounces; 1 ounce=24 scrupula; 288 scrupula to the pound.

^a Marx quotes in French.-Ed.

^b Heavy copper (measured by weight).— Ed.

^c Literally: to buy with the help of copper and scales; figuratively: to buy with due observance of the formalities.— *Ed*.

^d From the founding of the city (of Rome).—Ed.

^e This and the following passages are partly in French and partly in German translation in the manuscript.—*Ed.*

(The Roman citizen's daily consumption [of bread] was somewhat more than 2 French pounds; that of a countryman 3 pounds. A Parisian consumes 0.93 pound of bread; a countryman in the 20 departments in which corn is the main source of nourishment, 1.70 pounds (l.c., [p. 277]). In present-day Italy, 1 lb. 8 ounces, where corn is the main source of nourishment. Why did the Romans eat relatively more? Originally they ate the corn raw or only softened in water; afterwards, they got the idea of roasting it. Later they picked up the art of grinding corn into flour, and at first ate the dough made from this flour raw. To grind the grain, they used a pestle or two stones knocked or rotated against each other The Roman soldier prepared a supply of this raw dough, puls, that would last him for several days. Then the winnowing-fan was invented, which screens the grain; a means was found for separating the bran from the flour; finally, leaven was added, and at first bread was eaten raw, until it was accidentally discovered that by cooking the bread it could be prevented from going sour and that it would keep much longer. It was not until after the war against Perseus, in 580, that bakers appeared in Rome (l.c., p. 279). "Before the Christian era, the Romans had no knowledge of windmills" (l.c., p. 280).)

"Parmentier has shown that in France the art of milling has made great progress since the time of Louis XIV, and that the difference between the yield of the old and the new method of milling amounts to 1/2 the bread supplied by the same grain. At first 4, then 3, then 2 and finally 11/3 setiers of wheat were assigned for the annual consumption of an inhabitant of Paris. So the enormous disproportion between the daily consumption of wheat by the Romans and by us is easily explained; it stems from the imperfect methods of milling and breadmaking" (l.c., p. 281).

"The agrarian law was a limitation of landed property among active citizens. This limitation of property formed the foundation of the existence and prosperity of the old republics" (l.c., [Vol. II,] p. 256).

"The revenues of the State consisted of the returns from Crown land, payment in kind, statute labour, and a number of money taxes paid on the import and export of merchandise, or levied on the sale of certain commodities. This mode exists, almost without change, in the Ottoman Empire. At the time of Sulla's dictatorship and even at the end of the 7th century, anno 697, the annual receipts of the Roman republic totalled only 40 million francs.... In 1780, the revenue of the Turkish sultan was only 35 million piastres or 70 million francs.... The Romans and the Turks collected most of their revenues in kind. In the case of the Romans, the taxes amounted to $1/_{10}$ of the grain crop, $1/_5$ of the fruit; among the Turks, they varied from $1/_2$ to $1/_{10}$ of the produce.... Since the Roman Empire was merely an immense agglomeration of independent municipalities, the greater part of the charges and expenses remained communal" ([Vol. II], pp. 402-05).

(The Rome of Augustus and Nero, without the suburbs, had only 266,684 inhabitants. Assumes that in the fourth century of the Christian era the suburbs had 120,000 inhabitants, and that 382,695 people lived within the Aurelian walls; a total of 502,695; plus 30,000 soldiers and 30,000 foreigners; all told roughly 562,000 people. *Madrid*, for $1^{1/2}$ centuries from the time of Charles V the capital of a part of Europe and of half the New World, had many correspondences with Rome. Its population, too, did not grow in proportion to its political importance" (l.c., [Vol. I,] pp. [370, 403,] 405-06).)

"The state of society in Rome at the time resembled that in Russia or in the Ottoman Empire, far more than that in France or in England: little commerce or industry; immense fortunes alongside extreme poverty" (l.c., [Vol. II,] p. 214).

(Luxury only in the capital and at the residences of the Roman satraps.)

"From the destruction of Carthage to the founding of Constantinople, the relation of Roman Italy to Greece and the Orient was the same as that of Spain to Europe in the eighteenth century. In Alberoni's words: 'Spain is to Europe what the mouth is to the body: everything goes into it, nothing stays there'" (l.c., [Vol. II,] pp. 399-400).

Usury was initially free in Rome. The law of the Twelve Tables (303 A.U.C.) fixed interest on money at 1% per annum (Niebuhr says 10%).⁴⁰ These laws were promptly violated. Duilius (398 A.U.C.) once again reduced the interest on money to 1%, *unciarium foenus*^a Reduced to 1/2% in 408; in 413, lending at interest was absolutely forbidden by a referendum held by the tribune Genucius. It is not surprising that in a republic in which industry and wholesale and retail trade were forbidden to citizens, *trading in money* was likewise forbidden (l.c., Vol. II, pp. [259,] 260, 261). This state of affairs lasted for 300 years, till the capture of Carthage. Then [the maximum chargeable] 12%; the usual rate 6% per annum (l.c., p. 261). Justinian fixed the interest rate at 4%. In Trajan's time, the *usura quincurxb* was the legal interest of 5%. In Egypt in 146 B.C., the commercial rate of interest was 12% (ibid., p[p. 261-]263).

[VII-46] The involuntary alienation of feudal landed property develops with usury and money:

"THE INTRODUCTION OF MONEY, WHICH BUYS ALL THINGS, and hence the FAVOUR for the CREDITOR who loans MONEY to the landowner, BRINGS IN THE NECESSITY OF LEGAL ALIENATION for the advance" (John Dalrymple, An Essay towards a General History of Feudal Property in Great Britain, 4th ed., London, 1759, p. 124).

In medieval Europe: "Payments in gold were customary only in the case of some objects of trade, mainly costly objects. Gold changed hands for the most part outside the merchant circle, in gifts made by the Great, in the payment of certain high duties and heavy money fines, and in purchases of landed estates. Uncoined gold was not infrequently weighed, in pounds or marks (half-pounds) ... 8 ounces=1 mark; one ounce was therefore=to 2 Lot or 3 carats. Until the time of the Crusades, the only gold coins known were the Byzantine solidi, the Italic tari, and the Arabian maurabotini" (AFTERWARDS maravedi). (Hüllmann, Städtewesen des Mittelalters, Part I, Bonn, 1826, pp. 402-04.)

"In the Frankish laws as well, the solidus figures merely as coin of account in which the value of agricultural products levied as fines was expressed. E.g., among the Saxons, the solidus was equivalent to a yearling bullock, in the condition in which it usually is in autumn.... In Ripuarian law,⁴¹ a healthy cow represented one solidus ... twelve denarii=1 gold solidus" (pp. 405, 406). 4 tari=1 Byzantine solidus.... From the thirteenth century onwards, various gold coins were minted in Europe: *augustales* (issued by Emperor Frederick II in Sicily: Brundisium and Messina); florentini or floreni (1252 in Florence); ... ducats or sequins (Venice, since 1285) (l.c., pp. 408-11).

"In Hungary, Germany and the Netherlands also, larger gold coins were minted from the fourteenth century onwards; in Germany, such coins were simply called gulden" (l.c., p. 413).

^a An increase of one ounce.-Ed.

^b An interest of 5 ounces.-Ed.

"When payment was in silver, weighing, mostly in marks, was the general practice in all larger payments. Coined silver, too, was weighed in such payments, since the coins were still almost totally composed of pure silver, and it was only a matter of weight. Hence the names pound (livre, lire)* and 'mark' in part signified imaginary coins or coins of account, and in part were transferred to real silver coins. Silver coins: denaren or kreuzer. In Germany, these denaren were called pfennigs (pennig, penning, phenning) from as early as the ninth century. Originally pending, penthing, pfenting, derived from pfündig,^a in the old form pfünding, as much as full-weight: hence pfündige denaren, abbreviated into pfündinge. Another name for the denaren, from the beginning of the twelfth century in France, Germany, the Netherlands, and England, derives from the star [Stern, in German] which replaced the crosses stamped on the coin: sternlinge, sterlinge, starlinge. Denaren sterling=pfennigs sterling. In the fourteenth century, 320 of the Netherlands sterlinge composed a pound, 20 pieces to the ounce. Silver solidi in German were called schildlinge, schillinge. In the early Middle Ages, silver solidi were not real coins but the content of 12 denaren. 1 gold solidus=12 denaren or sterlinge, for this was the average ratio of gold and silver.

"Obols, half pfennigs, hälblinge were in circulation as *small change*.... As the small crafts became increasingly widespread, a growing number of trading cities and petty princes obtained the right to strike their local coin, which was therefore mostly small change. They admixed copper, this went further and further.... Thick pfennigs, gros deniers, grossi, groschen, groats, were first coined in Tours before the middle of the thirteenth century. These groschen were originally double pfennigs" (pp. 415-33).

"The fact that the Popes levied ecclesiastical dues upon almost all Catholic countries contributed not a little, first, to the development of the entire monetary system in trade-plying Europe, and then, as a consequence, to various attempts to get round the Church ban (on interest). The Pope made use of Lombards for the collection of the pallium-fees from the Archbishops, and for exacting the other dues. They were the most important usurers and pawnbrokers, under Papal protection. Known ever since the middle of the twelfth century. Particularly from Siena. 'Official usurarit'. In England, they were called 'Romish-episcopal money dealers'. Some bishops, i.a. those of Basel, pawned their episcopal ring, silken vestments and the whole of the Church valuables to the Jews in return for a small sum, and paid interest. On the other hand, bishops, abots and priests themselves engaged in usury by pawning the Church valuables, with Tuscan money-dealers Ifom Florence, Siena and other cities for a share in the profits", etc. (see l.c. [Part II, pp. 36-45], Notebook, p. 39⁴²).

Since money is the universal equivalent, the GENERAL POWER OF PURCHASING, everything is purchasable, everything is convertible into money. But it can be converted into money only by being alienated, by its owner giving it up. EVERYTHING IS THEREFORE ALIENABLE, or indifferent for the individual, external to him. The so-called *inalienable, eternal* possessions, and the immovable, settled property relations corresponding to them, therefore collapse before money. Furthermore, since money itself only exists in circulation and is

* Notabene: In Mexico, there existed money, but no weights; in Peru, weights, but no money.

^a Weighing one pound.— Ed.

exchanged for enjoyments, etc.-for values-which are all ultimately reducible to purely individual enjoyments, everything is valuable only in so far as it exists for the individual. The independent value of things-except in so far as it consists in their mere being for other purposes, their relativity, exchangeability-the absolute value of all things and relations is thereby dissolved. Everything is sacrificed to egoistic enjoyment. For, just as everything can be alienated for money, everything can be obtained for money. Everything can be had for "ready money", which as something existing externally to the individual can be got hold of BY FRAUD, VIOLENCE, etc. Hence everything is appropriable by everyone, and what the individual can or cannot appropriate is a matter of chance, since it depends upon the money he possesses. In this way, the individual in himself is posited as the lord of everything. There are no absolute values, since value as such is relative to money. There is nothing inalienable, for everything is alienable for money. There is nothing sublime, sacred, etc., since everything can be appropriated with money. The "res sacrae" and "religiosae", which can be "in nullius bonis", "nec aestimationem recipere, nec obligari alienarique posse", which are exempted from "commercio hominum", a do not exist before money, just as all are equal before God. Beautiful the way the Roman Church itself acted as the chief propagandist for money in the Middle Ages.

"As the ecclesiastical law against usury had long since become a dead letter, [Pope] Martin in 1425 abolished it in name too" (Hüllmann, l.c., Part II, Bonn, 1827, p. 55). "In the Middle Ages, no country had a general rate of interest. First, the strictness of the clerics. Insecurity of the legal provisions for protecting loans. The interest rate was so much the higher in individual cases. The limited circulation of money, the need to make most payments in cash, [VII-47] the bill business being as yet undeveloped. Therefore wide divergences in interest rates and in the concept of usury. In Charlemagne's time, it was only considered usurious to charge 100% [or more]. In Lindau on Lake Constance, in 1344, local burghers took 216²/₅%. In Zurich, the City Council fixed the legal interest rate at 43¹/₅%. In Italy, 40% had sometimes to be paid, although the usual rate from the 12th to the 14th century did not exceed 20%. Verona decreed that $12^{1}/_{2}$ % should be the legal rate. Frederick II fixed the rate at 10%, but only for Jews. He did not wish to speak for Christians. In Rhenish Germany, 10% was the usual rate as early as the 13th century" (l.c., pp. 55-57).

^a The "sacred and religious objects", which can be "in no one's possession" and "can neither be put a value upon nor pawned or alienated", and which are exempted from the "trade of men" (*Corpus iuris civilis*, Digesta I, 5, 8, 9 and Institutiones II, 1, 7, 8).— Ed.

"Productive CONSUMPTION, where the consumption of a commodity IS A PART OF THE PROCESS OF PRODUCTION ([S. Ph.] Newman, [Elements of Political Economy, Andover and New York, 1835, p. 296,] Notebook XVII, 10^{42}). "IT wILL BE NOTICED THAT IN THESE INSTANCES THERE IS NO CONSUMPTION OF VALUE, THE SAME VALUE EXISTING UNDER A NEW FORM" (ibid.). Further "CONSUMPTION ... the APPROPRIATION OF INDIVIDUAL REVENUE TO ITS DIFFERENT USES" (l.c., p. 297).

"TO SELL FOR MONEY SHALL AT ALL TIMES BE MADE SO EASY AS IT IS NOW TO BUY WITH MONEY, AND PRODUCTION WOULD BECOME THE UNIFORM AND NEVER FAILING CAUSE OF DEMAND" (John Gray, The Social System etc., Edinburgh, 1831, p. 16). "After land, capital and labour, the fourth necessary condition of production is: the INSTANT POWER OF EXCHANGING" (I.C., p. 18). "TO BE ABLE TO EXCHANGE IS FOR THE MAN IN SOCIETY AS IMPORTANT AS IT WAS TO ROBINSON CRUSOE TO BE ABLE TO PRODUCE" (ibid., p. 21).

"According to Say, credit merely transfers capital, but creates none. This is true only in the case of loans made by capitalists to industrialists, but not of credit between producers in their mutual advances. What one producer advances to another is not capital; it is products, commodities. These products, these commodities, can and doubtless will become active capital in the hands of the borrower, i.e. instruments of labour; but in the hands of their owner they are, in fact, merely products for sale, and consequently inactive.... One must distinguish between products, or commodities, and agents of labour, or productive capital. As long as a product remains in the hands of its producer, it is merely a commodity, or, if one wishes to put it this way, inactive, inert capital. Far from offering any advantage to the manufacturer who holds it, that product is a burden to him, a constant source of inconvenience, of overhead costs and losses: the cost of storage, maintenance and safeguarding, interest on the outlay, etc., not counting the deterioration or waste to which nearly every commodity is subject when it is not used for a long time.... If he, therefore, sells his commodity on credit to another industrialist who can apply it to his own kind of labour, the commodity is converted, for the latter, from inert merchandise into active capital. In this way, the productive capital of one party increases without any diminution in that of the other. What is more: if it is admitted that the seller, even though disposing of his commodities on credit, nevertheless receives for them bills of exchange which it is legal for him to have discounted at once, is it not clear that he thereby acquires the means to renew his own raw material and instruments of labour, enabling him to resume work? There is thus a double increase in productive capital; in other words, power acquired by both parties" (Charles Coquelin, Du crédit et des banques dans l'industrie, Revue des deux mondes, Vol. 31, 1842, pp. 799-800).^a

"[Suppose] that the whole of the merchandise for sale passes rapidly, without delays or obstacles, from the state of an inert product to that of active capital: what new activity in a country! ... This rapid transformation is precisely the benefit brought about by credit. This is the *activity of circulation*. In this way, credit can multiply the industrialists' business ten-fold. In a given period of time, the merchant or producer renewed his raw materials and products not once but ten times. Credit effects this by increasing everyone's purchasing power. Instead of this power being restricted to those who are able to pay at the given moment, credit confers it upon everyone whose position and morality offer a guarantee of future repayment; it gives it to whoever is capable of using the products by means of labour. Hence the first benefit of credit is that it increases, if not the sum of the

^a Here and below Marx quotes from Coquelin in French, using German words occasionally.— Ed.

values possessed by a country, at least the sum of the active values. This is the immediate effect. From it flows an increase in the productive forces, hence also in the sum of values, etc." (l.c. [pp. 801, 802, 805]).

"LETTING IS A CONDITIONAL SALE, OR SALE OF THE USE OF A THING FOR A LIMITED TIME" (Th. Corbet, An Inquiry into the Causes and Modes of the Wealth of Individuals etc., London, 1841, p. 81).

"TRANSFORMATIONS TO WHICH CAPITAL IS SUBJECTED IN THE WORK OF PRODUCTION. CAPITAL, TO BECOME PRODUCTIVE, MUST BE CONSUMED" (S. P. Newman, *Elements of Political Economy*, Andover and New York, 1835, p. 80).

"ECONOMIC CYCLE ... THE WHOLE COURSE OF PRODUCTION, FROM THE TIME THAT OUTLAYS ARE MADE, TILL RETURNS ARE RECEIVED. IN AGRICULTURE, SEED TIME IS ITS COMMENCEMENT, AND HARVESTING ITS ENDING" ([ibid.,] p. 81). The distinction between FIXED and CIRCULATING CAPITAL is based on the fact that during every ECONOMIC CYCLE, A PART IS PARTIALLY, AND ANOTHER PART TOTALLY CONSUMED (1.c.).

CAPITAL AS DIRECTED TO DIFFERENT EMPLOYMENTS (l.c. [p. 82]).

This belongs in the theory of competition.

"A MEDIUM OF EXCHANGE: In undeveloped nations, WHATEVER COMMODITY CONSTITUTES THE LARGER SHARE OF THE WEALTH OF THE COMMUNITY, OR FROM ANY CAUSE BECOMES MORE FREQUENTLY THAN OTHERS AN OBJECT OF EXCHANGE, IS WONT TO BE USED AS A CIRCULATING MEDIUM. HEnce CATTLE are a means of exchange among PASTORAL TRIBES, DRIED FISH IN NEWFOUNDLAND, SUGAR in the West Indies, tobacco in Virginia. *PRECIOUS METALS* [have the] advantage: (a) SAMENESS OF QUALITY IN ALL PARTS OF THE WORLD; (b) ADMIT OF MINUTE DIVISION AND EXACT APPORTIONMENT; (c) RARITY AND DIFFICULTY OF ATTAINMENT; (d) THEY ADMIT OF COINAGE (I.c., p[p. 99,] 100 [101]).

The notion of capital as an entity which reproduces itself—as a value which perpetuates and augments itself by VIRTUE OF AN INNATE QUALITY—has led Dr. Price to prodigious fancies, which far outstrip the fantasies of the alchemists. Pitt took them seriously and, in his laws on the SINKING FUND (see Lauderdale), made them into the pillars of his financial wisdom.⁴³ The following are a few striking extracts from Price:

[VII-48] "MONEY BEARING COMPOUND INTEREST INCREASES AT FIRST SLOWLY. BUT, THE RATE OF INCREASE BEING CONTINUALLY ACCELERATED, IT BECOMES IN SOME TIME SO RAPID, AS TO MOCK ALL THE POWERS OF THE IMAGINATION. ONE PENNY, PUT OUT AT OUR SAVIOUR'S BIRTH TO 5% COMPOUND INTEREST, WOULD, BEFORE THIS TIME, HAVE INCREASED TO A GREATER SUM, THAN WOULD BE CONTAINED IN A 150 MILLIONS OF EARTHS. ALL SOLID GOLD. BUT IF PUT OUT TO SIMPLE INTEREST, IT WOULD, IN THE SAME TIME, HAVE AMOUNTED TO NO MORE THAN 7 SHILLINGS $4^{1}/_{2}$ d. OUR GOVERNMENT HAS HITHERTO CHOSEN TO IMPROVE MONEY IN THE LAST, RATHER THAN THE FIRST OF THESE WAYS" (Richard Price, An Appeal to the Public, on the Subject of the National Debt, 2nd ed., London, 1772, pp. 18-19).

(His grand idea: The Government should borrow at simple interest, and loan out that money at compound interest.^a)

^a See present edition, Vol. 28, p. 298.-Ed.

In his Observations on Reversionary Payments etc. ([2nd ed.,] London, 1772), his fantasy soars even higher:

"A SHILLING PUT OUT TO 6% COMPOUND INTEREST AT OUR SAVIOUR'S BIRTH WOULD ... HAVE INCREASED TO A GREATER SUM THAN THE WHOLE SOLAR SYSTEM COULD HOLD, SUPPOSING IT A SPHERE EQUAL IN DIAMETER TO THE DIAMETER OF SATURN'S ORBIT" (l.c., p. XIII, note). "A State needs never, therefore, be under any difficulties; for, with the *smallest* savings, it may, in as little time as its interest can require, pay off the *largest* debts" (pp. XIII-XIV).

The worthy Price was SIMPLY DAZZLED BY THE ENORMOUS QUANTITIES RESULTING FROM GEOMETRICAL PROGRESSION OF NUMBERS. Since he considered capital, without any regard to the conditions of reproduction of LABOUR, as a SELF-ACTING THING, merely as a number which multiplies itself, he was well able to believe that he had discovered the law of its growth in that formula (see above). Pitt, in 1792, in a speech in which he proposed increasing the sum allocated to the SINKING FUND, took Dr. Price's mystification quite seriously. (S=C (l+i)ⁿ⁴⁴).

In his Dictionary of commerce, 1841, McCulloch lists the properties of metal money thus:

"The material must be: (1) divisible INTO THE SMALLEST PORTIONS; (2) capable of being kept for AN INDEFINITE PERIOD without DETERIORATING; (3) easily TRANSPORTABLE from place to place by virtue of possessing GREAT VALUE IN SMALL BULK; (4) such that one piece of money, OF A CERTAIN DENOMINATION, should always be equal, in magnitude and QUALITY. TO EVERY OTHER PIECE OF THE SAME DENOMINATION; (5) ITS VALUE should be COMPARATIVELY STEADY" (p. 836 [MacCulloch, A Dictionary, practical, theoretical, and historical, of commerce and commercial navigation, London, 1847.]).

Throughout his polemic with Bastiat, in Gratuité du crédit. Discussion entre M. Fr. Bastiat et M. Proudhon, Paris, 1850, the whole argument of the worthy Proudhon hinges on the fact that lending appears to him to be something quite different from selling.

The lending of money at interest "is the ability of selling the same object over and over again, and receiving the price of it, over and over again, without ever giving up the ownership of what is sold"^a (p. 9, in the first letter of Chevé, one of the editors of *La Voix du Peuple*).

The different forms in which the reproduction of capital appears here prevent him from seeing that this continual reproduction of capital—the price of which constantly returns, and is over and over again exchanged for labour with profit, a profit which is over and over again realised in purchase and sale—constitutes its concept. He is led astray by the fact that the

9*

^a Here and below Marx quotes from Proudhon in French.-Ed.

"object" does not change owners, as in purchase and sale; hence, au fond, by the form of reproduction, which capital loaned out at interest shares with fixed capital. In the case of house rent, of which Chevé speaks, the form involved is, directly, that of fixed capital. If circulating capital is considered in its entire process, it is evident that, although it is not the same object (e.g., a particular pound of sugar) that is sold over and over again, the same value is reproduced over and over again, and the alienation only concerns the form, not the substance.

Obviously, people who are capable of raising such objections are still confused about the most elementary concepts of political economy. Proudhon does not understand how either profit or, therefore, interest originates from the law of exchange of values. Hence he argues that "house", money, etc. should not be exchanged as "capital" but as "commodities ... at cost price" ([Gratuite du crédit, pp. 43,] 44).

The worthy young fellow does not understand the crucial point—that value is exchanged for labour, according to the law of values; and consequently that, if he is to abolish interest, he would have to abolish *capital* itself, the mode of production based on exchange value, and therefore abolish wage labour, too.

Mr. Proudhon's inability to find even one distinction between loan and sale:

"Actually, the hatter who sells his hats ... obtains the value of them, neither more nor less. But the capitalist who loans out his capital ... not merely gets his capital back in full; he gets back more than his capital, more than he brought to the exchange; over and above his capital, he gets an interest" (p. 69).

Consequently, Mr. Proudhon's hatters do not reckon either profit or interest in their cost price. He does not understand that precisely by obtaining the *value* of their hats they obtain more than the hats have cost them, because a part of this value has been appropriated without equivalent in the exchange with labour. Here is also his great proposition, elucidated above^a:

"It is impossible, with interest on capital being added in commerce to the worker's wages to make up the price of the commodity, for the worker to be able to buy back what he himself has produced. Living by working is a principle which, under the rule of interest, is implicitly self-contradictory" ([l.c.,] p. 105).

In letter IX (pp. 144-52), the worthy Proudhon confuses money as means of circulation with capital, and on this basis concludes that the "capital" existing in France yields 160% (viz. 1,600 million in annual interest on the national debt, mortgages, etc., for a

^a See present edition, Vol. 28, pp. 352-62.- Ed.

capital of 1,000 million ... the sum of money ... circulating in France).

How little he understands about capital in general and its continuous reproduction is evident from the following assertions which he makes specifically about capital-money, i.e. money loaned out as capital:

"As, by the accumulation of interest, capital-money, from exchange to exchange, always returns to its source, it follows that the re-lending, always done by the same hand, always profits the same person" (p. 154).

"All labour must yield a surplus" [p. 200].

(Everything should be *sold*, nothing should be *loaned*. That is the whole trick. Inability to see that the exchange of commodities rests upon the exchange between capital and labour, and the latter form of exchange involves profit and interest. Proudhon wants to cling to the simplest, most abstract form of exchange.)

Mr. Proudhon provides the following elegant demonstration:

"Since value is only a proportion, and all products necessarily bear a certain proportion to one another, it follows that from the social point of view products are always values and realised values; for society, the distinction between capital and product does not exist. The distinction is completely subjective to the individuals" (p. 250).

The antagonistic nature of capital, and the necessity for it of the existence of the propertyless worker, is naively expressed by earlier English economists, e.g. the REVEREND MR. Joseph Townsend, the father of the population theory, by the FRAUDULENT appropriation of which Malthus made himself into a great man. (In general, Malthus is a shameless plagiarist, e.g., his theory of rent is borrowed from the farmer Anderson.) Townsend [VII-49] says:

"IT SEEMS TO BE A LAW OF NATURE THAT THE POOR SHOULD BE TO A CERTAIN DEGREE IMPROVIDENT, THAT THERE MAY BE ALWAYS SOME TO FULFIL THE MOST SERVILE, THE MOST SORDID, AND THE MOST IGNOBLE OFFICES IN THE COMMUNITY. THE STOCK OF HUMAN HAPPINESS IS THEREBY MUCH INCREASED. The more delicate are thereby relieved from DRUDGERY, and are at liberty to pursue higher CALLINGS", etc. (A Dissertation on the Poor Laws. EDITION OF 1817, p. 39). "LEGAL CONSTRAINT to labour is ATTENDED WITH TOO MUCH TROUBLE, VIOLENCE, AND NOISE, CREATES ILL WILL, etc., WHEREAS HUNGER IS NOT ONLY A PEACEABLE, SILENT, UNREMITTED PRESSURE, BUT, AS THE MOST NATURAL MOTIVE TO INDUSTRY AND LABOUR, IT CALLS FORTH THE MOST POWERFUL EXERTIONS" (p. 15).

(This, IN FACT, provides the answer to the question: which LABOUR is MORE PRODUCTIVE, that of slaves or that of free workers? A. Smith did not need to raise this question, since the capitalist mode of production presupposes free labour. On the other hand, it is likewise the developed relationship of capital and labour that vindicates A. Smith in distinguishing between PRODUCTIVE and UNPRODUCTIVE LABOUR. Lord Brougham's insipid witticisms against that distinction, and the objections to it, intended to be serious, by Say, Storch, McCulloch, and *tutti quanti*,^a rebound upon it. A. Smith went astray only by conceiving of the objectification of labour in somewhat too crude a fashion, as labour which fixes itself in a tangible object. But this is of little consequence in him, clumsiness of expression.)

For Galiani, too, the existence of WORKMEN is due to a law of nature. In his book, published in 1750, Galiani says:

"God ordains that men who carry on trades of primary utility are born in abundance" (Della Moneta, Scrittori classici Italiani di Economia Politica, Parte Moderna, Vol. III, Milan, 1803, p. 78).^b

But he also already has the correct conception of value:

"It is toil alone ... that gives value to the thing" ([ibid.,] p. 74).

True, there are also qualitatively different kinds of labour, not merely because there are different branches of production, but because labour may be more intensive or less intensive, etc. Of course, the way in which these differences are adjusted, and all labour is reduced to SIMPLE UNSKILLED LABOUR, cannot be discussed here yet. It is sufficient to state that this reduction is, in fact, completed by the positing of the products of all kinds of labour as values. As values, they are equivalent to one another in certain proportions; the higher sorts of labour are themselves estimated in terms of simple labour. This becomes clear immediately when it is considered that, e.g., Californian gold is the product of simple labour, and yet every kind of labour is paid with it. This means that the qualitative distinction is abolished, and the product of a higher kind of labour is, in effect, reduced to a certain quantity of simple labour. Hence, such calculations of the various qualities of labour are completely irrelevant and do not lessen the validity of the [general] principle.

"Metals are used as money because they are valuable; they are not valuable because they are used as money" ([Galiani,] l.c., [p.] 95). "It is the velocity of the circulation of money, and not the quantity of the metals, that causes the amount of money to be large or small" ([p.] 99). "Money is of two kinds: *ideal* and *real*. And it is used for two different purposes: to *valuate* things and to *buy* them. For valuation, ideal money is just as good as real money, and probably even better.... The other use of money is to buy the very things for the pricing of which it serves.... Prices and contracts are estimated in ideal money and realised in real"

^a All the rest.—*Ed.*

^b Marx quotes this and the following passages from Galiani's book in Italian.—Ed.

(pp. 112 et sq.). "A peculiar feature of metals is that in them alone all relations are reduced to a single one, namely, their quantity, for they have not been endowed by nature with any difference of quality either in their internal composition or in their external form and structure" ([pp.] 126-27).

This is a very important observation. Value implies a common substance, and that all distinctions, proportions, are reduced to purely quantitative ones. This is the case with the precious metals, which therefore appear as the natural substance of value.

"Money ... as a standard measuring all things by reference to the needs of life—is that which is generally called the *price* of things" (152). "Ideal money itself is usually the *money of account*, that is to say, the medium used to stipulate, contract and valuate everything. This is due to the same reason why the coins which today are ideal are the oldest coins of every nation, and all of them were once real, and precisely because they were real they were used for calculation" (153).

(This is also the formal explanation of the ideal money of Urquhart, etc. The BAR of iron was originally real money to the NIGGERS,^a etc., and was then converted into an ideal money; but they still tried to maintain its previous value. Since, as they see from trade, iron varies in value against gold, etc., the ideal BAR, to maintain its value, expresses varying proportions of actual quantities of iron. A complicated method of calculation, which does honour to these gentlemen's power of abstraction.) (*Castlereagh*, in the debates set off by the Bullion Committee in 1810, put forward similar CONFUSED NOTIONS.^b)

Galiani elegantly states:

"That infinity which (things) do not possess when progressing, they possess in circulation" (156).

About use value, Galiani says beautifully:

"Price is a relation.... The price of things is their proportion to our need ... it does not yet have a fixed measure. Perhaps it will be found. I, for my part, think it is man himself" ([159,] 162).

"Spain, at the time when it was both the greatest and the richest power, calculated with reals and with the very small maravedis" (172-73).

"In fact, he" (man) "is the sole and true wealth" (188). "Wealth is a relation between two persons" (221). "When the price of a thing, or its proportion with other things, changes in the same proportion relative to all things, it is an obvious indication that the value of this thing alone has changed, and not that of all the others" (154).

(The costs of **PRESERVING** capital, repairing it, must also be included in the calculation.)

223

^a See p. XXIV of the Preface.--Ed.

^b See this volume, p. 319.—Ed.

"THE POSITIVE LIMITATION OF QUANTITY IN PAPER MONEY WOULD ACCOMPLISH THE ONLY USEFUL PURPOSE THAT COST OF PRODUCTION DOES IN THE OTHER" ([G.] Opdyke, [A Treatise on Political Economy, New York, 1851, p.] 300).

The merely quantitative distinction in the material of money:

"MONEY IS RETURNED IN KIND ONLY" (in the case of LOANS); "WHICH FACT DISTINGUISHES THIS AGENT FROM ALL OTHER MACHINERY ... INDICATES THE NATURE OF ITS SERVICE ... CLEARLY PROVES THE SINGLENESS OF ITS OFFICE" ([ibid., p.] 267).

"WITH MONEY IN POSSESSION, WE HAVE BUT ONE EXCHANGE TO MAKE IN ORDER TO SECURE THE OBJECT OF DESIRE, WHILE WITH OTHER SURPLUS PRODUCTS WE HAVE TWO, THE FIRST OF WHICH (SECURING THE MONEY) IS INFINITELY MORE DIFFICULT THAN THE SECOND" (287-88).

"The BANKER DIFFERS FROM THE OLD USURER ... THAT HE LENDS TO THE RICH AND SELDOM OR NEVER TO THE POOR. HENCE HE LENDS WITH LESS RISK, AND CAN AFFORD TO DO IT ON CHEAPER TERMS; AND FOR BOTH REASONS, HE AVOIDS THE POPULAR ODIUM WHICH ATTENDED THE USURER" (F. W. Newman, Lectures on Political Economy, London, 1851, p. 44).

[VII-50] All hide and secretly bury their money deep in the ground, especially the gentiles, who are almost the sole masters of trade and money, being held in thrall to the belief that gold and silver they hide during their lifetime will serve them after their death (François Bernier, Voyages contenant la description des états du Grand Mogol etc., Vol. I, Paris, 1830, p. 314).^a

In its natural state, matter is always destitute of value. Only by means of labour does it obtain exchange value, become an element of wealth (McCulloch, Discours sur l'origine, [les progrès, les objets particuliers, et l'importance] de l'économie politique etc., translated by Prévost. Geneva and Paris, 1825, p. 57).

Commodities in exchange act as each other's measure (Storch, Cours d'economie politique. Avec des notes, etc., par J. B. Say, Vol. I, Paris, 1823, p. 81). "In the trade between Russia and China, silver is used to evaluate all commodities, yet this commerce is carried on by trocs^b" (p. 88). "Just as labour is not the source of the value of wealth, is it not its measure either" (l.c., p. 123). "Smith allowed himself to be persuaded that the same cause which makes material objects exist was also the source and measure of their value" (p. 124).

"Interest is the price which one pays for the use of a capital" (p. 336). Money must have a direct value, but one based on a *besoin factice*. Its material must not be indispensable for man's existence, since the entire quantity of it which is used as money can never be individually employed; it must always circulate (Vol. II, pp. 113, 114). "Money takes the place of all things" (p. 133).

Vol. V., Considérations sur la nature du revenu national, Paris, 1824:

"Acts of reproductive consumption are not, strictly speaking, expenses, but merely *advances*, since they are paid back to those who make them" (p. 54). "Is there not a manifest contradiction in this proposition that nations enrich themselves

^a The passages from Bernier and, below, from the French translation of McCulloch's book are quoted in the manuscript in French; those from Storch are partly in German translation and partly in the original French.—Ed.

^b Barter.—Ed.

^c Factitious need.-Ed.

by their abstinence or their *privations*, that is to say by voluntarily condemning themselves to poverty?" (p. 176).

"At the time when hides and furs served as money in Russia, the inconvenience attached to the circulation of so bulky and so perishable a currency gave rise to the idea of replacing them with small stamped pieces of leather, which thus became tokens payable in hides and furs.... They preserved this role until 1700" (namely, later, that of representing the fractional parts of the silver kopecks), "at least in the town of Kaluga and its environs, until Peter I" (in 1700) "decreed that they should be surrendered in exchange for small brass coins" ([Storch, Vol. IV,] p. 79).

A suggestion of the miracles worked by compound interest is already to be found in *Jos. Child*, the great opponent of usury in the 17th century (*Traités sur le commerce etc.*, translated from the English (published in English in 1669), Amsterdam and Berlin, 1754, pp. 115-17).

"IN POINT OF FACT A COMMODITY WILL ALWAYS EXCHANGE FOR MORE LABOUR THAN that which has produced it; AND IT IS THIS EXCESS THAT CONSTITUTES PROFITS" (McCulloch, The Principles of Political Economy, London, 1825, p. 221).

This remark shows how well Mr. McCulloch has understood Ricardo's principle. He distinguishes between the *real value* and the *exchange value* [of a commodity]; the former, (1), is the QUANTITY OF LABOUR EXPENDED IN ITS APPROPRIATION OR PRODUCTION; the latter, (2), is [this commodity's] *power of purchasing* CERTAIN QUANTITIES OF LABOUR or other commodities (p. 211).

MAN IS AS MUCH THE *PRODUCE OF LABOUR* AS ANY OF THE MACHINES CONSTRUCTED BY HIS AGENCY; AND IT APPEARS TO US THAT IN ALL ECONOMICAL INVESTIGATIONS HE OUGHT TO BE CONSIDERED IN PRECISELY THE SAME POINT OF VIEW (1.c., p. 115). WAGES REALLY CONSIST OF A PART OF THE PRODUCE OF THE INDUSTRY OF THE LABOURER (p. 295). THE PROFITS OF CAPITAL ARE ONLY ANOTHER NAME FOR THE WAGES OF ACCUMULATED LABOUR (p. 291).

"A PERIODICAL DESTRUCTION OF CAPITAL HAS BECOME A NECESSARY CONDITION OF THE EXISTENCE OF ANY MARKET RATE OF INTEREST AT ALL. AND, CONSIDERED IN THAT POINT OF VIEW, THESE AWFUL VISITATIONS, TO WHICH WE ARE ACCUSTOMED TO LOOK FORWARD WITH SO MUCH DISQUIET AND APPREHENSION, AND WHICH WE ARE SO ANXIOUS TO AVERT, MAY BE NOTHING MORE THAN THE NATURAL AND NECESSARY CORRECTIVE OF AN OVERGROWN AND BLOATED OPULENCE, THE *vis medicatrix* BY WHICH OUR SOCIAL SYSTEM, AS AT PRESENT CONSTITUTED, IS ENABLED TO RELIEVE ITSELF FROM TIME TO TIME OF AN EVER-RECURRING PLETHORA WHICH MENACES ITS EXISTENCE, AND TO REGAIN A SOUND AND WHOLESOME STATE" (John Fullarton, *On the Regulation of Currencies, etc.*, London, 1844, p. 165).

MONEY-GENERAL POWER OF PURCHASING (Chalmers, [On Political Economy in Connexion with the Moral State and Moral Prospects of Society, 2nd ed., Glasgow, 1832, p. 164]).^a

CAPITAL ... SERVICES AND COMMODITIES USED IN PRODUCTION. MONEY: THE MEASURE OF VALUE, THE MEDIUM OF EXCHANGE, AND THE UNIVERSAL EQUIVALENT; MORE PRACTICALLY: THE MEANS OF OBTAINING CAPITAL; THE ONLY MEANS OF PAYING FOR CAPITAL PREVIOUSLY OBTAINED FOR CREDIT; VIRTUALLY A SECURITY FOR OBTAINING ITS

^a See present edition, Vol. 28, p. 520.-Ed.

EQUIVALENT VALUE IN CAPITAL. COMMERCE IS THE EXCHANGE OF CAPITAL FOR CAPITAL THROUGH THE MEDIUM OF MONEY, AND THE CONTRACT BEING FOR THE MEDIUM, MONEY ALONE CAN SATISFY THE CONTRACT AND DISCHARGE THE DEBT. IN SELLING, ONE KIND OF CAPITAL IS DISPOSED OF FOR MONEY FOR OBTAINING ITS EQUIVALENT SPECIFIED VALUE IN ANY KIND OF CAPITAL. INTEREST—THE CONSIDERATION GIVEN FOR THE LOAN OF MONEY. IF THE MONEY BE BORROWED FOR THE PURPOSE OF PROCURING CAPITAL, THEN THE CONSIDERATION GIVEN IS A REMUNERATION FOR THE USE OF CAPITAL (RAW MATERIALS, LABOUR, MERCHANDISE, ETC.) WHICH IT OBTAINS. IF BORROWED FOR THE PURPOSE OF DISCHARGING A DEBT, FOR PAYING FOR CAPITAL PREVIOUSLY OBTAINED AND USED (CONTRACTED TO BE PAID FOR IN MONEY), THEN THE CONSIDERATION GIVEN IS FOR THE USE OF MONEY ITSELF, AND IN THIS RESPECT INTEREST AND DISCOUNT ARE SIMILAR. DISCOUNT SOLELY THE REMUNERATION FOR MONEY ITSELF, FOR CONVERTING CREDIT MONEY INTO REAL MONEY. A GOOD BILL GIVES THE SAME COMMAND OVER CAPITAL AS BANK NOTES, MINUS THE CHARGE FOR DISCOUNT; AND BILLS ARE DISCOUNTED FOR THE PURPOSE OF OBTAINING MONEY OF A MORE CONVENIENT DENOMINATION FOR WAGES AND SMALL CASH PAYMENTS, OR TO MEET LARGER ENGAGEMENTS FALLING DUE; AND ALSO FOR THE ADVANTAGE TO BE GAINED WHEN READY MONEY CAN BE HAD BY DISCOUNTING AT A LOWER RATE THAN 5%, THE USUAL ALLOWANCE MADE FOR CASH. THE MAIN OBJECT, HOWEVER, IN DISCOUNTING DEPENDS FUNDAMENTALLY UPON THE SUPPLY AND DEMAND OF LEGAL TENDER MONEY.... THE RATE OF INTEREST DEPENDS MAINLY ON THE DEMAND AND SUPPLY OF CAPITAL, AND THE RATE OF DISCOUNT ENTIRELY ON THE SUPPLY AND DEMAND OF MONEY (The Economist, 13 March, 1858. Letter to the Editor).

[VII-51] Mr. K. Arnd, who is quite in his element when he argues about the "dog tax",⁴⁵ has made the following interesting discovery:

"In the natural course of goods production there is just one phenomenon which, in countries where all available land is under cultivation, seems in some measure to regulate the rate of interest; this is the proportion in which the timber in European forests is augmented through their annual growth. This new growth occurs, quite independently of the exchange value of the timber, at the rate of 3 or 4 to 100" (*Die naturgemässe Volkswirthschaft, gegenüber dem Monopoliengeiste und dem Communismus*, Hanau, 1845, pp. 124-25).

This deserves to be called the forest-grown rate of interest.

"THE REMAINING VALUE OR OVERPLUS WILL IN EACH TRADE BE IN PROPORTION TO THE VALUE OF THE CAPITAL EMPLOYED" (Ricardo, [On the Principles of Political Economy etc., p. 84]).

Speaking of *interest*, two things must be considered:

Firstly, the division of *profit* into interest and profit. (Profit as the unity of the two is called GROSS PROFIT by the English.) The distinction becomes a tangible, palpable one as soon as a class of MONIED CAPITALISTS confronts a class of INDUSTRIAL CAPITALISTS. Secondly, capital itself becomes a commodity, or the commodity (money) is sold as capital. For instance, capital is said to adjust its price according to supply and demand like any other commodity. So it is this that determines the rate of interest. Therefore, here capital as such enters into circulation. MONIED CAPITALISTS and INDUSTRIAL CAPITALISTS can only constitute 2 distinct classes, because it is possible for profit to be split up into 2 distinct branches of revenue. The 2 sorts of CAPITALISTS merely express that FACT; but there must be this division, this splitting-up of profit into 2 distinct forms of revenue, for 2 distinct classes of capitalists to arise.

The form of interest is older than that of profit. The rate of interest paid by COMMON AGRICULTURISTS in India is in no way an indication of the level of profit. It shows, rather, that the usurer appropriates both profit and a part of wages itself in the form of interest. It is a proceeding worthy of Mr. Carey's historical acumen to compare this interest with that prevailing in the English MONEY MARKET, the interest paid by the English capitalist, and to conclude from that how much higher "labour's portion" (labour's share in the product) is in England than in India.^a He ought to have taken for comparison the interest paid in England, e.g. in Derbyshire, by the HANDLOOM WEAVERS whose material and instrument are advanced (loaned) to them by the capitalist. He would have found that the interest here is so high that in the end, after all ITEMS have been settled, the worker is still in debt, despite the fact that he has not merely returned the advances to the capitalist, but has also added his own labour to them gratis.

Historically, the form of industrial profit only emerges when capital has ceased to appear alongside the independent worker. Initially, therefore, profit appears as determined by interest. But in bourgeois economy, interest is determined by profit and is merely a part of it. Hence, profit must be sufficiently large for a part of it to be able to be detached from it as interest. The converse was the case historically. Interest must be depressed to such an extent that a part of the surplus gain can make itself independent as profit.

There is a natural relation between wages and profit—necessary labour and surplus labour; but is there any between profit and interest, save that which is determined by the competition between these two classes arranged under these different forms of revenues? But in order that this competition exist, and the two classes, the division of the surplus value into profits and interest is already presupposed. Capital considered in general is not a mere abstraction. If I consider the total capital of a nation, e.g., in distinction from the totality of its wage labour (or also landed property), or if I regard capital as the general economic basis of

^a H. Ch. Carey, The Credit System in France, Great Britain, and the United States, London, Philadelphia, 1838, pp. 2 and 9.— Ed.

one class in distinction from another class, I am considering it in general. It is the same as if, e.g., I considered man physiologically, as distinct from the animal. The real distinction between profit and interest exists as that between a MONEYED CLASS OF CAPITALISTS and an INDUSTRIAL CLASS OF CAPITALISTS. But the possibility of 2 such classes confronting each other, their existence as 2 classes, presupposes a diremption of the surplus value posited by capital.

(Political economy is concerned with the specific social forms of wealth or rather of the production of wealth. The substance of wealth, whether subjective, like labour, or objective, like objects for the satisfaction of natural or historically evolved requirements, appears at first as common to all epochs of production. Hence, this substance initially appears as a mere presupposition, which lies completely outside the sphere of political economy, and falls within that sphere only when it is modified by, or appears as modifying, the relations of form. All that is usually said about it in general terms, is confined to abstractions. These were of historical value in the early essays of political economy, in which the forms were laboriously extracted from the substance and fixed, with great effort, as the proper object of analysis. Later they become leaden platitudes, the more distasteful the greater the scientific pretension with which they are presented. This applies to all the idle chatter the German economists indulge in under the category of "goods".)

The important thing is that interest and profit both express relations of *capital*. As a particular form, interest-bearing capital does not confront labour but profit-bearing capital. The relationship in which, on the one hand, the worker still appears as independent, i.e. not as a wage worker, while, on the other hand, his objective conditions already possess an independent existence alongside him, constituting the property of a particular class of usurers, necessarily develops—in all the modes of production more or less based upon exchange—with the development of merchants' wealth or monetary wealth in opposition to the particular and restricted forms of AGRICULTURAL or artisan wealth. The development of merchants' wealth itself can be regarded as a development of exchange value and hence of circulation and of money relationships in those spheres. On the one hand, this relationship of course shows that the conditions of labour-which to an increasing degree are derived from circulation and depend upon it-become independent of and detached from the economic existence of the worker. On the other hand, his economic existence is not as yet subsumed in the process of

capital. Therefore the mode of production has not, as yet, essentially changed. If this relationship recurs within the bourgeois economy, it does so in backward branches of industry or in such as still [VII-52] resist extinction in the face of the modern mode of production. The most loathsome exploitation of labour still takes place within them, without the relationship of capital and labour in them constituting to any extent the basis for the development of new productive forces or the germ of new historical forms. In the mode of production itself, capital still appears here as materially subsumed in the individual worker or the worker's familywhether in handicraft industry or in small-scale agriculture. There is exploitation by capital, without the mode of production of capital. The rate of interest is very high because it includes profit and even part of the wages. This form of usury, in which capital does not seize hold of production, and therefore is capital only in form, presupposes the dominance of pre-bourgeois forms of production. But it is given a new lease of life, in subordinate spheres, within the bourgeois economy itself.

The second historical form of interest is the lending of capital to consuming wealth. It is historically important here as itself a moment of the origin of capital, since the revenue (AND OFTEN THE LAND TOO) OF THE LANDED PROPRIETORS ACCUMULATES AND BECOMES CAPITALISED IN THE POCKETS OF THE USURER. It is one of the processes by which circulating capital or also capital in the form of money concentrates in the hands of a class independent of the landed proprietors.

The form adopted by realised capital, as well as by its realised surplus value, is money. Hence profit (and not only interest) is expressed in money; because it is in money that value is realised and measured.

The necessity of paying in money—not merely of money for the purchase of commodities, etc.—arises wherever relations of exchange and money circulation obtain. It is not at all necessary that the exchange should be simultaneous. With money, it becomes possible for one party to yield up its commodity [at once], while the other makes its payment later. The need for money to that end (later developed in LOANS and DISCOUNTS) is historically one of the main sources of interest. We are not as yet concerned with this aspect; we must leave it until we come to discuss credit relations.

The distinction between BUYING (M-C) and SELLING (C-M):

"If I sell, I have (1) charged the profit on the commodity and obtained that profit; (2) received AN ARTICLE UNIVERSALLY REPRESENTATIVE OR CONVERTIBLE,

2

MONEY, for which, MONEY BEING ALWAYS SALEABLE, I can at all times command every other commodity; THE SUPERIOR SALEABLENESS OF MONEY BEING THE EXACT EFFECT OR NATURAL CONSEQUENCE OF THE LESS SALEABLENESS OF COMMODITIES. It is otherwise with buying. IF HE BUYS TO SELL AGAIN OR SUPPLY CUSTOMERS, WHATEVER MAY BE THE PROBABILITY, THERE IS NO ABSOLUTE CERTAINTY OF HIS SELLING AT A REMUNERATIVE PRICE. But all who buy do not sell again, people also buy for THEIR OWN USE OR CONSUMPTION," etc. (Th[omas] Corbet, An Inquiry into the Causes and Modes of the Wealth of Individuals, London, 1841, pp. 117 et sq.).

The Economist, 10 April [1858]: "A PARLIAMENTARY RETURN MOVED FOR BY MR. JAMES WILSON SHOWS THAT THE MINT COINED IN 1857 GOLD TO THE VALUE OF £4,859,000, OF WHICH £364,000 WAS IN HALF-SOVEREIGNS. THE SILVER COINAGE OF THE YEAR AMOUNTED TO £373,000, THE COST OF THE METAL USED BEING £363,000. THE TOTAL AMOUNT COINED IN THE TEN YEARS ENDING THE 31ST OF DECEMBER, 1857, WAS £55,239,000 IN GOLD, AND £2,434,000 IN SILVER. THE COPPER COINAGE LAST YEAR AMOUNTED IN VALUE TO £6,720—THE VALUE OF THE COPPER BEING £3,492; OF THIS, 3,136 WAS IN PENCE, 2,464 IN HALF-PENCE, AND 1,120 IN FARTHINGS. THE TOTAL VALUE OF THE COPPER COINAGE OF THE LAST TEN YEARS WAS £141,477, THE COPPER OF WHICH IT WAS COMPOSED BEING PURCHASED FOR £73,503."

"According to Thomas Culpeper (1641), Josiah Child (1670), Paterson (1694), Locke (1700), wealth depends upon the reduction, even if a forced one, of the interest rate of gold and silver. Abided by in England for almost 2 centuries" (Ganilh [Des systèmes d'économie politique, Vol. I, Paris, 1809, pp. 76-77]).

When *Hume* argued, in opposition to Locke, that the rate of interest was determined by the rate of profit,^a he was witnessing capital at a considerably higher stage of development; it was even more highly developed when Bentham, at the end of the 18th century, wrote his apologia for usury.^b

(From Henry VIII to Queen Anne, reduction of interest by law.)

"In every country: (1) A PRODUCING CLASS,⁴⁶ and (2) A MONIED CLASS, who live upon the interest of their capital" (J. St. Mill, [Essays on] Some Unsettled Questions of Political Economy, London, 1844, p. 110).

"IT IS BY FREQUENT FLUCTUATION IN A MONTH, AND BY PAWNING ONE ARTICLE TO RELIEVE ANOTHER, WHERE A SMALL SUM IS OBTAINED, THAT THE PREMIUM FOR MONEY BECOMES SO EXCESSIVE. 240 LICENSED PAWNBROKERS IN LONDON AND ABOUT 1,450 IN THE COUNTRY. THE CAPITAL EMPLOYED IS ESTIMATED AT ABOUT 1 MILLION. It is turned round at least thrice in the course of a year and yields each time $33 I_{20}$ on an average; so that the INFERIOR ORDERS of England yearly pay 1 million for a TEMPORARY LOAN of one million, EXCLUSIVE OF WHAT THEY LOSE BY GOODS BEING FORFEITED" (J. D. TUCKET, A History of the Past and Present State of the Labouring Population etc., Vol. I, London, 1846, p. 114).

^a D. Hume, Essays and Treatises on Several Subjects, Vol. 1.- Ed.

^b J. Bentham, Defence of Usury, London, 1787.-Ed.

"There are some labours which cannot be carried on except on a large scale, e.g. porcelain-making, glass-making, etc. Hence, these are never handicrafts. Some labours, like weaving, were already carried on on a large scale in the 13th and 14th centuries" (Poppe [p. 32]).

"In older times, all factories belonged to the handicrafts, and the *merchant* was merely carrier and deliverer for the handicrafts. This system was most strictly adhered to in cloth and linen manufacture. However, in many places the merchants gradually began to set themselves up as masters" (naturally, they were free from the old masters' guild prejudices, traditions and relation to the journeymen) "and took the journeymen into employment for daily wages" (Poppe, *Geschichte der Technologie*, Vol. I, Göttingen, 1807, pp. 70-71).

This was one of the main reasons why in England industry proper became established and developed in non-incorporated towns.

Commercial capital or money, as it makes its appearance as merchants' wealth, is the first form of capital, i.e. of value which originates exclusively from circulation (exchange) and is maintained, reproduced and increased in it, and hence the sole aim of this movement and activity is exchange value. Both movements [take place], buying in order to sell, and selling in order to buy, but the [VII-53] form M - C - C - M is dominant. Money and the increase of money is the exclusive aim of the operation. The merchant neither buys the commodity for his own need, for the sake of its use value, nor does he sell it in order to, e.g., discharge contracts stipulated in money, or to acquire other commodities for his needs. His direct aim is increase of value-increase in its immediate form as money. Mercantile wealth is first of all money as means of exchange, money as the mediating movement of circulation; it exchanges commodity for money, and money for commodity, and vice versa. Similarly, money appears here as an end in itself, but without for that reason existing in its metallic form. It is, here, the living conversion of value into the two forms of commodity and money: the indifference of value to the particular form of use value which it assumes, and simultaneously its metamorphosis into all these forms, which, however, appear merely as disguises.

If the activity of trade thus summarises the movements of circulation, and money as mercantile wealth, therefore, is, on the one hand, the first form of existence of capital, and appears so historically—this form appears, on the other hand, as directly contradictory to the *concept of value*. The law of trade is to buy cheap and sell dear. Hence not exchange of equivalents, with which trade as a particular branch of business would, in fact, be impossible.

Nevertheless, money as mercantile wealth-as it appears in the
most different social forms and at the most different stages of development of the social productive forces—is merely the mediating movement between extremes which it does not dominate, and between presuppositions which it does not create.

A. Smith, [Recherches sur la nature et les causes de la richesse des nations,] ed. Garnier, Vol. II, Book III:

"The great commerce of every civilised society is that carried on between the inhabitants of the town and those of the country ... consists in the exchange of raw products for manufactured products, either immediately, or by the intervention of money" (p. 403).^a

Trade always draws together; originally, production on a small scale.

"The town is a continual fair or market, to which the inhabitants of the country resort to exchange their raw products for manufactured products. It is this commerce which supplies the inhabitants of the town both with the materials of their work and with the means of their subsistence. The quantity of *finished goods* which they sell to the inhabitants of the country necessarily determines the quantity of the materials and provisions which they buy" (p. 408 [409]).

As long as "means of subsistence and of enjoyment" are the main aim, use value is dominant.

It is implicit in the concept of value that it is maintained and increased only by means of exchange. But existing value is first of all money.

"That industry, which aims at something outside the circle of absolute necessaries, was established in towns long before it could be commonly practised by the cultivators in the countryside" (p. 452).

"Although the inhabitants of a town ultimately draw their subsistence and all the means and materials for their industry from the countryside, those of a city near either the sea coast or a navigable river may draw them also from the most remote corners of the world, either in exchange for the manufactured products of their own industry, or by performing the office of carriers between distant countries and exchanging the products of one for those of another. Thus a city can become very rich, while not only the country in its immediate neighbourhood but the entire area in which it trades is poor. Each of those countries, taken singly, can afford it only a very small part of its subsistence and of what it needs for business; but all of them, taken together, can afford it a great quantity of subsistences and a great diversity of employment" (p. [452,] 453).

(The cities of Italy were the first in Europe to rise thanks to trade; at the time of the Crusades—Venice, Genoa and Pisa—partly owing to the transportation of people, and always owing to the transportation of provisions which had to be supplied to them. These republics were, one might say, the commissaries of those armies) (l.c.).

^a Marx quotes Smith in French. From the words "Although the inhabitants of a town", he quotes in German translation, occasionally using French phrases.—*Ed.*

Merchants' wealth conceived of as continuously in exchange, and exchanging for the sake of exchange value, is IN FACT living money.

"The inhabitants of trading cities, by importing refined articles and expensive luxuries from richer countries, catered to the vanity of the big landed proprietors, who bought them eagerly, paying with great quantities of the raw produce of their lands. The trade of a great part of Europe at the time, accordingly, consisted in the exchange of the raw products of some countries for the manufactured products of the industrially more advanced ones" (p. [454,] 455). "When this taste became so general as to occasion a considerable demand, the merchants, to save the expense of carriage, sought to establish similar manufactures in their own country. This the rise of the first manufactures for distant sale" (l.c.). Luxury goods manufactures, sprung from FOREIGN COMMERCE, were established by merchants (worked up foreign materials) (p. 456 [457]).

Adam Smith speaks of a second type of manufactures, which "arise naturally, of their own accord, by the gradual refinement of the crude domestic crafts". They work up HOMEGROWN MATERIALS (p. 459).

The trading peoples of antiquity were located, like the Gods of Epicurus, in the intermundia of the world,⁴⁷ or RATHER like the Jews in the pores of Polish society. Most of the independent trading peoples or cities that attained a high level of development were engaged in the *CARRYING TRADE*, based upon the barbarity of the producing peoples, between whom they played the role of money (the mediator).

At the initial stages of bourgeois society, trade dominated industry; in modern society, the other way round.

Naturally, trade will have repercussions, to a greater or lesser degree, upon the communities between which it is carried on. It will increasingly subject production to exchange value, and force immediate use value more and more into the background, by making subsistence depend more upon the sale of the product than upon its immediate use. It dissolves the old relationships and thereby increases money circulation. At first, it embraces only the surplus of production; but gradually it seizes hold of production itself. However, the dissolving effect greatly depends upon the nature of the producing communities between which trade is carried on. E.g., it has hardly shaken the ancient Indian community and Asiatic relationships in general. Fraud in the exchange is the [VII-54] basis of trade as it appears independently.

But capital emerges only when trade seizes control of production itself, and the merchant becomes a producer or the producer becomes merely a merchant. Opposed to this are the medieval guilds, the caste system, etc. But the rise of capital in its adequate form presupposes capital as commercial capital, so that production, more or less mediated by money, is no longer carried on for use, but for trade on a large scale.

Mercantile wealth as an independent economic form, and as the basis of trading cities and trading peoples, exists and has existed among peoples who are at the most different levels of economic development. And within the trading city itself (e.g. the ancient Asian, the Greek, and the Italian, etc., city of the Middle Ages), production may continue to exist in the form of guild production, etc.

Sleuart. "TRADE IS AN OPERATION BY WHICH THE WEALTH, OR WORK, EITHER OF INDIVIDUALS, OR OF SOCIETIES, MAY BE EXCHANGED, BY A SET OF MEN CALLED MER-CHANTS, FOR AN EQUIVALENT, PROPER FOR SUPPLYING EVERY WANT, WITHOUT ANY INTERRUPTION TO INDUSTRY, OR ANY CHECK TO CONSUMPTION. INDUSTRY IS THE APPLICATION TO INGENIOUS LABOUR IN A FREE MAN, IN ORDER TO PROCURE, BY THE MEANS OF TRADE, AN EQUIVALENT FIT FOR SUPPLYING EVERY WANT" ([An Inquiry into the Principles of Political Oeconomy,] Vol. I, [Dublin, 1770,] p. 166).

"WHILE WANTS CONTINUE SIMPLE AND FEW, A WORKMAN FINDS TIME ENOUGH TO DISTRIBUTE ALL HIS WORK; WHEN WANTS BECOME MORE MULTIPLIED, MEN MUST WORK HARDER; TIME BECOMES PRECIOUS; HENCE TRADE IS INTRODUCED.... The MERCHANT as mediator between WORKMEN AND CONSUMERS" (p. 171).

THE COLLECTION (of the products) INTO A FEW HANDS is the INTRODUCTION OF TRADE (l.c.). The CONSUMER does not buy in order to sell again. The merchant buys and sells merely with a VIEW TO A GAIN (p. 174) (i.e. for value). "The most simple of all TRADE is that which is carried on by *BARTERING the most necessary means of subsistence*" (between the SURPLUS FOOD in the hands of the farmers, and the FREE HANDS) [p. 175]. Progress is due mainly to the INTRODUCTION OF MONEY (p. 176).

As long as reciprocal wants are SUPPLIED BY BARTER, there is not the smallest occasion for money. This is the simplest combination. When wants are multiplied, BARTERING BECOMES more difficult; UPON THIS, MONEY IS INTRODUCED. This is the COMMON PRICE of all things. A PROPER EQUIVALENT in the hands of those who WANT. This OPERATION OF BUYING and SELLING is somewhat more complex than the former [p. 177].

Hence (1) BARTER; (2) SALE; (3) COMMERCE...

The merchant must come into play as a mediator. What we previously called WANTS, is now represented by the CONSUMER; industry, by the MANUFACTURER; money, by the merchant. The merchant represents the money, BY SUBSTITUTING CREDIT IN ITS PLACE; and as money was invented to facilitate BARTER, so the MERCHANT with his CREDIT is A NEW REFINEMENT UPON THE USE OF MONEY. This OPERATION of BUYING and SELLING is now TRADE; IT RELIEVES both parties of the whole TROUBLE OF TRANSPORTATION, and ADJUSTING WANTS TO WANTS. OR WANTS TO MONEY; the MERCHANT REPRESENTS BY TURNS THE CONSUMER, THE MANUFACTURER, and the money. To the CONSUMER he represents the whole body of MANUFACTURERS; to the latter, the whole body of CONSUMERS; and to both classes HIS CREDIT SUPPLIES THE USE OF MONEY (pp. 177, 178).

Merchants are SUPPOSED to BUY and SELL, not from necessity, but WITH A VIEW TO PROFIT (p. 201).

"Only the industrialist produces for the use of others, not for his own; these goods begin to be useful to him only at the moment at which he exchanges them. Thus they give rise to the need for trade or the art of exchange. They are only estimated in terms of their exchangeable value" (Sismondi, *Études sur l'économie politique*, Vol. II, Brussels, 1838, p. 161).^a Trade has robbed the things, the riches, of their primitive character of usefulness: *commerce has reduced everything to the opposition between use value and exchange value* (p. 162). Initially, utility is the true measure of values; trade does exist then, in the patriarchal state of society; but it has not wholly absorbed society, it embraces only the surplus of everyone's production, not what is necessary for his existence (pp. 162, 163). By contrast, our economic progress is characterised by the fact that *trade* has taken upon itself the *distribution* of the totality of the wealth annually produced, and consequently has completely suppressed the character of wealth as use value, and will not permit any other but exchange value to exist (163).

Before the introduction of trade, an increase in the quantity of output constituted a direct increase of wealth. The quantity of labour by means of which useful things were obtained was of little consequence then. And, in fact, the utility of the thing required would in no way be diminished even if no labour at all were necessary to obtain it. Grain and linen would be no less necessary to those possessing them, even if they had fallen from the heavens. That is without doubt the true estimation of wealth—enjoyment and utility. But from the moment when men ... made their subsistence dependent upon the exchanges which they could carry out, or on commerce, they were forced to adhere to another mode of estimation, to exchange value, to a value which stems not from utility, but from the relationship between the need of the entire society and the quantity of labour sufficient to satisfy this need, or also the quantity of labour which could satisfy it at some future time (l.c., p. 266). In the estimation of values which people have sought to measure by the agency of money, the concept of utility is wholly set aside. It is *labour* alone, the effort necessary to obtain the two things exchanged for one another, that is taken into consideration (p. 267).

On interest, J. W. Gilbart says (The History and Principles of Banking, London, 1834):

"That a man who borrows money with a view of making a profit by it, should give some portion of his profit to the lender, is A SELF-EVIDENT PRINCIPLE OF NATURAL JUSTICE. A man usually makes a profit by means of TRAFFIC. But in the Middle Ages the population was purely agricultural. And under such conditions, as under feudal GOVERNMENT, there can be but little TRAFFIC, and hence little PROFIT. Therefore, the laws on usury in the Middle Ages were justified. Besides, IN AN AGRICULTURAL COUNTRY A PERSON SELDOM WANTS TO BORROW MONEY EXCEPT HE BE REDUCED TO POVERTY OR DISTRESS BY MISERY^b" (p. 163).

Henry VIII limited interest to 10%, James I to 8, Charles II to 6, Anne to 5 (164, 165). In those [VII-55] times the lenders were in fact, if not legally, monopolists, and hence it was necessary to place them, like other monopolists, UNDER RESTRAINT (p. 165). In our times, the rate of profit regulates the rate of interest; in those times, the rate of interest regulated the rate of profit. If the money-lender charged a high rate of interest to the merchant, the merchant had to

235

ł

^a The excerpts from Sismondi are quoted by Marx in German translation, with a French word or phrase here and there.—*Ed.*

^b Gilbart has "by misfortune".— Ed.

set a higher rate of profit on his GOODS. Hence, a large sum of money was taken from the pockets of the buyers to be put into the pockets of the MONEY-LENDERS. This ADDITIONAL PRICE set upon the GOODS made the PUBLIC less able and inclined to buy them (l.c., p. 165).

"UNDER THE RULE OF INVARIABLE EQUIVALENTS, COMMERCE, etc., WOULD BE IMPOSSIBLE" (G. Opdyke, A Treatise on Political Economy, New York, 1851, p. 67).

"The positive limitation^a of quantity in this instrument" (i.e. paper money) "would accomplish the only useful purpose that cost of production does in the other" (metal money) (l.c., p. 300).

Interest. "If A FIXED SUM OF PRECIOUS METAL falls [in value], this is no reason why A SMALLER QUANTITY OF MONEY SHOULD BE TAKEN FOR ITS USE, for if the PRINCIPAL is of less value for the BORROWER, the interest is to the same extent less difficult for him to pay. In California, 3% per MONTH, 36% per annum, because of the UNSETTLED STATE. In Hindustan, with the Indian princes borrowing for UNPRODUC-TIVE EXPENSES, the lenders, to counterbalance on the average the losses of capital, [charge] very high interest, 30%, HAVING NO RELATION TO PROFIT WHICH MIGHT BE GAINED IN INDUSTRIAL OPERATIONS" (The Economist, [No. 491,] 22 January 1853 [p. 89]). (The lender "CHARGES here INTEREST SO HIGH AS TO BE SUFFICIENT TO REPLACE THE PRINCIPAL IN A SHORT TIME, OR AT LEAST AS ON THE AVERAGE OF ALL HIS LENDING TRANSACTIONS, MIGHT SERVE TO COUNTERBALANCE HIS LOSSES IN PARTICULAR INSTANCES, BY THE APPARENTLY EXORBITANT GAINS ACQUIRED IN OTHERS" (l.c.).)

The RATE of INTEREST DEPENDS: (1) on the RATE OF PROFIT; (2) on the proportion in which the ENTIRE PROFIT is divided between the LENDER and BORROWER (l.c.).

ABUNDANCE OR SCARCITY OF THE PRECIOUS METALS, THE HIGH OR LOW SCALE OF GENERAL PRICES PREVAILING, DETERMINES ONLY WHETHER A GREATER OR LESS AMOUNT OF MONEY WILL BE REQUIRED IN EFFECTING THE EXCHANGES BETWEEN BORROWERS AND LENDERS, AS WELL AS EVERY OTHER SPECIES OF EXCHANGE.... The only difference is THAT A GREATER SUM OF MONEY WOULD BE NEEDED TO REPRESENT AND TRANSFER CAPITAL LENT ... THE RELATION BETWEEN THE SUM PAID FOR THE USE OF CAPITAL AND THE CAPITAL EXPRESSES THE RATE OF INTEREST AS MEASURED IN MONEY (l.c. [pp. 89-90]).

DOUBLE STANDARD.

Formerly in the countries where gold and silver were the LEGAL STANDARD, the circulating currency consisted almost entirely of silver, because from 1800 to 1850 THE TENDENCY WAS FOR GOLD TO BECOME DEARER THAN SILVER. GOLD had somewhat risen in relation to silver, and in France bore a PREMIUM as compared to its ratio to silver fixed in 1802. So in the UNITED STATES; in India. (In the latter, there is now a silver standard, as in Holland, etc.) The circulation of the UNITED STATES was the first to be affected. Large imports of gold from California, a premium on silver in Europe, EXTENSIVE SHIPMENT OF SILVER COINS AND REPLACEMENT BY GOLD. The UNITED STATES GOVERNMENT minted gold coins of as LOW a value as 1 DOLLAR. Substitution of silver for gold in France (*The Economist*, [No. 429,] 15 November 1851 [p. 1257]).

a i. e., in Opdyke's usage, limitation "by positive law".- Ed.

LET THE "STANDARD OF VALUE" BE WHAT IT WILL, "AND LET THE CURRENT MONEY REPRESENT ANY FIXED PORTION OF THAT STANDARD THAT MAY BE DETERMINED UPON, THE TWO CAN ONLY HAVE A FIXED AND PERMANENT VALUE IN RELATION TO EACH OTHER, BY BEING CONVERTIBLE AT THE WILL OF THE HOLDER" (*The Economist* [No. 215, 9 October 1847, p. 1158]).

THE ONLY WAY IN WHICH ANY CLASS OF COINS CAN COMMAND A PREMIUM IS THAT NO ONE IS OBLIGED TO PAY THEM, WHILE EVERYONE IS OBLIGED TO TAKE THEM AS A LEGAL TENDER (*The Economist* [No. 386, 18 January 1851, p. 59]).

Consequently, no country can have more than one STANDARD (MORE THAN ONE STANDARD OF THE MEASURE OF VALUE); for this STANDARD must be UNIFORM and UNCHANGING. No article has a uniform, unchanging value in relation to others; IT ONLY HAS SUCH WITH ITSELF. One piece of gold is always of the same value as another of exactly the same fineness, the same weight and the same value in the same place; BUT THIS CANNOT BE SAID of gold and ANY OTHER ARTICLE, e.g. silver (*The Economist*, [No. 37, 11 May] 1844 [p. 771]).

The English pound sterling is somewhat less than 1/3 of its original value; the German florin=1/6; Scotland, prior to the Union,⁴⁸ had DEBASED its pound to 1/36; the French livre=1/74 [of its original value]; the Spanish maravedi=less than 1/1,000; the Portuguese re has suffered still more (Morrison, [Observations on the system of Metallic Currency adopted in this country, London, 1837,] p. 13).

Previous to the law of 1819,⁴⁹ the CAUSES IN EXISTENCE DETERMINING THE BULLION PRICE, other than the circulation of bank notes were (1) THE MORE OR LESS PERFECT CONDITION OF THE COIN. If the circulating metallic coins are DEBASED below their STANDARD WEIGHT, the slightest TURN OF EXCHANGE CAUSING A DEMAND FOR EXPORTATION must raise the price of UNCOINED BULLION at least by the amount of the degradation of the COIN; (2) PENAL LAWS, which prohibited the MELTING and EXPORTING of COIN and permitted the TRAFFIC IN BULLION. Given an intensive demand for EXPORT, this afforded LATITUDE for the VARIATION OF THE BULLION PRICE in relation to that of COIN even at times when paper was fully convertible. In 1783, 1792, 1795, 1796 ... 1816, the bullion price rose above the MINT PRICE, because the BANK DIRECTORS, IN THEIR ANXIETY TO PREPARE FOR THE RESUMPTION OF CASH PAYMENT, accepted gold at considerably above the MINT PRICE (Fullarton, [*On the Regulation of Currencies*, 2nd ed., London, 1845, pp. 7-9]).

The STANDARD can be in terms of gold, without there being a single ounce of gold in circulation (*The Economist* [No. 58, 5 October 1844]).

Under George III (1774) silver was legal TENDER only up to ± 25 . The bank, too, was now legally obliged to pay only in gold (Morrison [ibid., p. 12]). Through Lord Liverpool (beginning of the 19th century) silver and copper were turned into purely representative coins (l.c. [pp. 14-15]).

The dissolving effect of money. Money is the means of splitting up property.

Urguhart's rubbish concerning the STANDARD OF MONEY:

"THE VALUE OF GOLD IS TO BE MEASURED BY ITSELF; HOW CAN ANY SUBSTANCE BE THE MEASURE OF ITS OWN WORTH IN OTHER THINGS? THE WORTH OF GOLD IS TO BE ESTABLISHED BY ITS OWN WEIGHT, UNDER A FALSE DENOMINATION OF THAT WEIGHT— AND AN OUNCE IS TO BE WORTH SO MANY POUNDS AND FRACTIONS OF POUNDS. THIS IS—FALSIFYING A MEASURE, NOT ESTABLISHING A STANDARD!" (Familiar Words [London, 1856, pp. 104-05]).

÷

[VII-56] A. Smith calls LABOUR THE REAL and MONEY THE NOMINAL MEASURE OF VALUE; describes the former as the original measure.^a

The value of money. John Stuart Mill.

"Given the quantity of goods sold, and the number of sales and resales of these goods, the value of money depends upon its quantity, together with the number of times each piece of money changes hands in the process." "The quantity of money in circulation=the money value of all the goods sold, divided by the number which expresses the velocity of circulation." "Given the amount of goods and of transactions, the value of money is inversely as its quantity multiplied by the velocity of its circulation." But in all these propositions "only that quantity of money is meant which really circulates and is actually exchanged for goods". "The necessary quantity of money is determined partly by its production costs and partly by the velocity of its circulation. The velocity of circulation being given, the quantity of money depends on the velocity of circulation" [J. St. Mill, *Principles of Political Economy*, Vol. II, London, 1848, pp. 17, 18, 20, 30].

Money has no other equivalent than itself or what is a commodity. Hence it degrades everything. In France at the beginning of the 15th century, even the consecrated Church vessels (chalices), etc., were in pawn to the Jews (Augier [Du crédit public, Paris, 1842, pp. 95, 101]).^b

Money is not an object of direct consumption:

Currency never becomes an object of consumption. It always remains a commodity for sale [marchandise], never becomes one for consumption [denrée]. It directly possesses intrinsic value only for society; for every individual, it possesses exchange value. Therefore, the material of which it is composed must have value, but one based on a besoin factice,^c it may not be indispensable for man's existence, since the entire quantity of money which is employed as currency can never be individually employed; it must always circulate (Storch [Cours d'économie politique, Vol. II, Paris, 1823, pp. 109, 113-14]).

[VII-57] John Gray: The Social System: a treatise on the principle of exchange, Edinburgh, 1831.

"To sell for money should at all times be made as easy as it is to buy with money; production would then become the uniform and never failing cause of demand" (p. 16).

It is the quantity that can be sold at a profit, not the quantity that can be made, that is the present limit to production (59).

MONEY SHOULD BE MERELY A *RECEIPT*, AN EVIDENCE THAT THE HOLDER OF IT HAS EITHER CONTRIBUTED A CERTAIN VALUE TO THE NATIONAL STOCK OF WEALTH, OR THAT

^a A. Smith, An Inquiry into the Nature and Causes of the Wealth of Nations, Vol. I, London, 1835, pp. 100, 101 and 105.—Ed.

^b Marx quotes partly in French and partly in German translation. The passage from Storch that follows is in German translation, with a few occasional French words.—Ed.

^c Factitious need.—Ed.

HE HAS ACQUIRED A RIGHT TO THE SAID VALUE FROM SOME ONE WHO HAS CONTRIBUTED TO IT.... MONEY SHOULD BE NOTHING MORE OR LESS THAN PORTABLE, TRANSFERABLE, DIVISIBLE AND INIMITABLE EVIDENCES OF THE EXISTENCE OF WEALTH IN STORE (63-64).

An estimated value being previously put upon produce, let it be lodged in a bank, and drawn out again whenever it is required, merely stipulating, by common consent, that he who lodges any kind of property in the proposed national Bank, may take out of it an equal value of whatever it may contain, instead of being obliged to draw out the self same thing that he put in.... The proposed national banker should receive and take charge of *every* description of valuable, and give back *any* description of valuable in its stead (1.c., p. 68).

"IF MONEY," says Gray, "BE OF EQUAL VALUE WITH THAT WHICH IT REPRESENTS, IT CEASES TO BE A REPRESENTATIVE AT ALL. IT IS ONE OF THE CHIEF DESIDERATUMS IN MONEY, THAT THE HOLDER OF IT SHOULD BE COMPELLED AT ONE TIME OR OTHER TO PRESENT IT FOR PAYMENT AT THE PLACE FROM WHENCE HE RECEIVED IT. BUT IF MONEY BE OF THE SAME INTRINSIC VALUE AS THAT WHICH IS GIVEN FOR IT, NO SUCH NECESSITY EXISTS" (74).

"Depreciation of stock should form an item of national charge" (p. [115-] 116). "The business of every country to be conducted on a national capital" (171). "All land to be transformed into national property" (298).

Gray (John): Lectures on the Nature and Use of Money (Edinburgh, 1848):

"MAN COLLECTIVELY SHOULD KNOW NO LIMIT TO HIS PHYSICAL MEANS OF ENJOY-MENT, SAVE THOSE OF THE EXHAUSTION EITHER OF HIS INDUSTRY OR [of] HIS PRODUCTIVE POWERS; WHILST WE, BY THE ADOPTION OF A MONETARY SYSTEM, FALSE IN PRINCIPLE, AND DESTRUCTIVE IN PRACTICE, HAVE CONSENTED TO RESTRICT THE AMOUNT OF OUR PHYSICAL MEANS OF ENJOYMENT TO THAT PRECISE QUANTITY WHICH CAN BE PROFITABLY EXCHANGED FOR A COMMODITY, ONE OF THE LEAST CAPABLE OF MULTIPLICA-TION BY THE EXERCISE OF HUMAN INDUSTRY, OF ANY UPON THE FACE OF THE EARTH" (p. 29). What is required for a good system is (1) a system of banking, by the OPERATIONS of which the NATURAL RELATIONSHIP OF SUPPLY AND DEMAND WOULD BE RESTORED; (2) a true measure of value, in place of the existing fiction (108).

(In this book, the idea of the exchange bank is developed in even greater detail, with the present mode of production being retained.)

"THERE MUST BE A MINIMUM PRICE OF LABOUR PAYABLE IN STANDARD MONEY" (p. 160). E.g., let us call the lowest rate of wages per week, of 60-72 hours, that MAY BY LAW BE GIVEN by the name of 20s. or £1 standard (161). "SHALL WE RETAIN OUR *FICTITIOUS* STANDARD OF VALUE, *GOLD*, AND THUS KEEP THE PRODUCTIVE RE-SOURCES OF THE COUNTRY IN BONDAGE, OR SHALL WE RESORT TO THE *NATURAL* STANDARD OF VALUE, *LABOUR*, AND THEREBY SET OUR PRODUCTIVE RESOURCES FREE?" (p. 169). THE AMOUNT OF THIS MINIMUM WAGE BEING ONCE FIXED..., IT SHOULD REMAIN THE SAME FOR EVER (174). "ONLY let gold and silver TAKE THEIR PROPER PLACE IN THE MARKET BESIDE BUTTER AND EGGS AND CLOTH AND CALICO, and then the value of the precious metals will interest us no more than that of diamonds", etc. (182 [183]). No OBJECTION to make TO GOLD AND SILVER USED *AS INSTRUMENTS OF EXCHANGE*, BUT ONLY AS *MEASURES OF VALUE*... In a short time one would see how many ounces of gold or silver were obtainable in London, Edinburgh or Dublin in exchange for a HUNDRED POUND STANDARD NOTE (p. 188).

Interest.

As the class of rentiers increases, so also does that of lenders of CAPITAL, FOR THEY ARE ONE AND THE SAME. For this reason alone, interest must have had a tendency to fall in old countries (Ramsay, [An Essay on the Distribution of Wealth, Edinburgh, 1836] p. 202).

"IT IS PROBABLE THAT IN ALL AGES THE PRECIOUS METALS [have] COST MORE IN THEIR PRODUCTION THAN THEIR VALUE EVER REPAID" (W. Jacob, An Historical Inquiry into the Production and Consumption of the Precious Metals, Vol. II, London, 1831, p. 101).

Value of money.

The value of all things, divided by the number of transactions in which they have figured in their passage from the producer to the consumer, is equal to the value of the écus employed in their purchase divided by the number of times that these thaler have passed from hand to hand in the same period of time (Sismondi, *Nouveaux principes d'économie politique etc.* [2nd ed., Vol. II, Paris, 1827, p. 120]).

The false theory of price is developed most formally by James Mill (quoted according to the translation by J. T. Parisot, Paris, 1823. Élémens d'écon. pol.).⁵⁰

The most important passages from Mill are as follows:

"By value of money, is here to be understood the proportion in which it exchanges for other commodities, or the quantity of it which exchanges for a certain quantity of other things" (p. 128). "It is the total quantity of money in any country, which determines that portion. If we suppose that all the goods of the country are on one side, all the money on the other, and that they are exchanged at once against one another, it is evident that the value of money would depend wholly upon the quantity of it" (1.c.). "It will appear that the case is precisely the same in the actual state of the facts. The whole of the goods of a country are not exchanged at once against the whole of the money; the goods are exchanged in portions, often in very small portions, and at different times, during the course of the whole year. The same piece of money which is paid in one exchange to-day, may be paid in another exchange to-morrow. Some of the pieces will be employed in a [VII-58] great many exchanges, some in very few, and some, which happen to be hoarded, in none at all. There will, amid all these varieties, be a certain average number of exchanges, the same which, if all the pieces had performed an equal number, would have been performed by each; that average we may suppose to be any number we please; say, for example, ten. If each of the pieces of the money in the country perform ten purchases, that is exactly the same thing as if all the pieces were multiplied by ten, and performed only one purchase each. The value of all the goods in the country is equal to ten times the value of all the money, etc." (pp. 129, 130). "If the quantity of money, instead of performing ten exchanges in the year, were ten times as great, and performed only one exchange in the year, it is evident that whatever addition were made to the whole quantity, would produce a proportional diminution of value, in each of the minor quantities taken separately. As the quantity of goods, against which the money is all exchanged at once, is supposed to be the same, the value of all the money is no more, after the quantity is augmented, than before it was augmented. If it is supposed to be augmented one-tenth, the value of every part, that of an ounce for example, must be diminished one-tenth" (pp. 130, 131). "In whatever degree, therefore, the quantity of money is increased or diminished, other things remaining the same, in that same

proportion, the value of the whole, and of every part, is reciprocally diminished or increased. This, it is evident, is a proposition universally true. Whenever the value of money has either risen or fallen (the quantity of goods against which it is exchanged and the rapidity of circulation remaining the same), the change must be owing to a corresponding diminution or increase in the quantity; and can be owing to nothing else. If the quantity of goods diminish, while the quantity of money remains the same, it is the same thing as if the quantity of money had been increased," and vice versa. "Similar changes are produced by any alteration in the rapidity of circulation. An increase in the number of these purchases has the same effect as an increase in the quantity of money; a diminution the reverse" (pp. 131, 132). "If there is any portion of the annual produce which is not exchanged at all, as what is consumed by the producer; or what is not exchanged for money; that is not taken into account^a because what is not exchanged for money is in the same state with respect to the money, as if it did not exist" (pp. 132, 133). "Whenever the coining of money ... is free, its quantity is regulated by the value of the metal.... Gold and silver are in reality commodities, products It is cost of production ... which determines the value of these, as of other ordinary productions" (pp. 136, 137).

The insipidity of this line of argument is obvious.

(1) To assume that the quantity of commodities and also the velocity of circulation remain the same, and yet a greater quantity of gold or silver is exchanged for the same quantity of commodities (while the value of gold and silver, i.e. the quantity of labour contained in them, has not changed), is to assume EXACTLY what one wished to prove, viz. that the prices of commodities are determined by the quantity of the circulating medium and not the other way round.

(2) Mill admits that the commodities not thrown into circulation do not exist for money. It is equally clear that the money not thrown into circulation does not exist for the commodities. It follows that there is no fixed relation between the value of money in general and the quantity of it which enters into circulation. To say that the quantity of it actually in circulation, divided by the number of its turnovers, is equal to the value of money, is merely a tautological roundabout way of saying that the value of the commodity expressed in money is its price; because the money in circulation expresses the value of the commodities which it circulates—hence the value of these commodities is determined by the *quantity* of money in circulation.

(3) The confusion in Mill's views is clearly seen from his statement that the value of money diminishes or increases with "any alteration in the rapidity of circulation". Whether a pound sterling circulates once or 10 times in a day, in each exchange it expresses an equivalent for the commodity, is exchanged for the same value embodied in the commodity. In

^a The rest of the sentence is quoted in French in the manuscript.-Ed.

each exchange its own value remains the same, and hence does not change whether its circulation is slow or rapid. The quantity of money in circulation does change but neither the value of the commodity nor that of money.

"To say that a piece of cloth is worth £5, means that it possesses the value of 616,370 grains of standard gold. The reason assigned above may be paraphrased thus: 'prices must fall because commodities are estimated as being worth so many ounces of gold; and the amount of gold in this country is diminished'" (J. G. Hubbard, *The Currency and the Country*, London, 1843, p. 44).

(4) In his exposition of the theory, Mill initially assumes that the total quantity of money in a country is exchanged *at once* for the total quantity of commodities in that country. He then says that this is really the case, and that it is so above all because in practice precisely the opposite takes place: only portions of money are exchanged for portions of commodities, and only very few payments are ARRANGED BY PAYMENT ON THE SPOT-TIME BARGAINS. It follows that the total number of transactions or purchases made on any one day is quite independent of the [quantity of] money in circulation on this day, and that the quantity of money in circulation on a certain day is not the cause but the effect of a quantity of transactions executed earlier and quite independent of the money supply at the moment in question.

(5) Finally, Mill himself admits that with free money circulation, and we are concerned with it alone, the value of money is determined by its production costs, i.e., on his own showing, by the labour time contained in it.

[VII-59] Money matters. In Ricardo's pamphlet, Proposals for an Economical and Secure Currency; with observations on the profits of the Bank of England, London, 1816, there is a passage in which he topples his whole theory. It says:

"The amount of notes in circulation depends ... upon the amount required for the circulation of the country, which is regulated by the *value* of the STANDARD, the amount of payments, and the [degree of] economy practised in effecting them" (1.c., pp. 17, 18).

Under Louis XIV, XV and XVI in France, duties in kind were still levied on the rural population for government taxes (Augier [Du crédit public, pp. 128-29]).^a

Prices and the quantity of the circulating medium.

^a Marx quotes partly in French and partly in German translation.- Ed.

A mere RISE in prices is not sufficient to create a DEMAND for ADDITIONAL CURRENCY. This only the case if there is a simultaneous rise in production and consumption. E.g. the price of corn may rise, but its supply decline. Can therefore be handled with the same amount of CURRENCY.... But if prices rise because of rising demand, [the opening of] new markets, an increased SCALE OF PRODUCTION, in short, if a rise in prices is accompanied by a rise in the GENERAL SUM OF TRANSACTIONS, then this REQUIRES THE INTERVENTION OF MONEY TO BE MULTIPLIED IN NUMBER AND ENLARGED IN MAGNITUDE (Fullarton [On the Regulation of Currencies, 2nd ed., pp. 102-04]).

TRADE GOVERNS MONEY, not MONEY TRADE. THE SERVANT OF TRADE must follow the VARIATIONS (in the prices) of the other commodities (Davenant [Discourses on the Publick Revenues, and on the Trade of England, Part II, London, 1698, p. 16]).

Under the feudal monarchs, the few articles that were purchased by the great mass of the people had fallen to such an extent that no piece of gold or of silver was small enough to pay for what the LABOURER needed for his daily subsistence... Hence, as in ancient Rome, the CURRENT MONEY was wholly composed of the INFERIOR METALS, COPPER, TIN, IRON (Jacob [An Historical Inquiry into the Production and Consumption of the Precious Metals, Vol. I, pp. 301-02]).

Jacob assumes that, in this century, $^{2}/_{3}$ of the gold and silver in Europe is in the form of other objects—utensils and ornaments, not in that of coin [ibid, Vol. II, pp. 212-13]. (Elsewhere he reckons the precious metal thus used in Europe and America at £400 million.)

Prices and the quantity of the circulating medium.

Locke, The Spectator (19 October 1711), Hume, Montesquieu. Their theory is based on three propositions:

(1) The prices of commodities are proportional to the quantity of money in the country;

(2) The COIN and CURRENT MONEY in a country are the representatives of all the labour and commodities of it, so that in proportion as there is MORE OR LESS of this representation a greater or less QUANTITY OF THE THING REPRESENTED GOES TO THE SAME QUANTITY OF IT;

(3) Increase commodities, they become cheaper; increase money, they rise in their value (Steuart).^a

Marks (small copper or silver money, counters) in contrast to money of intrinsic worth (1.c.).

The dissolving effect of money.

Money is a means by which property (houses, other capital) can be split up into innumerable fragments and devoured piecemeal through exchange (Bray [Labour's Wrongs and Labour's Remedy, Leeds, 1839, pp. 140-41]).

÷

^a See this volume, p. 164.-Ed.

(Many objects cannot be exchanged, alienated, without the aid of money.)

"When immovable and IMMUTABLE THINGS came to be in commerce amongst men, as well as things which were movable and made for change, money came into use as the rule and measure (SQUARE) whereby these things received estimation and value" ([E. Misselden,] Free Trade [Or, the Meanes to Make Trade Florish], London, 1622 [p. 21]).

Coin. The silver and copper marks are representatives of fractional parts of the pound sterling. (Thus in a recent reply by the Lord of the TREASURY.)

Exchange Value. F. Vidal says (as does Lauderdale) (AND IN CERTAIN RESPECTS Ricardo):

"Real social value is value for use or consumption; exchange value merely indicates the *relative wealth* of each member of society in relation to the others" (*De la répartition des richesses etc.*, Paris, 1846, p. 70).^a

On the other hand, exchange value expresses the social form of value, while use value is not at all an economic form of value but merely the being of the product, etc., for man in general.

//From the fact that the profit may be *less* than the surplus value, and hence that capital [may] exchange at a profit without being valorised in the strict sense, it follows that not only individual capitalists, but nations too may continuously exchange with one another, and continuously repeat the exchange on an ever-growing scale, without gaining equally thereby. One nation may continuously appropriate part of the surplus labour of the other and give nothing in exchange for it, except that here the measure is not as in the exchange between capitalist and worker.//

Money in its third determination as money. (Value-for-itself, equivalent, etc.) The importance of the role still played by money in this determination—even in its immediate form—becomes evident at times of crises, deficient harvests, etc., in short, every time one nation must settle its account with another on the sudden. Money in its immediate, metallic form then appears as the only absolute means of payment, i.e. as the only counter-value, acceptable equivalent. Therefore, the movement it then performs is directly contradictory to that of all other commodities. Commodities as

a Marx quotes in French .--- Ed.

means of payment, etc., are transported from the country where they are cheapest to the country where they are dearest. It is the other way round with money. At all times when it presents its specific nature, i.e. when money, in contrast to all other commodities, is required as value-for-itself, absolute equivalent, the universal form of wealth, in the definite form of gold and silver—and such times are always more or less times of crisis, whether of a general crisis or of a grain crisis—at all such times gold and silver are transmitted from the country where they are dearest—i.e. where the relative fall in the prices of all commodities has been the greatest—to the country where they are cheapest, where commodity prices are relatively higher.

"IT IS A SINGULAR ANOMALY IN THE ECONOMY OF THE EXCHANGES, AND ONE PARTICULARLY DESERVING OF REMARK, THAT ... THE COURSE OF TRANSIT (OF GOLD BETWEEN TWO NATIONS EQUALLY EMPLOYING GOLD AS A CIRCULATING MEDIUM) IS ALWAYS FROM THE COUNTRY WHERE FOR THE MOMENT THE METAL IS DEAREST TO THE COUNTRY WHERE IT IS CHEAPEST, A RISE OF THE MARKET PRICE OF THE METAL TO ITS HIGHEST LIMIT IN THE HOME MARKET, AND A FALL OF THE PREMIUM IN THE FOREIGN MARKET, BEING THE CERTAIN RESULTS OF THAT TENDENCY TO AN EFFLUX OF GOLD WHICH FOLLOWS A DEPRESSION OF THE EXCHANGES" (J. Fullarton, On the Regulation of Currencies etc., 2nd ed., [pp. 119-20]).

[VII-60] Just as, in general, exchange begins where communities come to an end, and money as the measure produced by exchange itself, as means of exchange, and universal equivalent, acquires its specific significance not in internal trade, but in that between different communities, peoples, etc., in the same way, it was xar' έξοχήν^a as international means of payment—for the liquidation of international debts-that money became in the 16th century, in the period of the infancy of bourgeois society, the exclusive interest of states and of the nascent political economy. The important role which money (gold and silver) in this third form still plays in international trade, only became fully clear and was recognised once more by economists as a result of the series of monetary crises in 1825, 1839, 1847 and 1857. The economists help themselves by arguing that on such occasions money is not required as means of circulation, but as *capital*. This is correct. But it must not be forgotten that capital is required in the particular form of gold and silver, and not in that of any other commodity. Gold and silver play the role of absolute international means of payment because they are money as value-for-itself, independent equivalent.

^a Above all.-Ed.

"THIS, IN FACT, IS NOT A QUESTION OF CURRENCY, BUT OF CAPITAL."

(It is, rather, a question of money, not of currency, nor of capital, because not *capital* which is indifferent to the special form in which it exists, but value in the specific form of money is requested.)

"...ALL THOSE VARIOUS CAUSES WHICH, IN THE EXISTING CONDITION OF MONETARY AFFAIRS, ARE CAPABLE ... OF DIRECTING THE STREAM OF BULLION FROM ONE COUNTRY TO ANOTHER" (i.e. GIVING RISE TO A *DRAIN OF BULLION*) "RESOLVE THEMSELVES UNDER A SINGLE HEAD, NAMELY THE STATE OF THE BALANCE OF FOREIGN PAYMENTS, AND THE CONTINUALLY RECURRING NECESSITY OF TRANSFERRING *CAPITAL*" (BUT *notabene*! CAPI-TAL IN THE FORM OF MONEY) "FROM ONE COUNTRY TO ANOTHER TO DISCHARGE IT." FOR example, FAILURE OF CROPS. "WHETHER THAT CAPITAL IS *TRANSMITTED IN MERCHAN-DISE OR IN SPECIE*, IS A POINT WHICH IN NO WAY AFFECTS THE NATURE OF THE TRANSACTION" (*AFFECTS IT VERY MATERIALLY*!). Further, WAR EXPENDITURE.

(We are not concerned here with the CASE OF TRANSMISSION OF CAPITAL IN ORDER TO PLACE IT OUT TO GREATER ADVANTAGE AT INTEREST; likewise that resulting from the import of a surplus quantity of foreign goods, which Mr. Fullarton cites, although this CASE is, of course, relevant if that surplus importation coincides with crises.) (Fullarton, l.c., pp. 130, 132.)

"GOLD IS PREFERRED FOR THIS TRANSMISSION OF CAPITAL" //but in the case OF VIOLENT DRAINS OF BULLION there is no question at all of PREFERMENT// "ONLY IN THOSE CASES WHERE IT IS LIKELY TO EFFECT THE PAYMENT MORE CONVENIENTLY, PROMPTLY, OR PROFITABLY, THAN ANY OTHER DESCRIPTION OF STOCK OR CAPITAL"

(Mr. Fullarton incorrectly treats the TRANSMISSION of GOLD or of other forms of CAPITAL as a matter of choice, whereas what is at issue are CASES WHEN GOLD MUST BE TRANSMITTED IN INTERNATIONAL TRADE, just as in internal trade bills must then be acquitted in the legal money, and NOT IN ANY SUBSTITUTE.)

"GOLD AND SILVER ... CAN ALWAYS BE CONVEYED TO THE SPOT WHERE IT IS WANTED WITH PRECISION AND CELERITY, AND MAY BE COUNTED UPON TO REALISE ON ITS ARRIVAL NEARLY THE EXACT SUM REQUIRED TO BE PROVIDED, RATHER THAN INCUR THE HAZARD OF SENDING IT IN TEA, COFFEE, SUGAR, OR INDIGO. GOLD AND SILVER POSSESS AN INFINITE ADVANTAGE OVER ALL OTHER DESCRIPTIONS OF MERCHANDISE FOR SUCH OCCASIONS, FROM THE CIRCUMSTANCE OF THEIR BEING UNIVERSALLY IN USE AS MONEY. IT IS NOT IN TEA, COFFEE, SUGAR, OR INDIGO, THAT DEBTS, WHETHER FOREIGN OR DOMESTIC, ARE USUALLY CONTRACTED TO BE PAID, BUT IN COIN; AND A REMITTANCE, THEREFORE, EITHER IN THE IDENTICAL COIN DESIGNATED, OR IN BULLION WHICH CAN BE PROMPTLY TURNED INTO THAT COIN THROUGH THE MINT OR MARKET OF THE COUNTRY TO WHICH IT IS SENT, MUST ALWAYS AFFORD TO THE REMITTER THE MOST CERTAIN, IMMEDIATE, AND ACCURATE MEANS OF EFFECTING THIS OBJECT, WITHOUT RISK OF DISAPPOINTMENT FROM THE FAILURE OF DEMAND OR FLUCTUATION OF PRICE" ([ibid.,] pp. 132, 133).

He therefore refers precisely to the suitability of gold and silver for being MONEY, the universal commodity of contracts, the standard of values, which can, at the same time, be converted into means of circulation *ad libitum*. The English have the good word *currency* for money as means of circulation ("coin" is not a suitable word to use for that purpose, since it itself is the means of circulation in a particular form) and *money* for money in its third determination. But since they have not properly investigated that determination, they declare this *MONEY* to be *CAPITAL*, although then they are again in fact compelled to distinguish money as this definite form of capital from capital in general.

"RICARDO APPEARS TO HAVE ENTERTAINED VERY PECULIAR AND EXTREME OPINIONS, AS TO THE LIMITED EXTENT OF THE OFFICES PERFORMED BY GOLD AND SILVER IN THE ADJUSTMENT OF FOREIGN BALANCES. MR. RICARDO HAD PASSED HIS LIFE AMID THE CONTROVERSIES WHICH GREW OUT OF THE RESTRICTION ACT,⁴⁹ AND HAD ACCUSTOMED HIMSELF SO LONG TO CONSIDER ALL THE GREAT FLUCTUATIONS OF EXCHANGE AND OF THE PRICE OF GOLD AS THE RESULT OF THE EXCESSIVE ISSUES OF THE BANK OF ENGLAND, THAT AT ONE TIME HE SEEMED SCARCELY WILLING TO ALLOW, THAT SUCH A THING COULD EXIST AS AN ADVERSE BALANCE OF COMMERCIAL PAYMENTS ... AND SO SLIGHT AN ACCOUNT DID HE SET ON THE FUNCTIONS PERFORMED BY GOLD IN SUCH ADJUSTMENTS, AS TO HAVE EVEN ANTICIPATED, THAT DRAINS FOR EXPORTATION WOULD CEASE ALTOGETHER SO SOON AS CASH PAYMENTS SHOULD BE RESUMED, AND THE CURRENCY RESTORED TO THE METALLIC LEVEL" (SEE Mr. Ricardo's Evidence before the Lords' Committee of 1819 on the Bank of England, p. 186).

[...] But after 1800, when paper completely superseded gold in England, OUR MERCHANTS DID NOT REALLY WANT IT: FOR, OWING TO THE UNSETTLED STATE OF CONTINENTAL EUROPE, AND THE INCREASED CONSUMPTION THERE OF IMPORTED MAN-UFACTURES, IN CONSEQUENCE OF THE INTERRUPTIONS GIVEN TO INDUSTRY AND TO ALL DOMESTIC IMPROVEMENT BY THE INCESSANT MOVEMENT OF INVADING ARMIES, TOGETHER WITH THE COMPLETE MONOPOLY OF THE COLONIAL TRADE WHICH ENGLAND HAD OBTAINED THROUGH HER NAVAL SUPERIORITY, THE EXPORT OF COMMODITIES FROM GREAT BRITAIN TO THE CONTINENT CONTINUED GREATLY TO EXCEED HER IMPORTS FROM THENCE, SO LONG AS THE INTERCOURSE REMAINED OPEN; AND, AFTER THAT INTERCOURSE WAS INTERRUPTED BY THE BERLIN AND MILAN DECREES,⁵¹ THE TRANSAC-TIONS OF TRADE BECAME MUCH TOO INSIGNIFICANT TO AFFECT EXCHANGES IN ONE WAY OR THE OTHER. IT WAS THE FOREIGN MILITARY EXPENDITURE AND THE SUBSIDIES, AND NOT THE NECESSITIES OF COMMERCE, THAT CONTRIBUTED IN SO EXTRAORDINARY A MANNER TO DERANGE THE EXCHANGES AND ENHANCE THE PRICE OF BULLION IN THE LATTER YEARS OF THE WAR. THE DISTINGUISHED ECONOMISTS OF THAT PERIOD. THEREFORE, HAD FEW OR NO REAL OPPORTUNITIES OF PRACTICALLY ESTIMATING THE RANGE OF WHICH FOREIGN COMMERCIAL BALANCES ARE SUSCEPTIBLE." (They believed that with war and OVERISSUE the INTERNATIONAL TRANSMISSION of BULLION would cease.) "HAD MR. RICARDO LIVED TO WITNESS THE DRAINS OF 1825 AND 1839, HE WOULD NO DOUBT HAVE SEEN REASON TO ALTER HIS VIEWS" (l.c., pp. 133-36).

[VII-61] PRICE IS THE MONEY VALUE OF COMMODITIES (Hubbard [The Currency and the Country, p. 33]).

MONEY HAS THE QUALITY OF BEING ALWAYS EXCHANGEABLE FOR WHAT IT MEASURES, AND THE QUANTITY REQUIRED FOR THE PURPOSES OF EXCHANGE MUST VARY, OF COURSE, ACCORDING TO THE QUANTITY OF PROPERTY TO BE EXCHANGED (J. W. Bosanquet, Metallic, Paper, and Credit Currency etc., London, 1842, p. 100).

"I AM READY TO ADMIT THAT GOLD IS A COMMODITY IN SUCH GENERAL DEMAND THAT IT MAY ALWAYS COMMAND A MARKET, THAT IT CAN ALWAYS BUY ALL OTHER COM-MODITIES; WHEREAS, OTHER COMMODITIES CANNOT ALWAYS BUY GOLD. THE MARKETS OF THE WORLD ARE OPEN TO IT AS MERCHANDISE AT LESS SACRIFICE UPON AN EMERGENCY, THAN WOULD ATTEND AN EXPORT OF ANY OTHER ARTICLE, WHICH MIGHT IN QUANTITY OR KIND BE BEYOND THE USUAL DEMAND IN THE COUNTRY TO WHICH IT IS SENT" (Th. TOOKE, An Enquiry into the Currency Principle etc., 2nd ed., London, 1844, p. 10).

"THERE MUST BE A VERY CONSIDERABLE AMOUNT OF THE PRECIOUS METALS APPLICA-BLE AND APPLIED AS THE MOST CONVENIENT MODE OF ADJUSTMENT OF INTERNATIONAL BALANCES, BEING A COMMODITY MORE GENERALLY IN DEMAND, AND LESS LIABLE TO FLUCTUATIONS IN MARKET VALUE THAN ANY OTHER" (p. 13).

Causes of rises in the price of bullion above MINT PRICE, according to Fullarton:

"COIN DEBASED BY WEAR TO THE EXTENT OF 3 OR 4% BELOW ITS STANDARD WEIGHT; PENAL LAWS WHICH PROHIBITED THE MELTING AND EXPORTATION OF THE COIN. WHILE THE TRAFFIC IN THE METAL OF WHICH THAT COIN WAS COMPOSED REMAINED PERFECTLY FREE. However, these causes themselves only had an effect in the event of an unfavourable rate of exchange. But from 1816 to 1821 [the market price of gold bullion] always fell to the BANK PRICE OF BULLION when the EXCHANGE was favourable to England; BUT it ROSE NO HIGHER, when the EXCHANGE was unfavourable, than TO SUCH A RATE AS WOULD INDEMNIFY THE MELTERS OF THE COIN FOR ITS DEGRADATION BY WEAR AND FOR THE PENAL CONSEQUENCES OF MELTING IT" (see Fullarton's book, pp. [7,] 8, 9). "FROM 1819 TO THE PRESENT TIME, AMID ALL THE VICISSITUDES WHICH THE MONEY HAS UNDERGONE DURING THAT EVENTFUL PERIOD. THE MARKET PRICE OF GOLD HAS ON NO OCCASION RISEN ABOVE 78s, Der oz., NOR FALLEN BELOW 77s. 6d., AN EXTREME RANGE OF ONLY 6d. IN THE OUNCE. NOR WOULD EVEN THAT EXTENT OF FLUCTUATION BE NOW POSSIBLE: FOR IT WAS SOLELY OWING TO THE RENEWED DETERIORATION OF THE COIN. THAT EVEN SO TRIVIAL A RISE OCCURRED AS $1^{1}/_{9}d$. In the ounce, or about $1/_{a}$ p.c. above the mint price; and the fall to 77s. 6d. IS ENTIRELY ACCOUNTED FOR BY THE CIRCUMSTANCE OF THE BANK HAVING AT ONE TIME THOUGHT PROPER TO ESTABLISH THAT RATE AS THE LIMIT FOR ITS PURCHASES. THOSE CIRCUMSTANCES, HOWEVER, EXIST NO LONGER. FOR MANY YEARS THE BANK HAS BEEN IN THE PRACTICE OF ALLOWING 77s. 9d. FOR ALL THE GOLD BROUGHT TO IT FOR COINAGE" (i.e. the Bank pockets $1^{1/2}d$. seigniorage, as the Mint does the job gratis for it); "AND AS SOON AS THE RECOINAGE OF SOVEREIGNS NOW IN PROGRESS SHALL BE COMPLETED, THERE WILL BE AN EFFECTUAL BAR, UNTIL THE COIN SHALL AGAIN BECOME DETERIORATED. TO ANY FUTURE FLUCTUATION OF THE PRICE OF GOLD BULLION IN OUR MARKET BEYOND THE SMALL FRACTIONAL DIFFERENCE BETWEEN 77s. 9d. ALLOWED BY THE BANK, AND THE MINT PRICE OF 77s 101/9d." (l.c., pp. 9-10).

The contradiction between money as MEASURE and equivalent, on the one hand, and as means of circulation. In the latter form—abrasion, LOSS OF METALLIC WEIGHT. Garnier observes that

"if a slightly worn écu were to be considered to be worth somewhat less than a quite new one, circulation would be continually checked, and every payment would provide an occasion for dispute" [Garnier, *Histoire de la monnaie*, Vol. I, p. 24].

(The material destined for accumulation was naturally sought and chosen in the realm of minerals. Garnier [ibid., p. 7].)

"IT BEING OBVIOUS THAT THE COINAGE, IN THE VERY NATURE OF THINGS, MUST BE FOR EVER. UNIT BY UNIT, FALLING UNDER DEPRECIATION BY THE MERE ACTION OF ORDINARY AND UNAVOIDABLE ABRASION (TO SAY NOTHING OF THE INDUCEMENT WHICH EVERY RESTORATION OF THE COINAGE HOLDS OUT TO THE WHOLE LEGION OF 'PLUGGERS' AND 'SWEATERS'), IT IS A PHYSICAL IMPOSSIBILITY AT ANY TIME, EVEN FOR A SINGLE DAY, UTTERLY TO EXTERMINATE LIGHT COINS FROM CIRCULATION" (The Currency Theory reviewed etc.. By a Banker in England, Edinburgh, 1845 [pp. 69-70]).

This was written in December 1844, COMMENTING UPON THE OPERATION OF THE THEN RECENT PROCLAMATIONS RESPECTING THE LIGHT GOLD IN CIRCULATION in a letter to *The Times*. (Hence a difficulty arises: If light gold [coin] is refused, the whole STANDARD is made insecure. If it is accepted, the door is opened to fraudulence, with the same result.) Concerning the above-mentioned proclamations, it is said that

"their effect ... has virtually been to denounce the whole of the current gold coin as an unsafe and illegal medium for monetary transactions" (l.c., pp. 68-69).

"By English law, if a gold sovereign is more than 0.774 GRAINS DEFICIENT in weight, it should no longer pass as CURRENT. No such law for silver money" (W. H. Morrison, Observations on the system of Metallic Currency adopted in this country, London, 1837, p. 54).

The CURRENCY Men⁵² assert THAT THE VALUE OF A CURRENCY DEPENDS UPON ITS QUANTITY (Fullarton, [op. cit.,] p. 13). If the VALUE of THE CURRENCY and, on the other hand, the prices and the mass of transactions are given (and also the velocity of circulation), of COURSE only a *definite* quantity can circulate. Given the prices and the mass of transactions, and the velocity of circulation, this quantity depends exclusively on the value of the CURRENCY. Given this value and the velocity of circulation, it depends exclusively on the prices and the mass of transactions. This is how the quantity is determined. Hence, if representative money—mere tokens of value—is in circulation, the quantity of tokens that can circulate depends upon the standard which they represent. It is wrongly concluded from this that their value is determined solely by their quantity. E.g., notes representing pounds cannot circulate in the same quantity as notes representing shillings.

[VII-62] Capital which yields profit is real capital, value posited as simultaneously self-reproducing and self-multiplying, and as a presupposition remaining equal to itself, distinct from itself as surplus value posited by capital. Capital yielding interest is in its turn a purely abstract form of profit-yielding capital.

When capital is posited as yielding profit, corresponding to its value (assuming a certain level of productive power), the commodity, or the commodity posited in its form as money (the form which corresponds to it as value become independent, or, as we may now say: realised capital), can enter into circulation as capital; capital can as capital become a commodity. In this case, it is capital loaned out at interest. The form of its circulation-or of the exchange through which it passes—then appears specifically different from that considered so far. We have seen how capital posits itself both in the determination of commodity and in that of money. But this occurs only in so far as both appear as moments of the circuit of capital, in which it is alternately realised. They are merely transitory and constantly reproduced modes of existence of capital, moments of its life-process. Yet capital as capital has not itself become a moment of circulation; capital itself as a commodity. The commodity has not been sold as capital, nor has money as capital. In a word, neither commodity nor money-and strictly speaking we have only to consider the latter as the adequate form-have entered into circulation as profit-yielding values.

Maclaren says⁵³:

"Mr. Tooke, Mr. Fullarton, and Mr. Wilson consider money as possessing intrinsic value as a commodity, and exchanging with goods according to that value, and not merely in accordance with the supply of pieces at the time; and they suppose with Dr. Smith that exports of bullion are made, quite irrespective of the state of the currency, to discharge balances of international debt, and to pay for commodities, such as corn, for which there is a sudden demand, and that they are taken from a fund which forms no part of the internal circulation, nor affects prices, but is set apart for these purposes.... Difficulty in explaining in what manner the bullion they say is set apart for this purpose, and has no effect on prices, can escape the laws of supply and demand, and though existing in the shape of money lying unemployed and known for the making of purchases, is neither applied for that purpose nor affects prices by the possibility of its being so applied."

The reply to this is, that the stock of bullion in question represents surplus-capital, not surplus-income, and is not available, therefore, merely to increase the demand for commodities, except on condition of increasing also the supply. Capital in search of employment is not a pure addition to the demanding power of the community. It cannot be lost in the currency. If it tends to raise prices by a demand, it tends to lower them by a corresponding supply. Money, as the security for capital, is not a mere purchasing power,—it purchases only in order to sell, and finally goes abroad in exchange for foreign commodities rather than disburse itself in merely adding to the currency at home. Money, as the security for capital, never comes into the market so as to be set off against commodities, because its purpose is to reproduce commodities; it is only the money which represents consumption that can finally affect prices (*The Economist*, 15 May [18]58).

"Mr. Ricardo maintained that prices depend on the relative amount of the circulating medium and of commodities respectively, that prices rise only through a depreciation of the currency, that is, from a too great abundance of it in proportion to commodities, that they fall either from a reduction in the amount of the currency, or from a relative increase in the stock of general commodities which it circulates. All the bullion and gold coin in the country is, according to Mr. Ricardo, to be reckoned currency, and if this increases without a corresponding increase in commodities, the currency is depreciated, and it becomes profitable to export bullion rather than commodities. On the other hand, if a bad harvest or any other calamity cause a great destruction of commodities, without any corresponding change in the amount of the circulation, the currency, whose amount was proportioned to the estimated rather than to the suddenly reduced market of commodities, again becomes redundant or 'depreciated', and must be diminished by exportation before its value can be restored. According to this view of the circulation, which is at the root of Lord Overstone's theory, the supply of circulating medium or currency is always capable of being indefinitely increased in amount, and diminishes in value according to that increase; and can be restored to its proper value only by exportation of the superabundant portion. Any issue, therefore, of paper money which might supply the gap caused by the exportation of the bullion, and so prevent the 'natural' fall of prices otherwise certain to ensue, is held by Mr. Ricardo's school to be an interference with the economical laws of price, and a departure from the principles which would necessarily regulate a purely metallic currency" (l.c.).

÷

I. VALUE⁵⁴

[VII-63]

This section to be inserted earlier.

The first category in which bourgeois wealth makes its appearance is that of the *commodity*. The commodity itself appears as the unity of two determinations. It is use value, i.e. an object for the satisfaction of some system of human wants. This is its material aspect, which can be common to the most disparate epochs of production and lies outside the sphere of investigation of political economy. Use value comes within that sphere as soon as it is modified by the modern production relations or itself exerts a modifying influence on them. What is usually said about this in general terms, for the sake of decorum, is confined to platitudes which had an historical value in the early beginnings of that science, when the social forms of bourgeois production were still being laboriously abstracted from the material and with great effort fixed as independent objects for investigation. In fact, however, the use value of the commodity is a given presupposition-the material basis in which a definite economic relation presents itself. It is only this definite relation which stamps the use value as a commodity. E.g., wheat possesses the same use value, whether it is grown by slaves, serfs or free labourers. It would not lose its use value were it to fall from the sky like snow.

Well, how does use value turn into a commodity? By being a bearer of *exchange value*. Although they are directly united in the commodity, use value and exchange value equally directly fall asunder. Exchange value not merely does not appear to be determined by use value, but the commodity, rather, only becomes

a commodity, is only realised as exchange value, to the extent that its owner does not relate to it as a use value. Only by alienating it, by exchanging it for other commodities, does he appropriate use values. Appropriation by means of alienation is the basic form of the social system of production whose simplest, most abstract expression is exchange value. The use value of the commodity is presupposed, yet not for the owner of the commodity, but for society in general.

//Just as a Manchester family of factory workers in which the children stand in a relation of exchange to their parents and pay board and lodging to them does not represent the customary economic organisation of the family, so the system of modern private exchange does not, in general, represent the spontaneously evolved economy of societies. Exchange does not begin between individuals within a community, but at the point where the communities cease-at their frontiers, at the point of contact between different communities. Communal property has recently been rediscovered as a peculiarly Slavic curiosity.55 But in fact India offers us a pattern card of the most diverse forms of such an economic community, more or less decomposed but still entirely recognisable; and more thorough historical study finds it as the starting point of all cultured peoples. The system of production based upon private exchange is initially the historical dissolution of this spontaneously evolved communism. Yet a whole series of economic systems lies between the modern world, in which exchange value dominates production in its entire depth and width, and the social formations whose basis is decomposed communal property, without however [...]⁵⁶

GOLD-WEIGHING MACHINES^a

[VII-64]

"Mr. Cotton's machine ... the most delicate ever yet constructed for weighing gold coin. Adopted by the Bank of England. Divides the sheep from the goats b ... In the transaction between the Bank of England and the public, the weighing of gold coin has been a most anxious and tedious process. As between the Bank and the Mint, the labour is not so minute; for 200 sovereigns being first accurately weighed, all the rest are weighed in groups of 200. The Mint officers are allowed a deviation of 12 grains in about 50 sovereigns; but they generally work to within half of this amount of error; and if the groups of sovereigns are correct within the prescribed limits no closer weighing is adopted. In the transactions between the Bank and the public, however, matters must be treated in more detail. It is no satisfaction to Smith to know that if his sovereign is light, Brown has a correct one and Jones a heavy one, so that therefore the Bank is just in the aggregate; each one demands that his sovereign should be of proper weight ... If a difference of even $\frac{1}{100}$ of a grain existed between 2 sovereigns, it is said that this machine would detect it. On a rough average, 30,000 sovereigns pass over the Bank counter every day; each machine can weigh 10,000 sovereigns in 6 hours; and there are 6 machines; so that the Bank can weigh all its issues of gold by these means, and have reserve power to spare. Between 1844 and 1848 there were 48 million gold coins weighed by these machines at the Bank ... These machines save $\pounds 1,000$ a year to the Bank in weighers' wages. (A child can turn the handle, but the machine judges for itself, casts the full-weight sovereigns to one side and the light ones to the other.) (Formerly liability of error on the part of the weighers (the 'personal equation', as the astronomers would term it) not equal.) An expert weigher could weigh about 700 sovereigns in an hour by the old balance; but the agitation of the air by the sudden opening of a door, the breathing of persons near the apparatus, the fatigued state of the hand and eye of the weigher-all led to minute errors" (Dodd's Curiosities of Industry, London, 1854 [pp. 19-21]).

Curiosities of Money. "When society rises above the level of mere barter[ing] transactions, any substance which is equally valued by buyer and seller may become

^a The title and the text, except for a few words, are in English in the manuscript.— Ed.

^b Matthew 25:32.— Ed.

money; ... One of the earliest *cattle*, but this is obviously a coin inapplicable to small purchasers, for it would puzzle the seller to give change out of an ox. *Shells* are used to a great extent as money, in India, the Indian islands, and Africa; the *coury shells* of India have a value of about 32 to an English farthing. *Cocca-nuts, almonds, maize* have all had to do duty as money. In hunting countries *skins ... salt ... Dried fish* [is] often the money in Iceland and Newfoundland; *sugar* has at times been a West-India money."

"Gold very solid and dense; divisible or separable in an extraordinary degree; very little affected by air or moisture, or ordinary usage, etc. (its supply very limited).

"Wearing away of gold coin, by the constant friction to which it is exposed. No one can say whither the worn particles go.... When gone, somebody must bear the loss. A baker who takes a sovereign one day, and pays it away to his miller the next, does not pay the veritable sovereign itself; it is a lighter one than when he received it.... According to Jacob each gold coin in England bears an annual loss of about 1/900 by friction (little more than a farthing in the pound). In silver coins the loss is supposed to be 5 or 6 times greater, owing to the more unceasing circulation of silver than gold, and to the less fitness of the metal to bear friction" [ibid., pp. 14-17].

A CONTRIBUTION TO THE CRITIQUE OF POLITICAL ECONOMY⁵⁷

ł.

PART ONE

Written in November 1858-January 1859

Printed in Berlin in 1859 Signed: Karl Marx Printed according to the 1859 edition

Sur Kritik

÷

ber

Politischen Dekonomie

von

Rarl Mary.

Erftes Deft.

Berlin.

Berlag von Frauz Duncker. (B. Beffer's Berlagshandlung.)

1859.

Title page of the first edition of A Contribution to the Critique of Political Economy

.

PREFACE

I examine the system of bourgeois economy in the following order: capital, landed property, wage-labour; the State, foreign trade, world market. The economic conditions of existence of the three great classes into which modern bourgeois society is divided are analysed under the first three headings; the interconnection of the other three headings is self-evident. The first part of the first book, dealing with Capital, comprises the following chapters: 1. The commodity; 2. Money or simple circulation; 3. Capital in general. The present part consists of the first two chapters. The entire material lies before me in the form of monographs, which were written not for publication but for self-clarification at widely separated periods; their remoulding into an integrated whole according to the plan I have indicated will depend upon circumstances.⁵⁸

A general introduction,^a which I had drafted, is omitted, since on further consideration it seems to me confusing to anticipate results which still have to be substantiated, and the reader who really wishes to follow me will have to decide to advance from the particular to the general. A few brief remarks regarding the course of my study of political economy may, however, be appropriate here.

Although jurisprudence was my special study, I pursued it as a subject subordinated to philosophy and history. In the year 1842-43, as editor of the *Rheinische Zeitung*, I first found myself in the embarrassing position of having to discuss what is known as

^a See present edition, Vol. 28, pp. 17-48.- Ed.

material interests. The deliberations of the Rhine Province Assembly in thefts of wood and the division of landed property: the official polemic started by Herr von Schaper, then Oberpräsident of the Rhine Province, against the Rheinische Zeitung about the condition of the Mosel peasantry, and finally the debates on free trade and protective tariffs caused me in the first instance to turn my attention to economic questions.^a On the other hand, at that time when good intentions "to push forward" often took the place of factual knowledge, an echo of French socialism and communism, slightly tinged by philosophy, was noticeable in the Rheinische Zeitung. I objected to this dilettantism, but at the same time frankly admitted in a controversy with the Allgemeine Augsburger Zeitung^b that my previous studies did not allow me to express any opinion on the content of the French theories. When the publishers of the Rheinische Zeitung conceived the illusion that by a more compliant policy on the part of the paper it might be possible to secure the abrogation of the death sentence passed upon it. I eagerly grasped the opportunity to withdraw from the public stage to my study.

The first work which I undertook to dispel the doubts assailing me was a critical re-examination of the Hegelian philosophy of law; the introduction^c to this work being published in the Deutsch-Französische Jahrbücher issued in Paris in 1844. My inquiry led me to the conclusion that neither legal relations nor political forms could be comprehended whether by themselves or on the basis of a so-called general development of the human mind, but that on the contrary they originate in the material conditions of life, the totality of which Hegel, following the example of English and French thinkers of the eighteenth century, embraces within the term "civil society" ⁵⁹; that the anatomy of this civil society, however, has to be sought in political economy. The study of this, which I began in Paris, I continued in Brussels, where I moved owing to an expulsion order issued by M. Guizot.^d The general conclusion at which I arrived and which, once reached, became the guiding principle of my studies can be summarised as follows.

^a A reference to the articles "Proceedings of the Sixth Rhine Province Assembly. Third article. Debates on the Law of Thefts of Wood", "Polemical Articles Against the *Allgemeine Zeitung*" and "Justification of the Correspondent from the Mosel".— *Ed.*

^b See "Communism and the Augsburg Allgemeine Zeitung".- Ed.

^c See «Contribution to the Critique of Hegel's Philosophy of Law" and "Contribution to the Critique of Hegel's Philosophy of Law. Introduction".— Ed.

^d On January 11, 1845.- Ed.

In the social production of their existence, men inevitably enter into definite relations, which are independent of their will, namely relations of production appropriate to a given stage in the development of their material forces of production. The totality of these relations of production constitutes the economic structure of society, the real foundation, on which arises a legal and political superstructure and to which correspond definite forms of social consciousness. The mode of production of material life conditions the general process of social, political and intellectual life. It is not the consciousness of men that determines their existence, but their social existence that determines their consciousness. At a certain stage of development, the material productive forces of society come into conflict with the existing relations of production or-this merely expresses the same thing in legal terms-with the property relations within the framework of which they have operated hitherto. From forms of development of the productive forces these relations turn into their fetters. Then begins an era of social revolution. The changes in the economic foundation lead sooner or later to the transformation of the whole immense superstructure. In studying such transformations it is always necessary to distinguish between the material transformation of the economic conditions of production, which can be determined with the precision of natural science, and the legal, political, religious, artistic or philosophic-in short, ideological forms in which men become conscious of this conflict and fight it out. Just as one does not judge an individual by what he thinks about himself, so one cannot judge such a period of transformation by its consciousness, but, on the contrary, this consciousness must be explained from the contradictions of material life, from the conflict existing between the social forces of production and the relations of production. No social formation is ever destroyed before all the productive forces for which it is sufficient have been developed, and new superior relations of production never replace older ones before the material conditions for their existence have matured within the framework of the old society. Mankind thus inevitably sets itself only such tasks as it is able to solve, since closer examination will always show that the problem itself arises only when the material conditions for its solution are already present or at least in the course of formation. In broad outline. the Asiatic, ancient, feudal and modern bourgeois modes of production may be designated as epochs marking progress in the economic development of society. The bourgeois relations of production are the last antagonistic form of the social process of

production—antagonistic not in the sense of individual antagonism but of an antagonism that emanates from the individuals' social conditions of existence—but the productive forces developing within bourgeois society create also the material conditions for a solution of this antagonism. The prehistory of human society accordingly closes with this social formation.

Frederick Engels, with whom I maintained a constant exchange of ideas by correspondence since the publication of his brilliant essay on the critique of economic categories^a (printed in the Deutsch-Französische Jahrbücher), arrived by another road (compare his Condition of the Working-Class in England) at the same result as I, and when in the spring of 1845 he too came to live in Brussels, we decided to set forth together our conception as opposed to the ideological one of German philosophy, in fact to settle accounts with our former philosophical conscience. The intention was carried out in the form of a critique of post-Hegelian philosophy. The manuscript, two large octavo volumes,^b had long ago reached the publishers in Westphalia when we were informed that owing to changed circumstances it could not be printed. We abandoned the manuscript to the gnawing criticism of the mice all the more willingly since we had achieved our main purposeself-clarification. Of the scattered works in which at that time we presented one or another aspect of our views to the public, I shall mention only the Manifesto of the Communist Party, jointly written by Engels and myself, and a Speech on the Question of Free Trade, which I myself published. The salient points of our conception were first outlined in an academic, although polemical, form in my Poverty of Philosophy..., this book which was aimed at Proudhon appeared in 1847. The publication of an essay on Wage-Labour written in German in which I combined the lectures I had held on this subject at the German Workers' Society in Brussels,60 was interrupted by the February Revolution and my forcible removal from Belgium in consequence.

The publication of the Neue Rheinische Zeitung in 1848 and 1849 and subsequent events cut short my economic studies, which I could only resume in London in 1850. The enormous amount of material relating to the history of political economy assembled in the British Museum, the fact that London is a convenient vantage point for the observation of bourgeois society, and finally the new stage of development which this society seemed to have entered

^a F. Engels, "Outlines of a Critique of Political Economy".- Ed.

^b K. Marx and F. Engels, The German Ideology.-Ed.

Preface

with the discovery of gold in California and Australia,⁴ induced me to start again from the very beginning and to work carefully through the new material. These studies led partly of their own accord to apparently quite remote subjects on which I had to spend a certain amount of time. But it was in particular the imperative necessity of earning my living which reduced the time at my disposal. My collaboration, continued now for eight years, with the *New York Tribune*,⁶¹ the leading Anglo-American newspaper, necessitated an excessive fragmentation of my studies, for I wrote only exceptionally newspaper correspondence in the strict sense. Since a considerable part of my contributions consisted of articles dealing with important economic events in Britain and on the Continent, I was compelled to become conversant with practical details which, strictly speaking, lie outside the sphere of political economy.

This sketch of the course of my studies in the domain of political economy is intended merely to show that my views—no matter how they may be judged and how little they conform to the interested prejudices of the ruling classes—are the outcome of conscientious research carried on over many years. At the entrance to science, as at the entrance to hell, the demand must be made:

> Qui si convien lasciare ogni sospetto Ogni viltà convien che qui sia morta.^a

> > Karl Marx

London, January 1859

(English translation by Laurence Binyon-Dante, The Divine Comedy, Inferno, Canto III, ll. 14-15, Viking Portable Library, 1969.)-Ed.

^a Dante, La Divina commedia, Inferno, Canto III.

Here all misgiving must thy mind reject. Here cowardice must die and be no more.

.

BOOK ONE

ON CAPITAL
Section One CAPITAL IN GENERAL

Chapter One THE COMMODITY

The wealth of bourgeois society, at first sight, presents itself as an immense accumulation of commodities, its unit being a single commodity. Every commodity, however, has a twofold aspect—use value and exchange value.*

To begin with, a commodity, in the language of the English economists, is "any thing necessary, useful or pleasant in life",⁶² an object of human wants, a means of subsistence in the widest sense of the term. Use value as an aspect of the commodity coincides with the physical palpable existence of the commodity. Wheat, for example, is a distinct use value differing from the use values of cotton, glass, paper, etc. A use value has value only in use, and is realised only in the process of consumption. One and the same use value can be used in various ways. But the extent of its possible applications is limited by its existence as an object with distinct properties. It is, moreover, determined not only qualitatively but also quantitatively. Different use values have different measures appropriate to their physical characteristics; for example, a bushel of wheat, a quire of paper, a yard of linen, etc.

* Aristoteles, De Republica, l. I, c. 9 (edit. I. Bekkeri, Oxonii, 1837). "Of everything which we possess there are two uses: ... one is the proper, and the other the improper or secondary use of it. For example, a shoe is used for wear, and is used for exchange; both are uses of the shoe. He who gives a shoe in exchange for money or food to him who wants one, does indeed use the shoe as a shoe, but this is not its proper or primary purpose, for a shoe is not made to be an object of barter. The same may be said of all possessions...." [The English translation is taken from Aristotle, *Politica*, by Benjamin Jowett, revised edition, Oxford, 1966, 1257^a.] [Marx quotes in Greek.]

269

Whatever its social form may be, wealth always consists of use values, which in the first instance are not affected by this form. From the taste of wheat it is not possible to tell who produced it, a Russian serf, a French peasant or an English capitalist. Although use values serve social needs and therefore exist within the social framework, they do not express the social relations of production. For instance, let us take as a use value a commodity such as a diamond. We cannot tell by looking at it that the diamond is a commodity. Where it serves as an aesthetic or mechanical use value, on the neck of a courtesan or in the hand of a glass-cutter. it is a diamond and not a commodity. To be a use value is evidently a necessary prerequisite of the commodity, but it is immaterial to the use value whether it is a commodity. Use value in this indifference to the determined economic form, i.e. use value as such, lies outside the sphere of investigation of political economy.* It belongs in this sphere only when it is itself a determinate form. Use value is the immediate physical entity in which a definite economic relationship-exchange value-is expressed.

Exchange value appears first as a quantitative relation, the proportion in which use values are exchanged for one another. In this relation they constitute equal exchangeable magnitudes. Thus one volume of Propertius and eight ounces of snuff may have the same exchange value, despite the dissimilar use values of snuff and elegies. Considered as exchange value, one use value is worth just as much as another, provided the two are available in the appropriate proportion. The exchange value of a palace can be expressed in a definite number of tins of boot polish. London manufacturers of boot polish, on the other hand, have expressed the exchange value of their numerous tins of polish in terms of palaces. Ouite irrespective, therefore, of their natural form of existence, and without regard to the specific character of the needs they satisfy as use values, commodities in definite quantities are congruent, they take one another's place in the exchange process, are regarded as equivalents, and despite their motley appearance have a common denominator.

Use values serve directly as means of subsistence. But, on the other hand, these means of subsistence are themselves the

^{*} That is why German compilers write con amore about use values, calling them "goods". See for example the section on "goods" in L. Stein, System der Staatswissenschaft, Bd. I. Useful information on "goods" may be found in "manuals dealing with merchandise".

products of social activity, the result of expended human energy, *objectified labour*. As objectification of social labour, all commodities are crystallisations of the same substance. The specific character of this substance, i.e. of labour which is embodied in exchange value, has now to be examined.

Let us suppose that one ounce of gold, one ton of iron, one quarter of wheat and twenty yards of silk are exchange values of equal magnitude. As equivalents in which the qualitative difference between their use values is eliminated, they represent equal amounts of the same kind of labour. The labour which is uniformly objectified in them must be uniform, homogeneous, simple labour; it matters as little whether this is embodied in gold, iron, wheat or silk, as it matters to oxygen whether it is found in rusty iron, in the atmosphere, in the juice of grapes or in human blood. But digging gold, mining iron, cultivating wheat and weaving silk are qualitatively different kinds of labour. In fact, what appears objectively as diversity of the use values, appears, when looked at dynamically, as diversity of the activities which produce those use values. Since the particular material of which the use values consist is irrelevant to the labour that creates exchange value, the particular form of this labour is equally irrelevant. Different use values are, moreover, products of the activity of different individuals and therefore the result of individually different kinds of labour. But as exchange values they represent the same homogeneous labour, i.e. labour in which the individual characteristics of the workers are obliterated. Labour which creates exchange value is thus abstract general labour.

If one ounce of gold, one ton of iron, one quarter of wheat and twenty vards of silk are exchange values of equal magnitude or equivalents, then one ounce of gold, half a ton of iron, three bushels of wheat and five yards of silk are exchange values which have very different magnitudes, and this quantitative difference is the only difference of which as exchange values they are at all capable. As exchange values of different magnitudes they represent larger or smaller portions, larger or smaller amounts of simple, uniform, abstract general labour, which is the substance of exchange value. The question now arises, how can these amounts be measured? Or rather the question arises, what is the quantitative form of existence of this labour, since the quantitative differences of the commodities as exchange values are merely the quantitative differences of the labour objectified in them. Just as motion is measured by time, so is labour by labour time. Variations in the duration of labour are the only possible difference that can occur

if the quality of labour is assumed to be given. Labour time is measured in terms of the natural units of time, i.e. hours, days, weeks, etc. Labour time is the living state of existence of labour, irrespective of its form, its content and its individual features; it is the living quantitative aspect of labour as well as its inherent measure. The labour time objectified in the use values of commodities is both the substance that turns them into exchange values and therefore into commodities, and the standard by which the precise magnitude of their value is measured. The corresponding quantities of different use values containing the same amount of labour time are equivalents; that is, all use values are equivalents when taken in proportions which contain the same amount of expended, objectified labour time. Regarded as exchange values all commodities are merely definite quantities of *congealed labour time*.

The following basic propositions are essential for an understanding of the determination of exchange value by labour time. Labour is reduced to simple labour, labour, so to speak, without any qualitative attributes; labour which creates exchange value, and therefore commodities, is specifically *social labour*, finally, labour in so far as its results are use values is distinct from labour in so far as its results are exchange values.

To measure the exchange values of commodities by the labour time they contain, the different kinds of labour have to be reduced to uniform, homogeneous, simple labour, in short to labour of uniform quality, whose only difference, therefore, is quantity.

This reduction appears to be an abstraction, but it is an abstraction which is made every day in the social process of production. The conversion of all commodities into labour time is no greater an abstraction, and is no less real, than the resolution of all organic bodies into air. Labour, thus measured by time, does not seem, indeed, to be the labour of different persons, but on the contrary the different working individuals seem to be mere organs of *this* labour. In other words the labour *embodied* in exchange values could be called *human* labour *in general*. This abstraction, human labour in general, exists in the form of average labour which, in a given society, the average person can perform, productive expenditure of a certain amount of human muscles, nerves, brain, etc. It is simple labour * which any average individual can be trained to do and which in one way or another he has to

* English economists call it "UNSKILLED LABOUR".

perform. The characteristics of this average labour are different in different countries and different historical epochs, but in any particular society it appears as something given. The greater part of the labour performed in bourgeois society is simple labour as statistical data show. Whether A works 6 hours producing iron and 6 hours producing linen, and B likewise works 6 hours producing iron and 6 hours producing linen, or A works 12 hours producing iron and B 12 hours producing linen is quite evidently merely a different application of the same labour time. But what is the position with regard to more complicated labour which, being labour of greater intensity and greater specific gravity, rises above the general level? This kind of labour resolves itself into simple labour put together; it is simple labour raised to a higher power, so that for example one day of skilled labour may equal three days of simple labour. The laws governing this reduction do not concern us here. It is, however, clear that the reduction is made, for, as exchange value, the product of highly skilled labour is equivalent, in definite proportions, to the product of simple average labour; thus being equated to a certain amount of this simple labour.

The determination of exchange value by labour time, moreover, presupposes that the same amount of labour is objectified in a particular commodity, say a ton of iron, irrespective of whether it is the work of A or of B, that is to say, different individuals expend equal amounts of labour time to produce use values which are qualitatively and quantitatively equal. In other words, it is assumed that the labour time contained in a commodity is the labour time *necessary* for its production, namely the labour time required, under the generally prevailing conditions of production, to produce another unit of the same commodity.

From the analysis of exchange value it follows that the conditions of labour which creates exchange value are social categories of labour or categories of social labour, social however not in the general sense but in the particular sense, denoting a specific type of society. Uniform simple labour implies first of all that the labour of different individuals is equal and that their labour is treated as equal by being in fact reduced to homogeneous labour. The labour of every individual in so far as it manifests itself in exchange values possesses this social character of equality, and it manifests itself in exchange value only in so far as it is equated with the labour of all other individuals.

Furthermore, in exchange value the labour time of a particular individual is directly represented as *labour time in general*, and this

general character of individual labour appears as the social character of this labour. The labour time expressed in exchange value is the labour time of an individual, but of an individual in no way differing from the next individual and from all other individuals in so far as they perform equal labour; the labour time, therefore, which one person requires for the production of a given commodity is the necessary labour time which any other person would require to produce the same commodity. It is the labour time of an individual, his labour time, but only as labour time common to all; consequently it is quite immaterial whose individual labour time this is. This universal labour time finds its expression in a universal product, a universal equivalent, a definite amount of objectified labour time, for which the distinct form of the use value in which it is manifested as the direct product of one person is a matter of complete indifference, and it can be converted at will into any other form of use value, in which it appears as the product of any other person. Only as such a universal magnitude does it represent a social magnitude. The labour of an individual can produce exchange value only if it produces universal equivalents, that is to say, if the individual's labour time represents universal labour time or if universal labour time represents individual labour time. The effect is the same as if the different individuals had amalgamated their labour time and allocated different portions of the labour time at their joint disposal to the various use values. The labour time of the individual is thus, in fact, the labour time required by society to produce a particular use value, that is to satisfy a particular want. But what matters here is only the specific manner in which the social character of labour is established. A certain amount of a spinner's labour time is objectified, say, in 100 lbs. of linen yarn. The same amount of labour time is assumed to be represented in 100 yards of linen, the product of a weaver. Since these two products represent equal amounts of universal labour time, and are therefore equivalents of any use value which contains the same amount of labour time, they are equal to each other. Only because the labour time of the spinner and the labour time of the weaver represent universal labour time, and their products are thus universal equivalents, is the social aspect of the labour of the two individuals represented for each of them by the labour of the other, that is to say, the labour of the weaver represents it for the spinner, and the labour of the spinner represents it for the weaver. On the other hand, under the rural patriarchal system of production, when spinner and weaver lived under the same

roof-the women of the family spinning and the men weaving, say for the requirements of the family-yarn and linen were social products, and spinning and weaving social labour within the framework of the family. But their social character did not appear in the form of yarn becoming a universal equivalent exchanged for linen as a universal equivalent, i.e. of the two products exchanging for each other as equal and equally valid expressions of the same universal labour time. On the contrary, the product of labour bore the specific social imprint of the family relationship with its naturally evolved division of labour. Or let us take the service and dues in kind of the Middle Ages. It was the distinct labour of the individual in its original form, the particular features of his labour and not its universal aspect that formed the social ties at that time. Or finally let us take communal labour in its naturally evolved form as we find it among all civilised nations at the dawn of their history.* In this case the social character of labour is evidently not mediated by the labour of the individual assuming the abstract form of universal labour or his product assuming the form of a universal equivalent. The communal system on which [this mode of] production is based prevents the labour of an individual from becoming private labour and his product the private product of a separate individual; it causes individual labour to appear rather as the direct function of a member of the social organisation. Labour which manifests itself in exchange value appears to be the labour of an isolated individual. It becomes social labour by assuming the form of its direct opposite, of abstract universal labour.

Lastly, it is a characteristic feature of labour which posits exchange value that it causes the social relations of individuals to appear in the perverted form of a social relation between things. The labour of different persons is equated and treated as universal labour only by bringing one use value into relation with another one in the guise of exchange value. Although it is thus

* At present an absurdly biased view is widely held, namely that *primitive* communal property is a specifically Slavonic, or even an exclusively Russian, phenomenon.⁵⁵ It is an early form which can be found among Romans, Teutons and Celts, and of which a whole collection of diverse patterns (though sometimes only remnants survive) is still in existence in India. A more careful study of Asiatic, particularly Indian, forms of communal property would indicate that the disintegration of different forms of primitive communal ownership gives rise to diverse forms of property. For instance, various prototypes of Roman and Germanic private property can be traced back to certain forms of Indian communal property.

correct to say that exchange value is a relation between persons,* it is however necessary to add that it is a relation hidden by a material veil. Just as a pound of iron and a pound of gold have the same weight despite their different physical and chemical properties, so two commodities which have different use values but contain the same amount of labour time have the same exchange value. Exchange value thus appears to be a social determination of use values, a determination which is proper to them as things and in consequence of which they are able in definite proportions to take one another's place in the exchange process, i.e. they are equivalents, just as simple chemical elements combined in certain proportions form chemical equivalents. Only the conventions of everyday life make it appear commonplace and ordinary that social relations of production should assume the shape of things, so that the relations into which people enter in the course of their work appear as the relations of things to one another and of things to people. This mystification is still a very simple one in the case of a commodity. Everybody understands more or less clearly that the relations of commodities as exchange values are really the relations of people to the productive activities of one another. The semblance of simplicity disappears in more advanced relations of production. All the illusions of the monetary system⁶⁸ arise from the failure to perceive that money,^a though a physical object with distinct properties, represents a social relation of production. As soon as the modern economists, who sneer at the illusions of the monetary system, deal with the more complex economic categories, such as capital, they display the same illusions. This emerges clearly in their confession of naive astonishment when the phenomenon that they have just ponderously described as a thing reappears as a social relation and, a moment later, having been defined as a social relation, teases them once more as a thing.

Since the exchange value of commodities is indeed nothing but a mutual relation between various kinds of labour of individuals regarded as equal and universal labour, i.e. nothing but a material expression of a specific social form of labour, it is a tautology to say that labour is the *only* source of exchange value and accordingly of wealth in so far as this consists of exchange value.

^{* &}quot;Wealth is a relation between two persons." Galiani, Della Moneta, p. 221 in Vol. III of Custodi's collection of Scrittori classici Italiani di Economia Politica. Parte Moderna, Milano, 1803. [Marx quotes in Italian.]

^a The original has "gold"; changed by Marx in his own copy.- Ed.

It is equally a tautology to say that material in its natural state does not have exchange value* since it contains no labour, and that exchange value as such includes no material in a natural state. It is true that William Petty calls "labour the father and earth the mother of wealth",^a Bishop Berkeley asks

"whether the four elements, and man's labour therein, be not the true source of wealth", \ast

and the American Thomas Cooper explains in popular form:

"Take away from a loaf of bread the labour bestowed on it, the labour of the baker, the miller, the farmer, etc., and what will remain? A few grains of grass, growing wild, and unfit for any human purpose." ***

But all these observations are concerned not with abstract labour, which is the source of exchange value, but with concrete labour as the source of material wealth, in short with labour in so far as it produces use values. Since the use value of the commodity is postulated, the specific utility and the definite usefulness of the labour expended on it is also postulated; but this is the only aspect of labour as useful labour which is relevant to the study of commodities. In considering bread as a use value, we are concerned with its properties as an article of food and by no means with the labour of the farmer, miller, baker, etc. Even if the labour required were reduced by 95 per cent as a result of some invention, the usefulness of a loaf of bread would remain quite unaffected. It would lose not a single particle of its use value even if it dropped ready-made from the sky. Whereas labour positing exchange value manifests itself in the equality of commodities as universal equivalents, labour as useful productive activity manifests itself in the infinite variety of use values. Whereas labour positing exchange value is abstract universal and uniform labour, labour positing use value is concrete and distinctive labour, comprising infinitely varying kinds of labour as regards its form and the material to which it is applied.

* "In its natural state, matter ... is always destitute of value." MacCulloch, *Discours sur l'origine de l'économie politique etc.*, traduit par Prévost, Genève, 1825, p. 57. [Marx quotes MacCulloch in French.] This shows how high even a MacCulloch stands above the fetishism of German "thinkers" who assert that "material" and half a dozen similar irrelevancies are elements of value. Cf., e.g., *L. Stein*, l. c., Vol. I, p. 170.

** Berkeley, The Querist, London, 1750. [The original English text is given by Marx in this footnote.]

*** Th. Cooper, Lectures on the Elements of Political Economy, London, 1831 (Columbia, 1826), p. 99.

^a W. Petty, A Treatise of Taxes and Contributions, London, 1667, p. 47.- Ed.

It would be wrong to say that labour which produces use values is the only source of the wealth produced by it, that is of material wealth. Since this labour is an activity which adapts material for some purpose or other, it needs material as a prerequisite. Different use values contain very different proportions of labour and natural products, but use value always comprises a natural element. As useful activity directed to the appropriation of natural factors in one form or another, labour is a natural condition of human existence, a condition of material interchange between man and nature, quite independent of the form of society. On the other hand, the labour which posits exchange value is a specific social form of labour. For example, tailoring if one considers its physical aspect as a distinct productive activity produces a coat, but not the exchange value of the coat. The exchange value is produced by it not as tailoring as such but as abstract universal labour, and this belongs to a social framework not devised by the tailor. Women in ancient domestic industry, for instance, produced coats without producing the exchange value of coats. Labour as a source of material wealth was well known both to Moses, the law-giver, and to Adam Smith, the customs official.*

Let us now examine a few propositions which follow from the reduction of exchange value to labour time.

A commodity as a use value has an eminently material function. Wheat for example is used as food. A machine replaces a certain amount of labour. This function, by virtue of which a commodity is only a use value, an article of consumption, may be called its service, the service it renders as a use value. But the commodity as an exchange value is always considered solely from the standpoint of the result. What matters is not the service it renders, but the service ** rendered to it in the course of its production. Thus the exchange value of a machine, for instance, is determined not by the amount of labour time which it can replace, but by the amount of labour time expended in its production and therefore required for the production of a new machine of the same type.

* Friedrich List has never been able to grasp the difference between labour as a producer of something useful, a use value, and labour as a producer of exchange value, a specific social form of wealth (since his egotistic mind being occupied with practical matters was not concerned with understanding); he therefore regarded the modern English economists as mere plagiarists of Moses of Egypt. [F. List, *Das nationale System der politischen Oekonomie*, Vol. 1, Stuttgart and Tübingen, 1841, p. 205.]

** It can easily be seen what "service" the category "service" must render to economists such as J. B. Say and F. Bastiat, whose sagacity, as Malthus has aptly remarked, always abstracts from the specific form of economic conditions.

Thus, if the amount of labour required for the production of commodities remained constant, their exchange value would also remain unchanged. But the facility or difficulty of production varies continually. If the productivity of labour grows, the same use value will be produced in less time. If the productivity of labour declines, more time will be needed to produce the same use value. The amount of labour time contained in a commodity, and therefore its exchange value, is consequently a variable quantity, rising or falling in inverse proportion to the rise or fall of the productivity of labour. The level of the productivity of labour, which is predetermined in manufacturing industry, depends in agriculture and extractive industry also upon uncontrollable natural conditions. The same quantity of labour will result in a larger or smaller output of various metals-depending on the relative rarity and frequency of the deposits of these metals in the earth's crust. The same amount of labour may yield two bushels of wheat in a favourable season, and perhaps only one bushel in an unfavourable season. Scarcity or abundance brought about by natural circumstances seems in this case to determine the exchange value of commodities, because it determines the productivity of the specific concrete labour which is bound up with the natural conditions.

Equal amounts of labour time, or equal amounts of exchange value, are contained in unequal volumes of different use values. The smaller the volume of a use value which contains a given amount of labour time as compared with other use values of commodities, the greater is the *specific exchange value* of that commodity. If we find that in different epochs of civilisation separated by long periods of time, various use values—for example gold, silver, copper and iron, or wheat, rye, barley and oats—form a series of specific exchange values which on the whole retain their relative order in relation to one another, though not their exact numerical proportions, it follows that the progressive development of the social productive forces has exerted a uniform or nearly uniform effect on the labour time required for the production of these various commodities.

The exchange value of a commodity is not expressed in its own use value. But as objectification of universal social labour time, the use value of one commodity is brought into relation with the use values of other commodities. The exchange value of one commodity thus manifests itself in the use values of other commodities. In fact the exchange value of one commodity expressed in the use value of another commodity represents

equivalence. If one says, for instance, one yard of linen is worth two pounds of coffee, then the exchange value of linen is expressed in the use value of coffee, and it is moreover expressed in a definite quantity of this use value. Once the proportion is given, the value of any quantity of linen can be expressed in terms of coffee. It is evident that the exchange value of a commodity, e.g. linen, is not exhaustively expressed by the proportion in which a particular commodity, e.g. coffee, forms its equivalent. The quantity of universal labour time represented by a yard of linen exists simultaneously in infinitely varied amounts of the use values of all other commodities. The use value of any other commodity taken in the proportion which represents the same quantity of labour time constitutes an equivalent for the yard of linen. The exchange value of this particular commodity can therefore be exhaustively expressed only by the infinite number of equations in which the use values of all other commodities form its equivalent. The only exhaustive expression for a universal equivalent is the sum of these equations or the totality of the different proportions in which a commodity can be exchanged for any other commodity. For example the series of equations-

> 1 yard of linen = 1/2 lb. of tea, 1 yard of linen = 2 lbs. of coffee, 1 yard of linen = 8 lbs. of bread, 1 yard of linen = 6 yards of calico

may be put in the following form—

1 yard of linen = $\frac{1}{8}$ lb. of tea + $\frac{1}{2}$ lb. of coffee + 2 lbs. of bread + $\frac{1}{2}$ yards of calico.

Thus if we had all the equations in which the value of a yard of linen is exhaustively expressed, we could denote its exchange value in the form of a series. This is in fact an infinite series, for the range of commodities can never be finally circumscribed but expands continuously. Since the exchange value of one commodity is measured by the use values of all other commodities, the exchange values of all other commodities are on the contrary measured in terms of the use value of the one commodity measured by them.* If the exchange value of one yard of linen is expressed in $\frac{1}{2}$ lb. of tea, or 2 lbs. of coffee, or 6 yards of calico,

^{* &}quot;It is also a feature of measures to enter into such a relation with the thing measured that in a certain way the latter becomes the measure of the former." Montanari, *Della Moneta*, p. 41 in Custodi's collection, Vol. III, *Parte Antica*. [Marx quotes in Italian.]

or 8 lbs. of bread, etc., it follows that coffee, tea, calico, bread, etc., must be equal to one another in the proportion in which they are equal to linen, a third magnitude, linen thus serves as a common measure of their exchange value. The exchange value of any commodity considered as objectified universal labour time, i.e. as a definite quantity of universal labour time, is measured successively in terms of definite quantities of the use values of all other commodities; and on the other hand the exchange values of all other commodities are measured in the use value of this one exclusive commodity. But any commodity considered as exchange value is both the exclusive commodity which serves as the common measure of the exchange values of all other commodities and on the other hand it is merely one commodity of the many commodities in the series in which the exchange value of any other commodity is directly expressed.

The existing number of different types of commodities does not affect the value of a commodity. But whether the series of equations in which its exchange value can be realised is longer or shorter depends on the greater or smaller variety of other commodities. The series of equations which express, say, the value of coffee shows the range of its exchangeability, the limits within which it functions as an exchange value. The exchange value of a commodity as the objective expression of universal social labour time finds its appropriate expression of equivalence in the infinite variety of use values.

We have seen that the exchange value of a commodity varies with the quantity of labour time directly contained in it. Its realised exchange value, that is its exchange value expressed in the use values of other commodities, must also depend on the degree to which the labour time expended on the production of all other commodities varies. For example, if the labour time necessary for the production of a bushel of wheat remained unchanged, while the labour time needed for the production of all other commodities doubled, the exchange value of a bushel of wheat in terms of its equivalents would have been halved. The result would actually be the same as if the labour time required to produce a bushel of wheat had been halved and the labour time required to produce all other commodities had remained unchanged. The value of commodities is determined by the amount of them which can be produced in a given labour time. In order to examine what changes are liable to affect this proportion, let us take two commodities, A and B. First. The labour time required for the production of B is assumed to remain unchanged. In this case the

exchange value of A expressed in terms of B falls or rises in direct proportion to the decrease or increase in the labour time necessary for the production of A. Secondly. The labour time necessary for the production of commodity A is assumed to remain unchanged. The exchange value of commodity A in terms of B falls or rises in inverse proportion to the decrease or increase in the labour time required to produce B. Thirdly. The labour time required for the production of A and of B is assumed to decrease or increase at the same rate. The equation expressing the value of commodity A in terms of B remains unchanged in this case. If some factor were to cause the productivity of all types of labour to fall in equal degree, thus requiring the same proportion of additional labour time for the production of all commodities, then the value of *all* commodities would rise, the actual expression of their exchange value remaining unchanged, and the real wealth of society would decrease, since the production of the same quantity of use values would require a larger amount of labour time. Fourthly. The labour time required for the production of both A and B is assumed to increase or decrease but in unequal degree, or else the labour time required for the production of A is assumed to increase while that required for B decreases, or vice versa. All these cases can be simply reduced to the position where the labour time required for the production of one commodity remains unchanged, while that required for the production of the other either increases or decreases.

The exchange value of any commodity is expressed in terms of the use value of any other commodity, either in whole units or in fractions of that use value. Every commodity as exchange value can be just as easily divided as the labour time objectified in it. The equivalence of commodities is just as independent of their physical divisibility as use values as the summation of the exchange values of commodities is unaffected by the real change of form which the use values of these commodities may undergo in the course of their transformation into a *single* new commodity.

So far two aspects of the commodity—use value and exchange value—have been examined, but each time one-sidedly. The commodity, however, is the direct *unity* of use value and exchange value, and at the same time it is a commodity only in relation to other commodities. The *exchange process* of commodities is the *real* relation that exists between them. This is a social process which is carried on by individuals independently of one another, but they take part in it only as commodities exist, they thus appear to be in fact the conscious representatives of the exchange process.

The commodity is a use value, wheat, linen, a diamond, machinery, etc., but as a commodity it is simultaneously not a use value. It would not be a commodity, if it were a use value for its owner, that is a direct means for the satisfaction of his own needs. For its owner it is on the contrary a non-use value, that is merely the physical depository of exchange value, or simply a means of exchange. Use value as an active carrier of exchange value becomes a means of exchange. The commodity is a use value for its owner only so far as it is an exchange value.* The commodity therefore has still to become a use value, in the first place a use value for others. Since it is not a use value to its owner, it must be a use value to owners of other commodities. If this is not the case, then the labour expended on it was useless labour and the result accordingly is not a commodity. The commodity must, on the other hand, become a use value for its owner, since his means of subsistence exist outside it, in the use values of other people's commodities. To become a use value, the commodity must encounter the particular need which it can satisfy. Thus the use values of commodities become use values by a mutual exchange of places: they pass from the hands of those for whom they were means of exchange into the hands of those for whom they serve as consumer goods. Only as a result of this universal alienation of commodities does the labour contained in them become useful labour. Commodities do not acquire a new economic form in the course of their mutual relations as use values. On the contrary, the specific form which distinguished them as commodities disappears. Bread, for instance, in passing from the baker to the consumer does not change its character as bread. It is rather that the consumer treats it as a use value, as a particular foodstuff, whereas so long as it was in the hands of the baker it was simply representative of an economic relation, a concrete and at the same time an abstract thing. The only transformation therefore that commodities experience in the course of becoming use values is the cessation of their formal existence in which they were non-use values for their owner, and use values for their non-owner. To become use values commodities must be altogether alienated; they must enter into the exchange process; exchange however is concerned merely with their aspect as exchange values. Hence.

^{*} It is in this sense that Aristotle speaks of exchange value (see the passage quoted at the beginning of this chapter).

only by being realised as exchange values can they be realised as use values.

The individual commodity as a use value was originally regarded as something independent, while as an exchange value it was from the outset regarded in its relation to all other commodities. But this was merely a theoretical, hypothetical, relation. It realises itself only in the process of exchange. On the other hand, a commodity is an exchange value in so far as a definite amount of labour time has been expended on its production and it accordingly represents objectified labour time. Yet the commodity as it comes into being is only objectified individual labour time of a specific kind, and not universal labour time. The commodity is thus not immediately exchange value, but has still to become exchange value. To begin with, it can be objectification of universal labour time only when it represents a particular useful application of labour time, that is a use value. This is the material condition under which alone the labour time contained in commodities is regarded as universal, social labour time. A commodity can only therefore become a use value if it is realised as an exchange value, while it can only be realised as an exchange value if it is alienated and functions as a use value. The alienation of a commodity as a use value is only possible to the person for whom it is a use value, i.e. an object satisfying particular needs. On the other hand, it can only be alienated in exchange for another commodity, or if we regard the matter from the standpoint of the owner of the other commodity, he too can only alienate, i.e. realise, his commodity by bringing it into contact with the particular need of which it is the object. During the universal alienation of commodities as use values they are brought into relation with one another as discrete things which are physically different and because of their specific properties satisfy particular needs. But as mere use values they exist independently of one another or rather without any connection. They can be exchanged as use values only in connection with particular needs. They are, however, exchangeable only as equivalents, and they are equivalents only as equal quantities of objectified labour time, when their physical properties as use values, and hence the relations of these commodities to specific needs, are entirely disregarded. A commodity functions as an exchange value if it can freely take the place of a definite quantity of any other commodity, irrespective of whether or not it constitutes a use value for the owner of the other commodity. But for the owner of the other commodity it becomes a commodity only in so far as it constitutes a use value for him, and for the owner in whose hands it is it becomes an exchange value only in so far as it is a commodity for the other owner. One and the same relation must therefore be simultaneously a relation of essentially equal commodities which differ only in magnitude, i.e. a relation which expresses their equality as materialisations of universal labour time, and at the same time it must be their relation as qualitatively different things, as distinct use values for distinct needs, in short a relation which differentiates them as actual use values. But equality and inequality thus posited are mutually exclusive. The result is not simply a vicious circle of problems, where the solution of one problem presupposes the solution of the other, but a whole complex of contradictory premisses, since the fulfilment of one condition depends directly upon the fulfilment of its opposite.

The exchange process must comprise both the evolution and the solution of these contradictions, which cannot however be demonstrated in the process in this simple form. We have merely observed how the commodities themselves are related to one another as use values, i.e. how commodities as use values function within the exchange process. On the other hand, exchange value as we have considered it till now has merely existed as our abstraction, or, if one prefers, as the abstraction of the individual commodity owner, who keeps the commodity as use value in the warehouse, and has it on his conscience as exchange value. In the exchange process, however, the commodities must exist for one another not only as use values but also as exchange values, and this aspect of their existence must appear as their own mutual relation. The difficulty which confronted us in the first place was that the commodity as a use value has to be alienated, disposed of, before it can function as an exchange value, as objectified universal labour time, while on the contrary its alienation as a use value presupposes its existence as exchange value. But let us suppose that this difficulty has been overcome, that the commodity has shed its particular use value and has thereby fulfilled the material condition of being socially useful labour, instead of the particular labour of an individual by himself. In the exchange process, the commodity as exchange value must then become a universal equivalent, objectified general labour time for all other commodities; it has thus no longer the limited function of a particular use value, but is capable of being directly represented in all use values as its equivalents. Every commodity however is the commodity which, as a result of the alienation of its particular use value, must appear as the direct materialisation of universal labour time. But on the other hand, only particular commodities, particular use values embodying the labour of private individuals, confront one another in the exchange process. Universal labour time itself is an abstraction which, as such, does not exist for commodities.

Let us consider the series of equations in which the exchange value of a commodity is expressed in concrete terms, for example—

> 1 yard of linen = 2 lbs. of coffee, 1 yard of linen = $\frac{1}{2}$ lb. of tea, 1 yard of linen = 8 lbs. of bread, etc.

To be sure, these equations merely denote that equal amounts of universal social labour time are objectified in 1 yard of linen, 2 lbs. of coffee, $\frac{1}{2}$ lb. of tea, etc. But the different kinds of individual labour represented in these particular use values, in fact, become labour in general, and in this way social labour, only by actually being exchanged for one another proportionately to the duration of labour contained in them.ª Social labour time exists in these commodities in a latent state, so to speak, and becomes evident only in the course of their exchange. The point of departure is not the labour of individuals considered as social labour, but on the contrary the particular kinds of labour of private individuals, i.e. labour which proves that it is universal social labour only by the supersession of its original character in the exchange process. Universal social labour is consequently not a ready-made prerequisite but an emerging result. Thus a new difficulty arises: on the one hand, commodities must enter the exchange process as objectified universal labour time, on the other hand, the labour time of individuals becomes objectified universal labour time only as the result of the exchange process.

It is through the alienation of its use value, that is of its original form of existence, that every commodity has to acquire its corresponding existence as exchange value. The commodity must therefore assume a dual form of existence in the exchange process. On the other hand, its second form of existence, exchange value, can only be represented by another commodity, for only commodities confront one another in the exchange process. How is it possible to present a particular commodity directly as *objectified universal* labour time, or—which amounts to the same thing—how can the individual labour time objectified in

^a The original has: "proportionately to their duration"; changed by Marx in his own copy.— *Ed.*

a particular commodity directly assume a universal character? The concrete expression of the exchange value of a commodity, i.e. of any commodity considered as universal equivalent, consists of an infinite series of equations such as—

1 yard of linen = 2 lbs. of coffee, 1 yard of linen = $\frac{1}{2}$ lb. of tea, 1 yard of linen = 8 lbs. of bread, 1 yard of linen = 6 yards of calico, 1 yard of linen = and so on.

This is a theoretical statement since the commodity is merely *regarded* as a definite quantity of objectified universal labour time. A particular commodity as a universal equivalent is transformed from a pure abstraction into a *social* result of the exchange process, if one simply reverses the above series of equations. For example—

2 lbs. of coffee = 1 yard of linen, $\frac{1}{2}$ lb. of tea = 1 yard of linen, 8 lbs. of bread = 1 yard of linen, 6 yards of calico = 1 yard of linen.

Just as the labour time contained in coffee, tea, bread, calico, in short in all commodities, is expressed in terms of linen, so conversely the exchange value of linen is reflected in all other commodities which act as its equivalents, and the labour time objectified in linen becomes direct universal labour time, which is equally embodied in different volumes of all other commodities. Linen thus becomes the universal equivalent in consequence of the universal action of all other commodities in relation to it. Every commodity considered as exchange value became a measure of the value of all other commodities. In this case, on the contrary, because the exchange value of all commodities is measured in terms of one particular commodity, the excluded commodity becomes the adequate representation of exchange value as the universal equivalent. On the other hand, the infinite series or the infinite number of equations in which the exchange value of each commodity was expressed is now reduced to a single equation consisting of two terms. The equation 2 lbs. of coffee = 1 yard of linen is now a comprehensive expression for the exchange value of coffee, for in this expression it appears as the direct equivalent to a definite quantity of any other commodity. Commodities within the exchange process accordingly exist for one another, or appear to one another, as exchange values in the form of linen. The fact

that all commodities are related to one another as exchange values, i.e. simply as different quantities of objectified universal labour time, now appears in the form that all exchange values represent merely different quantities of one and the same article, linen. Universal labour time thus appears in turn as a specific thing, as a commodity in addition to and apart from all other commodities. At the same time, the equation in which one commodity represents the exchange value of another commodity. e.g. 2 lbs. of coffee = 1 vard of linen, has still to be realised. Only by being alienated as a use value-an alienation which depends on whether it is able to prove in the exchange process that it is a needed object-is it really converted from the form of coffee into that of linen, thus becoming a universal equivalent and really representing exchange value for all other commodities. On the other hand, because as a result of their alienation as use values all commodities are converted into linen, linen becomes the converted form of all other commodities, and only as a result of this transformation of all other commodities into linen does it become the direct objectification of universal labour time, i.e. the product of universal alienation and of the supersession of all individual labour. While commodities thus assume a dual form in order to represent exchange value for one another, the commodity which has been set apart as universal equivalent acquires a dual use value. In addition to its particular use value as an individual commodity it acquires a universal use value. This latter use value is itself a determinate form, i.e. it arises from the specific role which this commodity plays as a result of the universal action exerted on it by the other commodities in the exchange process. The use value of each commodity as an object which satisfies particular needs has a different value in different hands, e.g. it has one value for the person who disposes of it and a different value for the person who acquires it. The commodity which has been set apart as the universal equivalent is now an object which satisfies a universal need arising from the exchange process itself, and has the same use value for everybody-that of being carrier of exchange value or a universal means of exchange. Thus the contradiction inherent in the commodity as such, namely that of being a particular use value and simultaneously universal equivalent, and hence a use value for everybody or a universal use value, has been solved in the case of this one commodity. Whereas now the exchange value of all other commodities is in the first place presented in the form of an ideal equation with the commodity that has been set apart, an equation which has still to be realised;

288

the use value of this commodity, though real, seems in the exchange process to have merely a formal existence which has still to be realised by conversion into actual use values. The commodity originally appeared as commodity in general, as universal labour time objectified in a particular use value. All commodities are compared in the exchange process with the one excluded commodity which is regarded as commodity in general, the commodity, the embodiment of universal labour time in a particular use value. They are therefore as *particular* commodities opposed to one particular commodity considered as being the universal commodity.* The fact that commodity owners treat one another's labour as universal social labour appears in the form of their treating their own commodities as exchange values; and the interrelation of commodities as exchange values in the exchange process appears as their universal relation to a particular commodity as the adequate expression of their exchange value; this in turn appears as the specific relation of this particular commodity to all other commodities and hence as the distinctive, as it were naturally evolved, social character of a thing. The particular commodity which thus represents the exchange value of all commodities, that is to say, the exchange value of commodities regarded as a particular, exclusive commodity, constitutes money. It is a crystallisation of the exchange value of commodities and is formed in the exchange process. Thus, while in the exchange process commodities become use values for one another by discarding all determinate forms and confronting one another in their immediate physical aspect, they must assume a new determinate form, they must evolve money, so as to be able to confront one another as exchange values. Money is not a symbol, just as the existence of a use value in the form of a commodity is no symbol. A social relation of production appears as something existing apart from individual human beings, and the distinctive relations into which they enter in the course of production in society appear as the specific properties of a thing-it is this perverted appearance, this prosaically real, and by no means imaginary, mystification that is characteristic of all social forms of labour positing exchange value. This perverted appearance manifests itself merely in a more striking manner in money than it does in commodities.

The necessary physical properties of the particular commodity,

^{*} The same term is used by Genovesi. [Note in Marx's own copy.]

in which the money form of all other commodities is to be crystallised-in so far as they directly follow from the nature of exchange value-are: unlimited divisibility, homogeneity of its parts and uniform quality of all units of the commodity. As the materialisation of universal labour time it must be homogeneous and capable of expressing only quantitative differences. Another necessary property is durability of its use value since it must endure through the exchange process. Precious metals possess these qualities in an exceptionally high degree. Since money is not the result of deliberation or of agreement, but has come into being spontaneously in the course of exchange, many different, more or less unsuitable, commodities were at various times used as money. When exchange reaches a certain stage of development, the need arises to polarise the functions of exchange value and use value among various commodities-so that one commodity, for example, shall act as means of exchange while another is disposed of as a use value. The outcome is that one commodity or sometimes several commodities representing the most common use value come occasionally to serve as money. Even when no immediate need for these use values exists, the demand for them is bound to be more general than that for other use values, since they constitute the most substantial physical element in wealth.

Direct barter, the spontaneous form of exchange, signifies the beginning of the transformation of use values into commodities rather than the transformation of commodities into money. Exchange value does not acquire an independent form, but is still directly tied to use value. This is manifested in two ways. Use value, not exchange value, is the purpose of the whole system of production, and use values accordingly cease to be use values and become means of exchange, or commodities, only when a larger amount of them has been produced than is required for consumption. On the other hand, they become commodities only within the limits set by their immediate use value, even when this function is polarised so that the commodities to be exchanged by their owners must be use values for both of them, but each commodity must be a use value for its non-owner. In fact, the exchange of commodities evolves originally not within primitive communities,* but on their margins, on their borders, the few

^{*} Aristotle makes a similar observation with regard to the individual family considered as the primitive community. But the primitive form of the family is the tribal family, from the historical dissolution of which the individual family

points where they come into contact with other communities. This is where barter begins and moves thence into the interior of the community, exerting a disintegrating influence upon it. The particular use values which, as a result of barter between different communities, become commodities, e.g. slaves, cattle, metals, usually serve also as the first money within these communities. We have seen that the degree to which the exchange value of a commodity functions as exchange value is the higher, the longer the series of its equivalents or the larger the sphere in which the commodity is exchanged. The gradual extension of barter, the growing number of exchange transactions, and the increasing variety of commodities bartered lead, therefore, to the further development of the commodity as exchange value, stimulate the formation of money and consequently have a disintegrating effect on direct barter. Economists usually reason that the emergence of money is due to external difficulties which the expansion of barter encounters, but they forget that these difficulties arise from the evolution of exchange value and hence from that of social labour as universal labour. For example commodities as use values are not divisible at will, a property which as exchange values they should possess. Or it may happen that the commodity belonging to A may be use value required by B; where B's commodity may not have any use value for A. Or the commodity owners may need each other's commodities but these cannot be divided and their relative exchange values are different. In other words, on the plea of examining simple barter, these economists display certain aspects of the contradiction inherent in the commodity as being the direct unity of use value and exchange value. On the other hand, they then persistently regard barter as a form well adapted to commodity exchange, suffering merely from certain technical inconveniences, to overcome which money has been cunningly devised. Proceeding from this quite superficial point of view, an ingenious British economist has rightly maintained that money is merely a material instrument, like a ship or a steam engine, and not an expression of a social relation of production, and hence is not an economic category. It is therefore simply a malpractice to deal with this subject in political economy, which in fact has nothing in common with technology.*

develops. "In the first community, indeed, which is the family, this art" (that is, trade) "is obviously of no use" (Aristotle, loc. cit.). [Marx quotes in Greek.]

^{* &}quot;Money is, in fact, only the instrument for carrying on buying and selling" (but, if you please, what do you understand by buying and selling?) "and the

The world of commodities presupposes a developed division of labour, or rather the division of labour manifests itself directly in the diversity of use values which confront one another as particular commodities and which embody just as many diverse kinds of labour. The *division of labour* as the aggregate of all particular types of productive activity constitutes the totality of the physical aspects of social labour as labour producing use values. But it exists as such—as regards commodities and the exchange process—only in its results, in the particularisation of the commodities themselves.

The exchange of commodities is the process in which the social metabolism, in other words, the exchange of particular products of private individuals, simultaneously gives rise to definite social relations of production, into which individuals enter in the course of this metabolism. As they develop, the interrelations of commodities crystallise into distinct aspects of the universal equivalent, and thus the exchange process becomes at the same time the process of formation of money. This process as a whole, which comprises several processes, constitutes *circulation*.

A. HISTORICAL NOTES ON THE ANALYSIS OF COMMODITIES

The decisive outcome of the research carried on for over a century and a half by classical political economy, beginning with William Petty in Britain and Boisguillebert in France,* and ending with Ricardo in Britain and Sismondi in France, is an analysis of the aspects of the commodity in two forms of labour—use value is reduced to concrete labour or purposive productive activity, exchange value to labour time or homogeneous social labour.

Petty reduces use value to labour without deceiving himself about the dependence of its creative power on natural factors. He

consideration of it no more forms a part of the science of political economy than the consideration of ships or steam engines, or of any other instruments employed to facilitate the production and distribution of wealth" (Th. Hodgskin, *Popular Political Economy etc.*, London, 1827, pp. 178, 179). [Marx quotes and makes a remark in English.]

^{*} A comparative study of Petty's and Boisguillebert's writings and characters apart from illuminating the social divergence between Britain and France at the close of the seventeenth century and the beginning of the eighteenth—would explain the origins of those national contrasts that exist between British and French political economy. The same contrast reappears in Ricardo and Sismondi.

immediately perceives concrete labour in its entire social aspect as division of labour.* This conception of the source of material wealth does not remain more or less sterile as with his contemporary Hobbes, but leads to the *political arithmetic*, the first form in which political economy is treated as a separate science. But he accepts exchange value as it *appears* in the exchange of commodities, i.e. as money, and money itself as an existing commodity, as gold and silver. Caught up in the ideas of the monetary system, he asserts that the labour which determines exchange value is the particular kind of concrete labour by which gold and silver is extracted.

* Petty treats the division of labour also as a productive force, and he does so on a much grander scale than Adam Smith. See An Essay concerning the Multiplication of Mankind etc., Third Edition, 1698, pp. 35-36. In this essay he shows the advantages which division of labour has for production not only with the example of the manufacture of a watch-as Adam Smith did later with the example of the manufacture of a pin-but considers also a town and a whole country as large-scale industrial establishments. The Spectator of 26 November 1711 refers to this "ILLUSTRATION OF THE ADMIRABLE Sir William Petty". MacCulloch's conjecture that The Spectator confused Petty with a writer forty years his junior is therefore wrong. (See MacCulloch, The Literature of Political Economy, a Classified Catalogue, London, 1845, p. 102.) Petty regards himself as the founder of a new science. He says that his method "is not very usual", for instead of using only comparative and superlative words, and intellectual arguments, he proposes to speak in TERMS OF NUMBER, WEIGHT OR MEASURE; to use only arguments of sense, and to consider only such causes, AS HAVE VISIBLE FOUNDATIONS IN NATURE; leaving those that depend upon the MUTABLE MINDS, OPINIONS, APPETITES, AND PASSIONS OF PARTICULAR MEN, to the consideration of others (Political Arithmetick etc., London, 1699, Preface). His audacious genius becomes evident for instance in his proposal to transport all the movables and people of Ireland, and of the Highlands of Scotland ... into the rest of Great Britain. This would result in the saving of labour time, in increasing productivity of labour, and "the King and his Subjects would thereby become more rich and strong" (Political Arithmetick, Chapter 4 [p. 225]). Also in the chapter of his Political Arithmetick in which—at a time when Holland was still the predominant trading nation and France seemed to be on the way to becoming the principal trading power-he proves that England is destined to conquer the world market: "THAT THE KING OF ENGLAND'S SUBJECTS HAVE STOCK COMPETENT AND CONVENIENT TO DRIVE THE TRADE OF THE WHOLE COMMERCIAL WORLD" (I.c., Chapter 10 [p. 272]). "THAT THE IMPEDIMENTS OF ENGLAND'S GREAT-NESS, ARE BUT CONTINGENT AND REMOVABLE" (p. 247 et seq.). A highly original sense of humour pervades all his writings. Thus he shows for example that the conquest of the world market by Holland, which was then regarded as the model country by English economists just as Britain is now regarded as the model country by continental economists, was brought about by perfectly natural causes "WITHOUT SUCH ANGELICAL WITS AND JUDGMENTS, AS SOME ATTRIBUTE TO THE HOLLANDERS" (J. C., pp. 175-76). He champions freedom of conscience as a condition of trade, "because the poor are diligent and believe that labour and industry is their duty towards God so long as they are permitted to think that, having less wealth, they have the more Wit and Understanding, especially of the things of God, which they think

What he really has in mind is that in bourgeois economy labour does not directly produce use values but commodities, use values which, in consequence of their alienation in exchange, are capable of assuming the form of gold and silver, i.e. of money, i.e. of exchange value, i.e. of objectified universal labour. His case is a striking proof that recognition of labour as the source of material wealth by no means precludes misapprehension of the specific social form in which labour constitutes the source of exchange value.

Boisguillebert for his part, in fact, although he may not be aware of it, reduces the exchange value of commodities to labour time, by determining the "true value" (la juste valeur) according to the correct proportion in which the labour time of the individual producers is divided between the different branches of industry, and declaring that free competition is the social process by which this correct proportion is established. But simultaneously, and in contrast with Petty, Boisguillebert wages a fanatical struggle against money, whose intervention, he alleges, disturbs the natural equilibrium or the harmony of the exchange of commodities and, like a fantastic Moloch, demands all physical wealth as a sacrifice. This polemic against money is, on the one hand, connected with definite historical conditions, for Boisguillebert fights against the blindly destructive greed for gold which possessed the court of

294

chiefly belong to the Poor". From whence it follows that trade is "not fixed to any species of religion as such; but rather to the Heterodox part of the whole" (l.c., pp. 183-86). He recommends special public contribution for rogues, since it would be better for the general public to impose a tax on themselves for the benefit of the rogues than to be taxed by them (l.c., p. 197). On the other hand, he rejects taxes which transfer wealth from industrious people to those who "do nothing at all, but eat and drink, sing, play, and dance: nay such as study the Metaphysics" [op. cit., p. 198]. Petty's writings have almost become bibliographical curiosities and are only available in old inferior editions. This is the more surprising since William Petty is not only the father of English political economy but also an ancestor of Henry Petty, alias Marquis of Lansdowne, the Nestor of the English Whigs. But the Lansdowne family could hardly prepare a complete edition of Petty's works without prefacing it with his biography, and what is true with regard to the origin of most of the big Whig families, applies also in this case --- THE LESS SAID OF IT THE BETTER. The army surgeon, who was a bold thinker but quite unscrupulous and just as apt to plunder in Ireland under the aegis of Cromwell as to fawn upon Charles II to obtain the title of baronet to embellish his trash, is hardly a suitable image of an ancestor for public display. In most of the writings published during his lifetime, moreover, Petty seeks to prove that England's golden age was the reign of Charles II, a rather heterodox view for hereditary exploiters of the "GLORIOUS REVOLUTION".64

Louis XIV, his tax-farmers and the aristocracy*; whereas Petty acclaims the greed for gold as a vigorous force which spurs a nation to industrial progress and to the conquest of the world market; at the same time however it throws into bold relief more profound fundamental differences which recur as a perpetual contrast between typically English and typically French ** political economy. Boisguillebert, in fact, turns his attention only to the material content of wealth, to use value, enjoyment of it,*** and regards the bourgeois form of labour, the production of use values as commodities and the exchange of commodities, as the appropriate social form in which individual labour accomplishes this object. Where, as in money, he encounters the specific features of bourgeois wealth, he therefore speaks of the intrusion of usurping alien factors, and inveighs against one of the forms of labour in bourgeois society, while simultaneously pronouncing utopian eulogies on it in another form.**** Boisguillebert's work proves that it is possible to regard labour time as the measure of the value of commodities, while confusing the labour which is objectified in the exchange value of commodities and measured in time units with the direct physical activity of individuals.

It is a man of the New World—where bourgeois relations of production imported together with their representatives sprouted rapidly in a soil in which the superabundance of humus made up for the lack of historical tradition—who for the first time deliberately and clearly (so clearly as to be almost trite) reduces exchange value to labour time. This man was *Benjamin Franklin*, who formulated the basic law of modern political economy in an

* As against the "black art of finance" of his time, Boisguillebert says: "The science of finance is nothing but a thorough knowledge of the interests of agriculture and of commerce" (*Le détail de la France*, 1697. In Eugène Daire's edition of *Economistes financiers du XVIII^e siècle*, Paris, 1843, Vol. I, p. 241). [Marx quotes in French.]

** But not *Romance* political economy, since the contrast of English and French economists is repeated by the Italians in their two schools, one at Naples and the other at Milan; whereas the Spaniards of the earlier period are either simply Mercantilists and modified Mercantilists like Ustáriz, or follow Adam Smith in observing the "happy mean" like Jovellanos (see his *Obras*, Barcelona, 1839-40).

*** "True wealth ... is the complete enjoyment not only of the necessaries of life but also of all the superfluities and of all that can give pleasure to the senses" (Boisguillebert, *Dissertation sur la nature de la richesse etc.*, p. 403). [Marx quotes in French.] But whereas Petty was just a frivolous, grasping, unprincipled adventurer, Boisguillebert, although he was one of the intendants of Louis XIV, stood up for the interests of the oppressed classes with both great intellectual force and courage.

**** French socialism as represented by Proudhon suffers from the same national failing.

early work, which was written in 1729 and published in 1731.* He declares it necessary to seek another measure of value than the precious metals, and this measure is labour.

"By labour may the value of silver be measured as well as other things. As, suppose one man is employed to raise corn, while another is digging and refining silver; at the year's end, or at any other period of time, the complete produce of corn, and that of silver, are the natural price of each other; and if one be twenty bushels, and the other twenty ounces, then an ounce of that silver is worth the labour of raising a bushel of that corn. Now if by the discovery of some nearer, more easy or plentiful mines, a man may get forty ounces of silver as easily as formerly he did twenty, and the same labour is still required to raise twenty bushels of corn, then two ounces of silver will be worth no more than the same labour of raising one bushel of corn, and that bushel of corn will be as cheap at two ounces, as it was before at one, *cateris paribus.*^a THUS THE RICHES OF A COUNTRY ARE TO BE VALUED BY THE QUANTITY OF LABOUR ITS INHABITANTS ARE ABLE TO PURCHASE" (l.c., p. 265).^b

From the outset Franklin regards labour time from a restricted economic standpoint as the measure of value. The transformation of actual products into exchange values is taken for granted, and it is therefore only a question of discovering a measure of their value.

To quote Franklin again:

296

"Trade in general being nothing else but the exchange of labour for labour, the value of all things is, as I have said before, most justly measured by labour" (l.c., p. 267).^c

If in this sentence the term labour is replaced by concrete labour, it is at once obvious that labour in one form is being confused with labour in another form. Because trade may, for example, consist in the exchange of the labour of a shoemaker, miner, spinner, painter and so on, is therefore the labour of the painter the best measure of the value of shoes? Franklin, on the contrary, considers that the value of shoes, minerals, yarn, paintings, etc., is determined by abstract labour which has no particular quality and can thus be measured only in terms of quantity.** But since he does not explain that the labour contained in exchange value is abstract universal social labour, which is

* B. Franklin, A Modest Inquiry into the Nature and Necessity of a Paper Currency, in The Works of Benjamin Franklin, edit. by J. Sparks, Vol. II, Boston, 1836.

** Remarks and Facts relative to the American Paper Money, 1764 (l.c.).

^a Other things being equal.— Ed.

^b The original English text of the last sentence and the page reference are given by Marx in a footnote.— Ed.

^c The original English text of this passage and the page reference are given by Marx in a footnote.—Ed.

brought about by the universal alienation of individual labour, he is bound to mistake money for the direct embodiment of this alienated labour. He therefore fails to see the intrinsic connection between money and labour which posits exchange value, but on the contrary regards money as a convenient technical device which has been introduced into the sphere of exchange from outside.* Franklin's analysis of exchange value had no direct influence on the general course of the science, because he dealt only with special problems of political economy for definite practical purposes.

The difference between concrete useful labour and labour which creates exchange value aroused considerable interest in Europe during the eighteenth century in the following form: what particular kind of concrete labour is the source of bourgeois wealth? It was thus assumed that not every kind of labour which is materialised in use values or yields products must thereby directly create wealth. But for both the Physiocrats and their opponents the crucial issue was not what kind of labour creates value but what kind of labour creates surplus value. They were thus discussing the problem in a complex form before having solved it in its elementary form; just as the historical progress of all sciences leads only through a multitude of contradictory moves to the real point of departure. Science, unlike other architects, builds not only castles in the air, but may construct separate habitable storeys of the building before laying the foundation stone. We shall now leave the Physiocrats and disregard a whole series of Italian economists, whose more or less pertinent ideas come close to a correct analysis of the commodity,** in order to turn at once to Sir James Steuart,*** the first Briton to expound a general system of bourgeois political economy. The concept of exchange value like the other abstract categories of political economy are in his work still in process of differentiation from their material content and therefore appear to be blurred and ambiguous. In one passage he

* See Papers on American Politics, and Remarks and Facts relative to the American Paper Money, 1764 (l.c.).

** See for instance Galiani, Della Moneta, Vol. III, in Scrittori classici Italiani di Economia Politica (published by Custodi), Parte Moderna, Milano, 1803. He says: "It is toil [fatica] alone that gives value to the thing," p. 74. The term "fatica" for labour is characteristic of the southerner. [Marx quotes in Italian.]

*** Steuart's work An Inquiry into the Principles of Political Economy, Being an Essay on the Science of Domestic Policy in Free Nations was first published in London in 1767, in two quarto volumes, ten years earlier than Adam Smith's Wealth of Nations. I quote from the Dublin edition of 1770. 298

determines *real value* by labour time (WHAT A WORKMAN CAN PERFORM IN A DAY), but beside it he introduces wages and raw material in a rather confusing way.* His struggle with the material content is brought out even more strikingly in another passage. He calls the physical element contained in a commodity, e.g. the silver in silver filigree, its "*INTRINSIC WORTH*",^a and the labour time contained in it its "*USEFUL VALUE*".^a

"The first," he says, "is something real in itself... the use value, on the contrary, must be estimated according to the labour it has cost to produce it. The labour employed in the modification of the material REPRESENTS A PORTION OF A MAN'S TIME, ETC." **

His clear differentiation between specifically social labour which manifests itself in exchange value and concrete labour which yields use values distinguishes Steuart from his predecessors and his successors.

Labour, he says, which through its ALIENATION^a creates A UNIVERSAL EQUIVAL-ENT,^a I call *industry*.

He distinguishes labour as industry not only from concrete labour but also from other social forms of labour. He sees in it the bourgeois form of labour as distinct from its antique and mediaeval forms. He is particularly interested in the difference between bourgeois and feudal labour, having observed the latter in the stage of its decline both in Scotland and during his extensive journeys on the continent. Steuart knew very well that in pre-bourgeois eras also products assumed the form of commodities and commodities that of money; but he shows in great detail that the commodity as the elementary and primary unit of wealth and alienation as the predominant form of appropriation are characteristic only of the bourgeois period of production, and that accordingly labour which creates exchange value is a specifically bourgeois feature.***

* Steuart, l.c., Vol. I, pp. 181-83.

** Ibid., pp. 361-62 [here Marx reproduces the English part of the sentence].

*** Steuart therefore declares that the patriarchal form of agriculture whose direct aim is the production of use values for the owner of the land, is an "abuse", although not in Sparta or Rome or even in Athens, but certainly in the industrial countries of the eighteenth century. This "ABUSIVE AGRICULTURE" is not "TRADE" but a "mere means of subsistence". Just as bourgeois agriculture clears the land of superfluous mouths, so bourgeois manufacture clears the factory of superfluous hands.

^a Marx gives this English term in parentheses after its German equivalent.- Ed.

Various kinds of concrete labour, such as agriculture, manufacture, shipping and commerce, had each in turn been claimed to constitute the real source of wealth, before Adam Smith declared that the sole source of material wealth or of use values is labour in general, that is the entire social aspect of labour as it appears in the division of labour. Whereas in this context he completely overlooks the natural factor, he is pursued by it when he examines the sphere of purely social wealth, exchange value. Although Adam determines the value of commodities by the labour time contained in them, he then nevertheless transfers this determination of value in actual fact to pre-Adamian times. In other words, what he regards as true when considering simple commodities becomes confused as soon as he examines the higher and more complex forms of capital, wage labour, rent, etc. He expresses this in the following way: the value of commodities was measured by labour time contained in them in the PARADISE LOST of the bourgeoisie, where people did not confront one another as capitalists, wage workers, landowners, tenant farmers, usurers, and so on, but simply as persons who produced commodities and exchanged them. Adam Smith constantly confuses the determination of the value of commodities by the labour time contained in them with the determination of their value by the value of labour; he is often inconsistent in the details of his exposition and he mistakes the objective equalisation of unequal quantities of labour forcibly brought about by the social process for the subjective equality of the labours of individuals.* He tries to accomplish the transition from concrete labour to labour which produces exchange value, i.e. the basic form of bourgeois labour, by means of the division of labour. But though it is correct to say that private exchange presupposes division of labour, it is wrong to maintain that division of labour presupposes private exchange. For example, division of labour had reached an exceptionally high degree of development among the Peruvians, although no private

* Adam Smith writes for instance—"Equal quantities of labour, at all times and places, must be of equal value to the labourer. In his ordinary state of health, strength, and spirits; in the ordinary degree of his skill and dexterity, he must always lay down the same portion of his ease, his liberty, and his happiness. The price which he pays is always the same, whatever may be the quantity of goods which he receives in return for his labour. Of these, indeed, that price may sometimes purchase a greater and sometimes a smaller quantity; but it is so merely because their value varies, not that of the labour which purchases them. Labour alone, therefore, never varies in its own value. It is, therefore, the real price of commodities, etc." [Wealth of Nations, Book I, Chapter V.] exchange, no exchange of products in the form of commodities, took place.

David Ricardo, unlike Adam Smith, neatly sets forth the determination of the value of commodities by labour time, and demonstrates that this law governs even those bourgeois relations of production which apparently contradict it most decisively. Ricardo's investigations are concerned exclusively with the magnitude of value, and regarding this he is at least aware that the operation of the law depends on definite historical preconditions. He says that the determination of value by labour time applies to

such commodities only as can be increased to any quantity by industry, and the production of which is dominated by unrestrained competition.*

This in fact means that the full development of the law of value presupposes a society in which large-scale industrial production and free competition obtain, in other words, modern bourgeois society. For the rest, the bourgeois form of labour is regarded by Ricardo as the eternal natural form of social labour. Ricardo's primitive fisherman and primitive hunter are from the outset owners of commodities who exchange their fish and game in proportion to the labour time which is objectified in these exchange values. On this occasion he slips into the anachronism of allowing the primitive fisherman and hunter to calculate the value of their implements in accordance with the annuity tables used on the London Stock Exchange in 1817. Apart from bourgeois society, the only social system with which Ricardo was acquainted seems to have been the "parallelograms of Mr. Owen".⁶⁵ Although encompassed by this bourgeois horizon, Ricardo analyses bourgeois economy, whose deeper layers differ essentially from its surface appearance, with such theoretical acumen that Lord Brougham could say of him:

"MR. Ricardo seemed as if he had dropped from another planet." a

Arguing directly with Ricardo, *Sismondi* not only emphasises the specifically social character of labour which creates exchange value,** but states also that it is a "characteristic feature of our economic progress" to reduce value to *necessary* labour time, to

* David Ricardo, On the Principles of Political Economy, and Taxation, Third Edition, London, 1821, p. 3.

** Sismondi, *Etudes sur l'économie politique*, tome II, Bruxelles, 1838. "Trade has reduced the whole matter to the antithesis of use value and exchange value." P. 162. [Marx quotes in French.]

^a The Parliamentary Debates. New series, Vol. I, London, 1820, p. 685 .-- Ed.

"the relation between the needs of the whole society and the quantity of labour which is sufficient to satisfy these needs".*

Sismondi is no longer preoccupied with Boisguillebert's notion that labour which creates exchange value is distorted by money, but just as Boisguillebert denounced money so does Sismondi denounce large industrial capital. Whereas Ricardo's political economy ruthlessly draws its final conclusion and therewith ends, Sismondi supplements this ending by expressing doubt in political economy itself.

Since the determination of exchange value by labour time has been formulated and expounded in the clearest manner by Ricardo, who gave to classical political economy its final shape, it is quite natural that the arguments raised by economists should be primarily directed against him. If this polemic is stripped of its mainly trivial ** form it can be summarised as follows:

One. Labour itself has exchange value and different types of labour have different exchange values. If one makes exchange value the measure of exchange value, one is caught up in a vicious circle, for the exchange value used as a measure requires in turn a measure. This objection merges into the following problem: given labour time as the intrinsic measure of exchange value, how are wages to be determined on this basis. The theory of wage labour provides the answer to this.

Two. If the exchange value of a product equals the labour time contained in the product, then the exchange value of a working day is equal to the product it yields, in other words, wages must be equal to the product of labour.*** But in fact the opposite is true.

* Ibid., pp. 163-66 et seq.

** It probably assumes the most trivial form in J. B. Say's annotations to the French translation—prepared by Constancio—of Ricardo's work, and the most pedantic and presumptuous in Mr. Macleod's recently published *Theory of Exchange*,⁶⁶ London, 1858.

*** This objection, which was advanced against Ricardo by bourgeois economists, was later taken up by socialists. Assuming that the formula was theoretically sound, they alleged that practice stood in conflict with the theory and demanded that bourgeois society should draw the practical conclusions supposedly arising from its theoretical principles. In this way at least English socialists turned Ricardo's formula of exchange value against political economy. The feat of declaring not only that the basic principle of the old society was to be the principle of the new society, but also that he was the inventor of the formula used by Ricardo to summarise the final result of English classical political economy, was reserved to M. Proudhon. It has been shown that the utopian interpretation of Ricardo's formula was already completely forgotten in England, when M. Proudhon "discovered" it on the other side of the Channel. (Cf. the section on la valeur constituée, in my Misère de la philosophie..., Paris, 1847.)

ŧ

Ergo, this objection amounts to the problem,—how does production on the basis of exchange value solely determined by labour time lead to the result that the exchange value of labour is less than the exchange value of its product? This problem is solved in our analysis of capital.

Three. In accordance with the changing relation of demand and supply, the market price of commodities falls below or rises above their exchange value. The exchange value of commodities is, consequently, determined not by the labour time contained in them, but by the relation of demand and supply. In fact, this strange conclusion only raises the question how on the basis of exchange value a market price differing from this exchange value comes into being, or rather, how the law of exchange value asserts itself only in its antithesis. This problem is solved in the theory of competition.

Four. The last and apparently the decisive objection, unless it is advanced—as commonly happens—in the form of curious examples, is this: if exchange value is nothing but the labour time contained in a commodity, how does it come about that commodities which contain no labour possess exchange value, in other words, how does the exchange value of natural forces arise? This problem is solved in the theory of rent.