KARL MARX FREDERICK ENGELS Collected Works

Volume 34 Marx: 1861-1863

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KARL MARX ECONOMIC WORKS 1861-1864

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Translated by

BEN FOWKES

(For the translators of the passages from the *Theories of Surplus Value* see Preface, p. X.) κ.

Preface

Volume 34 of the *Collected Works* of Marx and Engels contains the conclusion of Marx's Economic Manuscript of 1861-63 (Notebooks XX-XXIII, pp. 1251-1472 of the manuscript). The manuscript as a whole is the second rough draft of *Capital* and makes up volumes 30 to 34 of the present edition. This volume also includes Marx's manuscript "Chapter Six. Results of the Direct Production Process" and other fragments of the Economic Manuscript of 1863-64, the only extant remnants of the third rough draft of Book I of *Capital*. All these manuscripts are presented in accordance with their new publication in the languages of the original in *Karl Marx/Friedrich Engels*. *Gesamtausgabe (MEGA)*. Zweite Abteilung. Bd. 3. Berlin, 1976-1982 and Bd. 4.1. Berlin, 1988.

In the part of the 1861-63 manuscript contained in this volume Marx concludes his analysis of the production process of capital, concentrating on relative surplus value and its connection with absolute surplus value and on the primitive accumulation of capital. He also deals here with problems which he subsequently discussed in Book II of *Capital*, in particular the reproduction and circulation of the total social capital. The closing part of the manuscript consists of excerpts from the works of earlier and contemporary political economists and Marx's commentaries. In "Chapter Six" Marx examines in detail the prerequisites for and results of the direct production process of capital, considering from this angle the commodity, the production of surplus value and the reproduction of the capitalist relations of production.

Obvious slips of the pen in Marx's text have been corrected by the Editors without comment. The proper and geographical names and other words abbreviated by the author are given in full. Defects in the manuscript are indicated in footnotes, places where the text is damaged or illegible are marked by dots. Editorial reconstructions, where they were possible, are given in square brackets.

Foreign words and phrases are given as used by Marx, with the translations supplied in footnotes where necessary. English phrases and individual words occurring in the original are set in small caps. Longer passages and quotations in English are given in asterisks. The passages from English political economists quoted by Marx in French or German are given according to contemporary English editions. In all cases the form of quoting used by Marx is respected. The language in which Marx quotes is indicated unless it is German.

The text and notes to Volume 34 were prepared by Irina Antonova, Mikhail Ternovsky, Yelena Vashchenko and Lyubov Zalunina, and edited by Larisa Miskievich (Russian Independent Institute of Social and National Problems). The Index of Ouoted and Mentioned Literature and the Name Index were compiled by Vardan Azatyan in conjunction with Georgi Volovik. The Subject Index to volumes 30-34 was prepared by Yuri Kharitonov (RIISNP). The bulk of the text in this volume was translated by Ben Fowkes (Lawrence & Wishart). The translation of pp. XX-1291a-1294a, XXI-1300-1301, XXII - 1346-1351, XXII - 1397-1400, XXIII— 1418-1420, XXIII-1433-1434, XXIII-1449-1451 of Marx's Manuscript of 1861-63 was taken from the three-volume edition of his Theories of Surplus Value, issued by Progress Publishers, Moscow. It was made by Emile Burns, Renate Simpson and Jack Cohen and edited by Salo Ryazanskaya. Volume 34 was edited by Svetlana Gerasimenko and Victor Schnittke and prepared for the press by Alla Varavitskaya (Progress Publishing Group Corporation).

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KARL MARX

ECONOMIC WORKS

1861-1864

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ECONOMIC MANUSCRIPT OF 1861-1863 (Conclusion)

A CONTRIBUTION TO THE CRITIQUE OF POLITICAL ECONOMY¹

[I) THE PRODUCTION PROCESS OF CAPITAL]

XXI²

Hume and Massie (INTEREST)

- i) Formal and real subsumption of labour under capital. Transitional forms.
- k) Productivity of capital, productive and unproductive labour.

XXII³

Historical: Petty.

- 4) a) Reconversion of surplus value into capital.
 - β) Original accumulation, so called.
 - γ) The system of colonisation.

XXIII⁴

Works

[3) RELATIVE SURPLUS VALUE

γ) MACHINERY. UTILISATION OF THE FORCES OF NATURE AND OF SCIENCE (STEAM, ELECTRICITY, MECHANICAL AND CHEMICAL AGENCIES). CONCLUSION]⁵

[XX-1251] REPLACEMENT OF LABOUR BY MACHINERY

//P. 138a, Notebook IV.^a The relations mentioned there belong to the section we are coming to now, namely the relation between wages and surplus value.^b However, what was said there, all of which, properly speaking, refers to relative surplus value and therefore presupposes the magnitude of the total working day as a given quantity, needs to be supplemented in two respects:

Machinery lessens the number of workers employed by a given capital. Hence, if on the one hand it raises the rate of surplus value, on the other hand it reduces its amount, because it reduces the number of workers employed simultaneously by a given capital.

Secondly: The increase in productive power, HENCE the fall in the prices of commodities and the devaluation of labour capacity, allows the purchase of more labour capacity with the same capital. Thus not only is the rate of surplus value (quoad the individual worker) increased, but there is also an increase in the number of workers who can be exploited simultaneously using the same capital.⁶ This is true of all the means which increase the productive power of labour (hence also true for machinery).

Surplus value (we are not concerned here with profit) always=surplus labour. The rate of surplus value, i.e. the ratio between the surplus labour of the individual worker and his necessary labour,=the ratio of the total surplus value created by capital to the variable capital. For the variable capital=the wage of

^a See present edition, Vol. 30, pp. 251-52.- Ed.

^b Cf. present edition, Vol. 30, pp. 311-12 and Vol. 33, p. 347.--Ed.

the individual worker multiplied by the number of workers employed at the same time by this capital.

Assuming that the wage of the individual worker is 10, and the number of workers is x, the variable capital (equal to the total amount of wages paid out)=10x. If the surplus value created by the individual worker=2, the surplus value created by x workers=2x. And the ratio $\frac{2x}{10x}$, i.e. the ratio of the total surplus value to the variable capital is the same, 2/10, [as] the rate of surplus value the individual worker creates. 2/10 = 1/5, i.e. the surplus labour time=1/5 of the necessary labour time. It therefore follows that the rate of surplus value can only rise or fall in an inverse ratio to the necessary labour, and that the *rate* of surplus value always=the rate of surplus labour.

But it has been demonstrated in considering absolute surplus value that its amount depends not only on its rate, but on the number of workers employed at the same time.^a Now, however, the development of productive power increases the number of workers who can be employed simultaneously by a variable capital of a given magnitude. If the wage = a, and the number of workers = x, the variable capital = ax. If we assume that ax is a constant magnitude, = v (variable capital), it is clear that the smaller a is, the larger will x be, the number of workers, and the larger a, the smaller x. The number of labour capacities which can be bought with a given variable capital, v, evidently depends on, rises and falls with, the value of those labour capacities. Therefore, in so far as the increase in the productive powers of labour depreciates labour capacity, it increases the number of labour capacities v can buy simultaneously. Thus the same means which raise the rate of relative surplus value or lessen necessary labour time also increase the quantity of surplus value, not only because they raise the rate of exploitation of the individual worker but also because more workers can be exploited at this rate with the same capital, v. So an increase in surplus value takes place, not only because the rate of surplus value rises, but also because the quantity of workers exploited by the same capital v grows. Relative surplus value therefore implies not only a reduction of necessary labour time, but also an increase in the number of workers exploited by the same v. To that extent, a rise in relative surplus value is not simply identical with a fall in the rate of necessary labour time, for both factors of surplus value are simultaneously

^a See present edition, Vol. 30, pp. 179-80, 185-86, 206.- Ed.

affected by the rise in relative surplus value, both the [XX-1252] rate of surplus value and the number of workers exploited by a v of the same value.

This by no means contradicts the law that with the development of the productive forces, hence of capitalist production, the ratio of variable capital, i.e. that laid out in wages, to total capital falls, because its proportion to constant capital falls-and profit must be examined chiefly from this point of view. Nor does it contradict the fact, which emerges in particular when one considers machinery, that the same capital (total capital) reduces the number of workers it employs. Assume that the total capital is 500; let the original ratio v:c (variable to constant)=400:100, hence $\frac{4}{5}v$ and $\frac{1}{5c}$. Let the constant capital rise from 100 to 400 as a result of capitalist development. This development may be accompanied not only by a fall from 400 to 100 in the capital laid out in wages, because the number of workers employed by the capital has undergone a 4fold reduction, but also a fall from 100 to only 50, for the same reasons, in the cost of this number of workers, now reduced to $\frac{1}{4}$ of its former size. The same variable capital of 400 would now set in motion twice the number of workers, and the REMAINING VARIABLE CAPITAL OF 50 now in fact sets in motion-for its aliquot part-twice as great a number of workers as previously. There has been a relative increase in the number of workers set in motion by variable capital, even though there has been a fall in this variable capital and thereby in the absolute number of workers employed.⁷

Absolute surplus value-which presupposes a given level of productivity-can increase the number of workers simultaneously employed and therefore the amount of surplus value, at a given rate, only in so far as there is a growth in capital, more capital is employed altogether; it does contribute to this growth, admittedly, in so far as the accumulation of capital-the reconversion of surplus value into capital-increases with the increase in surplus value, no matter how the latter process can be effectuated. But relative surplus value directly increases the rate of gratis labour, and lessens the absolute wage, thus making it possible to exploit more workers at the same time with the same variable capital at the increased rate of exploitation. It makes it possible to draw in more labour capacities with the same wage payment (also through the introduction of female and child labour), and thus has an impact on the population absolutely (just as, in relative terms, it constantly increases it by making some sort of labour or other continuously redun-DANT), thereby increasing the mass of living labour capacities which

forms the basis for exploitation by capital; the animate material from which surplus value is extracted.//

If the quantity of workers employed is reduced by machinery in *a single* branch, while their wages are at the same time reduced by the cheapening of the commodities which enter into the workers' consumption, there is a simultaneous reduction in wages in all other branches of capitalist production, in which this revolution has not taken place, because one of the elements which go to make up wages has fallen in value. Here the same quantity of labour is employed as before, but using less capital. A part of the capital previously laid out in wages is therefore freed.⁸

The capital thus set free can be invested in the same branches of production, to extend them, or in new branches. And since machinery takes hold, now of one branch, now of another (disregarding here the fact that the use value of the income is increased, hence a greater part of it can be reconverted back into capital), capital is in this manner continuously set free. This is naturally slower to take effect than the displacement of the workers by machinery. On the other hand, the demand of those thrown out of work falls or ceases altogether. Therefore the capitals which in part derived their RETURN from the consumption of these workers are in part depreciated, if they cannot find a foreign market for the part of their product which has been set free in this way. But the variable capital which has now been converted into constant capital, ceases to constitute a demand for labour. Even the labour it originally set in motion (machine workers, etc.) is never as much as the labour it releases, for this part of the capital, e.g. 1,000 laid out in machines, now represents not only the wages of the mechanics, but at the same time the profit of these capitalists, whereas previously it only represented wages (Ricardo^a).⁹

[XX-1253] As an infinite drive for enrichment, capital strives for the infinite increase of the productive forces. On the other hand, every increase in the productive powers of labour—leaving aside the fact that it increases use values for capital—is an increase in the productive power of capital and it is only a productive power of labour in so far as it is a productive power of capital.¹⁰

ACCUMULATION

We have shown *alio* $loco^{b}$ that, in so far as the reproduction process of the total capital is confined to the reproduction of the

^a See present edition, Vol. 32, pp. 177-200.- Ed.

^b In another place.—Ed.

process on the previous scale, the different moments are conditioned by natural laws, and that in fact exchange takes place between the surplus value of the producers of constant capital and the constant capital of the producers of the means of subsistence, etc. We have further seen how a part of this surplus value of all classes is exchanged for the new gold and silver of the producers of the precious metals.¹¹ But to the extent that the reproduction process is a process of *direct* accumulation, i.e. the conversion of surplus value (income) into capital, there is no such mutual dependence. It is possible that a part, whether of the commodities which enter into constant capital or form constant capital, or even of the commodities which enter into variable capital, exchanges definitively for money, whether HOARDED MONEY or new supplies of gold and silver, and that on one side the SURPLUS is fixed to the spot in this money form as latent capital. In this form it is a draft on future labour. As such, it is a matter of indifference whether this exists in the form of tokens of value, debt claims, etc. It may be replaced by any other title. Like the state creditor with his COUPONS, every capitalist possesses a draft on future labour in his newly acquired value, and by appropriating present labour he has already appropriated future labour. The accumulation of capital in the money form is by no means a material accumulation of the material conditions of labour. It is rather an accumulation of property titles to labour.¹²

There is a distinction between absolute and relative surplus value which emerges for variable capital. In the first case, v can only employ *n* workers, e.g. with 100 thalers it can employ 100 workers. The ratio between the value of the variable capital and the number of workers simultaneously employed is constant here. Admittedly, if the working day is prolonged in absolute terms, 100 workers who work 16 hours (their product=1,600 hours of labour) replace 133^{1}_{3} workers who work only 12 hours (for $12 \times 133^{1}_{3} = 1,600$ hours of labour). Or, in other words, the same aim is achieved by prolonging labour time by 4 hours as if $33^{1}/_{3}$ more workers working the old day of 12 hours were to be added. Leaving aside the fact that the instruments of labour, factory buildings, etc., are saved for these $33^{1}/_{3}$ workers, a saving which occurs even if the 4 surplus labour hours are paid in the same proportion as the 12, hence are not appropriated by the capitalist ALTOGETHER gratis. This represents a positive saving in the constant capital laid out, which does not need to grow here in the same measure as the quantity of labour exploited.

If a part of the constant capital (instrument of labour, buildings,

etc.) is worn out more rapidly, firstly this does not happen in the same proportion (neither in the case of the instrument, nor, even less, in the case of the buildings) as the increase in the productive USE of these conditions of labour. Secondly, no component of surplus value is thereby added to the commodities produced, SINCE the proportion of these conditions of labour to the labour itself remains constant in the worst case, but IN REALITY falls. Thirdly, the more rapid turnover, which AT ONCE replaces greater capital outlays, is of direct profit to the capitalist. The individual capitalist never has more than a certain amount of capital at his disposal. Every acceleration of turnover, which permits him to exploit the same quantities of labour with a lessened capital outlay-since the rapidity of circulation lessens the size of the capital that needs to be laid out and allows the same operations to be carried out with a smaller amount of [XX-1254] capital-reduces the production costs of the exploitation and increases his capacity of disposition over his capital. All these considerations, however, belong to the examination of profit-where the ratio of the surplus value to the total amount of capital laid out is discussed.¹³

But as far as the variable capital is concerned, the capitalist must pay as much for 100 workers as for 133¹/₈, if he pays the 4 hours of OVERTIME at the same rate as the previous 12 hours; or if the 4 hours are divided into necessary and surplus labour in the same proportion as the 12 were. In this case no alteration in the variable capital would take place. As against this, if, once the working day is raised from 12 to 16 hours, more SURPLUS labour in general is added for nothing, say for the sake of simplicity the whole of the 4 hours, a variable capital of $33^{1}/_{3}$ thalers is of course saved. namely the amount that needed to be laid out to produce the same magnitude of value under the 12-hour working day. Nevertheless, the 100 workers can only be employed for 100 thalers. The variable capital laid out for them remains constant in relation to the number employed by it, although it has fallen relatively in relation to the quantity of surplus labour set in motion by it, and therefore in relation to the increased number of workers who would have had to be paid under other circumstances.

The ratio between the value of the variable capital and the number of workers employed, however, changes as a result of the increase in the productive forces and the relative devaluation of labour capacity brought about by this. Now perhaps only 70 thalers are needed to employ the same 100 workers. This sets free a part of the variable capital,=30 thalers, quite apart from the increase in relative surerus labour. The same number of workers produce more commodities, and provide a greater amount of surplus value. However, the rate of surplus value grows here because wages fall, hence there is also a decline in the *value* of the variable capital in proportion to the number of workers set in motion by it. It can now be seen that the *ratio of variable to constant capital*, its rise or fall, is subject to different variations from those affecting the ratio between the *value of the variable capital* and the *number* of labour capacities it can buy.

Since the surplus value a given variable capital produces is doubly determined, by the rate of surplus and by the number of workers employed at the same time, it can be seen in considering relative surplus value how the development of productive power and therefore the development of *real capitalist production* affects both these moments.¹⁴

With the division of labour and simple cooperation, it appears more clearly that the number of workers remains the same or even increases, but that they are set in motion, are represented, by a variable capital of relatively smaller value; with machinery the *number* of workers employed is reduced, and the *value* of the *variable capital* falls at the same time in proportion to the *number* of workers, so that if e.g. there are 50 workers instead of 100, the variable capital which sets these 50 in motion is smaller than the variable capital which set $\frac{100}{2}$ or 50 in motion on the old scale.

Lauderdale makes the point against the saving of labour by machinery that this is not the characteristic thing, because labour performs operations by means of machinery which it could not do without it.^a The latter, however, concerns only the use value of the machine and has nothing to do with the exchange value of the commodities produced by it, hence it has nothing to do with the surplus value either.

The greater productivity of labour expresses itself in the fact that capital has to buy less necessary labour to produce *the same* value and a *greater* quantity of use values. The growth of the productive forces therefore implies that, if *the total value of capital remains the same*, or for a capital of a *given* magnitude, the constant part of it grows continuously relative to the variable, i.e. to that part of the capital which is laid out in living labour, the part which constitutes the wage fund. This means at the same time that a smaller amount of labour sets in motion a greater amount of capital.¹⁵

^a [J. M.] Lauderdale, Recherches sur la nature et l'origine de la richesse publique..., Paris, 1808, pp. 119-20. Cf. also present edition, Vol. 31, pp. 162-63.-Ed.

With absolute surplus value, the raw material must increase if the labour time is prolonged. But the quantity of labour and the quantity of constant capital (in so far as the latter grows at all, hence only the part of it which is formed by raw material) remain in a *constant* ratio, and grow [XX-1255] in a constant ratio. (Although the quantity of *paid* labour does not grow in the same ratio as the constant capital does. But the *number of workers* remains the same.) If the limit^a of the working day is given here, constant and variable capital remain in *the same* ratio.

Although in considering *surplus value* we merely have to consider the ratio of the surplus labour to the variable capital, hence not the ratio of the surplus value to the total capital, the result that emerges is the same as is already to be noted in considering relative surplus value, namely that the *development of the productive forces*, which is the condition for the increase of relative surplus value, presupposes or is accompanied by two things:

1) Concentration of capital, i.e. an absolute increase in the amounts of value which must be present in the hands of the individual capitalists; for work on a large scale is a presupposition. Hence an increase in the total amounts of capital which represent the property of the individual capitalists. These amounts of capital must therefore be concentrated in a few hands.

2) While the absolute *amounts of capital* in the hands of the individual capitalist increase, take on *social* dimensions, there is at the same time a change in the composition of the capitals. The variable capital declines relatively in proportion to the constant capital, and forms a progressively smaller component of the total capital.

//The question is whether this should not be placed together in the following section, δ), where we derive the results from the characteristics of capitalist production.//¹⁶

If there is an increase in the total value of the capital which enters into the production process, the wage fund, the variable capital, must decline relatively, in comparison with the previous ratio, in which the productive power of labour remained the same. If the ratio changes in such a way that, out of 100, only $^{1}/_{4}$ instead of $^{1}/_{2}$ is laid out in labour, hence 75c+25v, the capital would have to increase from 100 to 200 in order to employ the same number of workers as before. Then [we should have] 150c+50v.

^a In the manuscript: "d. Gze", which can mean both "die Grenze" (the limit) and "das Ganze" (the total length).— Ed.

The 2 moments of surplus value are its rate, the surplus time the individual worker works, and the number of workers employed simultaneously, hence from the point of view of the total capital the surplus labour of the individual worker multiplied by the number of simultaneous workers, or by the *working population*. If the latter is given, the surplus value can only grow through a relative increase in surplus labour, and an absolute reduction in necessary labour time. If the rate is given, it can only grow through a growth in the population.

The ratio between the *rate of surplus value* and the *number* of simultaneously exploited workers receives a characteristic modification with the development of the productive forces, particularly through machinery—in short with the real development of capitalist production.

The ratio of the part of the individual working day (if its limit has been reached) which constitutes *surplus labour* to the part which consists of necessary labour time is modified by the development of the productive forces, so that the necessary labour is restricted to an ever smaller fractional part. But the same is then true for the population. A working population OF, SAY, 6 millions can be considered as one working day of 6×12 , i.e. 72 million hours of labour; so that *the same* laws are applicable here. But this first develops with the employment of machinery.

Capital can produce surplus labour only by positing necessary labour, i.e. by entering into exchange with the worker. It is therefore the tendency of capital to produce as much labour as possible, just as it is its tendency to reduce necessary labour to a minimum. It is therefore as much the tendency of capital to enlarge the working population as it is to posit a part of that population as a surplus population,=a population which is initially useless, until such time as capital can utilise it. (Surplus population and surplus capital.) It is as much the tendency of capital to render human labour superfluous, as to drive it on without limit. It must increase the number of simultaneous working days in order to increase the surplus; but equally, it must transcend it as necessary labour in order to posit it as surplus labour.¹⁷ And indeed we see that the reduction in necessary labour presupposes cooperation, hence also the materials of labour, on a mass scale, and that the population is thus itself a means of positing surplus population, just as on the other hand-at a given rate of surplus labour-it sets a limit to the amount of labour that can be exploited simultaneously.

With respect to the single working day, the process is as follows:

1) to lengthen it to the limit of physical possibility; 2) to shorten more and more the necessary part of it.

The VERY process by which necessary labour is reduced makes it possible to set to work new necessary labour; i.e. the *production of workers* becomes cheaper, more workers can be produced in the same time in the measure to which the proportion of necessary labour time becomes smaller, or the time required for the *production of the living labour capacities* is reduced. This irrespective of the fact that the increase in population increases the productive power of labour, by making possible division of labour, cooperation, etc. [XX-1254a]^a Increase in population is a *natural power* of labour for which nothing is paid.

On the other hand, it is just as much the tendency of capital-as previously in the case of the single working day-now to reduce to a minimum the many simultaneous working days (which, so far as value alone is concerned, can be regarded as one single working day), i.e. to posit as many of them as possible as not necessary. As previously in the case of the single working day it was the tendency of capital to reduce the hours of necessary labour, so now it tends to reduce the necessary working days in relation to the total of objectified labour time. If 6 are necessary to produce 12 hours of surplus labour, capital works towards the reduction of these 6 to 4. $6 \times 2 = 4 \times 3$. Thus 4 workers who work 3 surplus [hours] produce as much surplus value as 6 workers each of whom only works 2 surplus hours. Or 6 working days=a working day of 72 hours. The surplus labour here=12 hours, hence the necessary labour=60 hours. If capital succeeds in reducing necessary labour time by 24 hours (i.e. by two working days or 2 workers), the total working day remains 60-24+12=36+12=48, of which 12 are surplus [hours]. On the other hand, the newly created surplus capital can be valorised as such only by being exchanged for living labour. Hence it is just as much the tendency of capital constantly to increase the working population as it is constantly to diminish the necessary part of it, i.e. posit a part of it as surplus population, overpopulation. It is a reserve. Au fond^b this is only the application of what has been developed in the case of the single working day. All the contradictions expressed, but not understood, in modern population theory¹⁸ are, therefore, already latent here.¹⁹

^a The pages 1254a and 1255a (numbered by Marx) are between pages 1255 and 1256.— Ed.

^b At bottom.—Ed.

Ricardo, in speaking of machinery, correctly states that capital *makes* a *REDUNDANT* population.^a It has the tendency both to increase the population absolutely and to posit an ever-increasing part of the latter as surplus population.

The division of labour and the combination of labour within the production process is a machinery which costs the capitalist nothing. He pays for the individual labour capacities, not for their combination, not for the social power of labour. Another productive force which costs him nothing is SCIENTIFIC POWER.^b The growth of the population is a further productive force which costs nothing. But it is only through the possession of capital—in particular in its form as machinery—that he can appropriate for himself these free productive forces; the latent wealth and powers of nature just as much as all the social powers of labour which develop with the growth of the population and the historical development of society.

The reduction of necessary labour relative to surplus labour is expressed, if we consider a single working day, in the appropriation of a larger part of the working day by capital. Here the living labour which is employed remains the same. Let us assume that 3 workers out of 6 are made superfluous through the employment of machinery. If the 6 workers themselves possessed the machinery, they would now work for only half a day each (presupposing, that is, that this proportion applies generally, so that a use value of the value of 6 hours performs the same service as previously the use value of the value of 12 hours did). Now 3 continue to work for the whole day each day of the week.

Assume that necessary labour previously amounted to 10 hours and surplus labour to 2 hours daily; in this case the surplus labour performed by the 6 workers amounted to 2×6 hours=1 working day, and over the week to the weekly surplus labour of a single worker. Each worked one day a week gratis. It would be the same as if 5 workers had worked only for themselves and the 6th had worked gratis for the whole of the week. One worker in 6 costs the capitalist nothing. The 5 workers represent *necessary labour*. If their number could be reduced to 4, and the one worker worked for nothing as before, relative surplus value would have grown. Previously, its ratio was 1:6 and it is now 1:5. If each one, instead of working 10 hours of necessary labour time, only works $9^3/_5$, hence surplus [labour] is $2^2/_5$ instead of 2, $2^2/_5 \times 5 = 12$ hours of

^a See present edition, Vol. 32, pp. 195-200.-Ed.

^b See this volume, p. 32 ff.-Ed.

labour=1 whole working day, and it would be the same as if 1 of the 5 workers represented the whole of the surplus labour, and the other 4 worked the necessary labour time for themselves and for the 5th worker. The variable capital would have fallen from 6x(x=the wage) to 5x. 6x was=5 weekdays, and 5x is now=4 weekdays, but provides the same surplus value. Thus the rate of surplus value has grown. The same quantity of surplus labour is extracted with less variable capital.

If it is possible for this capital to employ the 6 workers at the *new* rate, surplus value will increase not merely relatively to the variable capital laid out, but absolutely as well. For now each of 6 workers works $2^2/_5$ hours a day gratis. This= $(2+^2/_5)6=^{72}/_5=14^2/_5$. Previously it was only=12. $2^2/_5$ performed by 6 is of course more than $2^2/_5$ performed by 5.²⁰

[XX-1255a] Given this new rate, capital again has an interest in employing as many workers as possible at this rate, partly in consequence of the law, developed in the case of absolute surplus value, that if the rate of surplus value is given, its amount can only grow in proportion to the number of workers employed simultaneously^a; partly because the advantages deriving from the combination and division of labour grow as the number of workers employed simultaneously grows.

The tendency of capital is, or COURSE, to link absolute SURPLUS value with relative; hence the greatest possible extension of the working day and the maximum number of simultaneous workers, accompanied by the reduction of necessary labour time to the minimum and therefore a restriction of the necessary number of workers to the minimum. The contradictions involved here appear as a process in which mutually contradictory conditions alternate in time. One necessary consequence is the greatest possible diversification of the use value of labour—or of the branches of production so that capital's production strives on the one hand for the development and intensification of productive power and on the other hand for a limitless variety of branches of labour, i.e. that production should have the maximum of all-round content, subjecting to itself all aspects of nature.²¹

a) D'abord,^b any concern with profit is to be left aside here. Machinery can always step into the place of workers, whether they worked as independent handicraftsmen or in manufacture based on the division of labour, as soon as the *price of the commodity* is

^a See present edition, Vol. 30, pp. 179-80, 185-86, 206.- Ed.

^b First of all.-- Ed.

thereby lessened, and this always takes place once the part of the value which falls to the individual commodity as depreciation of the machinery is smaller than the value added to the commodity by the labour replaced by the machine. Because as the machinery replaces labour, it goes without saying that less living labour enters into the individual commodity, or a smaller amount of living labour produces the same quantity of commodities as before, or a greater quantity. Hence the price of the individual commodity falls under these circumstances, SINCE it=the value of the smaller, the greater the quantity of use values a given quantity of living labour produces. It is not necessary to speak here of the value of the raw material, because it is constant for both kinds of production, the old and the new. Raw material enters into both as a given value.

But the total amount of more cheaply produced commodities is not greater than the total amount of more expensively produced commodities. I.e., if the same labour time (objectified+living labour) produces twice as many commodities as before, this double quantity of commodities is now worth only the same amount as the half produced before. In itself, the cheapening of the commodity brought about by machinery creates no surplus value. The surplus value remains, as before, equal to the surplus labour, the excess [of the total labour performed] over the necessary labour. But since the number of workers a capital of a given magnitude sets in motion has become smaller-owing to the employment of machinery-the total quantity of living labour set in motion by that capital has also become smaller. So that for the surplus value to remain the same it must increase relatively, i.e. a greater part than previously of the now smaller total quantity of labour must be surplus labour, or, and this is the same thing, the smaller number of workers must provide the same quantity of surplus labour as the greater number did previously. The surplus value would then stay the same, but would even so have grown relatively, SINCE wages, and therefore the variable capital, would have fallen. For to say that a greater proportion of the total quantity of labour is surplus labour means nothing more than that the [proportion of] necessary labour, labour necessary for the reproduction of labour capacity, has fallen. Hinc^a the amount of wages [has fallen too]. Despite this relative rise in surplus value and fall in wages, the capitalist would have no more surplus value TO POCKET THAN

^a Hence.— Ed.

BEFORE, because the rate of surplus value would only have risen in the same proportion as the number of workers has fallen, hence the total amount of surplus value,=the result of multiplying the number of workers by the rate of surplus value, would have remained *the same*. Therefore for the employment of machinery to bring the capitalist more surplus value for a given capital the surplus value would have to grow absolutely, i.e. the reduced number of workers would have to do not only just as much surplus labour as the greater number did before, but more surplus labour than they did.

Now, however—leaving aside the fact that skilled labour is reduced to simple labour—the wage only falls in so far as the cheaper commodities produced by machinery enter into the worker's consumption, thereby cheapening the reproduction of labour capacity and depreciating its value, so that it is represented by a wage of lesser [XX-1256] value.

It is clear, firstly, that *this* reduction of wages by machinery is not simultaneous with the latter's introduction, but only occurs gradually; however, once the fall in the value of the commodity produced by the machinery has become general, surplus value rises, not just in the branch where machinery has been introduced, but in *all* branches of production, SINCE ONE ELEMENT of the VALUE of labour capacity has undergone a general fall. Indeed, surplus value rises more in branches where machinery has not been introduced, for those branches employ the same number of workers as before, but pay less for them. This cannot therefore be a motive for the branch of production which is introducing machinery.

Secondly, machinery only cheapens the particular product of a particular branch of production; this product only enters into the value of labour capacity or the consumption of the worker as a particular ITEM, and only reduces that value in the proportion to which it forms an element in the worker's means of subsistence. The DEPRECIATION of labour capacity which results from this—or the surplus value which results from this—therefore stands in no relation to the proportion to which the machinery has increased the productive power of labour or reduced the number of workers necessary for the production of a given quantity of use values.

Thirdly, however, it is clear that the surplus labour provided by a smaller number of workers as a result of the introduction of machinery—hence in the branches of production where machinery has been introduced—can only grow absolutely up to a certain limit, or even only be kept equal, within certain limits, to the surplus labour provided by a greater number of workers before the introduction of machinery. E.g. if the working day=12 hours, the machine replaces 24 workers by 2, and the surplus labour previously amounted to 1 hour, the quantity of surplus labour provided by the 24=24 hours or 2 working days, hence as large as the total amount of labour provided by the 2 workers, taking necessary and surplus labour together. The greater the proportion in which the machinery reduces the number of workers set in motion by a given capital, the more impossible does it become for the number of workers remaining to provide a greater amount of surplus labour than, or an equal amount to, that provided by the workers who have been displaced, however much the *relative* surplus labour time they work may grow.

But the value of a commodity is determined by the labour time necessary to produce it under the conditions of production prevailing in general. The capitalists who are first to introduce machinery into a particular branch of production produce the commodity with the expenditure of less labour time than the time socially necessary. The individual value of their commodity therefore stands below its social value. This therefore enables them until machinery has taken over generally in that branch of production—to sell the commodity above its individual value, although they are selling it below its social value. Or the labour of their workers appears so FAR as higher labour, standing above average labour, and its product therefore has a higher value. Thus, for the capitalist who introduces machinery, a smaller number of workers in fact produce a higher surplus value than was produced by the larger number of workers.

Let us assume that 2 workers have displaced 12. The 2 produce as much as the 12 did. Each of the 12 had to work 1 hour surplus, hence 12 hours altogether. If the capitalist now sells his product at 24, the old total of labour time (22 of which are necessary labour and 2 surplus labour),+10 hours, the whole of the surplus labour of the 10 who have been displaced, the part of the value of the product which corresponds to the raw material remains the same. Let the depreciation of the machinery which enters into the product (from which one must further deduct in the comparison the depreciation of the old handicraft tools) amount annually to $^{1}/_{10}$ of the machinery which displaced the 10 workers.²² The total amount of the previous product cost 12×12 hours=144 hours+the raw material+the depreciation of the old handicraft tools. The total amount of product produced by machinery=24 hours+10 hours+ $^{120}/_{10}=12=46$ hours. The price of a single commodity has therefore fallen greatly. The raw material can be left out of account on both sides. The capitalist therefore extracts a surplus value of 12 hours out of the 24 hours.²³ Or each of the 2 workers provides for him as much surplus as 6 did previously. It is the same as if he had reduced necessary labour time to 6 hours and bought the whole working day with the *value* of the product of half the working day.

On the other hand, there is no doubt that the reduction in the number of workers set in motion with a given capital, and therefore in one of the factors which constitute surplus value, a reduction resulting from the introduction of machinery, gives rise in part to the tendency, which is precisely a feature of the mechanical workshop, to prolong absolute labour time, hence to have the 2 workers work e.g. 16 or 17 hours, when they previously only worked 12. This tendency receives all possible FACILITIES from the character of machinery, and, apart from the motive indicated, it is accompanied by yet further motives, which will be developed later (in connection with profit and as determined by the ratio between variable and constant capital).

[XX-1257] Once machinery has been introduced generally into the branch of production, thereby obliterating the difference between the individual and the social value of the commodity produced by it, there is naturally an increase in this tendency to expand the amount of surplus value—lessened by the reduction in the number of workers—by *absolutely lengthening* the working day, and thus increasing the absolute quantity of labour extracted from this smaller number of workers.

Once barriers have been put up against this tendency and the normal working day has been established, the tendency is to increase the *intensity* of labour and thus to valorise it as standing above simple labour. This point has already been developed.^a

In so far as machinery brings about a direct reduction of wages for the workers employed by it, by e.g. using the demand of those rendered unemployed to force down the wages of those in employment, it is not part of our task to deal with this case. It belongs to the theory of wages.²⁴ In our investigation we proceed from the assumption that the *labour capacity* is paid *at its value*, hence wages are only reduced by the DEPRECIATION of that labour capacity, or, what is the same thing, by the cheapening of the means of subsistence entering into the workers' consumption. Here, in contrast, it is not a matter of a reduction in the *value* of the AVERAGE

^a See present edition, Vol. 30, pp. 335-39, and Vol. 33, pp. 384-86.-Ed.

wage, but of a reduction below its previous AVERAGE (expressed quantitatively, in use values), of a reduction in the AVERAGE itself or a fall in the price of labour below its value.

But the following is indeed relevant here:

Firstly: The fact that owing to the direct exploitation of the labour of women and children, who must earn their wages themselves, so that a greater amount of labour from the whole of the worker's family falls to the share of capital, firstly: there is an increase in the total amount of exploitable labour a given population offers to capital, hence also in the amount of surplus labour extractable from this working population; secondly: the labour capacity of the adult worker is depreciated. Previously the worker's wage had to suffice to maintain himself and his family. The wife worked for their house, not for the capitalist, and the children only began to earn the equivalent for their consumption at an advanced age. The wage of the adult père de famille had to suffice not only to maintain them without labour on their part, but also to replace the cost of developing their labour capacity, which is reduced almost to 0 by machinery.

Now, in contrast, women and children not only reproduce an equivalent of their consumption but at the same time [produce] surplus value. Thus the whole family must provide a greater amount of labour, necessary+surplus labour, must supply more surplus labour in order to squeeze out the same AVERAGE wage for the whole family.

Secondly: In so far as machinery replaces the skilled independent handicraftsman, replacing equally the specialisation developed through the division of labour with simple labour, differentiated at most by distinctions of age and sex, it reduces all labour capacities to simple labour capacities and all labour to simple labour, whereby the total amount of labour capacities is depreciated.

All this refers to the workers employed by machinery. We shall come back later to the workers who have to compete with the new machine workers or those working with improved machinery.^a

 β) We now have two further questions to investigate. Firstly, how far the effects of machinery differ from those of the division of labour and simple cooperation, and secondly the effects of machinery on those thrown out of work, displaced by it.

It is characteristic of all *social forms* and combinations of labour developed within capitalist production that they curtail the time necessary for the production of commodities, hence also lessen the

^a See this volume, pp. 28-29.-Ed.

number of workers required to produce a given quantity of commodities (and similarly surplus value). Yet it is only in machinery, and in the mechanical workshop based on the application of the new system of developed machinery, that the replacement of workers by a part of constant capital (by the part of the product of labour which again becomes a means of labour) exists; in general, only here does the rendering of the workers superfluous emerge as an explicit and conscious tendency and a tendency acting on a large scale. Past labour appears here as a means of replacing living labour or lessening the number of workers. This reduction in human labour appears here as a capitalist speculation, as a means of increasing surplus value.

(This can in fact only take place to the extent that the commodities produced by machinery enter as means of subsistence into the consumption of the worker, or form reproductive elements of labour capacity. Nevertheless, in so far as the *individual value* of the commodities produced by machinery is initially, before the general introduction of machinery, [XX-1258] different from their social value, and the individual capitalist pockets part of this difference, it is a *general* tendency of capitalist production to replace human labour by machinery in all branches of production.)

It is also with the coming of machinery that the worker first directly fights against the productive power developed by capital, seeing in it a principle antagonistic to him personally, to living labour. The destruction of machinery and the resistance in general on the part of the workers to the introduction of machinery is the first declaration of war against the mode of production and the means of production developed by capitalist production. Nothing of this kind takes place with simple cooperation and the division of labour. On the contrary. The division of labour within manufacture in a certain manner reproduces the division of labour between the different crafts. The only antagonism we find here is the prohibition, on the part of the guild and the medieval organisation of labour, on the employment by a single master of more than a maximum of workers, and the complete ban on their employment by a mere merchant, who is not a master. This antagonism is *instinctively* directed against the general foundation on which alone the transition from the handicraft-based to the capitalist mode of production can take place, namely the cooperation of many workers under a single master, and against production on a mass scale, although the social powers of labour which this mass production develops, and the DEPRECIATION or even

replacement of living labour by the product of past labour, could not here as yet be present to consciousness.

The division of labour and simple cooperation never rest *directly* upon replacing labour or rendering workers superfluous, since their basis is on the one hand the CONGLOMERATION of workers, on the other hand the establishment of a living machinery or system of machines by means of these conglomerated workers. Admittedly, labour is rendered *relatively* superfluous by these methods. E.g. when a manufactory based on the division of labour, with 30 workers, produces x times as many locks as 30 independent locksmiths could produce, not only are the independent locksmiths driven out of business when they come into competition with the manufactory, but the growth in the production of locks no longer presupposes, as it did previously, a proportionate growth in the number of locksmiths. This appears more as a transformation of guild masters and their journeymen into capitalists and wage labourers than as a displacement of the wage labourers themselves by the application of capital and scientific knowledge. The latter form is the less likely to be seen in that manufactories appear only sporadically, in so far as they appear before the invention of machinery; they by no means seize hold of all branches, and they coincide with the initial development of industrial labour on a large scale and the requirements based on this. The later manufactories, which go hand in hand with machinery, have it as a presupposition, even if they are only able to employ it partially as yet. They have as a presupposition the surplus population formed by machinery and constantly renewed by it.

Adam Smith could therefore still view the division of labour in manufacture and the increase in the number of workers as identical expressions. (See the one quotation.^a)

Here the main form always remains—the relative number of workers (because the quantity of labour) required to produce a given amount of the commodity is reduced, or the same number produce more (hence also the demand for labour for the expansion of production falls relatively), but at the same time more workers must be employed in order to bring about this relative increase in productive power. The tangible, visible form in which this appears here is a relative reduction of the necessary labour time, not a reduction in the absolute amount of labour employed; because the living worker, and the number of workers simultaneously employed, always remains the basis here. The more so as the emergence of

^a See present edition, Vol. 31, pp. 185-86.- Ed.

manufacture falls in a period during which needs, the amount of commodities being exchanged, and foreign trade (in fact a *relative world market*) suddenly underwent an immense expansion. We therefore only find manufacture in conflict with handicraft production, by no means with *wage labour* itself, which (in the towns) first assumes an existence on a broad scale with this mode of production.

The necessary labour time is changed, but only because of the growth in the number of workers employed simultaneously, and in general because industrial labour as wage labour is separated from handicraft and rural patriarchal production. But the basis of this development of productive power is always the worker and the extension of his specific kind of skill. The situation is admittedly different in *large-scale agriculture*, which develops simultaneously with manufacture. From the outset this type of agriculture operates in the manner of machinery, but in fact only because here, both in the conversion of arable land into pasture and in the employment of better implements and horses, past labour, as with machinery, steps forth as a means of replacing or lessening *living labour*.

[XX-1259] As regards machinery, however:

Where *new branches of industry* are founded on machinery, one cannot of course speak of the replacement of workers by machinery. But this CASE does not in general arise until machinery is already developed; in an advanced epoch of the mode of production based on it, and even here only to an infinitesimally small extent, whether compared with commodities where human labour is displaced by machinery, or commodities which replace those produced previously by hand labour alone.

The first thing is always the application of machinery to branches where the work was previously carried on as a handicraft or manufacture. With this the machine steps forth as a revolution in the mode of production altogether, emerging from the capitalist mode of production. The purpose, once the mechanical workshop has been set up, is to make continuous improvements in the machinery, which will either subordinate to the machine system sections of the workshop not yet subordinated to it, or reduce the number of workers employed, or put the labour of women and children in place of that of adult male workers, or, finally, increase the productive power of the same number of workers to a greater extent than in manufacture (which is therefore directly felt by the workers) thereby lessening the relative number of workers required for the production of a given quantity of commodities. The formula with machinery is not the relative shortening of the single working day—the shortening of its necessary part—but the reduction of the number of workers, i.e. of the working day which is composed of many simultaneous working days put together—the reduction of its necessary part; i.e. the aim is to throw out, to extinguish, a certain number of workers, as being superfluous to the production of surplus labour; leaving aside the annihilation of the specialisation developed through the division of labour and the resultant DEPRECIATION of labour capacity. Past labour—and the social circulation of labour—is consciously treated here as a means of rendering living labour superfluous. In the other form, necessary labour time is the basis on which surplus labour is developed. Here, inversely, what is calculated is how a given quantity of surplus labour can be obtained through the possession of a given quantity of necessary labour.

Here the antithesis between capital and wage labour develops into a complete contradiction, in that capital appears as a means, not only of depreciating living labour capacity, but of making it *superfluous*; completely superfluous for particular processes, but on the whole as a means of *reducing it to the smallest possible number*. Necessary labour is directly posited here as superfluous *overpopulation*—in so far as it is not required for the production of surplus labour.

We have already explained ^a how in this way capital—against its will—in fact lessens the amount of surplus labour a given capital can produce. Hence in turn the contrary tendency to cause the relatively small number of workers actually employed by machinery to do as much absolute surplus labour as possible, i.e. to extend the absolute working day.

The political economists of the period of large-scale industry therefore attack the erroneous view, which still prevailed in the period of manufacture, that it was in the interest of the state—i.e. here the capitalist class—to employ the largest possible *number of workers*. The task appears to be the opposite one, to reduce as far as possible the number of workers required for the production of surplus labour and to MAKE POPULATION REDUNDANT.²⁵

 γ) What this amounts to for the worker is not only the annihilation of his special skill and the DEPRECIATION of his labour capacity, but the annihilation, for a constantly fluctuating section of workers, of their only commodity—*labour capacity*—which is posited as superfluous by machinery, whether because part of the

^a See present edition, Vol. 28, pp. 259-66.- Ed.

work is entirely taken over by the machinery, or because the number of workers assisting the machinery is very much reduced and the workers belonging to the previous mode of production and competing with the machinery are ruined. The *labour time necessary* for the production of the commodity *for them* as individuals is no longer the labour time socially necessary. Their labour of 16 to 18 hours now only has the [XX-1260] value of the 6 or 8 hours' labour required with machinery. Confronted with a labour time prolonged beyond all normal limits and with inferior remuneration—since the value of their labour is regulated by the value of the commodities produced with machinery—they then take up the struggle against machinery until they finally go under. (See the example with the *weavers* in the supplementary notebook.²⁶)

If on the one hand machinery has the tendency constantly to throw workers out, whether from the mechanical workshop itself, or from the handicraft enterprise, on the other hand it has the tendency constantly to attract them, since once a particular stage of development of productive power is given, surplus value can only be increased by increasing the number of workers employed at the same time. This attraction and repulsion is the characteristic feature of machinery, hence the constant fluctuation in the worker's existence.

It is also demonstrated in *STRIKES* that machinery is invented and employed in direct opposition to the claims of living labour, and that it appears as a means of defeating and breaking them. (See *Ricardo* on the constant antagonism between machinery and living labour.²⁷)

Here, therefore, we have, in a concentrated expression, the alienated form which the objective conditions of labour—past labour—assume against living labour; here we have it as a direct antagonism, in that past labour, hence the general social powers of labour, including natural forces and scientific knowledge, appear directly as weapons, used partly to throw the worker onto the streets, to posit him as a *surplus object*, partly to break down his special skill and the claims based on the latter, partly to subject him to the thoroughly organised despotism of the factory system and the military discipline of capital.

It is in this form, therefore, that the social conditions of labour, which emerge from the social productive power of labour and are posited by labour itself, appear most emphatically as forces not only alien to the worker, belonging to *capital*, but also directed in the interests of the capitalist in a hostile and overwhelming fashion
against the individual worker. We have seen at the same time how the capitalist mode of production not only changes the labour process formally, but radically remoulds all its social and technological conditions²⁸; and how capital here no longer appears as material conditions of labour—raw material and means of labour—not belonging to the worker, but as the quintessence of the social forces and forms of the individual worker's common labour confronting him.

Here too past labour—in the automaton and the machinery moved by it—steps forth as acting apparently in independence of [living] labour, it subordinates labour instead of being subordinate to it, it is the iron man confronting the man of flesh and blood.²⁹ The subsumption of his labour under capital—the absorption of his labour by capital—which lies in the nature of capitalist production, appears here as a technological fact. The *keystone of the arch* is complete. Dead labour has been endowed with movement, and living labour only continues to be present as one of dead labour's conscious organs. The *living connection* of the whole workshop no longer lies here in cooperation; instead, the system of machinery forms a unity, set in motion by the PRIME MOTOR and comprising the whole workshop, to which the living workshop is subordinated, in so far as it consists of workers. Their *unity* has thus taken on a form which is tangibly autonomous and independent of them.

Here we should further cite, first, the relevant passages from Ure, etc., and, second, some comments on scientific knowledge and the forces of nature.

The workshop based on machinery constantly repels workers as necessary and, on the other hand, attracts those who have been repelled, to perform functions set by the machine itself. If e.g. 40 out of 50 workers have been dislodged, there is nothing at all to prevent 40 workers from being brought back on the basis of the new level of production. A more detailed discussion of this point does not belong here, however, since it concerns relations between variable and constant capital. The peculiar obsession of the political economists with demonstrating that in the long run large-scale industry based on the employment of machinery always re-absorbs the REDUNDANT POPULATION is laughable. First they want to prove that machinery is good because it saves labour, and then it is once again good because it doesn't save any labour, compensating for its replacement of manual labour at one point by making manual labour necessary at another point. [XX-1261] For it is particularly the subsidiary labour, not performed by machinery but made necessary as a result of machinery, that bourgeois political economy points to as a consolation for the worker. The consolation therefore consists in the fact that machinery only apparently does away with DRUDGERY, but in fact creates new forms of it alongside the old. Or, as far as concerns the workers employed in the mechanical workshop itself, that in spite of the machinery-and in spite of the fact that the toil of the individual worker is increased by machinery-the number of those condemned to this DRUDGERY is itself increased. Incidentally, this is not the place to discuss this question in more detail, since it presupposes an examination of the real movement of capital which is not yet possible here. Nevertheless, the examples I have adduced so far make it possible at least to illustrate the effects of machinery in both directions. This is just as little the place to undertake any further demonstration of the way in which in agriculture the predominant tendency of machinery must be to make the population redundant not only temporarily but absolutely.

With machinery—and the mechanical workshop based on it—the domination of past labour over living labour assumes not only a social validity—expressed in the relation of capitalist and worker—but so to speak a *technological* validity.

One might ask how it is possible at all for the application of machinery-leaving aside a setting free of capital and labourdirectly to make possible new and increased labour, SINCE all labour, from start to finish, whether directly performed by machinery or presupposed by it, must be < than the amount of labour previously contained in the commodity produced without machinery. But although e.g. the quantity of labour contained in a vard of machine-made linen is < than that in a vard made without machinery, it by no means follows from this that if now 1,000 vards are produced with machinery where previously one yard was produced, there is not a great increase in labour the labour of flax cultivation, transport and all kinds of intermediary labour. The increase concerns not the quantity of labour contained in a single yard, but the greater amount of preliminary labourindependent of the weaving itself-which 1,000 yards require, as opposed to one yard, whether in the preparation of the material or in the circulation (transport). Each vard would remain cheaper as a result of machine labour, although the thousand yards set in motion a thousand times as much subsidiary labour as the single vard did previously.

It is mass production—cooperation on a large scale, with the employment of machinery—that first subjugates the *forces of nature* on a large scale—wind, water, steam, electricity—to the direct production process, converts them into agents of social labour. (In agriculture, in its pre-capitalist forms, human labour appears rather as merely an assistant to the process of nature, which it does not control.) These forces of nature cost nothing as such. They are not the product of human labour. But their appropriation occurs only by means of machinery, which does have a cost, is itself the product of past labour. They are therefore only appropriated as agents of the labour process through machinery and by the owners of machinery.

Since these NATURAL AGENTS cost nothing, they enter into the labour process without entering into the valorisation process. They make labour more productive without raising the value of the product, without adding to the value of the commodity. They rather lessen [the value of] the single commodity, since the quantity of commodities produced in the same labour time is increased, hence the value of every aliquot part of this quantity is reduced. Thus, in so far as these commodities enter into the reproduction of labour capacity, the value of labour capacity is thereby reduced, or the labour time necessary for the reproduction of the wage is shortened, and the surplus labour is lengthened. To that extent, therefore, the forces of nature themselves are appropriated by capital, not through their raising the value of the commodities, but through their reducing it, through their entering into the labour process without entering into the valorisation process. The employment of these forces of nature on a large scale is only possible where machinery is employed on a large scale, hence also where there is a corresponding conglomeration of workers and cooperation of workers subsumed under capital.

The employment of the NATURAL AGENTS—their incorporation so to speak into capital—coincides with the development of scientific knowledge as an independent factor in the production process. In the same way as the production process becomes an application of scientific knowledge, so, conversely, does science become a factor, a function so to speak, of the production process.³⁰ Every invention becomes the basis of new inventions or new, improved methods of production. It is the capitalist mode of production which first puts the natural sciences [XX-1262] to the service of the direct production process, while, conversely, the development of production provides the means for the theoretical subjugation of nature. It becomes the task of science to be a means for the production of wealth; a means of enrichment.

This is the first mode of production where practical problems are posed which can only be solved scientifically. Only now is experience and observation—and the NECESSITIES of the production process itself—on a scale which permits and necessitates the APPLICATION of scientific knowledge. Exploitation of science, of the theoretical progress of humanity. Capital does not create science, but it exploits it, appropriates it to the production process. There is at the same time a separation of science, as science applied to production, from direct labour, whereas at earlier stages of production the restricted measure of knowledge and experience is directly linked with labour itself, does not develop as an autonomous power separated from labour, and therefore in general never goes beyond a collection of procedures carried on traditionally and only expanding very slowly and little by little. (Learning by experience of the MYSTERIES OF EACH HANDICRAFT.) No separation of hand from brain.

MR. Howell (ONE OF THE FACTORY INSPECTORS) says, in Reports etc. [of the Inspectors of] Factories [for the] Half Year ending 31st October 1856, pp. 53[-54]:

* "According to the best authority in such matters, it would seem that factory employment is a kind of drudgery which requires small cultivation of the faculties of the mind",*

and he cites the MASTERS themselves, AS FOLLOWS:

...The factory operatives should keep in wholesome remembrance the fact that theirs is really a low species of skilled labour; and that there is none which is more easily acquired or of its quality more amply remunerated, or which, by a short training of the least expert can be more quickly as well as abundantly supplied.' The master's machinery really plays a far more important part in the business of production than the labour and skill of the operative, which six month's education can teach, and a common labourer can learn'." (The Master Spinners and Manufacturers' Defence Fund. Report of the Committee appointed for the receipt and apportionment of this fund, to the Central Association of Master Spinners and Manufacturers, [Manchester, 1854,] pp. 17[-19]).^a

(The meaning of the *word *factory* as given in the interpretation clause of the Factory Act of 1844 (7 Victoria, c. 15, section 73)*^b is this:

"The word factory ... shall be taken to mean all buildings and premises ... wherein or within the curtilage of which steam, water, or any other mechanical power shall be used to move or work machinery employed in preparing, manufacturing, or finishing, or in any process incident to the manufacture of cotton, etc." $^{31}$

The particular *object* on which the FACTORY works, such as COTTON,

^a Cf. present edition, Vol. 30, pp. 341-42.- Ed.

^b An Act to Amend the Laws Relating to Labour in Factories.-Ed.

WOOL, HAIR, SILK, FLAX, HEMP, JUTE OR TOW, is of course a LOCAL matter, etc., and does not form part of the essential character of the FACTORY.)

Just as MACHINERY is described here as the "MASTER'S MACHINERY", and its function is described as his function in the production process (THE BUSINESS OF PRODUCTION), SO equally is this true for the scientific knowledge which is embodied in this MACHINERY, or in the METHODS OF producing, chemical processes, etc. Science appears as a potentiality alien to labour, hostile to it and dominant over it, and its application-on the one hand concentration and on the other hand the development into a science of the knowledge, observations and craft secrets obtained by experience and handed down traditionally, for the purpose of analysing the production process to allow the application of the natural sciences to the material production process-this, the application of science, rests entirely on the separation of the intellectual potentialities of the process from the knowledge, understanding and skill of the individual worker, just as the concentration and development of the conditions of production and their conversion into capital rests on the divestiture-the separation-of the worker from those conditions. Instead, FACTORY labour leaves the worker only a knowledge of certain hand movements; with this, therefore, the laws on APPRENTICESHIP are done away with; and the struggle of the state, etc., to get the FACTORY children at least to learn reading and writing shows how this APPLICATION OF SCIENCE UPON THE PROCESS OF PRODUCTION coincides with the suppression of all intellectual development in the course of this process. Admittedly, a small class of higher workers does take shape, but this does not stand in any proportion to the masses of "deskilled" workers.

[XX-1263] On the other hand, two points are also clear:

The development of the natural sciences themselves //and they form the basis of all knowledge// as also the development of all knowledge with regard to the production process, itself takes place on the basis of capitalist production, which generally first produces the sciences' material means of research, observation and experiment. In so far as the sciences are used as a means of enrichment by capital, and thereby become themselves a means of enrichment for those who develop them, the MEN OF SCIENCE compete with each other to discover *practical applications* for their science. Moreover, *invention* becomes a *métier* by itself. With capitalist production, therefore, the *scientific factor* is for the first time consciously developed, applied, and called into existence on a scale which earlier epochs could not have imagined. "This invention" (of the iron man²⁹) "confirms the great doctrine already propounded, that when capital enlists science in her service, the refractory hand of labour will always be taught docility" (Ure, l.c., [Vol.] II, [p.] 140 [p. 368]).³

It is very good that the same *Ure* who tells us here that science in the service of capital subjects the refractory hand of labour to its yoke—as shown particularly in his account of the inventions called forth by STRIKES—makes this proclamation to the worker:

"What a different lot would be his, did he quietly move onwards in the progression of improvement designed by Providence to emancipate his animal *functions* from brute toil, and to leave his intelligent principle leisure to think of its immortal interests!" ([Vol.] II, [p.] 143 [p. 370]).

The same Ure who bluntly informs us here that science enlisted in the service of capital subjects labour to the yoke of capital [says]:

"The blessings which physico-mechanical science has bestowed on society, and the means it has still in store for ameliorating the lot of mankind, have been too little dwelt upon; while, on the other hand, it has been *accused* of lending itself to the rich capitalists as an instrument for harassing the poor, and of exacting from the operative an accelerated rate of work" (Ure, Vol. I, [p.] 10 [p. 7]).

//Since Ure has in fact expressed the spirit of the factory system, and of modern industry in general, more correctly than any other official spokesman, let us bring together here a brief collection of his own contradictory statements:

Vol. I, p. 13: "This class of operatives, who, though inmates of factories, are not, properly speaking, factory workers, being independent of the moving power, have been the principal source of the obloquy so unsparingly cast on the cotton and other factories" [pp. 8-9].^b

As if these assistants of the actual machine workers were not a necessary result of the system!

"By the infirmity of human nature it happens, that the more skilful the workman, the more self-willed and intractable he is apt to become, and, of course, the less fit a component of a mechanical system, in which, by occasional irregularities, he may do great damage to the whole. The grand object therefore of the modern manufacturer is, through the union of capital and science, to reduce the task of his work-people to the exercise of vigilance and dexterity,—faculties, when concentred to one process, speedily brought to perfection in the young" (Vol. I, [pp.] 30-31 [pp. 20-21]).^c

^a Here and below, Marx quotes from Ure in French, from a French edition (A. Ure, *Philosophie des manufactures...*, Paris, 1836). He also uses occasionally French words and phrases in his comments on Ure. Here the original English is reproduced (A. Ure, *The Philosophy of Manufactures...*, London, 1835, first edition). The page numbers Marx gives refer to the French edition. Those in square brackets, supplied by the Editors, refer to the English edition.—*Ed.*

^b Cf. present edition, Vol. 33, p. 496.-Ed.

^c Ibid., p. 498.—Ed.

"Thus, that cramping of the faculties, that narrowing of the mind, that stunting of the frame, which were ascribed, and not unjustly, by moral writers, to the division of labour, cannot, in common circumstances, occur under the equable distribution of industry" ([Vol.] I, [p.] 34 [pp. 22-23]).^a

"It is, in fact, the constant aim and tendency of every improvement in machinery to supersede human labour altogether, or to diminish its cost, by substituting the industry of women and children for that of men; or that of ordinary labourers, for trained artisans" ([Vol.] I, [pp. 34-]35 [p. 23]).^a

"The principle of the factory system then is, to substitute mechanical science for [XX-1264] hand skill, and the partition of a process into its essential constituents, for the division or graduation of labour among artisans" ([Vol.] I, [p.] 30 [p. 20]).

"On the graduation system, a man must serve an apprenticeship of many years before his hand and eye become skilled enough for certain mechanical feats; but on the system of decomposing a process into its constituents, and embodying each part in an automatic machine, a person of common care and capacity may be entrusted with any of the said elementary parts after a short probation, and may be transferred from one to another, on any emergency, at the discretion of the master" ([Vol.] I, [pp.] 32-33 [pp. 21-22]).^b

And after he has told us that the constant aim of machinery is to devalue labour and displace skilled by unskilled labour //since now skill is transferred to the machine and the individual worker's special knowledge is replaced by the *application of mechanical science*//, he lists this as one of the advantages of machinery:

"They effect a substitution of more skilled labour for that which is comparatively unskilled" c ([Vol.] I, [p.] 46 [p. 30]).

He says in the same passage ([Vol.] I, p. 46 [p. 30]):

"They enable an operative to turn out a greater quantity of work than he could before,—time" //i.e. not the time for which the worker must work but the time needed to turn out a greater quantity of work/, "*labour*" //this is wrong: the labour becomes more intensive with the increased speed of the machinery//, "and quality of work remaining constant."^d

Machinery imposes continuity of labour on the worker:

"In like manner, he must necessarily renounce his old prerogative of stopping" (work) "when he pleases, because he would thereby throw the whole establishment into disorder" ([Vol.] II, [p.] 4 [p. 279]).

After Ure has told us that it is the tendency of machinery to make labour superfluous or depreciate it:

"Instead of repining as they have done at the prosperity of their *employers*, and concerting odious measures to blast it, they should, on every principle of gratitude

^a Cf. present edition, Vol. 33, p. 499.-Ed.

^b Ibid., Vol. 30, p. 288.—Ed.

^c The English original has: "They effect a substitution of labour comparatively unskilled, for that which is more skilled."—Ed.

^d Cf. present edition, Vol. 33, p. 500.-Ed.

and self-interest, have rejoiced at the success resulting from their labours... Had it not been for the violent collisions and interruptions resulting from erroneous views among the operatives, the *factory system would have been developed still more rapidly* and beneficially for all concerned than it has been" ([Vol.] II, [pp.] 5-6 [pp. 279, 280]).

Thus the workers have harmed themselves by their STRIKES, etc., because they have prevented the mechanical workshop from developing still. more rapidly. But then he reproaches them for the opposite reason, because their STRIKES, COMBINATIONS, etc., have called forth inventions, extended the [factory] system, and accelerated its development, thereby harming themselves once again. (Previously he said that the worker must renounce "his prerogative of stopping work". Now he says it is untrue that "the work in a factory is incessant" ([Vol.] II, [p.] 50 [p. 309]) because he views the labour of VIGILANCE as non-labour, and only counts the moments when the worker has to perform an operation with his fingers.)

"Fortunately for the state of society in the cotton districts of Great Britain, the improvements in machinery are gradual, or at any rate brought very gradually into general use" ([Vol.] II, [p.] 68 [p. 322]).

On the one hand he praises the inventions called forth by COMBINATIONS and STRIKES for having furthered the development of the system and expanded its power of production to an extraordinary degree. E.g. [he speaks] of the *iron man*,

"a creation destined to restore order among the industrious classes, and to confirm to Great Britain the empire of the cotton industry^a" ([Vol.] II, [p.] 138 [p. 367]).

Thus in the case of the machines employed in calico printworks (for printing colours, etc.):

"At length capitalists sought deliverance from this intolerable bondage in the resources of science, and were speedily re-instated in their legitimate rule, that of the head over the inferior members" (Vol. II, [p.] 141 [p. 369]).

(The mindlessness and inferiority of the workers, their existence as mere organs of the factory is the *legitimate right* of capital, which exists as the *head* through this fact alone.)

Through their revolts, he explains in detail, the workers themselves "hastened" the development of the system, and thereby brought about their own ruin.

"Violent revulsions of this nature display short-sighted [XX-1265] man in the contemptible character of a *self-tormentor*. What a different lot would be his, did he quietly move onwards in the progression of improvement" (Vol. II, [pp.] 142-43 [p. 370]).

^a The English original has: "...the empire of art". The text version follows the French translation used by Marx.—*Ed.*

He likewise demonstrates that science, enlisted by capital, is not employed for the suppression of the "oppressed class", by saying that in all conflicts between capital and labour "science enlisted in the service of capital" compels the workers "to surrender at discretion" (Vol. II, [p.] 142 [p. 370]) and secures to capital its "legitimate right" to be the head of the factory and to degrade the workers to the level of organs of the factory, lacking in mind or will.

It is capitalist production which first transforms the material production process into the application of science to production science put into practice—but it does so only by subjecting labour to capital and suppressing the worker's own intellectual and professional development.

Let us now see Ure's further apologies for the displacement of labour, the throwing out of labour by machinery and the devaluation of labour associated with this, and on the other hand his presentation of the drawing back of labour. For this repulsion and attraction is what is peculiar to the system.

//Ure presents it as an advantage of the more rapid development of the system that a couple more workers are employed as the NCOs of capital, and placed in opposition to their own class, or even that there is an increasing number of examples of working-class parvenus, who have themselves turned into exploiters of the workers. But in particular [he says it is an advantage] that there are yet more factory workers.

"Thus good workmen would have advanced their condition to that of overlookers, managers, and partners in new mills, and have increased at the same time the demand for their companions' labour in the market" ([Vol.] 11, [p.] 5 [p. 280]).

"The system ... would have exhibited still more frequently gratifying examples of skilful workmen becoming opulent proprietors" ([Vol.] II, [pp. 5-]6 [p. 280]).//

//Ure admits that the regulation of the *working day* on the part of the state, the Twelve Hours', Ten Hours' Bill, etc., owes its existence solely to "the revolts" of the workers, to their *UNIONS* (he describes them *polemically* as "conspiracies"):

"In consequence of these turmoils and complaints" //of the Spinners' Union in the period around 1818//, "Sir Robert Peel's bill for regulating the hours of labour in factories was passed in 1818: but a similar spirit of discontent continuing to manifest itself, a second bill was passed in 1825, and a third in 1831—the last under the direction of Sir J. C. Hobhouse" ([Vol.] II, [p.]19 [p. 288]).//

//"The Spinners' Union succeeded perfectly in mystifying their dupes by romantic representations of white slavery, and of the hecatombs of infants sacrificed annually on the calico-crowned altar of Mammon" ([Vol.] II, [pp.] 39-40 [p. 302]).//

"The effect of improvements in machinery, not merely in superseding the necessity for the employment of the same quantity of adult labour as before, in order to

produce a given result, but in substituting one description of human labour for another,—the less skilled for the more skilled, juvenile for adult, female for male—causes a fresh disturbance in the rate of wages. It is said to lower the rate of earnings of adults by displacing a portion of them, and thus rendering their number superabundant as compared with the demand for their labour.

"It certainly augments the demand for the labour of children, and increases the rate of their wages" ([Vol.] II, [p.] 67 [p. 321]).

"If any check were given to the cotton manufacture, nay, if *its continual expansion* shall not prove sufficiently great to *re-absorb* those *adults* whom it is *continually casting out*, then the improvements in machinery might be said to have a tendency to 'lower wages'" ([Vol.] II, [p.] 67 [pp. 321-22]).

Here the process is described correctly. Machinery continually casts out adult workers, and in order merely to "re-absorb" them, to draw them back in, it needs to expand continuously.

Improvements in machinery are gradual, or only come into general use gradually. At the same time there is a continuous gradual extension in that

"the demand [for the manufactured article], arising from the decrease of price, bringing it continually within the range of the means of greater numbers of consumers, keeps up the demand for adult labour, and thus counteracts the effect of the improvements of machinery which operate to displace it. Hence no [XX-1266] diminution of earnings for adults has thus far arisen" ([Vol.] II, [pp.] 68-69 [p. 322]).

"In cotton-spinning it would now be possible to reduce the wages of labour, because, since the mules have been enlarged, there is always a sufficiency of hands... The operative spinners, aware that a great excess of hands would have the effect of reducing their wages, combine to pay the expenses of sending their unemployed comrades away to America... The *trade-unions* are, in fact, bound by their articles to pay certain sums to their idle members, in order to support them, and to prevent them volunteering to work at under-wages from necessity" ([Vol.] II, [pp.] 74-75 [pp. 326-27]).

"The main reason why they" (wages) //in the mechanised factory// "are so high is, that they form a small part of the value of the manufactured article" (and this is true in general of the labour added to the material)... "The less proportion wages bear to the value of the goods, the higher, generally speaking, is the recompense of labour" ([Vol.] II, [p.] 78 [p. 329]).

Ure relates how in their war with the workers the manufacturers enlarged the MULE-JENNIES,^a increased the number of spindles, etc.

"The workmen could not decently oppose" this "because its direct tendency was to raise, or uphold at least, the wages of each spinner, but to diminish the numbers necessary for the same quantity of work; so that those employed would prosper, but the combined body would be impoverished" ([Vol.] II, [pp.] 133-34 [p. 364]). (Incidentally, Ure admits here that ([Vol.] II, [p.] 134 [p. 365]) there is some "additional task in the shape of a lengthened mule".)

Division of labour and mechanical workshop. Ure says this of the invention of a machine for dressing warps:

^a In the manuscript, the English term is given in brackets after its French equivalent.— Ed.

"Thus the combined mal-contents who fancied themselves impregnably intrenched behind the old lines of the division of labour, found their flanks turned and their defences rendered useless by the new mechanical tactics, and were obliged to surrender at discretion" ([Vol.] II, [p.] 142 [p. 370]).^a//

//It is possible for wages to stand e.g. higher in England than on the Continent, and yet be lower *relatively*, in proportion to the productivity of labour.^b Ure himself cites from the Supplément de rapport des manufactures. Préfaces des tables par M. J. W. Cowell^c:

"Mr. Cowell, however, by a most elaborate analysis of cotton-spinning, endeavours to prove in his supplementary report, that the wages in England are *virtually* lower to the capitalist, though higher to the operative, than on the continent of Europe, in consequence of the amount of work turned out daily by every machine being more than equivalent to the higher price of labour upon it" ([Vol.] II, [p.] 58 [pp. 314-15]).//

//On the determination of the minimum, and of the wage in general, in the case of TASK WORK, see the following passage from Ure:

"So much weight of prepared cotton is delivered to him" [the spinner], "and he has to return by a certain time in lieu of it a given weight of twist or yarn of a certain degree of fineness, and he is paid so much per pound for all that he so returns. If his work is defective in quality, the penalty falls on him; if less in quantity than the minimum fixed for a given time, he is dismissed and an abler operative procured. The productive power of his spinning-machine is accurately measured, and the rate of pay for work done with it decreases with (though not as) the increase of its productive power" ([Vol.] II, [p.] 61 [pp. 316-17]).

//The mitigating circumstance mentioned at the end comes into force if the price of the manufactured product does not sink in the same proportion as its value is reduced, and the demand for labour is so strong that the worker can appropriate for himself PART OF THE AUGMENTED PRODUCTIVITY. Or if the *intensity of the labour* also grows with the increased productivity of the mule, and the labour does *not* remain *the same* for a given time.// And apart from this, Mr. Ure himself indicates that the increase in the productivity of the mule is accompanied by an increase in the number of children employed, children the spinner has to pay, and thus the *apparent increase in his wage*, which may be shown by comparative tables, is reduced to nothing, and probably turns into a negative quantity. Say, e.g., that the number of spindles carried by the mule is to be increased from 500 to 600:

"By this increase, the productive power of the machine will be augmented one-fifth. When this event happens, the spinner will not be paid at the same rate for work done as he was before; but as that rate will not be diminished in the ratio

^a Cf. present edition, Vol. 30, p. 341.- Ed.

^b Ibid., Vol. 31, p. 252.- Ed.

^c Marx presumably means Supplementary Report of Factory Commissioners.-Ed.

of one-fifth, the improvement will augment his money earnings for any given number of hours' work. The whole benefit arising from the improvement is divided between the master and the operative. Both the profits of the one, and the earnings of the other are simultaneously increased by it. The foregoing statement requires a certain modification ... the spinner has to pay something [XX-1267] for additional juvenile aid out of his additional sixpence. This deduction deserves to be considered."

//And as Ure himself concedes further on, this augmentation of juvenile aid is accompanied by the "displacement" of a portion of the adults, etc. ([Vol.] II, [pp.] 66, 67 [pp. 320, 321]).//

//Ure's grounds for consoling the factory workers are IN FACT that the agricultural workers of large-scale agriculture, which originates from the same system, are still worse off; that the children who work in the mines and in industries which have not yet developed to the stage of the mechanical workshop are still worse off; and particularly that workers in branches which have been ruined by machinery or have to compete with it, or into which machinery throws its displaced surplus workers, are still worse off than the workers employed directly in the mechanical workshop. And this is supposed to prove that the system is favourable to the working class!

"It has been said, for example, that the steam-engine now drives the power-looms with such velocity as to urge on their attendant weavers at the same rapid pace; but that the hand-weaver, not being subjected to this restless agent, can throw his shuttle and move his treddles at his convenience" ([Vol.] I, [pp.] 10-11 [p. 7]).^a

He cites Dr. Carbutt of Manchester:

"With regard to Sir Robert Peel's assertion, a few evenings ago, that the hand-loom weavers are mostly small farmers, nothing can be a greater mistake; they live, or rather they just keep life together, in the most miserable manner, in the cellars and garrets of the town, working *sixteen or eighteen hours* for the merest pittance" ([Vol.] I, [pp.] 11-12 [pp. 7-8]).^a

"The textile manufactures consist of two distinct departments; one carried on by multitudes of small independent machines belonging" (not always, and less and less) "to the workmen, another carried on by concatenated systems of machinery, the property of the masters. Of the former, muslin and stocking-weaving are examples; of the latter, mule-spinning and power-loom weaving. The workmen of the first class being scattered over a wide tract of country, and being mutual competitors for work and wages, can seldom conspire with one another, and never with effect against their employers. But supposing them to do so in some degree, they would lock up as much of their own capital as of their masters'; that is, they would lose as much interest of money in their unemployed looms and loom-shops, as he would lose on the capital advanced to them in yarn for weaving. The operatives of the latter class are necessarily associated in large bodies, and moreover have no capital sunk in machinery

^a Cf. present edition, Vol. 33, p. 496.-Ed.

or work-shops. When they choose to strike they can readily join in the blow, and by stopping they suffer merely the loss of wages for the time, while they occasion to their master loss of interest on his sunk capital and his taxes, as well as injury to the delicate moving parts of metallic mechanisms by inaction in our humid climate... If we add to the loss of this interest, that of the profit fairly resulting from the employment of the said capital, we may be able to appreciate ... the vast evils which mischievous cabals among the operatives may inflict on mill-owners" ([Vol.] II, [pp.] 7-8 [pp. 281-82]).

(The loss of the "interest" and "profit" deriving from the appropriation of surplus LABOUR is treated in the same way as if these fellows had suffered the theft of *their property* and its NATURAL FRUITS.)//

//"Under what pretext, or with what face of pretension, operatives, whose labour is assisted by steam or water power, can lay claim to a peculiar privilege of exemption from more than ten hours' daily labour it is hard to conjecture. They compare their toil [with that] of the small class, comparatively speaking, of artisans, such as carpenters, bricklayers, stone-masons, etc., who, they say, work only from six to six, with two one-hour intervals for meals: a class, however, in this material respect distinguished from most factory operatives, that their work is done entirely by muscular effort, and after serving a long apprenticeship with no little outlay. But what do the factory people think of the numerous class of domestic operatives, the stocking or frame-work knitters, the hand-loom weavers, the wool-combers, the lace-manufacturers, and a variety of others, who work, and very hardly too, from twelve to sixteen hours a-day, to earn a bare subsistence ... The consideration is also overlooked by these interested" (the capitalists, after all, are DISINTERESTED!) "reasoners" //he is not a reasoner!//, [XX-1268] "that by reducing the hours of labour, and thereby the amount of subsistence derivable from the less objectionable occupations, they would cause a corresponding increase of competition for employment in the more objectionable ones, and thus inflict an injury on the whole labouring community, by wantonly renouncing the fair advantages of their own" ([Vol.] II, [pp.] 76-77 [pp. 328, 329]).

This "reasoning" goes even beyond the heights of absurdity one may expect from Ure. Thus if the workers work 10 hours instead of 12, then //assuming productivity remains the same and is not increased by new inventions// the capitalists, so as to continue producing on the same scale, will have to employ not more workers at the same time, which would reduce the SURPLUS POPULATION of the unemployed, thereby reducing the competition between workers in general, but the reverse, less workers will be employed at the same time, thus increasing the competition among them! If 6 workers do 2 hours of overwork every day, they displace 1 worker a day and 6 workers a week. According to Ure the situation is reversed, 6 more are employed because 6 are displaced!//

//"It deserves to be remarked, moreover, that handworking" (working at home) "is more or less *discontinuous* from the caprice of the operative, and never gives an average weekly or annual product comparable to that of a like machine equably driven by power. For this reason hand-weavers very seldom turn off in a week much more than one-half of what their loom could produce if kept *continuously in* action for twelve or fourteen hours a day, at the rate which the weaver in his working paroxysms impels it" ([Vol.] II, [pp.] 83-84 [p. 333]).^a

"The present net weekly earnings of the cotton hands in the stocking trade are from 4s. to 7s. a week; but those received by a far greater number are less than the lowest sum... The full-wrought cotton-hose workmen are all sober and industrious persons ... their average earnings are not more than 6s.6d. a week. On this sum, a man, his wife, and children, have to be maintained. Many among them are therefore extremely wretched and destitute of the necessaries of life... The embroidery of bobbin-net, called lace running, also a non-factory household work, painfully illustrates our position. No less than one hundred and fifty thousand females, chiefly of very youthful ages, get their livelihood from this employment in Great Britain. The work is wholly domestic; and though requiring more skill and harder labour than any other branch of the lace business, it is the worst paid... They begin early, and work late, and during this long daily period their bodies are constantly bent over the frame upon which the lace is extended", etc. ... "[They contract al consumptive tendency, distortion of the limbs, and general debility", etc. "Aversion to the control and continuity of factory labour, and the pride of spurious gentility or affectation of lady-rank are among the reasons why young women so frequently sacrifice their comfort and health to lace-embroidery at home. One girl in her examination states, 'I like it better than the factory, though we can't get so much. We have our liberty at home, and get our meals comfortable, such as they are'" ([Vol.] II, [pp.] 86-88 [pp. 334-35, 336]).32

Flattering as the last point is for the FACTORY SYSTEM, it becomes absurd when Ure applies it generally. How much EXTENSION would be needed for the COTTON INDUSTRY to absorb e.g. 150,000 more GIRLS, considering that in 1860, therefore almost 30 years after the appearance of Ure's book, all the COTTON mills of the UNITED KINGDOM employed no more than 269,013 FEMALES OF ALL AGES! This is the kind of rubbish the fellow talks. Even if these 150,000 GIRLS wanted to enter any factory at all, all the FACTORIES of all kinds employed only 467,261 FEMALES OF ALL AGES in 1860! Ure did, nevertheless, with the aim of glorifying factory labour, perform the service of highlighting and stressing the still more atrocious condition of the OUT OF DOOR workers—itself in this form A RESULT OF THE [factory] SYSTEM. Thus he stresses the extraordinary wretchedness of the hand-weavers, as if this misery were not the result of mechanical weaving and of the actions of the CAPITALISTS, who themselves in turn exploited this misery.

"There is no combination among these poor men. They work in damp detached cellars as long as they can see. [XX-1269] Each brings his individual labour to the *proprietor of the material, who will of course accept the cheapest offer*" ([Vol.] II, [p.] 92 [p. 338]).

"It must appear to every impartial judge ... that the hardest labour, in the worst room, in the worst conducted factory, is less hard, less cruel, and less demoralising, than the labour in the best of coal mines" ([Vol.] II, [p.] 90 [p. 337]).

^a Cf. present edition, Vol. 33, p. 441.-Ed.

"A brutality of manners is here disclosed, too gross for transcription, and most discreditable to the masters of the mines" ([Vol.] II, [p.] 90 [p. 337]).

Ure has this to say about the *combination of spinning* and *weaving*:

"The difficulty of competition from the augmented capital and skill, is increased" ([Vol.] II, [p.] 79 [p. 330]).

"The continental nations must serve a severe and tedious apprenticeship under the fostering care of tranquillity and capital, before they can fabricate and manage a good system of throstles, self-actors, mules, and power-looms" (l.c., [p.] 81 [p. 331]).

"On the other hand, non-factory processes of art which can be condensed into a single frame or machine moveable by hand, come within the reach of operatives in every adjacent country, and will have their profits ere long reduced to the minimum consistent with the employment of capital in it, and their wages brought down to the scale of those in the cheapest or meanest living country. The stocking trade affords a painful illustration of this fact" ([Vol.] II, [p.] 82 [p. 332]).

So much for Ure.//

Improvements in shipbuilding, navigation, geography, astronomy, etc., have reduced the cost of a lb. of tea from $\pounds 6-10$ to 1-3s. (*Hodgskin.*)^a

* "The natural agent" * (such as * water power, coals, etc.) "has nothing that it did not possess 40 or 400 years before, but capital has rendered its powers productive" * (Carey, *Principles of Political Economy*, PART I, Philadelphia, 1837 [p. 42]).

"In the 13th century (and part of the 14th) English agriculture was *in a very deplorable state: *superstition* operated on the farmer, so that he would not sow seeds on certain unlucky days, etc.; the implements of husbandry also were generally insufficient for good farming operations; hence, indifferent crops were the result, frequently not more than 6 bushels an acre." *33 (Now the average is 3 qrs or 24 BUSHELS.) (J. D. Tuckett, A History of the Past and Present State of the Labouring Population etc., Vol. 1, London, 1846, [p.] 49.)

The expansion and improvement of the means of communication naturally have an effect on the PRODUCTIVE POWER OF LABOUR: they lessen the labour time required for the production of the same commodities, and they create that INTERCOURSE which is required for intellectual and commercial development, as also for improved agricultural methods, advances in chemistry, geology, etc. Enlightenment in general as well (see above the reference to SUPERSTITION), also legal security, etc. As late as under George II

* "our highways continued to be generally kept in repair merely by the compulsory labour of the parish paupers, or, where these could not be obtained, a compulsory statute labour on various farms in the parish" * (Tuckett, l.c. [p. 266]).

^a See Th. Hodgskin, Popular Political Economy, London, Edinburgh, 1827, pp. 65-67.-- Ed.

"Where no regular roads exist, *there can hardly be said to be a community; the people could have nothing in common"* (l.c. [p. 270]).^a

Such IMPROVEMENTS IN THE MODE AND OPERATION OF FARMING have been made that now 8 or 10 HANDS can supply the necessaries of 100 where 20 years ago, it took 35 PERSONS; and A CENTURY prior to this, it took as many as it now does in Italy, from 75 to 85. By this a portion of the [rural] LABOURERS have been driven to the manufacturing towns (Tuckett, Vol. II, p. 527).

[XX-1270] It is demonstrated most strikingly in *agriculture* (in England) that with an increase in the productive power of labour the AVERAGE wage not only does not rise, but falls. On the average, the condition of the agricultural labourers in England has deteriorated in the same ratio as agriculture has been improved.

//The article by that louse Potter (* M.P.*) in *The Times*,³⁴ of which we shall say more later, was written when he was CHAIRMAN of the Manchester CHAMBER OF COMMERCE, and, as *Ferrand* says (in his MOTION on the COTTON FAMINE. *House of Commons, April 27, 1863)*,

* "that letter might be looked upon as the manifesto of the manufacturers".* 35

Ferrand was invited by a deputation of WORKMEN from 16 DISTRICTS (27 DELEGATES FROM DIFFERENT PARTS OF Lancashire AND Cheshire) to bring forward their cause in Parliament, and he obtained information from them which none of the MANUFACTURERS present in the HOUSE OF COMMONS gave the lie to. We shall assemble together here the most important passages of his speech.

Intensity of labour.

* "They informed him that the labour in the factories was, owing to the improvement in the machinery, continually on the increase. When, for instance, the powerloom was first introduced, one person attended two looms; now one attended three without a helper, while it was not at all an unusual thing for one person to attend to 4 looms. There had also been a large increase in the number of 'picks'. In 1825, for instance, there were 85 picks a minute, there were now 160 on an average, being an increase of 50 picks a minute since the passing of the Ten Hours' Act. *Twelve hours work was,* it further appeared, now *done instead of ten,* owing to the increased speed of machinery since 1847. Hon. members would, therefore, at once see how much the labours of factory operatives had increased of late years."th

Vicissitudes of the cotton trade.

"The cotton trade of England had existed for 90 years. During the first half of that period our manufacturers had a monopoly of the world; ... it had lasted through *three generations* of the English race ... it had *destroyed nine generations* of the *cotton operatives* themselves. From 1815 to 1830 the cotton trade of this country had to contend against the cotton trade of the continent of Europe and against that of the United States of America. In 1833 the China and Indian trade was opened, and during the last 30 years it had extended itself in the East by the destruction of the *human race.* In 1790, when the first census of the United States' slaves was taken, the number was 697,000. In 1861 the probable number was 3,500,000.

^a Cf. present edition, Vol. 29, p. 167.- Ed.

^b The Times, No. 24544, April 28, 1863, p. 9, col. 1.-Ed.

"From 1815 to 1821 the cotton trade was depressed.

"1822 and 1823 prosperous years.

"1824 Repeal of the combination laws, important strikes frequent, mills at a stand for weeks.

"1825 Monetary crisis and failing trade.

"1826 Great distress, riots.

"1827 Slight improvement.

"1828 Great increase of power looms and exports.

"1829 Exports exceeded those of any former year, especially to India.

"1830 Great distress, glutted markets.

"1831-1833 Continued distress. In 1833 trade to the East thrown open.

"1834 Great increase of mills and machinery. At last discovered, when the mills were built and filled with machinery, that there was no population in the factory districts to work the machinery. A proposition was then made by the manufacturers to the Poor Law³⁶ Commissioners that the surplus population should be sent from the agricultural districts to the North, and that the manufacturers would absorb it and use it up. Those were the very words used by the cotton manufacturers. Agents were appointed in the town of Manchester, with the consent of the Poor Law Commissioners, lists of workpeople were made out and sent to these agents, the manufacturers [XX-1271] went to the offices, and, having selected such as suited them, the families were sent down from the South. They were forwarded ticketed, like so many bales of goods-by canal and by carriers' carts,-some tramped, and many were found in the manufacturing districts lost and half-starved. This had grown up into a regular trade. The House would hardly believe it, that this regular trade, this traffic in human flesh had continued to be carried on, and these people were bought and sold by the agents in Manchester to the cotton manufacturers just as regularly as slaves were sold to the cotton growers in the Southern States.

"1835 Trade again prosperous. Extinction of the handloom weavers by the powerlooms, many of them died by starvation, some of them with their families existed on $2^{1}/_{4}$ d. per day.

"1836 Prosperity.

"1837 and 1838 Depressed state.

 $^{\circ}1839$ Recovery of the cotton trade. Villiers' first motion for the repeal of the corn laws.^{37}

"1840 Great depression, riots put down by the military.

"1841 and 1842 Dreadful suffering." 1842 The manufacturers *locked out the factory operatives, to enforce the repeal of the corn laws. They flocked into Yorkshire by tens of thousands, driven back by the military, their leaders placed on their trial at Lancaster.

"1843 Great Distress.

"1844 Revival of trade.

"1845 Great Prosperity.

"1846 Repeal of the corn laws.

"1847 Trade depressed; wages reduced after the pledge of the masters that they would be raised.

"1848 Still depression, Manchester under the protection of the military.

"1849 Revival.

"1850 Prosperity.

"1851 Declining prices, low wages, and frequent strikes.

"1852 Slight improvement, strikes continued, proposal made to bring over foreigners to work the mills.

"1853 Great distress at Stockport. Eight months' strike at Preston to get back the 10% which had been taken from the operatives after the repeal of the corn laws. "1854 Markets glutted.

"1855 Frequent failures reported from the United States, Canada, and the Eastern markets, consequent on the glutted state of the markets.

"1856 Average commercial prosperity."*

1857 CRISIS in autumn. (Although the COTTON TRADE was affected only superficially.)

*"1858 Improvement of the cotton trade.

"1859 Great Prosperity. Increase of mills.

"1860 The cotton trade was at its zenith. Indian markets, etc., glutted with cotton."* As late as 1863 the GLUT in these MARKETS had not been entirely removed. Hence the [XX-1272] AMERICAN CRISIS was at first very advantageous for the MANUFACTURERS.³⁸ * "The French Treaty became law * in this year of 1860. * Enormous increase of mills and machinery in Lancashire, want of hands. The millowners applied to the flesh agents, and they sent to the downs of Dorset, the glades of Devon, and to the plains of Wilts, but the surplus population had been used up. The Bury Guardian^a said it was estimated that on the completion of the treaty 10,000 additional hands could be absorbed in Lancashire, and that between 30,000 and 40,000 would be needed. The agents and subagents having scoured the agricultural districts in 1860, and found the surplus population absorbed, a deputation from the cotton manufacturers waited upon the President of the Poor Law Board (Villiers) to ask him to supply them again with the poor orphans from the workhouses.

"1861 Census taken. Stated that the surplus population in the agricultural districts was on the decline.

"1862 Mills worked short time, and the great mass of the people unemployed. "1863 Trade prostrate, riots occurred.

"Between 1770 and 1815, cotton trade depressed or stagnant 5 years, and revived and prosperous 40 years.

"Between * 1815 and 1863 * depressed or stagnant 28 years, prosperous 20 vears.

"After 1846, since the repeal of the corn laws, cotton trade stagnant or depressed 9 years, revived 8.

"1834-35 The distress caused to the Indian handloom weavers frightful.

"The Governor General of India^b:

"'That distress was scarcely paralleled in the history of commerce,' 'The bones of the handloom weavers,'* says the same *Governor General, 'whited the plains of India.'

"1834 The New Poor Law passed, which favoured the migration of labour from the agricultural to the manufacturing districts." *c

The letter of Edmund Potter, to which Ferrand refers, is in The Times for March 24, 1863.^d This mouthpiece of the manufacturers says there, among other things:

^a The Bury Guardian, May 12, 1860.- Ed.

^b G. E. Auckland.— Ed.

^c The Times, No. 24544, April 28, 1863, p. 8, cols 5-6, p. 9, col. 1. Marx gives a brief summary of the article.-Ed.

^d The Times, No. 24514, March 24, 1863, p. 12, cols 2-4. See also this volume, p. 45.—*Ed*.

* "The cotton operative may be told the supply of cotton workers is too large ... it must be reduced by a third, perhaps, and that then there will be a healthy demand for the remaining two thirds. ... Public opinion urges *emigration...* The *master* cannot willingly see his *labour supply being removed*; he may think, and perhaps justly, that it is both wrong and unsound. ... If the public funds are devoted to assist emigration he has a right to be heard, and *perhaps to protest.*"*

The same Potter says in his apology for the COTTON TRADE:

* "True, the legislature interfered and regulated his trade, and forced upon the trade an extent of education for the young people and a restriction of the hours of working for females which has been singularly beneficial to the entire population... The growth and value of the trade has undoubtedly drawn the surplus population from Ireland and from many agricultural districts..."*

He considers that after a year or two the COTTON TRADE will again return to its old progress, especially through the expansion of the Asiatic market, and particularly the *Indian* market.

* "Ought we, then, to ... break up the very machinery of supply?" *

He cites these figures:

* "Cotton trade exports:

1830	£19,418,885	1855	£34,779,141
1840	[£]24,654,293	1860	£51,959,185
1850	[£]28,257,401	1861	£45,978,272*

[XX-1273] * "When in its zenith, it" (the cotton trade) "furnished 5/13 of our exports... It is not pretended that the trade will assume its former proportions till the raw material is produced at a certain rate, assume it to be 6d. per lb.; it may be some time before the supply can be forced sufficiently to bring it to that price, but it is not denied that time—*one, two or three years it may be*—will produce the quantity...³⁹

"The question I would put, then, is this — is the trade worth retaining, is it worth while to keep the machinery⁴⁰ in order, and is it not the greatest folly to think of parting with that? I think it is. I allow that the workers are not a property, not the property of Lancashire or the masters, but they are the strength of both; they are the mental and trained power which cannot be replaced for a generation; the mere machinery which they work might much of it be beneficially replaced, nay improved, in a twelvemonth. Encourage or allow the working power to emigrate, and what of the capitalist? He too will emigrate. Take away the cream of the workers, the fixed capital will depreciate in a great degree, and the floating will not subject itself to a struggle with the short supply of inferior labour ... [I will not go into the question as to where the 150,000 hands and those depended upon them are to be removed to, a question I should fancy quite as difficult to solve as the one it is sought to] decide upon—viz., emigration. We are told the workers wish it. Very natural it is that they should do so.

"Reduce, compress the cotton trade, by taking away its working power and reducing their wages' expenditure, say one-third, or five millions, and what then would happen to the class above, the small shopkeepers; and what of the rents, the cottage rents, the savings, and property, to some extent, of the workers themselves, or of those just above them; what would be the rate of rental if one-third were unoccupied? Every man, woman, and child among our working population now

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charity except such as private benevolence will continue to administer) extending, it may be, over two or three years, administered by Special Com-missioners added to the Boards of Guardians in the Cotton districts, under special legislative regulations of enforcing some occupation of labour, as a means of keeping up, at least, the moral standardl of the recipients of the loan. Hoth statesmen and employers and Langshire property owners will have to meet and yrapple with the diff-culty now; it is a duty which cannot, ought not to be delayed under present aspects. I may be hold that all this is very unsound—very exceptional, It may be. But can anything be worse for land It may be. But can anything be worse for land owners or masters than parting with the best of the workers and demoralizing and disappointing the rest by an extended depletive emigration, and a depletion of capital and value in an entire province, it may be called, containing 2,000,000 souls, or, taking Lancashiro and the adjacent parts of Che-shiro, of nearly 3,000,000 t

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pays a rental of 20s. per head per annum. Trace such effects upward to the small farmer, the better householder, and, last of all and most lightly, the landowner, and say if there could be any suggestion more suicidal to all classes of the country than by enfeebling a nation by exporting the best of its manufacturing population, and destroying the value of some of its most productive capital and enrichment.

"At the very worst, five or six millions sterling in the shape of a loan, safe enough as an investment, lent and judiciously expended with statesmanlike judgment, might preserve and ultimately resuscitate a trade which has done more for the prosperity of the nation, morally and physically, than anything history records.

"I suggest, then, a loan (no gifts, no charity except such as private benevolence will continue to administer), extending, it may be, over two or three years, administered by Special Commissioners added to the Boards of Guardians in the Cotton districts, under special legislative regulations, enforcing some occupation or labour, as a means of keeping up, at least, the moral standard of the recipients of the loan. Both statesmen and employers and Lancashire property owners will have to meet and grapple with the difficulty now; it is a duty which cannot, ought not to be delayed under present aspects. I may be told that all this is very unsound—very exceptional. It may be. But can anything be worse for landowners or masters than parting with the best of the workers and demoralising and disappointing the rest by an extended depletive emigration, and a depletion of capital and value in an entire province, it may be called, containing 2,000,000 souls, or, taking Lancashire and the adjacent parts of Cheshire, of nearly 3,000,000?"*

In the same issue, for March 24, 1863, *The Times* roundly rebukes Edmund Potter, this MOUTHPIECE of the COTTON MANUFACTURERS. The following cuttings come from its article:

[XX-1274] *"Mr. Edmund Potter, in another part of our paper, copiously argues that the Cotton workers of Lancashire and Cheshire must be kept together by national loans in idleness and in plenty, in order that the Cotton Trade may, at some uncertain future, revive.

"Mr. Potter thinks Cotton Lords do a great kindness to their country when they accumulate to themselves enormous fortunes.

"When we are told that but for the Cotton Trade morals and education would have been lower throughout England, we are tempted to recognise in such an assertion the conceit of an uneducated Plutocracy. When we are told of the reasonable profits of the masters, and yet of the 'self-made men and capitalists' who spring up in such unexampled profusion from the workers of the Cotton districts, we find a difficulty in reconciling these inconsistent assertions.

"If we look into any book of statistical references, such as M'Culloch,^a for example, we shall see that the Cotton Trade is estimated to maintain, directly, about half a million workers, and directly and indirectly about 1,200,000 men, women, and children. It is supposed to have a capital of £8,000,000 constantly circulating in wages, and to give an annual profit of £13,000,000 to the masters. During the last few years of extraordinary overtrading these figures have doubtless been increased; but these are the average dimensions of the trade according to the latest independent estimates.

"Edmund Potter argues otherwise. He is so impressed with the exceptional and supreme importance of the Cotton Masters that, in order to preserve this class and

^a J. R. MacCulloch, A Dictionary, Practical, Theoretical, and Historical, of Commerce and Commercial Navigation, London, 1847, pp. 437-38.— Ed.

perpetuate their profession, he would keep half a million of the labouring class confined in a great moral workhouse against their will. 'Is the trade worth retaining?' asks Mr. Potter. 'Certainly, by all honest means, it is,' we answer. 'Is it worth while keeping the machinery in order?' again asks Mr. Potter. Here we hesitate. By the 'machinery' Mr. Potter means the human machinery, for he goes on to protest that he does not mean to use them as an absolute property. We must confess that we do not think it 'worth while', or even possible, to keep the human machinery in order—that is, to shut it up and keep it oiled till it is wanted. Human machinery will rust under inaction, oil and rub it as you may. Moreover, the human machinery will, as we have just seen, get the steam up of its own accord, and burst or run a muck in our great towns. It might, as Mr. Potter says, require some time to reproduce the workers, but, having machinists and capitalists at hand, we could always find thrifty, hard, industrious men wherewith to improvise more master manufacturers than we can ever want. But to preserve the class of workers is just what we cannot do.

"Mr. Potter talks of the trade reviving 'in one, two, or three years', and he asks us not 'to encourage or *allow* (!) the working power to emigrate'. He says that it is very natural that the workers should wish to emigrate; but he thinks that, in *spite of their desire*, the nation ought to keep this half million of workers, with their 700,000 dependents, shut up in the Cotton districts; and, as a necessary consequence, he must of course think that the nation ought to keep down their discontent by force and sustain them by alms—and this upon the chance that the Cotton Masters may *some* day want them.

"Not fifty Cotton Trades could justify us in the folly of pauperising and demoralising a million of our countrymen; not a thousand Cotton Trades could pay us for the horrible necessity of slaughtering our people in civil broils. The time is come when the great public opinion of these Islands must operate to save this 'working power' from those who would deal with it as they would deal with iron, and coal, and cotton" * [p. 9, cols 2, 3].

[XX-1275] Finally, we shall give some further figures relating to cotton, wool, silk, flax, etc., taken from the *Statistical Abstract for the United Kingdom 1861*, issued officially by Parliament. These figures should be compared with the notes on the progress of FACTORIES given earlier.

QUANTITIES OF COTTON	IMPORTED INTO T	THE UNITED	Kingdom	[lbs] a 41.
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[Year]	1846	1847	1848	1849
[Imported]	467,856,274	474,707,615	713,020,161	755,469,012
Re-exported	588,667	669,235	660,891	882,978
There remain	467,267,607	474,038,380	712,359,270	754,586,034
[Year]	1850	1851	1852	1853
[Imported]	663,576,861	757,379,749	929,782,448	895,278,749
[Re-exported]	914,908	999,825	998,967	1,326,515
[There remain]	662,661,953	756,379,924	928,783,481	893,952,234

^a Statistical Abstract for the United Kingdom..., Eighth number, London, 1861, pp. 28, 40. Marx owned a copy of the book.—*Ed.*

[Year]	1854	1855	1856	1857
Imported	887,333,149	891,751,952	1,023,886,304	969,318,896
Re-exported	1,101,126	1,110,430	1,309,472	1,177,925
[There remain]	886,232,023	890,641,522	1,022,576,832	968,140,971
[Year]	1858	1859	1860	
[Imported]	1,034,342,176	1,225,989,072	1,390,938,752	
[Re-exported]	1,335,790	1,563,778	2,235,970	
[There remain]	1,033,006,386	1,224,425,294	1,388,702,782	

Let us now compare EXPORTS of COTTON commodities, in both quantity and value, according to the same Statistical Abstract^a:

[XX-1276] COTTON MANUFACTURES

DECL	ARED VALUE. £	QUANTITIES. Yds.	Cotton twist and yarn. De- clared value	TWIST AND YARN LBS QUANTI- TIES
1846	17,717,778	1,062,091,758	7,882,048	161,892,750
1847	17,375,245	937,229,489	5,957,980	120,270,741
1848	16,753,369	1,091,373,930	5,927,831	135,831,162
1849	20,071,046	1,327,448,640	6,704,089	149,502,281
1850	21,873,697	1,347,756,877	6,383,704	131,370,368
1851	23,454,810	1,536,101,929	6,634,026	143,966,106
1852	23,223,432	1,517,513,916	6,654,655	145,478,302
1853	25,817,249	1,584,727,106	6,895,653	147,539,302
1854	25,054,527	1,685,668,960	6,691,330	147,128,498
1855	27,578,746	1,929,941,646	7,200,395	165,493,598
1856	30,204,166	2,023,738,543	8,028,575	181,495,805
1857	30,372,831	1,968,056,485	8,700,589	176,821,338
1858	33,421,843	2,314,205,042	9,579,479	200,016,902
1859	38,744,113	2,551,909,929	9,458,112	192,206,643
1860	42,141,505	2,765,337,818	9,870,875	197,343,655

We now return to p. 1269.^b

[XX-1277] "As long as the prejudice which condemned labour [as degrading] retained its full force, the physicists, naturalists, engineers, and mathematicians claimed to be studying the sciences in a disinterested manner. They would have been ashamed to place the daughters of the muses in the service of sordid gain;

^a Statistical Abstract of the United Kingdom..., Eighth number, pp. 28, 34-37.-- Ed.

^b See this volume, pp. 43-45.-Ed.

they investigated the properties of matter or of numbers for their own sake; at most they allowed themselves to make occasional application of their discoveries to public works or the protection of health... But now all the universities have chairs of Chemistry, Physics, Mechanics in their application to the crafts; all men of learning pride themselves on their ability to justify the usefulness of their labours and their discoveries, by demonstrating the benefits to be drawn from them, in facilitating all kinds of labour, in bringing wealth to the markets, and in providing enjoyment to the consumers" (Sismondi, *Études*, Vol. I, [Brussels, 1837, p.] 38).

//Mr. MacCulloch says, on p. 165 of his Principles of Political Economy, Edinburgh, 1825:

"The bad consequences that have been supposed to result *from the indefinite extension and improvement of machinery* would *equally result from the continued improvement of the skill and industry of the labourer.*"

In so far as this SKILL rests on the division of labour—i.e. on the development of manufacture as opposed to handicrafts—the statement is in part correct. But even here it is not true, since *Ure* correctly remarks that the greater the SKILL of the worker, the more "self-willed", etc., the fellow is.^a There is a very great difference, invisible only to a M'Culloch, between a situation where progress in SKILL and INDUSTRY appears as the *personal* virtuosity of the worker, and a situation where this is *reversed*— as in the capitalist employment of machinery—as a *characteristic of capital as opposed to the worker* and at the expense of the worker.//

"It ascribes * to his property" (the capitalist's) "merely, whether he employ it to pay wages, or whether it consists in useful instruments, all that vast assistance, which knowledge and skill, when realised in machinery, give to labour—the productive power of this skill" (of combined labour) "is attributed to its visible products, the instruments, the mere owners of which, who neither use nor make them, imagine themselves to be very productive persons" * (Th. Hodgskin, Popular Political Economy, [London, Edinburgh, 1827.] pp. 249-51)."

In manufacture the worker is thrown out of work TEMPORARILY, in agriculture this is constant.

Jones says this of modern agriculture:

*"In the progress of culture,^c all, and perhaps more than all the labour and capital which once loosely occupied 500 acres, are now concentrated for the more complete tillage of 100" (Jones, *Distribution of Wealth*, London, 1831, [pp. 190-] 191).⁴²

"Since the general introduction of expensive machinery, human nature has been forced far beyond its average strength"* (R. Owen, Observations on the Effect of the Manufacturing System, 2ND ED., London, 1817, [p. 16]).

^a See A. Ure, *Philosophie des manufactures...*, Vol. I, pp. 30-31. Cf. this volume, p. 35.—*Ed.*

^b Cf. present edition, Vol. 33, p. 255.-Ed.

^c This phrase is Marx's summary of what Jones says in the opening part of this passage.—*Ed.*

Horses, working cattle, etc., also belong among the machines used in agriculture. Machines of this kind themselves consume commodities (not only coal) which otherwise would have been consumed by LABOURERS.

Messrs. Senior and Torrens assert, as do others, that machinery, when applied to commodities which fall within the worker's consumption, must always raise wages.

Senior says:

"Only in two cases can the **general rate of wages** be reduced by the introduction of machinery: **when labour is employed in the construction of machinery, which labour would otherwise have been employed in the production of commodities for the use of labourers*; and secondly, *when the machine itself consumes commodities (as horses, working cattle, etc.) which would otherwise have been consumed by labourers, and that to a greater extent than it produces them <i>**" (Senior, *Three Lectures on the Rate of Wages, London, 1830, [p.] 40).*

[XX-1278] Torrens, for his part, says:

* "Machines work but do not eat. When they displace labour, and render it dispensable,^a they at the same time displace and render dispensable^a the *real wages*, the food and clothing, which maintained it. The aggregate fund for the support of *labour* is not diminished"* (Torrens, *Wages and Combination*, London, 1834, [p.] 39).

The whole of this raisonnement^b rests on an incorrect conception of variable capital. The latter, considered from the point of view of its material elements, can in fact be resolved into the commodities that enter into the workers' consumption, the means of subsistence. But the converse by no means follows from this, namely that these commodities or means of subsistence must be consumed by the workers and form variable capital, with the result that there is a fixed proportion between the number of workers on the one hand and the quantity of the means of subsistence on the other. (Even Ricardo occasionally falls into this nonsensical way of speaking.) These means of subsistence are also consumed by the other classes, and they may be consumed by them in greater quantities. They may be consumed by unproductive workers (soldiers, servants, etc.). They may be exported and exchanged for luxuries. The more productive the branches of industry which produce the means of subsistence which are necessary, and therefore also enter into the consumption of the workers, the greater the possible size of that section of the workers who produce means of subsistence which do not enter at all into the consumption of the workers; and the more they are displaced by

^a Torrens has "disposible".- Ed.

^b Reasoning.— Ed.

machinery in those branches, the greater the competition between them, which results in a fall in wages in the other branches as well.

" $\pm 5-6$ per ACRE was regarded as the CAPITAL REQUIRED for the CULTIVATION OF LAND; but the HIGH FARMING OF MODERN TIMES REQUIRES almost double that sum" (W. Johnston, England As It Is etc., London, 1851, Vol. I, [p.] 14).

M'Culloch, l.c. (Principles of Political Economy, Edinburgh, 1825, p. 166):

"IF IT BE advantageous that the SKILL of the labourer should be INDEFINITELY EXTENDED—that he should be enabled to produce A VASTLY GREATER QUANTITY OF COMMODITIES with the same, or a less, quantity of labour, IT MUST ALSO BE ADVANTAGEOUS THAT HE SHOULD AVAIL HIMSELF OF THE ASSISTANCE OF SUCH MACHINERY AS MAY MOST EFFECTUALLY ASSIST HIM IN BRINGING ABOUT THAT RESULT."

Here Mr. M'Culloch assumes that the machine belongs to the worker.

"In a factory ... * the portions of capital and land are much greater than those of labour and skill *; and the * net revenue a cruing to their proprietors is also much greater. But the very preponderancy of machinery or capital begets the necessity of a corresponding excess of labour and skill in other processes—namely in the repair of mills and machinery, and in the construction of new ones, etc. ... industry preponderates in nearly every group employed in the fabrication of productive capital... And if we look at the means employed in the construction of expensive ornaments, and other articles of luxury, the demand for which is engendered by the profits of capital, we find their value to consist almost exclusively of the services of labour and skill — ... the preponderance (in service and profits), of skill in one process of production, begets the necessity of a corresponding excess of labour in one or more others, and vice versa ... the augmented profits of capital setting free a larger number of desires, increase the demand for and the production of value in its consumable forms *" (G. Opdyke, Treatise on Political Economy, New York, 1851, p. 98 sqq.).

This is partially correct. Large-scale production permits a large part of the labour to be employed, partly in luxury production (where it is in part paid still worse), partly in the production of fixed capital (railways, etc.), where much crude labour is required.

Differences in agricultural productivity.

"In Great Britain the production of wheat is about 32 bushels an acre; in France, by official returns, it only averages 14 bushels, and rarely exceeds 20. That is, in France, with twice the expenditure of labour, the RETURN is only one-half what it is in GREAT BRITAIN. Nearly the same as in Ireland" (*The Economist*, November 8, 1851 [p. 1231]).

In England $^{1}/_{7}$ of the agriculturists are independent peasants and cottiers, 43 $^{1}/_{7}$ tenant farmers, $^{5}/_{7}$ agricultural labourers. In Ireland $^{1}/_{13}$ EMPLOYS LABOURERS, $^{6}/_{13}$ cottiers, and $^{6}/_{13}$ LABOURERS. In England 28% [XX-1279] of the population are employed in the production of

a Opdyke has: "...the augmented profits of industry".- Ed.

FOOD, in Ireland 63%. But the ACREABLE PRODUCE in Ireland is only 1/2 what it is in England (*Third Report of the Irish Poor Law Commission*, 1836).^a Thus twice as many PEOPLE are engaged in producing half as much FOOD. Labour in Ireland is only 1/4 as productive as in England (*The Economist*, 1848).

"Labour is nothing without * knowledge.⁴⁴ In the subdivisions of occupations and of labour itself, it becomes ... so separated from labour in complicated societies,* that we must consider it apart" (W. Thompson, An Inquiry into the Principles of the Distribution of Wealth etc., London, 1824, [p.] 272).

"The chances of the future extension of science [are] multiplied in exact proportion to its diffusion" (p. 275).

"In the earlier stages of society, labour and knowledge accompany each other because they are both simple" (l.c.).

"The man of knowledge and the productive labourer come to be widely divided from each other: and knowledge, *instead of remaining the handmaid of labour in the hand of the labourer to increase his productive powers ... has almost everywhere arrayed itself against labour *... The possessors of KNOWLEDGE, and the possessors of POWER, sought everywhere to advance their own individual interests, KNOWLEDGE being such an instrument, so capable of being detached from labour, and opposed to it" (l.c., [p.] 274).

Knowledge thus becomes independent of labour and enters the service of capital; this process belongs in general to the category of the attainment of an independent position by the conditions of production vis-à-vis labour. This separation and autonomisation, which is at first of advantage to capital alone, is at the same time a condition for the development of the POWERS OF SCIENCE AND KNOWLEDGE.

"The union of the workers with the industrial entrepreneur is a genuine association" (Le comte A. de Laborde, De l'esprit d'association etc., Paris, 1818, [p.] 131.^b

This Laborde is the actual inventor of the economic harmonies. The fellow does not ask himself: *what kind of association* is this?

"Ten peasant families have been dismissed in the new system to make room for the farmer, who is not a peasant at all. He only contributes to production by the employment of his capital and his intelligence; but the greater the improvement in the condition of the rich farmer, the greater the deterioration in that of the men who work in the fields for him. The former reserves for himself the use of the will, of choice, of intelligence; that is to say, he denies his labourers and domestic servants the use of these things. From them he demands nothing but the employment of their muscular power, and he reduces them as much as he can to the level of machines" (Sismondi, *Etudes*, Vol. I, pp. [130-]131).^c

"Knowledge of the material world, and skill to apply it by labour, are the sources of wealth" (The Economist, August 30, 1851 [pp. 953-54, cols 2, 1]).

^a Third Report of the Commissioners for Inquiring into the Condition of the Poorer Classes in Ireland.., London, 1836.— Ed.

^b Marx quotes in French.—Ed.

^c Marx quotes partly in German and partly in French.-Ed.

In the 18th century advances in mathematics, mechanics and chemistry and discoveries occurred at almost the same rate in England, France, Sweden, and Germany. *Inventions* too in France for example. But only in England were they applied in capitalist fashion at the time, because there alone were the economic relations sufficiently developed to allow the exploitation of scientific progress by capital. (Particularly decisive in this connection were England's agricultural relations and colonial possessions.)

*"What presents or removes obstacles to the application of capital and labour" * //this therefore applies equally to civil institutions, security, means of transport, etc.// "*must affect production,* although the number of [XX-1280] labourers and the quantity of capital remain the same" (Bailey, *Money and Its Vicissitudes*, London, 1837, [p.] 55).

In the system of small-scale production the producers ARE AIDED BY

* "such knowledge only, and such an amount of mechanical power as may be found in the possession of persons labouring with their own hands for their own subsistence" (R. Jones, *Text-book of Lectures on Political Economy*, Hertford, 1852, [p.] 43).⁴⁵

"The lapse of two centuries has produced a wonderful change in the progress of science and in the instruments it has employed" (*The Industry of Nations*, Part II, London, 1855, [p.] 286).⁴⁶

"Up to a certain point, in fact, and especially in chemical investigations, costly and complicated apparatus is not essentially necessary. For much depends upon the observer's own faculties of perception and combination. But beyond this the philosopher becomes to a very large extent dependent upon his instruments" ([p.] 288).

"The insensitiveness of a chemist's balance, the defective construction of a lens, the incorrect graduation of a thermometer, or the faulty subdivision of the circle of a transit instrument, cannot but vitiate all researches in which they are employed... That physical science in the present day has attained its present eminent position, and is still progressing, must be in a large degree attributed to the wonderful care exercised, and the mechanical skill displayed, in the production of philosophical instruments" * 47 ([p.] 289).^a

On the other hand there is the impact of PHYSICAL SCIENCE ON PRODUCTION.

*"To it are we indebted for the steam-engine and the electric telegraphinventions originating entirely in physical philosophy" * ([p.] 290).

The loss of corn is estimated at $2^{1}/_{2}\%$ less with threshing machines than with ordinary hand threshing.^b With almost all machines, it is true to say that using the same amount of raw material they provide a greater quantity of manufactured goods

^a Cf. present edition, Vol. 33, p. 457.-Ed.

^b See W. Schulz, *Die Bewegung der Production*, Zurich and Winterthur, 1843, p. 36.—*Ed.*

than the imperfect tools of hand labour, by working the material more finely, etc. (Use of waste, reconversion of rags, etc., into raw material.)⁴⁸

Better methods in agriculture.

"Such as the introduction of green crops in place of fallow, and the introduction of beet cultivation on a large scale, which was begun under George II (in England). From that time onwards sandy ground and worthless game preserves were transformed into excellent wheat and barley fields, and the production of corn on light soils increased threefold, while at the same time excellent green fodder was gained for cattle and sheep. The expansion and improvement of cattle-raising by crossing the breeds, better methods of irrigation and drainage, a more appropriate rotation of the crops, the employment of bone-meal as a fertiliser, etc." ^a

"Malthus estimates the average crop yield in [West] European countries to be four times the amount of seed sown, in Hungary and the surrounding area eight to ten times, and in the tropical parts of America as much as 12 to 20 times."^b

	Hectares	Workers	Hectolitres of corn	Horses	Oxen	Sheep
Great Brit- ain pro- duces						
on	13 mill.	5,200,000	56 mill.	170,000	1,250,000	10,200,000
France	40 [mill.]	22-24 mill.	153 [mill.]	40,000	800,000	5,200,000

//"The system of free competition, that system which consists in the nonexistence of system, has only a negative significance in itself. It means the dissolution of the earlier associations of real and personal wealth, which had emerged in the big estate complexes and the union between landowners and peasants, as also in the corporations of the guild type, with their precisely structured relations between masters, journeymen and apprentices" (W. Schulz, Die Bewegung der Production, Zurich, 1843, [pp.] 57-58).

[XX-1281] "All statistically based assertions that wages have risen, or at least not fallen in relation to the necessary means of subsistence, possess at most a merely abstract validity, which reveals itself to be nothing but an illusion when applied to reality. All that can be said is that those occupations which presuppose specific dispositions or a long apprenticeship have on the whole become more remunerative; whereas the relative wage for the mechanically uniform activity which one person can be trained for as easily and quickly as another has fallen with the growth of competition, and necessarily had to fall. And it, is precisely *this* kind of labour which is still the most widely practised, at the present stage of its organisation. Thus if a worker of the first category now earns seven times as much as 50 years ago, and a worker of the second category earns the same as 50 years ago, both workers will of course earn four times as much on an *average*. But if there are in a given country only 1,000 of the first category, while the second category includes 1,000,000 human beings, 999,000 are not better off than 50 years

^b Ibid., p. 42. The following table was compiled by Marx. Cf. ibid., p. 43.- Ed.

a Ibid.—Ed.

ago, and they are *worse off* if the price of the requirements of life has risen at the same time" (Schulz, l.c., [p.] 65).

"Even if it were as true as it is actually false, that the average income of all the classes of society has risen, the differences between different incomes, and the *relative* gap between them, could well have increased, with the result that contrasts of wealth and poverty have emerged more sharply. Precisely because total production rises, there is, in the same degree as this happens, an increase in needs, desires and claims, with the result that *relative* poverty can increase while absolute poverty declines. A Samoyed who lives on oil and rancid fish is not poor, because in his enclosed society all have the same needs. But in a state which *progresses*, and increases its total production in proportion to the population in the course of a decade by perhaps one-third, the worker who earns exactly the same now as 10 years ago has not remained just as well off, but has become worse off by one-third. This is exactly the case in our present epoch" (l.c., [pp.] 65-66).

"In order to achieve a freer intellectual development, a people must cease its enslavement to its own physical needs, it must no longer be in servitude to the body. It must above all have time, to be able to create intellectually and enjoy the fruits of the intellect. This time is gained by progress in the organisation of labour... If a certain expenditure of time and human power was necessary previously for the satisfaction of a given quantity of material needs, and if this expenditure is subsequently reduced by a half, the room for manoeuvre available for intellectual creation and enjoyment is at the same time increased by as much, without any loss in physical well-being... But even the division of these spoils we have captured from old Chronos himself in his very own realm is still decided by the throw of blind and unjust fortune's dice... It is certain, at least, that for large numbers of people the duration of slave labour in the factories has indeed increased, regardless of the saving in time achieved by the perfecting of the machine system. And yet the gain of a greater quantity of free time is also a common acquisition by the power of the nation as a whole (l.c., [pp.] 67-68).

"Period of manufacture ... of handicraft activity subdivided to the highest degree, which is at the same time an activity in which one hand cooperates with another for one and the same purpose of production" (l.c., [p.] 37).

"The continued division of labour finally leads to the employment of a more highly perfected *machine system*, and thereby to the 4th stage" //first hand labour, then handicraft labour, then manufacture, then fabrication ³// "of actual *fabrication* by machines" (l.c., [p.] 37).

[XX-1282] In fabrication,

"man ... becomes the rational guide and director of the forces of nature, active intellectually rather than physically. He thereby enters into an entirely different relation of activity, since he now only brings the material which is to be subjected to the purposes of production into connection with natural forces alien to him, and therefore the result of their impact, or the product, no longer stands in any proportion to his own *physical* exertions" (l.c., [p.] 38).

(Even with manufacture and simple cooperation, it does not stand in proportion to his *individual* performance.)

"Trade, with its purpose of raising the value of a commodity by means of transport, is merely a branch of industry, and is essentially subject to the same law of development. The first and simplest kind of trade is the exchange of

^a Cf. W. Schulz, Die Bewegung der Production, p. 39.- Ed.

commodifies from hand to hand. Following this, it creates the first tools and means of transport, which are as yet simple, such as beasts of burden, or small boats; the rudder still serves man as a craft implement required for the steering and motion of these boats. There is also a continued subdivision of activities for the common purposes of transport, as is perhaps the case with the larger crews of big rowing boats, where a majority of the people still work in uniform, ever-repeated, but at the same time interconnected operations of the machine type. Finally a higher stage of development is reached, in that in sailing ships, steamships, steam-driven vehicles and the like, the power of wind and steam does not merely replace that of the human being, but is multiplied by its obedient subordination to his will... Thus trade too, like agriculture and industry, has its periods of hand labour, handicrafts, manufacture, and machinery" (l.c., [pp.] 38-39).//

We have seen how the ancients conceive the *division of labour* qualitatively—as improvement of labour and the use values created by labour.^a The application of machinery properly so called to production appears first of all in the water mill. The poem written by *Antipater*,^b a contemporary of Cicero, in honour of the introduction of water mills in Rome, bears witness once again to a conception entirely different from that of the moderns (in the Greek Anthology).

"He tells the female slaves whose task it is to grind the corn that they can sleep late now" (they no longer need to rise early) "even if the crowing cocks announce the dawn. For Ceres has ordered the Nymphs to perform the work of their hands, and they, dancing on top of the wheel" (leaping, hopping) "circle" (rotate in a circle) "the axle; this, with its twisted spikes, turns the weight of 4 concave millstones. We enjoy again" (taste again) "the old life, if we learn to feast on the gifts of Ceres without toil." 49

The sole point of view considered here is the saving of labour for the worker himself, not saving on the price of labour.

[XX-1283] h) [RELATIVE AND ABSOLUTE SURPLUS VALUE]⁵⁰

We have considered absolute and relative surplus value separately. But in capitalist production they are bound together. And it is precisely the development of modern industry which shows how they develop simultaneously, how the working day is prolonged in the same degree as necessary labour time is reduced by the development of the social productive powers of labour. It is capital's tendency to develop surplus value simultaneously in both forms. It thereby calls forth at once the struggle for the *normal working day*, depicted previously, and its enforced establishment as a law imposed on capital by the state.^c The tendency of capitalist

^a See present edition, Vol. 30, pp. 272, 280-85.- Ed.

^b Marx has Antiparus.-Ed.

^c See present edition, Vol. 30, pp. 216-26.-Ed.

production is shown clearly when one compares the state's intervention in the first dawn of bourgeois industry (as this appears e.g. in the labour statutes of the 14th century) with modern factory legislation. In the former case, labour time is fixed in order to compel the workers to perform a certain quantity of surplus labour for their EMPLOYERS (or even labour in general), to compel them to perform absolute surplus labour. In the latter case, the aim is forcibly to establish a boundary, beyond which the capitalist may not prolong absolute labour time, so as to prevent the prolongation of labour time beyond a definite limit. The necessity of such an intervention by the state, which was first demonstrated in England, the home of large-scale industry, and the necessity of extending this intervention progressively to new branches of industry, in the same measure as capitalist production seizes hold of those branches, proves at once, on the one hand, that capitalist production knows of no limits to the appropriation of alien labour time, and that, on the other hand, the workers are incapable within the established conditions of capitalist production-without acting as a class upon the state, and, through the state, upon capital-of saving from the harpy's claws of capital even the free time necessary for their physical preservation.⁵¹ The working day for children and adults in France is 12 hours.52 According to the Law of 1833, which preceded the Ten Hours' Bill, labour in England from 1835 onwards was to last 9 hours a day for children under 12 years old (since 1836 for children of 13 as well), and 12 hours a day for young persons below 18 years (not after 8.30 in the evening and not before 5.30 in the morning).^a $1^{1}/_{2}$ hours pour les repas, mais ce temps n'est pas compris dans les neuf ou 12 heures de travail.^b (At the same time the Law of 1833 included 2 hours of compulsory school attendance.) (As late as 1844 the manufacturers had the workers work 14 to 16 hours in those branches where children could be dispensed with or replaced by adults who had lost any other means of support.)

May 1844 12 hours for adults and $6^{1}/_{2}$ for children. (12 hours inclusive of free hours.) (* Half an hour for breakfast and an hour for dinner.*) In 1672 Petty wrote his Political Anatomy of Ireland. There he says⁵³:

* "Labouring men work 10 hours per diem, and make 20 meals per week, viz. 3 a day for working-days, and two on Sundays;" * (now only 2 meals) * "whereby it is plain, that if they could fast on Friday nights, and dine in one hour and a half" *

^a See present edition, Vol. 33, p. 493.-Ed.

^b For meals, but this time is not included in the 9 or 12 hours of labour.-Ed.

(now breakfast and dinner only amount to $1^{1}/_{2}$ hours), *"whereas they take two, from *eleven to one*; thereby thus working $^{1}/_{20}$ more, and spending $^{1}/_{20}$ less, the $^{1}/_{10}$ " * //for taxes// *"abovementioned might be raised" * (10th ED., London, 1691).

It follows from this passage that in those days the labour time for adults was not greater than what is now legally prescribed for children over 13 years old, and that the workers had more to eat. And we already find this favourable situation for the workers in England in the 15th century.

"It appears from the Statute of 1496 that the diet was then considered EQUIVALENT to 1/3 of the income of an artificer, and 1/2 the income of a LABOURER, which indicates a greater degree of independence among the WORKING CLASSES than prevails at present; for the board, both of LABOURERS and ARTIFICERS, would now be reckoned at a much higher proportion of their WAGES. The hours for MEALS and RELAXATION were more liberal, too, than at this day. They amounted to e.g. from March to September one hour for breakfast, an hour and a half for dinner, and half an hour for NOON-MEATE. Hence 3 hours altogether. In winter they worked from 5 o'clock in the morning until it went dark. In contrast, in the FACTORIES of the present there is only half an hour for breakfast, one hour for DINNER, exactly half what there was in the 15th century" (John Wade, History of the Middle and Working Classes, 3rd ED., London, 1835, [pp.] 24, 25 and 577, 578).

[XX-1284] The absolute surplus labour which is gained from lengthening the working day is of course the basis from which the individual capitalist proceeds, since an increase in the productivity of labour only brings about a relative reduction in the wages paid by the individual [capitalist], in so far as he is able to sell the product of labour above its individual value; in so far as the article he produces enters the consumption of the worker the effect is, with the exception of articles of decisive importance, not sudden, and secondly it is common to all capitalists, whether it is they or their BROTHER CAPITALISTS who bring about this alteration in the value of the means of subsistence. With the individual [capitalist], however, where there are piece-wages, it appears that with improvements in machinery, as Ure himself concedes, the piece-wage is reduced in the same proportion, or, if the state of business does not allow this, roughly in the same, as the productive power of labour grows, although the price of the product at first stands above its value, i.e. is not reduced in the same proportion as the amount of labour required to make it.^a There is a striking general example in the fact that directly after the abolition of the Corn Laws the manufacturers undertook a fairly general reduction of wages by 10%, an act which as late as 1853 produced a STRIKE of 8 months in Preston.⁵⁴ Wages rose later owing to a

^a Cf. this volume, pp. 40-41.-Ed.

combination of circumstances which produced an *extraordinary* demand for labour and were entirely independent of the general laws governing *average wages*.

[RATIO OF WAGES TO SURPLUS VALUE]

The question we [have] now to consider is the *ratio* of wages to surplus value.

Let us first take the working day as given. In this case the value of the product of the working day-or the total amount of value, part of which forms the wage, the other part the surplus value-remains constant. And it is clear that the magnitude of value of both parts and the change in their value stand in an inverse proportion. The greater the one, the smaller the other, and vice versa. Furthermore, we have seen^a that the rate of surplus value is, generally speaking, nothing but the ratio of surplus to necessary labour, or, and this is the same thing, the ratio of the surplus value to the variable capital; it follows from this that a change in the relative value of wages and surplus value can only come about through a change in the magnitude of the variable capital, or, and this is the same thing, a change in the necessary labour time or in wages altogether. If, as a result of an increase in the productive power of labour, the value of labour capacity falls, there is a rise in the part of the value of the product which represents unpaid labour or surplus value. If the productivity of labour falls, e.g. as a result of bad harvests, etc., the surplus value also falls. For it should not be forgotten that the proportion of necessary labour time to surplus labour time is determined not by the productivity of the sphere of industry in which the worker works, but by the productivity of all the branches whose results enter into his reproduction process. Whatever the circumstances, a rise or fall in surplus value can only emerge here from a change in the value of labour capacity, and this is conditioned by, and stands in an inverse ratio to, the productivity of labour.

The presupposition here is that labour capacity is paid at its *value*, hence there is an *average wage*, and no rise above this average takes place, no fall below this level. If the length of the working day is given, it is clear that the more productive the labour, the shorter the part of the working day the worker works for himself, and the longer the part he works for capital, and vice versa.

But even an increase of wages over the average would change

^a See present edition, Vol. 30, pp. 172-79.-Ed.

nothing in this law. Surplus value could only increase to the extent that there was a fall in the *value* of labour capacity and therefore in wages, and it could only fall for the opposite reason.

The average wage, or the value of labour capacity, as stated earlier, is not a constant magnitude quoad exchange value.^a But it expresses a constant quantity of use values, a constant quantity of commodities for the satisfaction of needs, i.e. means of subsistence. The value of this quantity of use values depends on the general productivity of all the branches of industry the results of which enter into the worker's necessary consumption. Assume now that industry becomes more productive. Then the following cases are possible. The worker receives the same quantity of use values as before. In this case there is a fall in the value of his labour capacity or his wage. For there has been a fall in the value of this quantity, which has remained constant. The worker has to work less labour time to pay the equivalent of his wage. A greater part of the working day therefore falls to the share of capital. The proportion in which the worker participates in the value of the product of his working day has fallen, while on the other hand there has been an increase in unpaid labour time, or capital's part of the value, surplus value. Hence the relative wage, the proportion of the wage, has dropped.

[XX-1285] Assume, secondly, that there is a rise in the amount, the *quantity*, of the means of subsistence, and therefore in the average wage, but not in the same proportion as in the worker's productivity. In this case the value of labour capacity falls, and surplus value rises in the same proportion. For although the worker receives a greater amount of commodities than before, they are the product of a smaller part of his working day than before. His paid labour time has fallen, his unpaid has risen. Although his real wage has risen (relating the real wage to use value), its value, and therefore the worker's relative wage-the proportion in which he shares with capital the value of his product—has fallen. Finally the third case: The worker continues to receive the same value-or the objectification of the same part of the working day-as before. In this case, because the productivity of labour has risen, the quantity of use values he receives, his real wage, has risen, but its value has remained constant, since it continues to represent the same quantity of realised labour time as before. In this case, however, the surplus value too remains unchanged, there is no change in the ratio

^a See present edition, Vol. 30, pp. 42-45.-- Ed.
between the wage and the surplus value, hence the *proportion* [of surplus value] to the wage remains unchanged.

The cases can be summarised as follows: quantity remains the same, proportion falls; quantity rises, proportion falls; proportion remains the same, quantity rises. But in all these cases the surplus value, the rate of surplus value, its ratio to the capital laid out in wages, can only grow through a fall in the value of wages; the growth can only be in inverse ratio to the value of wages, and only as a result of CHANGES occurring in the value of wages arising from a CHANGE in the productivity of labour. (If, on the other hand, the industry became less productive, the value of wages, relative wages, would rise if the quantity remained the same, and therefore surplus value, and hence the ratio of surplus value to variable capital, would fall.)

Assume a situation where wages remain constant in value, although the productivity of labour increases, hence there is an increase in the quantity of commodities in which this value is embodied. Then there would be no CHANGE in surplus value, although the latter would represent, just as wages would, a greater quantity of use values than before. It is therefore possible, looking at this from the point of view of use value, of the quantity of commodities in which wages and surplus value are expressed, for both to rise in the same proportion, but it is impossible for the exchange value of one to rise unless the exchange value of the other falls.

If the industry becomes less productive and wages do not fall below the AVERAGE, their value rises. Quantity remains the same. Proportion rises. If real wages fall, but in such a way as nevertheless to represent more labour time than before, proportion rises, although quantity falls. Proportion remains the same, quantity falls: if the worker only receives the product of the number of hours that was normal before the change in productive power.

"When an alteration takes place in the productiveness of industry, so that either more or less is produced by a given quantity of labour and capital, the proportion of wages may obviously vary, whilst the quantity which that proportion represents remains the same, or the quantity may vary, whilst the proportion remains the same" ([J. Cazenove,] Outlines of Political Economy, London, 1832, [p.] 67).

"In a country where the * gross return * is * small, a larger proportion of the whole may give the labourer a less command of necessaries, than in other countries, * where the * gross return * is greater, * a smaller proportion of the whole" * (Ramsay, [An Essay on the] Distribution of Wealth, Edinburgh, 1836, p. 178).

What Ricardo says about the ratio between profits and wages is true of the ratio between wages and surplus value.

"In proportion as less is appropriated for WAGES, more will be appropriated for PROFITS, and vice versa" ([Ricardo, On the Principles of Political Economy, and Taxation, 3rd ed., London, 1821, p.] 500).

"It is not the progress of mechanical science that is to blame, but *the social order*, if the worker, who gains the power of doing in two hours what he did previously in twelve, does not thereby become richer" (Sismondi, *Nouveaux principes*, Vol. I, [p.] 349).^{a55}

[XX-1286] "It is a remarkable result of the philosophical history of mankind that the progress of society in population, industry, and enlightenment is always achieved at the expense of the health, the skill and the intelligence of the great mass of the people ... the *individual happiness of the great majority is sacrificed to the happiness of a small number of individuals*, and it would be doubtful which of these two conditions, that of barbarism or prosperity, is to be preferred, if the insecurity inherent in the first did not incline the scales in favour of the second" (H. Storch, *Cours d'économie politique*, Vol. III, ed. by Say, [Paris,] 1823, [pp.] 342-43).^b

"Trades Unions, in their desire to maintain wages, endeavour to share in the profits of improved machinery... They demand higher wages because * labour is abbreviated* ... in other words: they endeavour *to establish a duty on manufacturing^c improvements"* (On Combinations of Trades, NEW ED., London, 1834, [p.] 42).

In the case considered, Ricardo is correct in saying that the sum of wages+profit=a constant magnitude of value, in so far as they always represent the same quantity of labour time.

We come now to the second case, the *lengthening of the working* day, and for the sake of simplification we assume here that the productive power of labour remains the same.

There are in fact only two possibilities to investigate.

1) Surplus labour time is lengthened, without any increase in wages, or any appropriation by the worker himself of a part of this overtime. This was for the most part the case throughout the period in which the FACTORY SYSTEM pushed OVERTIME to an unlimited extent, both in its own sphere and in other spheres (outside it). (The example of the London bakeries.^d) (Also shown in the fact that wages rose relatively more in the BRANCHES subject to the Ten Hours' Bill than where there was no normal working day laid down by law.) (See the list quoted earlier.^e) The value of labour capacity apparently remains the same here, while surplus value rises. Or the value of labour capacity, although it remains the same absolutely, falls relatively, because surplus value rises. SURPLUS labour does not grow because necessary labour is lessened absolutely, but

^a Marx quotes in French, from the second edition of Sismondi's work.- Ed.

^b Marx quotes in French.--- Ed.

^c The English original has "mechanical".-- Ed.

^d Cf. present edition, Vol. 30, pp. 181, 228. See also Marx's article "Bread Manufacture" (present edition, Vol. 19, p. 253).—Ed.

e See present edition, Vol. 30, p. 228.-Ed.

necessary labour falls in comparison with surplus labour, because the latter grows absolutely. If we compare the magnitude of the value of labour capacity or wages here with surplus value—or compare the paid with the unpaid part of the working day—the latter has risen absolutely, and *therefore* the former has fallen relatively, while in the first case (of a change resulting from a change in the productivity of labour) any rise or fall in surplus value arises only from a *direct change in the value* of labour capacity, or in the magnitude of the necessary labour time. Here too, a *relative* fall in wages corresponds to the growth of surplus value, but this is a relative fall which is caused by a CHANGE in SURPLUS labour, a movement independent of necessary labour time—or of the value of labour capacity.

There are, however, two comments to be made here.

If this lengthening of labour time is not temporary, and the lengthened and lengthening working day becomes firmly established as normal, if this lengthening becomes established as normal, as was previously the case in all the branches of labour now subject to the Ten Hours' Bill, and is now the case in a very large part of the spheres of production not yet subject to it, this fall in relative wages also rests on an absolute devaluation of labour capacity, a fall in its value. For, as we have seen, the daily, weekly average wage presupposes a normal number of years, which comprises a working life—the active existence of the worker, and therefore of his labour capacity. As a result of the lengthening of labour time this working life is shortened. If, e.g., the period=20 years, and the daily necessary wage=x, then the total value of the labour capacity is:

In 1 day the wage is x,

in 365 days the wage is 365 x,

in 20 years the wage= $365 \times 20 \times x$.

In 365 days $\times 20$ the wage = $365 \times 20 \times x$.

In 1 day the wage = $\frac{x [365 \times 20]}{365 \times 20}$

[XX-1287] If now the cycle of labour capacity is shortened by overtime from 20 years to 15, the value of labour capacity has fallen from $365 \times 20x$ to $365 \times 15x$, from 4 to 3, or from 1 to $^{3}/_{4}$. Hence by $^{1}/_{4}$. If the daily value of labour capacity is to remain constant, despite its accelerated consumption, x must be CHANGED INTO y, hence the following equation must take place:

$$365 \times 15y = 365 \times 20x$$
. $y = \frac{365 \times 20x}{365 \times 15} = \frac{20x}{15} = \frac{4}{3}x = \left(1 + \frac{1}{3}\right)x$. In other

.

words, the *necessary wage* would now have to grow by 1/3 in order to remain the same.

Assume, e.g., that the weekly wage=10s. With ABOUT 52 weeks, in the year this=520s., and in 20 years= $520 \times 20 = 10,400$ s.=(=£26 a year)=£520 in 20 years. Therefore, if the value of labour capacity is to remain the same, when its duration is reduced from 20 to 15 years by OVERTIME, the annual wage would have to= $\pounds^{520}/_{15}$ (or $\pounds 34^2/_3$) and the weekly wage= $\pounds \frac{520}{52 \times 15} = \pounds \frac{10}{15} = \frac{10 \times 20}{15}$ s.= $\frac{10 \times 4}{3}$ s.

= $13^{1}/_{3}$ s. Therefore, for the *daily value of labour capacity* to remain *the same*, not only nominally but in reality, the worker would have to appropriate for himself as necessary labour time $1/_{3}$ more of the total working day.

Under all circumstances, however, we must note (which is important for our later discussion) that when we look at the value of the product in which the total working day is objectified, this value naturally always=wages+surplus value, in other words necessary labour time+surplus labour time. It would on the other hand be wrong to invert this and say, as in the first case, that the total amounts of wages and surplus value always represent the same constant sum of value, because they represent the same labour time. They rather represent a changing labour time and therefore a variable sum of value.

Ferrand's witticism in his speech of April 27, 1863 in the House of Commons, cited above,^a contains no element of *contradictio in adjecto*^b:

* "The cotton trade of England had existed for 90 years. It had existed through three generations of the English race, and he believed he might safely say that during the same period it had destroyed nine generations of factory operatives."*

What *Professor Cairnes* says in *The Slave Power*, London, 1862, is even truer of the manufacturers, since they do not even have to pay the FEE-SIMPLE for the workers:

* "The rice-grounds of Georgia or the swamps of the Mississippi may be fatally injurious to the human constitution; but the waste of human life, which the cultivation of these districts necessitates, is not so great that it cannot be repaired from the teeming preserves of Virginia and Kentucky"

(read Ireland and the agricultural districts of England, as long as their surplus population was not yet used up or withered in the bud).

^a See this volume, p. 45.—Ed.

^b Here: "...no element of self-contradiction".--Ed.

"Considerations of economy, moreover, which, under a natural system, afford some security for humane treatment by identifying the master's interest with the slave's preservation, when once trading in slaves is practised, become reasons for racking to the uttermost the toil of the slave; for, when his place can at once be supplied from foreign preserves, the duration of his life becomes a matter of less moment than its productiveness while it lasts. It is accordingly a maxim of slave management, in slave importing countries, that the most effective economy is that which takes out of the [XX-1288] human chattel in the shortest space of time the utmost amount of exertion it is capable of putting forth. It is in tropical culture, where annual profits often equal the whole capital of plantations, that negro life is most recklessly sacrificed. It is the agriculture of the West Indies, which has been for centuries prolific of fabulous wealth, which has engulfed millions of the African race. It is in Cuba, at this day, whose revenues are reckoned by millions, and whose planters are princes, that we see, in the servile class, the coarsest fare, the most exhausting and unremitting toil, and even the absolute destruction of a portion of its members every year, by the slow torture of overwork and insufficient sleep and rest" * ([pp.] 110, 111).

> [CONVERTED FORM OF THE VALUE OF LABOUR CAPACITY IN THE VALUE OR PRICE OF LABOUR]

Consideration of the CASE cited above leads us further to a different conception of the *value* of labour capacity, which is of little importance in our analysis of capital, but becomes very important in considering wages specifically.

"The price of labour is the sum paid for a given quantity of labour; the wages of labour is the sum carned by the labourer ... the wages of labour depend upon the price of labour and the quantity of labour performed" (Sir Edw. West, Price of Corn and Wages of Labour, London, 1826, [pp.] 67, 68).

*"An increase in the wages of labour does not necessarily imply an enhancement of the price of labour. From fuller employment, and greater exertions, wages of labour may be considerably increased, whilst the price of labour may continue the same" * (l.c., [p.] 112).

//Malthus maintains that the value of labour is constant, and that only the values of the commodities in which labour is paid change. This assertion, which like everything else is also found at certain points in Adam Smith, rests on the following train of thought, of which Malthus himself is by no means conscious^a: Assume that the length of the working day is given, e.g.=12 hours. At a certain level of productive power, let necessary labour=10 hours and surrus labour=2. If there is a general growth in the productivity of labour, the results of which enter into the worker's necessary means of subsistence, the ratio will be changed into 9 hours of necessary and 3 hours of surplus labour. If the general productivity of labour declines, it will be changed into 11 hours of necessary

^a See present edition, Vol. 32, pp. 220-22.- Ed.

and 1 hour of surplus labour. If we look at this from the point of view of the worker, his wage always costs him 12 hours of labour, although the commodities into which the wage can be resolved represent in turn the value of 10, 9 and 11 hours, according to the different levels of productivity of labour, and, corresponding with this, his surplus labour=2, 3 and 1 hour, HENCE the profit is entirely different in each case. But to say that, because the worker-presupposing that the length of the working day is given-must work a given number of hours, e.g. 12, in order to obtain the product of 9, 10, or 11, the value of labour is constant, and therefore is the STANDARD OF VALUE, is preposterous. The same quantity of labour appears here rather in an expression which is variable, and entirely different from the product of that quantity of labour. It would, as Bailey rightly says," be the same as declaring 1 YARD of CLOTH to be the STANDARD OF VALUE because the YARD of CLOTH always remains identical whether it costs 5 or 1 or 6s.// 56

So far we have not spoken of the VALUE OF LABOUR but only of the value of labour capacity, since a direct exchange of more labour for less would contradict the law of commodity exchange, and the form, whether the labour is active or objective, is entirely irrelevant, and the more irrelevant in that the value of a definite quantity of objectified labour is measured not by the quantity of labour objectified in it but by the average quantity of living labour required to reproduce the same commodity. On the other hand, the concept of the commodity in and for itself excludes labour as process—i.e. the value of the commodity—: labour as process, in actu, is the substance and measure of value, not value. Only as objectified labour is it value. Therefore, in considering capital in general—where the presupposition is that commodities are exchanged at their value—labour can only function as labour capacity, which is itself an objective form of labour.

In the production process, however, this mediation disappears. If we disregard the formal process of the exchange [XX-1289] between capital and labour and consider what really occurs *in* the production process, and appears as the result of the production process, a certain quantity of living labour is exchanged for a smaller quantity of objective labour, and at the end of the process a certain quantity of objectified labour is exchanged for a smaller quantity of objectified labour.

^a See present edition, Vol. 32, p. 222.- Ed.

A working day of 12 hours, e.g., is exchanged on the part of the worker for the product of 12-2 hours, or 10 hours, if the surplus labour=2 hours.

It appears as a result that a commodity of the value of 10 hours=the value of the labour capacity, the value of the manifestation of this labour capacity of 12 hours, i.e. 12 hours of labour. In fact the reproduction of the worker's labour capacity=10 hours of labour, costs him 12 hours. He must work for 12 hours—must deliver a product in which 12 hours of labour are realised—in order to obtain commodities in which 10 hours are realised. The value of his labour capacity, determined by the 10 hours of labour time required for its daily reproduction, is the equivalent he receives for 12 hours of labour, and thus appears as the value of a 12-hour working day.

Price is at the outset merely the monetary expression of value. Assuming that the quantity of money which can be produced in an hour is 6d., this makes $6 \times 12d$., or 6s., for 12 hours of labour. If now the necessary labour time=6 hours, the price of labour capacity = 3s. (its value expressed in money) and these 3s. - the value or price of the labour capacity—appear as the value or price of a working day of 12 hours.

They are in fact the price, or the amount of value, the worker receives in payment for the 12 hours-as equivalent. It is in this sense that we speak of the value or price of labour. //Once again, this is as distinct from the market price of labour, which stands now above, now below, its value, as with every other commodity.// And it is in fact the form in which the relation appears. For our investigation we must hold fast to what is essential. So if we speak of the value (or, expressed in money, the price) of labour, this must always be understood to mean the value of labour capicity. But since this value of labour capacity (which is its daily, weekly, etc., value) in fact forms the wage, hence the sum of money the worker receives in payment for the whole of his working day, this price, in which only the paid part of the working day is objectified, appears as the price or value of the whole working day. And in this way 3s. are the value of a working day of 12 hours, although they are only the product of 6 hours of labour. In this form, the value, price of labour is a specific expression, which directly contradicts the concept of value. But this contradiction exists. It is mediated through a series of intermediate elements, which we have developed. In reality the relation appears unmediated, and therefore the wage appears as the value or price of a definite quantity of living labour. This form becomes important when one is examining wages in their real

movement. It is also important in understanding many misconceptions in the theory.^a But at this point we shall only consider [XX-1290] it incidentally in relation to the passage from West quoted above, and the CASE we are examining at present.

One can see that initially the phrase

*"the price of labour is the sum paid for a given quantity of labour" *b

is correct. It is the unconceptual form in which the VALUE OF LABOUR appears (i.e. the value of labour capacity). We do not de prime abord^c see from this SUM PAID what difference there exists between the labour the worker performs and the labour required for the production of his wage. Let us take the above example. The labour time of 1 hour is objectified in 6d., and the labour time of 12 hours in 6s. Since the worker only receives 3s. for 12 hours of labour, the ratio of his surplus labour to his necessary labour=100:100, or, this is the difference between the value of his labour capacity, which is paid him in wages, and its valorisation, which constitutes surplus value for the capitalist. This cannot, however, be perceived in the expression that the value of a working day of 12 hours=3s.*) Even so, this form too allows certain conclusions to be drawn which are relevant to our CASE.

Assume the total working day=10 hours, assume further that the necessary labour time=6 hours, and assume finally that 1 hour of labour is objectified in 6d. For 10 hours of labour the worker receives the product of 6 hours=36d.=3s. Thus the *price or value* of 1 hour (*value or price* in the sense developed above) comes to ${}^{3}/_{10}$ s. or ${}^{3}/_{5}$ d., and the surplus value comes to ${}^{2}/_{5}$ d. an hour. ${}^{2}/_{5}$: ${}^{3}/_{5}={}^{12}/_{5}:{}^{18}/_{5}=12:18=2:3$. Or, inversely, ${}^{3}/_{5}:{}^{2}/_{5}=3:2$. In fact the ratio of total surplus labour [to necessary labour] is 4 hours:6 hours={}^{2}/_{3}:1.

The total working day=10 hours, of which 6 are necessary labour. ${}^{6}/{}_{10}={}^{3}/{}_{5}$. The worker works for himself for ${}^{3}/{}_{5}$ of 10 hours, and he works for his capitalist for ${}^{2}/{}_{5}$. (This is again the ratio of

*) Let us assume that a commodity is sold at its price of production. If one deducts from its value the value of the constant capital contained in it, as well as the part of the wage contained in it, one might imagine that the excess was the surplus value, and thus the difference between the value and the valorisation of labour capacity could be calculated from the wage. We shall see later that this is not the case.

^a Cf. present edition, Vol. 32, pp. 530-31.- Ed.

^b See this volume, p. 70.-Ed.

c At first.-Ed.

3:2 or 2:3, according to whether one takes the ratio of necessary labour to surplus labour or the inversion of this.) He therefore works $\frac{3}{5}$ of every hour for himself, and $\frac{2}{5}$ for his capitalist. Or 36 minutes for himself and 24 minutes for capital. And these 36 minutes are represented by $3^3/_5d$, the 24 minutes by $2^2/_5d$. If surplus labour is now lengthened from 4 hours to 6, hence by 2 hours, the value of the working day remains 3s. as before,=the value of the labour capacity. The price of an hour of labour time now only comes to $\frac{3}{125}$, or 3d.; it has therefore fallen from $\frac{3^3}{5}$ to 3, or by $\frac{3}{5}$ d. Whereas the surplus value has risen from $\frac{2^2}{5}$ to 3, or by $\frac{3}{5}$. Previously the worker worked 36 minutes of each hour for himself, and 24 for the capitalist; now he works 36-6 for himself and 24+6 for the capitalist. This change in the ratio of necessary labour to surplus labour, brought about by the absolute prolongation of the working day, therefore finds expression as a fall in the price or value of a certain quantity of labour, of an hour of labour in the given case. Here it appears as an absolute (not merely relative) fall. (But, as we have seen, it also implies a real DEPRECIATION of labour capacity, in so far as 12 hours' use of labour capacity presupposes a different *duration* of labour capacity from 10 hours' use.)

[2)]^a Now let us assume the opposite case, where the worker receives the same price in payment for the 2 additional hours as for the 10, hence 2(3+3/5)d. or $7^{1}/5d$. The surplus value then comes to $2(2+^{2}/_{5})=4^{4}/_{5}d$. In the 12 hours, 6s. are now produced altogether. And of these 6s. the worker receives 3s. $7^{1}/_{5}d$., while the capitalist receives 2s. $4^{4}/_{5}d$. In this case the value of labour has risen from 3s. to 3s. $7^{1}/_{5}d$, and the surplus value from 2s. to 2s. $4^{4}/_{5}d$. This simultaneous rise in the value of labour and in surplus value is only possible given an absolute lengthening of the working day. //Except when the labour time becomes more intensive; but this can only apply to individual branches of labour. If the intensification becomes general, it is the normal intensity of labour, and the more intensive hour of labour is now the normal hour of labour, which is presupposed when one speaks of 1 hour of labour.// This rise in the wage (in its value) takes place without any increase in the price of labour or the value of labour. It only shows that labour time has been lengthened, and this absolute lengthening of the working day is not entirely a free gift for the capitalist. This shows the correctness of a [XX-1291] further remark by West:

^a See this volume, p. 67.-Ed.

* "The wages of labour is the sum earned by the labourer ... the wages of labour depend upon the price of labour and the quantity of labour performed... An increase in the wages of labour does not necessarily imply an enhancement of the price of labour... Wages of labour may be considerably increased, whilst the price of labour may continue the same." *a

It is therefore wrong to conclude that the VALUE OR PRICE OF LABOUR has increased if the exchange value of the wage has risen, where this rise is connected with a growth in the quantity of labour or a lengthening of the working day.

In this case the *surplus value has grown*, but not its rate, for the increase in the variable capital has kept pace with the growth in the surplus value.

As long as 10 hours were worked, capital paid a wage of 3s. (36d.) and made a surplus value of 2s. This is therefore a rate of surplus value of $2'_{3}=66^{2}_{3}\%$. Once 12 hours are worked, capital pays 3s. 7^{1}_{5} d. (or 43^{1}_{5} d.), and the surplus value=2s. 4^{4}_{5} d. (= 28^{4}_{5} d.). 43^{1}_{5} d.= $^{216}_{5}$ fd., and 28^{4}_{5} d.= $^{144}_{5}$. Hence the ratio of surplus value to variable capital= $^{144}_{216}=^{72}_{108}=^{36}_{54}=^{18}_{27}$, and $18:27=66^{2}_{3}:100$.

Here, therefore, there takes place a growth in the value of the wage and a growth in surplus value, without any change in the proportion between them, nor therefore in relative surplus value or in the relative wage.^{*)} But in this case the rise in the value of the wage is not accompanied by a rise in the price or value of labour, understanding this phrase to mean the total amount paid for a given labour time.

In the given case the worker works $7^{1}/_{5}$ of the 12 hours for himself and $4^{4}/_{5}$ for capital. Previously he worked 6 hours for himself and 4 for capital. But $7^{1}/_{5}$ is related to $4^{4}/_{5}$ as 6 is related to 4. I.e. the ratio of paid to unpaid labour time has remained unchanged. But since 6 hours was the labour time necessary for the reproduction of labour capacity, the wage now in fact appears to have risen above the minimum, above the value of labour capacity. The value of this labour capacity, however, was calculated on its being consumed for ten hours every day. With a twelve-hour consumption there is a change in its total duration, and therefore in the total value of this labour capacity, if the wage does

*) In the case indicated here, however, there would be a *relative* increase in *profit*, for reasons which can only be explained later.

^a See this volume, p. 70.-Ed.

not rise in the same proportion as the length of exploitation—the duration—of the labour capacity diminishes. It depends on the circumstances whether a lengthening of the working day, with the *price of labour* remaining constant, hence an *increase in the wage*, brings about a *real DEPRECIATION of labour capacity*, which is not indicated by any change in the *price of labour*, and indeed is accompanied by an increase in the *value of the wage*.

We have examined 1) the case where the lengthening of the absolute labour time is entirely appropriated by capital; and 2) the case where *the ratio* between paid and unpaid labour remains the same while labour time has been lengthened. Now we come 3) to the case where the OVERTIME is admittedly divided between capitalist and worker, but not in *the same* ratio as existed previously between paid and unpaid labour time.

As long as 10 hours were worked the worker worked 6 hours for himself (3s.) and 4 hours for the capitalist (2s.). Once 12 hours are worked, let him receive 6d. in payment for 1 hour, and work one hour for the capitalist (=6d.). The total labour time the worker now works for himself=7 hours, the labour time he works for the capitalist=5 hours. Previously the ratio was $\frac{4}{6}$ (= $\frac{2}{3}$), now it is $\frac{5}{7}$. $\frac{2}{3} = \frac{14}{21}$, and $\frac{5}{7} = \frac{15}{21}$. The worker now receives 3s. 6d. for 12 hours; this makes $3^{1}/2^{1}$ d. for one hour, instead of the previous $3^{3}/_{5}d$. The price of labour has therefore fallen by $1/_{10}d$. And the wage has risen from 3s. to 3s. 6d. [XX-1292] Here, therefore, a rise in wages has taken place (disregarding the DEPRECIATION of the labour capacity by its more rapid consumption) at the same time as a fall in the price of labour, and the surplus value has risen in the same proportion as the price of labour has fallen. Previously, the capitalist laid out 3 and received $2,=^{2}/_{3}$; now he lays [out] 3s. 6d. and receives 2s. 6d.; hence he lays out 42d. and receives 30. $^{30}/_{42} = ^{15}/_{21}$; $= ^{5}/_{7}$. The rate of surplus value has therefore risen from $^{2}/_{3}$ to $^{5}/_{7}$, or from $^{14}/_{21}$ to $^{15}/_{21}$ or by $^{1}/_{21}$.

Conversely, if the worker received $1^{1/2}$ of the 2 hours, hence 9d., the relation would be this: His wage now=3s. 9d.,=45d., this makes $3^{3}/_{4d}$ an hour, whereas previously he received only $3^{3}/_{5}$. ${}^{3}/_{4}-{}^{3}/_{5}={}^{15}/_{20}-{}^{12}/_{20}={}^{3}/_{20}$. In this case the rise in the wage is accompanied by a rise in the *price of labour*, to which there would correspond a *fall in the rate of surplus value*. The capitalist lays out 3s. 9d., there therefore remain for him 2s. 3d. 3s. 9d.=45d., and 2s. 3d.=27d. ${}^{27}/_{45}=60\%$. Previously it was $66^{2}/_{3}\%$. A fall of $6^{2}/_{3}\%$. We shall see later on that *relative profit* may grow even in this case, where the amount of surplus value increases although its rate declines.

A rise in wages—seen from the point of view of exchange value, not use value, and with the productivity of labour remaining constant, as is the overall assumption in this part of the investigation—can therefore take place with the price of labour remaining constant, whereby a DEPRECLATION of labour capacity is possible. It can take place with the price of labour falling, a DEPRECLATION of labour capacity accompanied by not only an absolute but also a relative increase in surplus value.

It is necessary to subdivide this form in this way, as value of labour or price of labour, in which the value of labour capacity presents itself in practice and in its direct manifestation, in order to solve certain problems connected with the movement of wages. In considering the general relation we have only to take account by way of exception of this inverted form in which the value of labour capacity appears. This inverted form is, however, the way in which it appears in the real process of competition, where everything appears in an inverted form, and in the consciousness of both worker and capitalist.

We saw earlier: Given the length of the working day (and as long as we are not speaking of a fall of wages below the minimum or of their rise above the minimum, hence of price fluctuations which do not concern value itself), any alteration can only proceed from CHANGES in the productivity of labour. So, assuming the case of a rise in the price of the necessary means of subsistence (e.g. the products of agriculture) as a result of a fall in the productivity of agriculture—with all other circumstances remaining the same. hence no fall for example in the price of the non-agricultural means of subsistence which might cancel out the above price rise-the value of labour capacity would have to rise, there would have to be an increase in necessary labour time at the cost of surplus labour time, and surplus value would have to fall. The quantity of the means of subsistence received by the workers would remain constant in spite of the rise in the value of labour capacity. If not, if it declined, the level of wages, or wages, would fall below its established minimum, in spite of the increased value of labour capacity and in spite of the resultant rise in relative wages and fall in relative surplus value. But this law does not by any means apply if the working day functions not as a constant but a variable magnitude, i.e. is prolonged beyond its previous normal limit. If absolute surplus labour is prolonged in this way, then despite the rise in the value of labour capacity relative surplus value can not only remain the same but even grow. This was unquestionably the case in England, e.g., for the period 1800 to

1815. During this time the products of agriculture became dearer but it was at the same time the main period of the *lengthening of* the normal working day.*'

[DERIVED FORMULAE FOR THE RATIO OF SURPLUS VALUE TO VARIABLE CAPITAL OR OF SURPLUS LABOUR TO NECESSARY LABOUR]

[XX-1293] We have seen^a that the rate of surplus value is to be calculated simply by reference to the magnitude of the variable capital, or, and this is the same thing, is to be expressed as the ratio of $\frac{SURPLUS LABOUR}{NECESSARY LABOUR}$. In the first expression surplus value variable capital ' the ratio of surplus value to the capital, whose variation it is, is expressed; it is a value relation; in the ratio of SURPLUS LABOUR to NECES-SARY LABOUR both values, the variable capital and the surplus labour, are reduced to the basic ratio which measures them both, since the ratio of the two values is determined by the labour time contained in them, and the values are therefore in the same rela-Surplus value tion to each other as the labour times. and variable capital

 $\frac{\text{SURPLUS LABOUR}}{\text{NECESSARY LABOUR}} \text{ or } \frac{\text{unpaid labour}}{\text{paid labour}} \text{ are all the original, conceptual}$

expressions of the same relation.

The same relation can also be expressed in other derived forms, but these do not present the essential points with the same conceptual rigour.

NECESSARY LABOUR+SURPLUS LABOUR=the total working day. Assuming that NECESSARY LABOUR=8, and SURPLUS LABOUR=4, the ratio= $\frac{4}{8}=\frac{1}{2}$. Or 50% is the rate of exploitation of labour. The total working day=12 (=NECESSARY LABOUR+SURPLUS LABOUR), necessary labour

*) There were other circumstances in that period which brought about not only a relative, but an absolute fall in the average wage. One of these factors was the continuous DEPRECIATION of money, and, as is well known, in epochs of the DEPRECIATION of money the nominal wage rises in the same proportion as money is depreciated. The value of money is taken as constant throughout our investigation.

¹⁾ I have already used the expression <u>paid labour</u> in my original presentation of the rate of surplus value. This must not be done. Since it presupposes the

payment of quantities of labour, not labour capacity. Unpaid labour is the expression used among the bourgeois themselves for abnormal OVERTIME.

^a See present edition, Vol. 30, pp. 172-80.- Ed.

time= $12 \times \frac{2}{3}$, and surplus labour time= $\frac{12}{3}$. Both can be expressed as aliquot parts of the total working day, and if we compare these expressions, the same proportion emerges. $\frac{12 \times 2}{3}$ or $\frac{24}{3}$: $\frac{12}{3}$ =24:12=8:4. But the rate of exploitation is not given directly by this expression. E.g., if surplus labour is 50% of necessary, it is $\frac{1}{3}$, or $33^{1}/_{3}$ %, of the total working day. This $33^{1}/_{3}$ % does not, unlike the 50%, directly express the rate of exploitation. Although this derivative form is serviceable in some investigations, it can lead to entirely false conclusions.

For example, if we assume that NECESSARY LABOUR=6 hours, and SURPLUS LABOUR=6 hours, the rate of surplus value, or the rate of exploitation, will be 100%. If we assume that NECESSARY LABOUR = 4 hours, and surplus LABOUR=8 hours, the rate of surplus value, or the degree of exploitation, will be 200%. It is clear, on the other hand, that surplus labour can never = 100%, since this ratio total working day $always = \frac{total working day - NECESSARY LABOUR}{total working day}$, in other words total working day the surplus labour always forms an aliquot part of the total working day, is always smaller than the total working day, hence never= $\frac{100}{100}$. Still less can it ever= $\frac{100 + x}{100}$. The total working day is a limit which surplus labour can never reach, however great the reduction in necessary labour.*) Since surplus labour=the total [working day]-necessary labour, it will grow in the same ratio as NECESSARY LABOUR becomes smaller. But if the latter became 0, surplus LABOUR would also be 0, since it is only a function of necessary labour. Various writers on political economy (some of whom also confuse profit with surplus value) have drawn from this the incorrect conclusion that the rate of surplus value can never amount to 100%,^{a57} thus taking a derived expression, which does not directly express the ratio, for the direct expression of the ratio. The expression must first be converted back in order to find the real ratio. If, e.g., we have the ratio of surplus labour to the total working day, or surplus labour, it results from this that neces-

^{*)} This applies to the worker in so far as he is employed. For the *total day* composed of many *simultaneous working days* the day of the individual worker can be left out of account.

^a Here Marx wrote "Rodbertus" above the line.--Ed.

sary labour=the total working day—surplus labour. And we therefore also have the ratio of the necessary working day to necessary labour

 $\frac{\text{surplus labour}}{\text{total working day}} \text{ yield } \frac{\text{surplus labour}}{\text{necessary labour}} \text{ and only with this ratio do}$

we have the real rate of exploitation, which can amount to 100% and more.

[XX=1294] Just as the expressions of necessary labour and surplus labour as fragments of the total working day are derived forms of the ratio $\frac{\text{surplus labour}}{\text{necessary labour}}$, $\frac{\text{paid labour}}{\text{unpaid labour}}$, so the expression of wages and surplus value as aliquot parts of the total

product (i.e. of the value of the total product) is a derived form

of the conceptual relation $\frac{\text{surplus value}}{\text{variable capital}}$. The value of the pro-

duct=constant capital+(variable capital+surplus value). If we put constant capital=0, i.e. if we abstract from its value, which does not affect the ratio between surplus value and variable capital, or does not affect the value the newly added labour has imparted to the product, the value of the total product=the value of the variable capital+the surplus value,=wages+surplus value. Hence once the production process is extinguished in its result, in the product, once the living labour exchanged for objectified labour has again objectified itself, wages and surplus value can be expressed as fractions of value, as proportional parts of the total value of the product. Thus if the variable capital of $\pounds 8$ is reproduced by $\pounds 8$, and if in addition the surplus labour has objectified itself in £4, the value of the product=8v+4s=£12. The values $\pounds 8$ and $\pounds 4$, in which necessary and surplus labour have respectively been objectified, can then be expressed as proportional parts of the total product of $\pounds 12$.

Firstly, this derived ratio suffers from the same disadvantage as the derived formula we considered earlier. It does not directly express the rate of exploitation. Secondly, because the finished product always expresses labour time of a specific magnitude, all relations emerging from variations in the working day, in absolute surplus labour, disappear in this form. We find, therefore, that in fact the writers on political economy who make particular use of this form ^a treat the sum of necessary time+surplus time, the total

^a See present edition, Vol. 31, p. 251-Ed.

working day, as a constant magnitude, hence they also treat the total value of the product, in which the total working day is expressed, solely as a constant magnitude. Lastly, however, when this formula is treated as the original formula, it blurs and falsifies the qualitative character of the exchange relation between capitalist and worker, the exchange between living labour and objectified labour, which really takes place in the production process, by dealing solely with objectified labour, labour objectified in the product. The essential relation, the fact that the worker has no share in the product, and that this exchange, instead of giving him a share, excludes him from any share in the product as such, this vital point of the whole relation, disappears, and its place is taken by the false semblance that the capitalist and the wage labourer form a PARTNERSHIP, and share out the product in proportion to their different contributions to its formation. This is therefore a favourite formula of bourgeois apologists for the relation of capital.

Nevertheless, this derived formula is an expression that emerges from the result of the production process itself, in which both wages and surplus value are ultimately represented as parts of the value of the product, the total amount of objectified labour. We shall learn the true meaning of this formula for the development of the relation of capital later on—when considering accumulation. This formula becomes all the more important because money figures as means of payment, i.e. labour is first paid for once it is objectified, hence has itself already passed over from the form of the process to that of rest, from the form of value-creating activity to that of value.

The value or price of labour (expressed in money) is the direct form in which the value of labour capacity appears. The situation appears to the worker as if he sells his labour for a certain sum of money; to the capitalist too it appears as if he buys this commodity for a certain sum of money. This price is then regulated, like that of every other commodity, by the laws governing the demand for, and supply of, labour. But the question has then to be asked, what regulates the laws of supply and demand? Or, in the case of this commodity (labour), as with all other commodities, one must ask what regulates its value, or the price corresponding to its value? Or its price, once supply and demand are evenly balanced? With labour as such, in contrast to all other commodities, we see that it is not directly covered by the law of value, for the value of a commodity, or the price which corresponds to that value, is determined by the quantity of [XX-1295] labour contained in this commodity, or the labour time objectified in it. It would be absurd

to speak of the quantity of labour contained in a quantity of living labour, or of the determination e.g. of 12 hours of labour by 12 hours of labour. Here it is apparent that value can only be determined, one can only speak of the value of labour at all, in so far as the latter is a derivative form of the value of labour capacity.

Let us look first at the conceptual expression [of labour capacity], and then at its converted form, as it appears on the surface—on the market. The comparison will serve also to clarify the relation between the two expressions.

Let us assume that the daily value of labour capacity=6 hours of labour. Let 1 hour of labour be realised in 6d; or let 6d. be the expression in money of 1 hour of labour. The worker sells his labour capacity to the capitalist for $6 \times 6d.=36d.=3s$. He has then sold his labour capacity at its value. The actual consumption of this commodity by the capitalist consists in the worker's labour. But labour capacity is only sold for a certain part of the whole day. Assume the normal working day is 12 hours. The value of the product in which the 12-hour working day is realised=12 hours. The first 6 hours in which it is realised are only an equivalent for the wage. The value of the product (12 hours) minus the value of the labour capacity (6 hours), the difference between the value in which the working day is realised and the value of the labour capacity, forms the surplus value. Or, the difference between the total working day and the necessary labour time=the surplus labour.

The value in which the total working day is realised=6s.; the value in which the value, or the price, of the labour capacity is replaced=3s. The surplus value=6-3s., or=3s., or the surplus labour=12 hours-6 hours=6 hours. The surplus value appears here directly as the difference between the total amount of value in which the working day is realised and the value in which the part of the working day is realised which replaces only the wage, the value of the labour capacity; in other words it appears as the difference between the total working day and the paid part of the working day.

But, as remarked earlier,^a labour capacity is one of the commodities where money figures as means of payment; i.e. it figures twice, first as means of purchase, in the sale, then as means of payment, when the sale is realised, once the use value of the commodity has passed into the possession of the buyer. The

^a See present edition, Vol. 30, p. 52.- Ed.

worker only receives payment, e.g. daily or weekly, once the capitalist has had his labour capacity work e.g. for a week during 12 hours of each day. The equivalent he receives therefore abbears as an equivalent for his 12 hours of labour. Apart from this, he has sold his labour capacity, hence its consumption, for a particular period of time. But this time-determined consumption on the part of the capitalist is on the part of the worker a particular quantity, measured in time, of his own activity, i.e. his labour, hence e.g. the sale of 12 hours of his labour a day. And the price, the sum of money he receives, thus reappears, for him as for the capitalist, as the price of, or the equivalent for, his 12 hours of labour. It is the more natural, therefore, that this real result of the process-namely that a particular quantity of labour has been bought and sold for a particular quantity of money-should also appear to the capitalist as the content of the transaction, since what concerns him in the whole of the transaction is only this content.

Now what appears in this form as the value of labour or as its price, forming THE LIMIT of market prices? Precisely the value of labour capacity, or the sum of money in which the necessary labour is objectified. If the normal working day consists of 12 hours-and necessary labour time is 6 hours-then 3s. (the result of 6 hours of labour) will appear as the value of the 12-hour working day. Prices which stand above or below this are prices which diverge from the value of labour and oscillate around it as a central point. Under these circumstances, therefore, 3d. appears as the value of one hour of labour. We have already explained earlier that this would have a higher expression if the normal working day were less than 12 hours, and [a smaller expression] if it were more than 12 hours. However, we do not want to return to this discussion here. Here we are concerned with another side, the qualitative side. (The wage for a particular period of time, a particular quantity of labour (e.g. an hour of labour), is determined here by the ratio of necessary labour to the total working day. And the wage appears as the sum which is paid for the total working day. If the price of labour remains constant, the wage can rise if labour time is prolonged; if the wage remains constant, the price of labour can fall if labour time is prolonged; equally, if the price of labour falls, the wage can rise if [labour] time [XX-1296] is prolonged.)

Hence the value in which the necessary labour time is realised appears as the value of the working day, which=necessary labour time+surplus labour time. 3s. thus appears under the above presupposition as the value of a 12-hour working day, although the 12-hour working day is objectified in 6s. Thus the value of the working day appears in this example as half the size of the value of the product in which this working day is objectified. (See p. 40 of Zur Kritik der politischen Oekonomie, Part One, 1859, where I announce that in my analysis of capital this problem will be solved:

"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?" ^a)

If the necessary labour time=x, the total working day=y or=x+z, and if x is realised in a value x', while y is realised in x'+z', x' appears as the value of x+z.

The value of labour (or of the working day), as it appears in this unconceptual form, is therefore something entirely different from the value of the commodity determined by the working day.

Before we go any further, two more remarks should be made.

Firstly: On the above presupposition, the value of an hour of labour=3d., and this is the case because the value of the labour capacity, or the value in which the necessary labour is realised,=6 hours, and the value of each hour=6d., hence the value in which 6 hours are realised=36d. This ${}^{36}/{}_{12}$, or the value of the labour capacity—the value of the commodities in which the necessary labour time is realised—divided by the number of hours which form the total working day, necessary+surplus labour, appears here as the value of an hour of labour. If the total working day came to only 10 hours, the value of an hour would= ${}^{36}/{}_{16}$. The constant factor is the value of the labour capacity, or the value in which the necessary labour is realised. But the *price of a particular quantity of labour*, e.g. the price of an hour, is determined by the ratio of the necessary labour time to the total working day, or to the necessary labour.

It is therefore clear that if on the above presupposition 3d. per hour is established as the average value of an hour of labour, this is on the assumption not only that the total working day is twice as long as the necessary labour time, 12 hours instead of 6, but that the worker is employed for 12 hours every day, or that his average daily employment over the year comes to 12 hours. For only if he works 12 hours every day is he capable of reproducing the value of his own labour capacity, and therefore continuing to live as a worker under the same average conditions; or, only if he works 12

^a K. Marx, A Contribution to the Critique of Political Economy. Part One (present edition, Vol. 29, p. 302).- Ed.

hours is he capable of producing for himself a daily value of 6 hours—the value of his labour capacity. If he were only employed for e.g. 10 hours at a *price per hour* of 3d., he would only receive 30d.=2s. 6d., a wage which would fall below the daily value of labour capacity, and therefore below the average wage. If he were only employed for 6 hours, he would receive precisely half the wage required to conduct his life in its traditional manner. The same phenomena occur when there is only half time work, 3/4 time, etc. It is for this *reason* that the London BUILDERS spoke out in their STRIKE of 1860 sq. against *payment by the hour* instead of by the working day or the working week.^a This is also an important aspect in determining the case of the *SEASONAL workers*, etc.; here the worker perhaps OVERWORKS for 3 months and for the rest of the year is only half or 1/3 EMPLOYED.

The second point follows from the specific nature of OVERTIME. The calculation of the price or value of an hour has hitherto always been done on the presupposition that the worker is employed for longer than 6 hours, i.e. that he works his necessary labour time for himself. With overtime this limit does not exist. There it is not only presupposed that the worker works 1/2 an hour for himself, $\frac{1}{2}$ an hour for his MASTER, but that he works $\frac{12}{2}$ hours for himself in the course of the day. This is IN FACT THE LIMIT. If the MASTER had him work only 6 hours, the necessary wage would be expressed as $\frac{3}{6} \times 6$ = 3s. I.e. the value of the labour = the value of the product of the labour; and the surplus labour, hence surplus value, would=0. If the whole working day only came to 7 hours, the MASTER would gain only 1 surplus hour, only the 6d. of surplus value in which the value of a surplus hour is expressed. If he now has the worker work more than the normal working time of 12 hours, and pays the wage of 6d. even for the 2 extra hours, the ratio of necessary to surplus labour no longer enters the picture. He can gain 1 surplus hour without having 6 necessary hours worked.

 $[XX-1291a]^{58}$ The value concept is not only completely extinguished in this expression of the value of labour or the price of labour time, but inverted into something directly contradictory to it. The value in which one part of the normal working day is embodied (namely the part necessary for the reproduction of labour capacity) appears as the value of the total working day. Thus the value of 12 hours of labour=3s., although the value of the commodity which is produced in 12 hours of labour=6s., and indeed because 12 hours of labour are represented by 6s. This is

^a See present edition, Vol. 30, p. 193.- Ed.

therefore an irrational expression, somewhat like $\sqrt{-2}$ in algebra. But it is an expression which necessarily results from the production process, it is the necessary form of appearance of the value of labour capacity. It is already contained in the term wage of labour, in which the wage of labour=the price of labour=the value of labour. This form lacks conceptual rigour; but it is the form which lives both in the consciousness of the worker and in that of the capitalist, because it is the form which directly appears in reality; it is therefore the form vulgar political economy sticks to, making the specific difference which sets the science of political economy apart from all the other sciences the fact that the latter seek to uncover the essence which lies hidden behind commonplace appearances, and which mostly contradicts the form of commonplace appearances (as for example in the case of the movement of the sun about the earth), whereas the former proclaims the mere translation of commonplace appearances into equally commonplace notions to be the true business of science. In this inverted and derived form, the form in which the value of labour capacity presents itself on the surface of bourgeois society, possesses its commonplace expression (its exoteric shape) as the value or, expressed in money, the price of labour, the difference between paid and unpaid labour is entirely extinguished, since the wage is after all a payment for the working day and an equivalent for it—IN FACT, for its product. The surplus value the product contains must therefore in fact be derived from an invisible, mysterious quality, from constant capital. This expression, the difference between wage labour and serf labour, forms a DELUSION of the worker himself.

[ADDENDA]

Before we proceed, a few more quotations and remarks relating to the whole of Section I, presented above.

According to Hobbes science, not operative labour, is the mother of the arts.

* "Arts of public use, as fortification, making of engines, and other instruments of war; because they confer to defence and victory, are power; and though the true mother of them be science, namely the mathematics, yet because they are brought into the light, by the hand of the artificer, they be esteemed, the midwife passing with the vulgar for the mother, as his issue" * (Leviathan, in The English Works of Thomas Hobbes, EDIT. by Molesworth, Vol. III, London, 1839-1844, [p.] 75). The product of mental labour—science—always stands far below its value, because the labour time needed to reproduce it has no relation at all to the labour time required for its original production. For example, a schoolboy can learn the binomial theorem in an hour.

Labour capacity:

"The value or worth of a man, is as of all other things, his price: that is to say, so much as would be given for the use of his power" (Hobbes, Leviathan, l.c., [p.] 76).* "A man's labour"* //that is, the *use of his labouring power// "also, is a commodity exchangeable for benefit, as well as any other thing"* (l.c., [p.] 233).

Productive and unproductive labour:

* "It is not enough, for a man to labour for the maintenance of his life; but also to fight, if need be, for the securing of his labour. They must either do as the Jews did after their return from captivity, in re-edifying the temple, build with one hand, and hold the sword in the other; or else they must hire others to fight for them"* (Hobbes, l.c., [p.] 333).

Locke. Taking Locke's whole doctrine of LABOUR together with his doctrine of the origin of interest and rent—for he considers surplus value only in these specific forms—surplus value is nothing but alien labour, surplus labour, which land and capital—the conditions of labour—enable their owners to appropriate. And ownership of a greater quantity of conditions of labour than one person can himself put to use with his own labour is, according to Locke, a *political* invention which contradicts the law of nature on which private property, the right to private property, [XX-1292a] is founded.

//For *Hobbes* too labour is the sole source of all wealth, apart from those gifts of nature which are to be found already in a consumable state. God (NATURE)

*"either freely gives, or for labour sells to mankind" * (Leviathan [p. 232]).

But for Hobbes it is the sovereign who distributes property in land at his discretion.//

The relevant passages [in Locke] are as follows:

* "Though the *earth*, and all inferior creatures, be common to all men, yet every man has a property in his own person: this nobody has a right to but himself. The labour of his body, and the work of his hands, we may say, are properly his. Whatsoever then he removes out of the state that nature has provided, and left it in, he has mixed his labour with, and joined to it something that is his own, and thereby makes it his property" (*Of Government*, Book II, Ch. V; [in *The*] *Works*, 7th edit., Vol. II, 1768 [p.] 229).

"His labour has taken it out of the hands of nature, where it was common, and belonged equally to all her children, and has thereby appropriated it to himself" (l.c., [p.] 230).

"The same law of nature, that does by this means give us property, does also bound that property too... As much as any one can make use of to any advantage of life before it spoils, so much he may by his labour fix a property in: whatever is beyond this, is more than his share, and belongs to others" (l.c.).

"But the chief matter of property being now not the fruits of the earth, etc., but the earth itself... As much land as a man tills, plants, improves, cultivates, and can use the product of, so much is his property. He by his labour does, as it were, enclose it from the common" ([p.] 230).

"Subduing or cultivating the earth, and having dominion, we see are joined together. The one gave title to the other" ([p.] 231).

"The measure of property nature has well set by the extent of men's labour and the conveniencies of life: no man's labour could subdue, or appropriate all; nor could his enjoyment consume more than a small part; so that it was impossible for any man, this way, to intrench upon the right of another, or acquire to himself a property, to the prejudice of his neighbour... This measure did confine every man's possession to a very moderate proportion, and such as he might appropriate to himself, without injury to anybody, in the first age of the world... And the same measure may be allowed still without prejudice to anybody, as full as the world seems"* ([pp.] 231-32).

Labour gives things almost all their value //value here=use value, and labour is taken as concrete labour, not as a quantity; but the measuring of exchange value by labour is in reality based on the fact that the labourer creates use value//. The remainder of use value which cannot be resolved into labour is the gift of nature, and hence in and for itself *common property*. What Locke therefore tries to show is not the contradiction—that property can nevertheless [be] acquired by other PROCEDURES than labour—but how, in spite of the COMMON PROPERTY in nature, individual property could be created by individual labour.

*"It is labour indeed that puts the difference of value on every thing... Of the products of the earth useful to the life of man ... $^{99}/_{100}$ are wholly to be put on the account of labour" ([p.] 234).

"It is labour then which puts the greatest part of the value upon land" ([p.] 235).

"Though the things of nature are given in common, yet man, by being master of himself, and proprietor of his own person, and the actions or labour of it, had still in himself the great foundation of property"* ([p.] 235).

One LIMIT [to property] is therefore the limit of *personal labour*; the other, that a man should not amass more things than he can use. The latter limit however is extended by exchange of perishable products for *money* (apart from other exchanges):

*"He might heap up as much of these *durable* things as he pleased; the exceeding of the bounds of his just property" * //apart from the *LIMIT* of his personal labour// *"not lying in the largeness of his possession, but the perishing of any thing uselessly in it. And thus came in the use of money, some lasting thing which men might keep without spoiling, and that by mutual consent men would take in [XX-1293a] exchange for the truly useful, but perishable support of life"* ([p.] 236).

Thus arises the inequality of individual property, though the *limit of personal labour* remains.

* "This partage of things in an inequality of private possessions, men have made practicable out of the bounds of society, and without compact; only by putting a value on gold and silver, and tacitly agreeing in the use of money"* ([p.] 237).

We must now compare with this the following passage from Locke's work on interest,^a not forgetting that according to him natural law makes *personal labour* the limit of **PROPERTY**:

"[...] let us next see how it" (money) "comes to be of the same nature with land, by yielding a certain yearly income, which we call Use or Interest. For land produces naturally something new and profitable, and of value to mankind; but money is a barren thing, and produces nothing, but by compact. *transfers that profit, that was the reward of one man's labour, into another man's pocket.* That which occasions this, is the unequal distribution of money; which inequality has the same effect too upon land, that it has upon money... For as the unequal distribution of land (you having more than you can, or will manure, and another less) brings you a tenant of your land; and the same unequal distribution of money ... brings me a tenant for my money: so my money is apt in trade, by the industry of the borrower, to produce more than 6 per cent to the borrower, as well as your land, by the labour of the tenant, is apt to produce more fruits, than his rent comes to" * (FOLIO EDITION OF Locke's Works, Vol., II, 1740).⁵⁹

In this passage Locke has in part the polemical interest of showing landed property that its rent is in no way different from usury. Both * "transfer that profit, which was the reward of one man's labour, into another man's pocket" * through the unequal distribution of the conditions of production.

Locke's view is all the more important because it was the classical expression of bourgeois society's ideas of right as against feudal society, and moreover his philosophy served as the basis for all the ideas of the whole of subsequent English political economy.

[INTERMEZZO] HUME AND JOSEPH MASSIE

Massie's anonymous work An Essay on the Governing Causes of the Natural Rate of Interest appeared in 1750. The second part of Hume's Essays, which contains "Of Interest", was published in 1752, that is, 2 years later. Massie therefore has priority. Hume attacks Locke, Massie attacks both Petty and Locke, both of whom still held the view that the level of interest depends on the quantity

^a J. Locke, Some Considerations of the Consequences of the Lowering of Interest, and Raising the Value of Money (1691). In: The Works, Vol. 11, London, 1740.— Ed.

of money, and that in fact the real object of the loan is money (not capital).⁶⁰

Massie laid down, more categorically than did Hume, that *INTEREST* is merely a part of profit.^a Hume is mainly concerned to show that the value of money makes no difference to the rate of interest, since the proportion between interest and money capital is given—6% for example, that is, $\pounds 6$ rises or falls in value at the same time as the value of the $\pounds 100$ (and, therefore, of one pound sterling) rises or falls, but the proportion 6 is not affected by this.

Let us start with Hume.

"Everything in the world is purchased by labour" (Essays, VOL. I, London, 1764, [p.] 289).⁶¹

The rate of interest depends on the demand from borrowers and the supply by lenders, that is, on demand and supply, but after that essentially on the level of

* "profits arising from commerce" (l.c., [p.] 329).⁶² "The greater or less stock of labour and commodities must have a great influence" (upon interest); "since we really and in fact borrow these, when we take money upon interest" (l.c., [p.] 337). "No man will accept of low profits, where he can have high interest; and no man will accept of low interest, where he can have high profits" * (l.c., [p.] 335).

High interest and high profit are both the expression

" of the small advance of commerce and industry, not of the scarcity of gold and silver. And *low interest* of the opposite" ([p.] 329).

[XX-1294a] *["In] a state, therefore, where there is nothing but a landed interest"* (or as he says later, *"landed gentry and peasants") "the borrowers must be numerous, and interest high"* ([p.] 330),

because wealth only concerned with enjoyment is driven by boredom to seek pleasures, while on the other hand production, except for agriculture, is very limited. The opposite is the case, when COMMERCE has developed. The passion for GAIN entirely dominates the MERCHANT. He

* "knows no such pleasure as that of seeing the daily increase of his fortune".*

(The passion for exchange value, abstract wealth, weighs with him far more than that for use values.)

*"And this is the reason why trade increases frugality, and why, among merchants, there is the same overplus of misers over prodigals, as, among the possessors of land, there is the contrary" * ([p.] 333).

Unproductive labour:

*"Lawyers and physicians beget no industry; and it is even at the expense of others they acquire their riches; so that they are sure to diminish the possessions of some of their fellow-citizens as fast as they increase their own" ([pp. 333-]334).

^a See this volume, p. 92.—Ed.

"Thus an increase of commerce raises a great number of lenders, and by that means produces a lowness of interest" ([p.] 334).

"Low interest and low profits of merchandise are two events, that mutually forward each other, and are both originally derived from that extensive commerce, which produces opulent merchants, and renders the monied interest considerable. Where merchants possess great stocks, whether represented by few or many pieces of metal, it must frequently happen, that when they either become tired of business, or have heirs unwilling or unfit to engage in commerce, a great deal of these riches naturally seeks an annual and secure revenue. The plenty diminishes the price, and makes the lenders accept of a low interest. This consideration obliges many to keep their stocks in trade, and rather be content with low profits than dispose of their money at an under value. On the other hand, when commerce has become very extensive, and employs very large stocks, there must arise rivalships among the merchants, which diminish the profits of trade, at the same time that they increase trade itself. The low profits of merchandise induce the merchants to accept more willingly of a low interest, when they leave off business, and begin to indulge themselves in ease and indolence. It is needless, therefore, to enquire which of these circumstances, viz. low interest or low profits, is the cause and which the effect. They both arise from an extensive commerce, and mutually forward each other... An extensive commerce, by producing large stocks, diminishes both interest and profits; and is always assisted, in its diminution of the one, by the proportional sinking of the other. I may add, that as low profits arise from the increase of commerce and industry, they serve in their turn to the farther increase of commerce, by rendering the commodities cheaper, encouraging the consumption and heightening the industry. And thus, ... interest is the true barometer of the state, and its lowness is a sign almost infallible of the flourishing of a people"* (l.c., [pp.] 334-36).

(Joseph Massie,) An Essay on the Governing Causes of the Natural Rate of Interest; wherein the Sentiments of Sir William Petty and Mr. Locke, on that Head, are considered, London, 1750.⁶³

*"It appears from these several extracts⁶⁴ that Mr. Locke attributes the government of the natural *rate of interest* to [the] proportion which the quantity of money in a country bears to the debts of its inhabitants one amongst [another,] and to the trade of it; and that Sir William Petty makes it depend on the quantity of money alone; so they [only differ] in regard to debts" ([pp.] 14-15).

[XXI-1300]⁶⁵ Rich people, "instead of employing their money themselves, let it out to other people for them to make profit of, reserving for the owners a *proportion of the profits to be made*. But when the riches of a country are dispersed into so many hands, and so equally divided, as not to leave many people enough to maintain two families, by employing it in trade, there can be *little borrowing*; for f20,000, when it belongs to one man, cannot ^a be lent, because the interest of it will keep a family, but if it belongs to ten men, it cannot be lent, because the interest will not keep 10 families" ([pp.] 23-24).

"All reasoning about natural interest from the rate which the Government pays for money, is, and unavoidably must be fallacious; experience has shown us, they neither have agreed, nor preserved a correspondence with each other; and reason tells us they never can; for the one has its foundation in profit, and the other in necessity; the former of which has bounds, but the latter none. The gentleman who borrows money to improve his land, and the merchant or tradesman who borrow

^a A slip of the pen. Massie has "may".-- Ed.

to carry on trade, have limits beyond which they will not go; if they can get 10 per cent by money, they may give 5 per cent for it; but they will not give 10; whereas he who borrows through necessity, has nothing else to determine by, and this admits of no rule at all" ([pp.] 31-32).

"The equitableness of taking interest depends not upon a man's making or not making *profit* by what he borrows, but upon its being capable of producing profit if rightly employed" ([p.] 49). "If *that which men pay as interest* for what they borrow, be a part of the profits it is capable of producing, this *interest* must always be governed by those *profits*" ([p.] 49).

"What proportion of these profits do of right belong to the borrower, and what to the lender? and this there is no other method of determining than by the opinions of borrowers and lenders in general; for right and wrong in this respect, are only what common consent makes" ([p.] 49).

"This rule of *dividing profits* is not however to be applied particularly to every lender and borrower, but to lenders and borrowers in general ... remarkably great and small gains are the rewards of skill, and the want of understanding, which *lenders have nothing at all to do with*; for as they will not suffer by the one, they ought not to benefit by the other. What has been said of *particular men* in *the same business* is applicable to *particular sorts of business*" ([p.] 50).

"The natural rate of interest is governed by the profits of trade to particulars" * ([p.] 51).

Why then was interest 4% instead of 8 as it had been earlier in England? Because English merchants at that time

* "got double the profits they now make".*

Why 3% in Holland, 5 and 6 in France, Germany, Portugal, 9% in the West and East Indies, 12 in Turkey?

* "One general answer will do for the whole, which is, that the profits of trade in these several countries differ from the profits of trade here, and so much as to produce all those different rates of interest"* ([p.] 51).

But what is the fall in profit due to? To competition, foreign and internal,

* "a decrease of foreign trade" * (through foreign competition) * "or to people in trade lowering the prices of their commodities upon each other ... through necessity to get some trade, or through avarice to get most" ([pp. 52-]53).

"The profits of trade in general, are governed by the proportion which the number of traders bears to the quantity of commerce"* ([p.] 55). "In Holland where the number of PEOPLE EMPLOYED in *trade bears the greatest proportion to the whole number of inhabitants ... interest is lowest; in Turkey, where the disproportion * is greatest, INTEREST is highest" ([pp.] 55-56).

[XXI-1301] * "What governs the *proportion between trade and traders*?" * ([p.] 57). The * "motives to trade", natural necessity, liberty, preservation of men's private rights, public safety ([p.] 58).

"There are no two countries which furnish an equal number of the necessaries of life in equal plenty, and with the same quantity of labour. Men's wants increase or diminish with the severity or temperateness of the climate they live in; consequently the proportion of trade which the inhabitants of different countries are obliged to carry on through necessity, cannot be the same, nor is it practicable to ascertain the degree of variation further than by the degrees of heat and cold; from whence one may make this general conclusion, that [the] quantity of labour required for a certain number of people is greatest in cold climates, and least in hot ones; for in the former, men not only want more clothes, but the earth more cultivating than in the latter" ([p.] 59). "One kind of necessity which is peculiar to Holland, arises from the country being overpeopled; which, with the great labour required to fence and drain the land, makes their necessity to trade greater than it is in any other part of the habitable world" * ([p.] 60).

Massie, even more definitely than Hume, presents INTEREST as a mere *part of profit*; both attribute the fall in profit to the accumulation of capitals (Massie [speaks] especially of competition) and the fall in profits resulting from this. Both [say] equally little about the *origin of the profit OF TRADE* itself.

i) [FORMAL AND REAL SUBSUMPTION OF LABOUR UNDER CAPITAL. TRANSITIONAL FORMS]⁶⁶

We have considered the two forms of absolute and relative surplus value separately, but shown at the same time how they are interconnected, and that it is precisely with the development of relative surplus value that absolute surplus value is pushed to its uttermost limit.^a We have seen how the separation of the two forms brings forth differences in the relations of wages and surplus value.^b Given the development of productive power, surplus value always appears as absolute surplus value, and in particular any change in it is only possible through a CHANGE in the total working day. If we presuppose the working day as given, the development of relative surplus value alone is possible, i.e. through the development of productive power.

But the mere existence of absolute surplus value implies nothing more than such a level of natural fertility, hence a productivity of labour of natural and spontaneous origin, that not all the (possible) (daily) labour time of a man is required for the maintenance of his own existence or the reproduction of his own labour capacity. The only further requirement is that he should be compelled—that an external compulsion should exist for him—to work more than the necessary labour time, a compulsion to do surplus labour. However, the physical possibility of a surplus PRODUCE, in which SURPLUS LABOUR is objectified, clearly depends on 2 circumstances: If needs are very limited, then even with a small natural productive power of labour

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^a See present edition, Vol. 30, pp. 172-346, Vol. 33, pp. 387-501, and this volume, pp. 8-86.—*Ed.*

^b See this volume, pp. 61-75.-Ed.

a part of the labour time can suffice to satisfy them, and thus to leave another part over for surplus LABOUR, and therewith for the creation of the surplus PRODUCE. On the other hand: If the natural productive power of labour is very high-i.e. if the natural fertility of the soil, the waters, etc., requires only a slight expenditure of labour to be made to gain the means of subsistence necessary to existence, this natural productive power of labour, or, IF YOU PLEASE, this productivity of labour of natural and spontaneous origin, naturally functions-if we consider the mere duration of the necessary labour time-in exactly the same way as the development of the social productive power of labour. A high level of productive power of labour, of natural origin, is connected with a rapid increase in the POPULATION—in labour capacities—and therefore in the material out of which the SURPLUS VALUE is cut. If, inversely, the natural productive power of labour is small, hence the labour time required for the satisfaction of even simple needs is great, the development of SURPLUS PRODUCE (Or SURPLUS LABOUR) can only come close to forming alien wealth if the number of people simultaneously exploited by one person is large. [XXI-1302] If we assume that the necessary labour time= $11^{1}/_{2}$ hours, and the working day=12 hours, one worker provides a surplus value of $\frac{1}{2}$ an hour. But since $\frac{23}{2}$ hours are required to maintain a single worker, the following calculation applies:

Workers

1 provides $\frac{1}{2}$ an hour of surplus labour.

23 [provide] $\frac{23}{2}$ hours.

Hence in this case 23 workers would be necessary in order to maintain one single person who lives without work, but only lives like a worker. For him to live 3 or 4 times better, and in addition to be able to turn a part of the surplus value back into capital, perhaps 23×8 workers, =184 workers, would have to be employed for one single individual. Moreover, the real wealth at the disposal of the single individual would be very small here. The greater the productive power of labour, the greater can the number of non-workers be in proportion to the workers, and the greater the number of workers who are not employed in the production of the necessary means of subsistence, or are not employed in material production at all, or, finally, the greater the number of persons who either directly are proprietors of the SURPLUS PRODUCE or who work neither physically nor intellectually but still perform "services" which the owners of the surplus produce pay for by setting aside a part of the latter for them.

In any case, to the two forms of surplus value—absolute and relative—if each is considered for itself in its separate existence, and absolute surplus value always precedes relative—there correspond two separate forms of the subsumption of labour under capital, or two separate forms of capitalist production, of which the first always forms the predecessor of the second, although the further developed form, the second one, can in turn form the basis for the introduction of the first in new branches of production.

I call the form which rests on absolute surplus value the *formal* subsumption of labour under capital. It is distinguished only *formally* from other modes of production, in which the actual producers provide a surplus PRODUCE, a SURPLUS VALUE, i.e. work more than the necessary labour time, but for others rather than for themselves.

The compulsion which is exerted—i.e. the method by which the sURPLUS VALUE, SURPLUS PRODUCE, Or SURPLUS LABOUR, is called into existence—is of a different kind. We shall first examine the specific differences in the next section, under accumulation.⁶⁷ But the essential points in this formal subsumption of labour under capital are:

1) that the *worker* confronts the capitalist, who possesses money, as the proprietor of his own person and therefore of his own labour capacity, and as the seller of the temporary use of the latter. Thus both meet as commodity owners, as seller and buyer, and thus as formally free persons, between whom in fact no other relation exists than that of buyer and seller, no other politically or socially fixed relation of domination and subordination;

2) (something which is implied by the first relation—for otherwise the worker would not have to sell his labour capacity) that the objective conditions of his labour (raw material, instruments of labour and therefore also means of subsistence during labour)⁶⁸ belong, completely or at least in part, not to him but to the buyer and consumer of his labour, therefore themselves confront him as *capital*. The more completely these *conditions of labour* confront him as the property of another, the more completely is *the relation of capital and wage labour* present *formally*, hence the more complete the formal subsumption of labour under capital.

As yet there is no difference in the *mode of production* itself. The labour process continues exactly as it did before—from the technological point of view—only as a labour process now *subordinated* to capital. Nevertheless, there develops within the production process itself, as we have indicated earlier //and everything said about this earlier is only now in the proper place $^{a}//, firstly$ a relation of domination and subordination, in that the consumption of labour capacity is done by the capitalist, and is therefore supervised and directed by him; and *secondly* a greater continuity of labour.

• If the relation of domination and subordination replaces those of slavery, serfdom, vassalage, patriarchal relations of subordination, there takes place only a *change in their form*. The form becomes freer, in that the subordination is now only of an *objective* nature, it is formally speaking voluntary, affects only the position between worker and capitalist in the production process. And this is the *change of form* which takes place in agriculture in particular when former serfs or slaves are transformed into free wage labourers.

[XXI-1303] Or the relation of *domination and subordination* in the production process replaces an earlier *independence* in the production process, as e.g. with all *self-sustaining peasants*, *farmers* who only had to pay a rent in kind, whether to the state or to the *LANDLORD*, with rural-domestic subsidiary industry, or *independent handicrafts*. Here, therefore, the loss of a previous *independence* in the production process is the situation, and the relation of domination of subordination is itself the product of the introduction of the capitalist mode of production.

Finally, the relation of capitalist and wage labourer can replace the master of the guild type and his journeymen and apprentices, a transition accomplished in part by urban manufacture at its very beginnings. The medieval guild relation, which developed in analogous form in narrow circles in Athens and Rome as well, and was of such decisive importance in Europe for the formation of capitalists on the one hand, and of a free estate of workers on the other, is a *limited*, not yet adequate, form of the relation of capital and wage labour. There exists here on the one hand the relation of buyer and seller. Wages are paid, and master, journeyman, and apprentice confront each other as free persons. The technological basis of this relation is the handicraft workshop, in which the more or less skilled manipulation of the instrument of labour is the decisive factor of production. Here independent personal labour and therefore its professional development, which requires a longer or shorter period of apprenticeship, determines the result of the labour. The master is admittedly in possession of the conditions of production, the tools of the trade, the material of labour //although the tools may also belong to the journeyman//,

^a See present edition, Vol. 30, pp. 92-95.- Ed.

and the product belongs to him. To that extent he is a *capitalist*. But as a capitalist he is not a master. He is first and foremost a craftsman himself, and is SUPPOSED to be a master of his craft. Within the production process itself he figures as a craftsman as much as do his journeymen, and he is the first to initiate his apprentices into the mysteries of the craft. He has exactly the same relation to his apprentices as a teacher has to his pupils. His relation to apprentices and journeymen is therefore not that of the capitalist as such, but that of the master of a craft, who holds as such a hierarchical position in the corporation, and therefore towards them, which is supposed to rest on his own mastery in the craft. His capital is therefore restricted both in its *material* form and in the extent of its value; it has not by any means yet attained the free form of capital. It is not a definite quantity of objectified labour, value in general, which can take on this or that form of the conditions of labour, and takes on whatever form it chooses, according to whether it decides to be exchanged for this or that form of living labour, in order to appropriate surplus labour. Only after he has passed through the prescribed stages of apprentice and journevman, etc., himself produced his masterpiece, can he put money to work in this particular branch of labour, in his own craft, partly by turning it into the objective conditions of the craft, partly by buying journeymen and keeping apprentices. Only in his own craft can he convert his money into capital, i.e. use it not only as the means of his own labour but also as a means of exploiting alien labour. His capital is tied to a particular form of use value. and therefore does not confront his workers as capital. The methods of work he employs are not only acquired by experience but prescribed by guild regulations-they count as the necessary methods, and thus from this angle too it is not exchange value but the use value of the labour which appears as the ultimate purpose. The delivery of work of this or that quality does not depend on his own discretion; the whole guild system is rather directed towards the delivery of work of a specific quality. The price of labour⁶⁹ is just as little subject to his arbitrary will as the method of work. The restricted form, which prevents his wealth from functioning as *capital*, is further shown by the fact that a *maximum* is in fact prescribed for the extent of the value of his capital. He is not allowed to keep more than a certain number of journeymen, since the guild is supposed to ensure for all masters a proportional share in the receipts of their craft. Finally there is the relation of the master to other masters as a member of the same guild; as such he belongs to a corporation, which has certain communal

conditions of production (guild order,⁷⁰ etc.), political rights, participation in the city administration, etc. He works to orderwith the exception of his work for merchants-for immediate use value, and so the number of masters is regulated accordingly. He does not confront his workers as a mere merchant. Still less can the merchant convert his money into productive capital; he can only "transfer" the commodities, he cannot produce them himself. An existence of the estate type-the purpose and result of the exploitation of alien labour is here not exchange value as such, not enrichment as such. What is decisive here is the instrument. The raw material is in many branches of labour (e.g. tailoring) delivered to the master himself by his customers. The barrier to production within the whole range of the available consumption is here a law. It is therefore by no means regulated by the barriers of capital itself. In the capitalist relation the barriers disappear along with the politico-social bonds in which capital still moves here, hence not yet appearing as *capital*.

[XXI-1304]⁷¹ [...] in Carthage and Rome, it is restricted to peoples among whom the Carthaginians [...] had developed capital in the form of commercial capital, and therefore made exchange values as such into the direct [...] production, or where, as with the Romans, through the concentration of wealth, particularly of landed property, in a few hands, production was necessarily directed no longer towards use by the producer himself but towards exchange value, hence possessed this aspect of capitalist production. For although the purpose for the rich Roman was consumption, the greatest possible quantity of use values, this could only be attained through the magnitude of the exchange value of the product offered for sale, and thus production was directed towards exchange value, and what concerned him was to get as much money as possible, hence to squeeze out as much labour as possible from the slaves.

In comparison with the independent craftsman, who works for STRAY CUSTOMERS, the continuity of [labour of] the worker, who works for the capitalist, is naturally greater, for his work does not find any limit in accidental needs that set him to work or in the magnitude of those needs; he is rather employed day in, day out, by capital, continuously, and more or less regularly. In comparison with that of the slave, this work is more productive, because more intensive and more continuous, for the slave only works under the impulse of external fear, but not for his own existence, which does not belong to him; the free worker, in contrast, is driven on by his own wANTS. The consciousness⁷² of free self-determination—of

freedom-makes the latter a much better worker than the former. and similarly the feeling of RESPONSIBILITY; for, like every seller of a commodity, he is **RESPONSIBLE** for the commodity he provides, and he must provide it at a certain quality, if he is not to be swept from the field by other sellers of commodities of the same species. The continuity of the relation between slave and slaveholder is preserved by the direct compulsion exerted upon the slave. The free worker, on the other hand, must preserve it himself, since his existence as a worker depends on his constantly renewing the sale of his labour capacity to the capitalist. Unlike both the slave and the serf, the worker receives an equivalent for his labour, since the wage, as we have seen,^a although it in fact only pays the necessary labour, appears as the value, the price of the working day; and although in fact his surplus labour is no more paid than the forced labour of the serf or the work the slave does over and above the time necessary for the reproduction of his keep. The difference here can only consist in the quantity of unpaid labour time, although a quantitative difference of this kind is not necessary, depending rather on the level of the customary value of labour capacity. But however much or however little surplus labour the free worker provides, however high or low the average wage stands, whatever the relation between his total working day and his necessary labour time, for him the form of the matter is always that he works for his wages, for money, and if he works for 12 hours to obtain an equivalent of 8 hours of labour, the 12 hours are only worked to buy with them the equivalent of 8. This is not the case with the slave. Even the part of the work he does for himself-i.e. in order to replace the value of his own keep-appears to him as labour he performs for the slaveowner, whereas with the free worker even the surplus labour he performs appears as labour performed in his own interest, i.e. as the means of purchasing his wages. The money relation, the sale and purchase between worker and capitalist, disguises the former's labour for no return, whereas with slave labour the property relation of the slave to his MASTER disguises the former's labour for himself. If the working day=12 hours, the labour time which is necessary and is therefore represented in the wage might=6, 7, 8, 9, 10, or 11 hours, and therefore the surplus labour, i.e. labour for no return, might equal, respectively, 6, 5, 4, 3, 2 hours or 1 hour, but the way the relation always appears to the worker is that he sells 12 hours of

^a See this volume, pp. 72-86.-Ed.

labour for a particular price, even if a variable one, and therefore always works only for himself, never for his MASTER.

[XXI-1305] [...] The higher value of this labour capacity must be paid to the worker himself, and it is expressed in a higher wage. Great differences in wages are therefore found, according to whether the specific kind of labour requires a more highly developed labour capacity, necessitating greater production costs, or not, and this on the one hand opens up an area of free movement for individual differences, while on the other hand it provides a spur to the development of the individual's own labour capacity. Certain as it is that the mass of labour must consist of more or less UNSKILLED LABOUR, and therefore that the mass of wages must be determined by the value of simple labour capacity, it remains possible for isolated individuals to make their way upwards into higher spheres of labour by particular energy, talent, etc., just as there remains the abstract possibility that this or that worker could himself become a capitalist and an EXPLOITER of alien labour. The slave belongs to a particular MASTER; it is true that the worker must sell himself to capital, but not to a particular capitalist, and thus he has a choice, within a particular sphere, as to who he sells himself to, and can change MASTERS. All these differences in the relation make the activity of the free worker more intensive, more continuous, more agile, and more dexterous than that of the slave, quite apart from the fact that they fit the worker himself to undertake historical actions of an entirely different nature. The slave receives the means of subsistence necessary for his maintenance in a natural form, which is as fixed in kind as in extent-in use values. The free worker receives them in the form of money, of exchange value, of the abstract social form of wealth. However much the wage is now in fact nothing but the silver or gold or copper or paper form of the necessary means of subsistence, into which it must constantly be resolved - money functioning here as the merely transitory form of exchange value, as mere means of circulation-abstract wealth, exchange value, and not a specific traditionally and locally limited use value, still remains for the worker the purpose and result of his labour. It is the worker himself who turns the money into whatever use values he wants, buys the commodities he wants with it, and as an owner of money, as a buyer of commodities, he stands in exactly the same relation to the sellers of commodities as any other buyer. The conditions of his existence-and also the limited extent of the value of the money he has acquired-naturally compel him to spend it on a rather restricted range of means of subsistence. Nevertheless,

some degree of variation is possible here, such as e.g. newspapers, which form part of the necessary means of subsistence of the English urban worker. He can save something, form a hoard. He can also waste his wages on spirits, etc. But in acting this way he acts as a free agent, he must pay his own way; he is himself responsible for the way in which HE SPENDS HIS WAGES. He learns to master himself, in contrast to the slave, who needs a MASTER. To be sure, this only applies when one considers the transformation of a serf or slave into a free wage labourer. The capitalist relation appears here as a step up the social scale. It is the opposite when an independent peasant or craftsman is transformed into a wage labourer. What a difference there is between the PROUD YEOMANRY OF ENGLAND, of whom Shakespeare speaks,73 and the English agricultural day labourers! Since the purpose of labour is for the wage labourer wages alone, money, a definite quantity of exchange value, in which any specific characteristics of use value have been extinguished, he is completely indifferent to the content of his labour, and therefore to the specific character of his activity. In the guild or caste system, on the other hand, this activity was regarded as the exercise of a vocation, whereas with the slave, as with the beast of burden, it is only a particular kind of activity, of exertion of his labour capacity, imposed on him and handed down from the past. Hence in so far as the division of labour has not made his labour capacity entirely one-sided, [XXI-1306] the free worker is in principle receptive to, and ready for, any variation in his labour capacity and his working activity which promises better wages (as is indeed demonstrated in the case of the surplus POPULATION of the countryside, which constantly transfers to the towns). If the developed worker is more or less incapable of this variation, he still regards it as always open to the next generation, and the emerging generation of workers can always be distributed among, and is constantly at the disposal of, new branches of labour or particularly prosperous branches of labour. In North America, where the development of wage labour has least of all been affected by reminiscences of the old guild system, etc., this variability, this complete indifference to the specific content of labour, this ability to transfer from one branch to another, is shown particularly strongly.^a Hence the contrast between this variability and the uniform, traditional character of slave labour, which does not vary according to the requirements of production, but rather the reverse, requiring that production should itself be

^a Cf. present edition, Vol. 28, p. 41.--Ed.
adapted to the mode of labour introduced originally and handed down by tradition, is emphasised by all United States writers as the grand characteristic of the free wage labour of the North as against the slave labour of the South. (See Cairnes.^a) The constant creation of *new kinds* of labour, this continuous variation—which results in a multiplicity of use values and therefore is also a real development of exchange value-this continuing division of labour in the whole of the society-first becomes possible with the capitalist mode of production. It begins with the free handicraftguild system, where it does not meet with a barrier in the ossification of each particular branch of the craft itself. With the merely formal subsumption of labour under capital, the compulsion to do surplus labour and therewith on the one hand to create needs and the means to satisfy those needs, and on the other hand to produce in quantities which go beyond the measure of the worker's traditional needs-and the creation of free time for development, independently of material production - merely takes on a different form from that of earlier modes of production, but it is a form which heightens the continuity and intensity of labour, increases production, is favourable to the development of variations in labour capacity and accordingly to the differentiation of kinds of labour and modes of gaining a living, and finally replaces the very relation between the owner of the conditions of labour and the worker by a new relation of purchase and sale, and eliminates all patriarchal and political admixtures from the relation of exploitation. To be sure, a relation of domination and subordination enters the relation of production itself; this derives from capital's ownership of the labour it has incorporated and from the nature of the labour process itself. The less capitalist production goes beyond this formal relation, the less is this relation developed, since it presupposes small capitalists alone, who are only marginally distinct from the workers themselves in their training and mode of employment.

Technologically, therefore — where this transformation of earlier modes of production into the capitalist one takes place and initially appears only as a *formal subsumption of labour under capital*—hence the relation of purchase and sale between the owners of the conditions of labour and the owners of labour capacity also appears this way—the real labour process remains the same, and the way in which it is carried on depends on the relation from

^a J. E. Cairnes, The Slave Power: Its Character, Career, and Probable Designs..., London, 1862, p. 44.—Ed.

which it has developed. Agriculture remains the same, although the day labourer has replaced the serf; similarly with the handicraft system, when it makes the transition from the guild-like to the capitalist mode of production. The difference in the *relation* of domination and subordination, when the mode of production is not yet affected, is at its greatest where *rural or in general domestic* subsidiary trades, or side occupations carried on just for the needs of the family, are transformed into separate branches of labour carried on in a capitalist way.

The difference between labour formally *subsumed* under *capital* and the previous way of employing labour emerges here to the same extent as the growth in the *magnitude of the capital* employed by the individual capitalist, hence in the number of workers he employs *simultaneously*. Only when capital has grown to a certain minimum level does the capitalist cease to be a worker himself and begin to reserve his energies for management and commercial dealings with the commodities that have been produced. On the other hand, the proper form of capitalist production, which is now to be considered, can only enter the picture once capitals of a certain magnitude have directly taken control of production, whether through the merchant's becoming a producer, or because larger capitals have gradually been formed within production itself.

* "A free labourer has generally the liberty of changing his master; this liberty distinguishes a slave from a free labourer, as much as an English man-of-war sailor is distinguished from a merchant sailor... The condition of a labourer is superior to that of a slave, because a *labourer thinks* himself *free*; and this condition,^a however erroneous, has no small influence on the character ... of a population"* (Th. R. Edmonds, *Practical Moral and Political Economy etc.*, London, 1828, [pp. 56-J57). "The motive which impels a free man to labour is much more violent than the motive impelling a slave: *a free man has to choose between hard labour [XXI-1307] and [starvation for himself and family; a slave has to choose between hard labour and] a good whipping" (I.c., [p.] 56). "The difference between the conditions of a slave and of a labourer under the money system is very inconsiderable ... the master of the slave understands too well his own interest to weaken his slaves by stinting them in their food; but the master of a free man gives him as little food as possible, because the injury done to the labourer does not fall on himself alone, but on the whole class of masters" * (I.c.).

"In the old world, *to make mankind labour beyond their wants, to make one part of a state work, to maintain the other part gratuitously,* could only be brought about by slavery, and slavery was therefore introduced universally. *Slavery was then as necessary towards multiplication, as it would now be destructive of it. The reason is plain. If mankind be not forced to labour, they will only labour for themselves; and if they have few wants, there will be few [who] labour. But when states come to be formed and have occasion for idle hands to defend them against

a Edmonds has "opinion".- Ed.

the violence of their enemies, food at any rate must be procured for those who do not labour; and as by the suppositions, 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... The slaves were forced to labour the soil which fed both them and the idle freemen, as was the case in Sparta; or they filled all the servile places which freemen fill now, and they were likewise employed, as in Greece and in Rome, in supplying with manufactures those whose service was necessary for the state. Here then was a violent method of making mankind 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, [An Inquiry into the Principles of Political Oeconomy...,] Vol. I, Dublin EDITION, [1770,] pp. 38-40).

//In agriculture, capitalist production in particular—production directed towards exchange value on the one hand, buying labour on the other hand—brings about a greater *intensity* of labour because the number of workers is very much reduced. Wages by no means increase in proportion to this heightened *intensity of labour*.

In the 16th century, while on the one hand the lords were dismissing their RETAINERS, the FARMERS, who were turning themselves into industrial capitalists, "were dismissing the IDLE MOUTHS"

Agriculture was converted from a MEANS OF SUBSISTENCE into a TRADE. The consequence, as *Steuart* says, was this:

*"The withdrawing ... [of] a number of hands from a trifling agriculture forces, in a manner, the husbandmen to work harder; and by hard labour upon a small spot, the same effect is produced as with slight labour upon a great extent" * (l.c., Vol. I, p. 105).

//Even in the handicrafts of the towns, production remained chiefly production of *MEANS OF SUBSISTENCE*, although in the nature of things the product was produced directly as a commodity, since it had first to be converted into money before it could be converted into means of subsistence.// (Enrichment as such was not its direct purpose.)//

THE REAL SUBSUMPTION OF LABOUR UNDER CAPITAL

//(Since the purpose of productive labour is not the existence of the worker but the production of surplus value, all necessary labour which produces no surplus labour is superfluous and worthless to capitalist production. The same is true for a nation of capitalists. The same proposition can also be expressed in this way, that all gross product which only replaces the worker's subsistence (approvisionnement), and produces no net product, is just as superfluous as the existence of those workers who themselves produce no net product or no SURPLUS VALUE—or those who, although they were necessary for the production of SURPLUS VALUE at a given stage of the development of industry, have become superfluous to the production of that surplus value at a more advanced stage of development. Or, in other words, only the number of people profitable to capital is necessary. The same is true for a nation of capitalists.

"Is not the *real interest* of a nation similar" to that of a private capitalist, for whom it would be a matter quite indifferent whether his capital would "employ 100 or 1,000 men" provided his [profits on a] capital of 20,000 "were not diminished in all cases below 2,000? Provided its net real income, its rent and profits be the same, it is of no importance whether the nation consists of 10 or of 12 millions [XXI-1308] of inhabitants... If 5 millions of men could produce as much food and clothing as was necessary for 10 millions, food and clothing for 5 millions would be the net revenue. Would it be of any advantage to the country, that to produce this same net revenue, 7 millions of men should be required, that is to say, that 7 millions? The food and clothing of 5 millions would be still the net revenue" [D. Ricardo, *Des principes de l'économie politique et de l'impôt*, Paris, 1819].^a

Even the philanthropists can have no objection to bring forward against this statement by Ricardo. For it is always better that out of 10 million people only 50% should vegetate as pure production machines for 5 million, than that out of 12 million 7 million, or $58^{1}/_{3}\%$, should vegetate in this way.)

*"Of what use in a modern kingdom would be a whole province thus divided" * //between *self-sustaining little farmers* as in the *first times of ancient Rome//, "however well cultivated, except for the mere purpose of breeding men, which, singly taken, is a most useless purpose" * (Arthur Young, *Political Arithmetic etc.*, London, 1774, [p.] 47).

//Factory work:

"A man becomes exhausted more quickly when he watches over the uniform motion of a mechanism for fifteen hours a day, than when he applies his physical strength over the same period of time. This *labour of surveillance*, which might perhaps serve as a useful exercise for the mind, if it did not go on too long, destroys both the mind and the body in the long run through excessive application" (G. de Molinari, *Études économiques*, Paris, 1846, [p. 49]).^b//

The real subsumption of labour under capital is developed in all the forms which produce relative, as opposed to absolute, surplus value, though, as we have seen, this definitely does not exclude the

^a Marx quotes Ricardo, partly in German and partly in French, from the book by Ch. Ganilh, *Des systèmes d'économie politique...*, 2nd ed., Vol. I, Paris, 1821, pp. 214-15. Here the original English is reproduced, due account being taken of the changes made by Marx. Cf. D. Ricardo, *On the Principles of Political Economy,* and Taxation, 3rd ed., London, 1821, pp. 416-17.— Ed.

^b Marx quotes in French.--- Ed.

possibility that they might increase the latter while increasing the former.

*"Agriculture for subsistence ... changed for agriculture for trade ... the improvement of the national territory ... proportioned to this change" * (Arthur Young, Political Arithmetic, London, 1774, [p.] 49, note).//

// Minimum of wages:

"The possession of property and * some interest in property * are essential * to preserve the common unskilled labourer from falling into the condition of a piece of machinery, bought at the minimum market price at which it can be produced,* that is * at which labourers can be got to exist and propagate their species, to which he is invariably reduced sooner or later, when the interests of capital and labour are quite distinct, and are left to adjust themselves under the sole operation of the law of supply and demand" * (Samuel Laing, National Distress etc., London, 1844, [p.] 46).//

With the real subsumption of labour under capital, all the CHANGES we have discussed take place in the technological process, the labour process, and at the same time there are changes in the relation of the worker to his own production and to capital-and finally, the development of the productive power of labour takes place, in that the productive forces of social labour are developed, and only at that point does the application of natural forces on a large scale, of science and of machinery, to direct production become possible. Here, therefore, there is a change not only in the formal relation but in the labour process itself. On the one hand the capitalist mode of production-which now first appears as a mode of production sui generis^a - creates a change in the shape of material production. On the other hand this change in the material shape forms the basis for the development of the capital-relation, whose adequate shape therefore only corresponds to a particular level of development of the material forces of production. We have examined the way in which the worker's relation of dependence in production itself is thereby given a new shape. This is the first point to be emphasised. This heightening of the productivity of labour and the scale of production is in part a result of, and in part a basis for, the development of the capital-relation.

The second point is this, that capitalist production now entirely strips off the form of production for subsistence, and becomes **PRODUCTION FOR TRADE**, in that neither the individual's own consumption nor the immediate needs of a given circle of customers remain a barrier to production; now the only barrier is the magnitude of the capital itself. On the other hand, where the

^a In its own right.— Ed.

whole of the product becomes a commodity (even where, as in agriculture, it partially re-enters production in natural form). all its elements leave the circulation and enter into the act of production as commodities. [XXI-1309] It is, finally, common to all these forms of capitalist production that, for production to occur in a capitalist way, an ever-growing minimum of exchange value, of money-i.e. of constant capital and variable capital-is required to ensure that the labour necessary to obtain the product is the labour socially necessary, i.e. that the labour required for the production of a single commodity=the minimum amount of labour necessary under average conditions. For objectified labour-money-to function as capital, it must be present in the hands of the individual capitalist in a certain minimum quantity; this minimum stands far above the maximum required in the case of the merely formal subsumption of labour under capital. The capitalist must be the owner or proprietor of means of production on a social scale, and the extent of their value, in one man's concentrated possession, stands increasingly outside all relation with the amount an individual person or an individual family could accumulate over generations by their own hoarding. The extent of the conditions of labour required thus stands in no relation at all to what the individual worker could appropriate for himself in the most favourable case, by saving, etc. This minimum amount of capital in a given branch of business is the greater, the more developed it is capitalistically, the higher the development of the productivity of labour, the social productivity of labour or the productivity of social labour within it. Capital must increase the magnitude of its value to the same extent, and it must assume the extent of the means of production required for social production, hence shed its individual character entirely. It is precisely the productivity, and therefore the quantity of production, the numbers of the population and of the surplus population, created by this mode of production, that constantly calls forth new branches of industry, operating with the capital and labour that have been set free. In these branches capital can once again work on a small scale and again pass through the various phases of development required until with the development of capitalist production labour is carried on on a social scale in these new branches of industry as well, and accordingly capital appears again as a concentration of a great mass of social means of production in a single person's hands. This process is continuous.

With the real subsumption of labour under capital a complete revolution takes place in the mode of production itself, in the productivity of labour, and in the relation—within production between the capitalist and the worker, as also in the social relation between them.

Only the simplest form, that of simple cooperation, is possible under earlier relations of production as well (see above, Egypt, etc.) //where this simple cooperation takes place for the building of pyramids, etc., instead of railways//^a and in the slave relation (on this see later ⁷⁴). The relation of dependence worsens here through the introduction of female and child labour, so that it again approximates to the slave relation. (See Steuart.^b)

What all these forms of production have in common, apart from the growing minimum amount of capital required for production, is that the common conditions for the labour of a large number of associated workers permit, as such, economies to be made in contrast with the fragmentation of these conditions when production is on a small scale; since the effectiveness of these common conditions of production, which does not appear to have any direct connection with the raising of the productivity of labour itself through cooperation, division of labour, machines, etc., does not require an equal increase in their amount and value. The common, simultaneous use of the conditions of production leads to a fall in their relative value, even though there is an increase in the absolute amount of value they represent.

//The positive result here is a fall in the labour time needed to produce an increased quantity of means of subsistence; this result is attained through the social form of the labour, and the individual's ownership of the conditions of production appears as not only unnecessary but incompatible with this production on a large scale. This is represented in the capitalist mode of production by the fact that the capitalist-the non-worker-is the owner of these social masses of means of production. He never in fact represents towards the workers their unification, their social unity. Therefore, as soon as this contradictory form [XXI-1310] ceases to exist, it emerges that they own these means of production socially, not as private individuals. Capitalist property is only a contradictory expression of their social property-i.e. their negated individual property-in the conditions of production. (Hence in the product. For the product is constantly changing into the conditions of production.) It appears at the same time that this

^a See present edition, Vol. 28, p. 452 and Vol. 30, pp. 255-63.- Ed.

^b Marx presumably refers to James Steuart's An Inquiry into the Principles of Political Oeconomy... In three volumes, Vol. I, Dublin, 1770, pp. 38-39. Cf. also this volume, pp. 103-04.—Ed.

transformation requires a certain stage of development of the material forces of production. E.g., in the case of the small PEASANT the piece of land he tills is his. The ownership of this, as his instrument of production, is the necessary spur to, and condition of, his labour. Similarly with handicrafts. In large-scale agriculture, as in large-scale industry, this labour does not first have to be separated from property in the conditions of production, the separation already in fact exists; this separation of property from labour, which is bemoaned by Sismondi,75 is a necessary transition to the conversion of property in the conditions of production into social property. The individual worker could only be restored as an individual to property in the conditions of production by divorcing productive power from the development of labour on a large scale. The alien property of the capitalist in this labour can only be abolished by converting his property into the property of the non-individual in its independent singularity, hence of the associated, social individual. This naturally brings to an end the fetishistic situation when the product is the proprietor of the producer, and all the social forms of labour developed within capitalist production are released from the contradiction which falsifies them all and presents them as mutually opposed, e.g. by failing to present a reduction in labour time in such a way that all work for 6 hours, saving instead that the 15-hour labour of 6 people is sufficient to maintain $20^{a}//^{76}$

Production for production's sake—i.e. the productive power of human labour developed without being determined in advance by any barrier of needs established beforehand. Later we shall discuss in more detail the fact that, even within capitalist production, this contradicts its own barriers, although it is the tendency to aim at this.^b For while it is the most productive of all modes of production so far, it includes—owing to its *contradictory character* barriers to production, which it constantly endeavours to transcend, hence crises, overproduction, etc. On the other hand, *production for production's* sake therefore appears as its precise opposite. Production not as the development of human productivity; but as the display of *material wealth*, in antithesis to the productive development of the human individual.

All the methods by which relative surplus value, and therewith the specifically capitalist mode of production, is developed, can be reduced in the most abstract form to this, that this mode of

^a Presumably it should be "15".-- Ed.

^b See this volume, pp. 441-42.-Ed.

production aims at bringing the value of the individual commodity down to its minimum, and therefore producing as many commodities as possible in a given labour time, or operating the transformation of the object of labour into a product with the smallest possible quantity of labour in the shortest possible labour time. Productivity of labour is in general nothing but the production of a maximum of product with a minimum of labour, or the realisation of a minimum of labour time in a maximum of product, HENCE the reduction of the value of the individual product to its minimum.

Two remarks should be made in this connection:

Firstly: It appears to be a contradiction that production directed towards exchange value, and dominated by it, endeavours to reduce the value of the individual product to a minimum. But the value of the product as such is a matter of indifference to capitalist production. Its goal is the production of the greatest possible amount of surplus value. And it is therefore determined, not by the value of the individual product, the individual commodity, but by the rate of surplus value, the ratio of the part of the commodity which represents variable capital to its variation, or the surplus labour contained in the product in excess of the value of the variable capital. Its purpose is not to make the individual product and therefore the total amount of product contain as much labour as possible, but to make it contain as much unpaid labour as possible. This contradiction was perceived by the Physiocrats. See Quesnay,^a in Supplementary Notebook C, p. 29 (and further 31).77

[XXI-1311] Secondly:

The reduction of the commodity to its minimum value, i.e. its greatest possible cheapening, only produces relative surplus value directly in so far as those commodities enter into the consumption of the worker as necessary means of subsistence, and their cheapening is therefore identical with the cheapening of labour capacity, i.e. with the reduction of necessary, and hence of paid, labour time, which as we have seen^b is in turn expressed from the point of view of the whole working day as a fall in the value or *price of labour*.

But this law is not just valid for this particular sphere of capitalist production; it covers all the spheres of production which

^a [F.] Quesnay, Dialogues sur le commerce et sur les travaux des artisans. In: Physiocrates... par M. Eugène Daire, Part I, Paris, 1846, pp. 188-89.— Ed.

^b See this volume, pp. 83-84.—Ed.

capital seeks gradually to control and subordinate to its mode of production. We have seen^a that the individual capitalist's cheaper production of his particular commodity does not directly achieve a cheapening of labour capacity (at least, there is no cheapening of labour capacity arising out of this cheapening of his product) and that to the extent that this cheapening is achieved, this does not redound to the benefit of this individual capitalist but to that of capital in general—the capitalist class—in that it produces a general cheapening of labour capacity.

But because the value of a commodity is determined by the average labour time necessary to produce it at a given stage of production, the individual value of the commodity which is produced by way of exception with more productive methods of labour, above the average level characteristic of the given stage of production, stands below the general or social value of that commodity. If, therefore, it is sold below the social value of commodities of the same kind, but above its individual valuehence sold at a certain value which retains some of the difference between its individual and its general value-it is sold above its value, or, in other words, the labour contained in it is momentarily higher labour than the average labour with which it is produced in general. But the labour capacity of the labour employed to produce it is not paid as higher labour capacity. This difference is pocketed by the capitalist and forms surplus value for him. This kind of surplus value, which is based on the difference between the individual and the social value of a commodity, brought about by a change in the mode of production, is of diminishing magnitude, and falls to 0 once the new mode of production is in general use, thereby itself becoming the average mode of production. And it is this diminishing surplus value that results *directly* from changes in the mode of production. It therefore forms the *direct motive* of the capitalist, and this thus holds sway over all the spheres of production which come under the control of capital equally, independently of the use value they produce and therefore independently of whether the product does or does not enter into the worker's necessary means of subsistence or into the reproduction of labour capacity. This form of surplus value, however, is transitory, it can only relate to the individual capitalist and not to capital as a whole, and although it produces a relative DEPRECIATION of labour capacity or the price of labour in the particular branch, this is not because the price falls but because it does not rise.

^a See present edition, Vol. 30, p. 319.-Ed.

Therefore, this form does not affect surplus value in general, because it does not call forth a *permanent* (*relative*) diminution of the price of labour in its own branch, any more than it produces a general cheapening of labour capacity and therefore a curtailment of necessary labour time, since its product does not enter into the worker's necessary means of subsistence.

But, secondly, the gradual introduction of the capitalist mode of production in these branches of production, for the motive we have indicated, leads here, as in the branches devoted to producing the necessary means of subsistence, to a reduction in the labour employed to simple average labour, combined at the same time with a tendency to prolong the absolute working day. Here, therefore, entirely the same DEPRECIATION of labour capacity as in the other branches takes effect, a DEPRECIATION which arises not from the cheapening of the means of subsistence but from the simplification of labour, its reduction to simple average labour.

If the worker works 12 hours, and, e.g., 10 hours of this is for himself and 2 hours for the capitalist, the *ratio of the surplus value* to the variable capital admittedly remains the same whether the 10 hours are labour of a higher or lower type. The value of the variable capital rises or falls with the level of the labour, and since the surplus labour has the same character as the necessary labour, the ratio between the surplus value and the variable capital remains the same.

The introduction of machine labour, etc., both provides new motives for the prolongation of absolute labour time, and at the same time facilitates this, since it robs the labour of its SINGULARITY, SO TO SAY. And it exerts this effect entirely independently of the particular nature of the branch of production into which it is introduced, and independently [XXI-1312] of whether the product of this branch enters or does not enter into the consumption of the workers.

As soon as the capitalist mode of production (i.e. the real subsumption of labour under capital) has taken control of agriculture, the mining industry, the manufacture of the main fabrics for the clothing industry and the transport system, means of locomotion, it gradually conquers the other spheres too, which are either subject to formally capitalist enterprise alone, or are still carried on by independent handicraftsmen, and it does this in the same measure as capital itself develops. This is capital's tendency. It has already been remarked, in our consideration of machinery,^a

^a See present edition, Vol. 30, pp. 319-46, and Vol. 33, pp. 387-501.-Ed.

that the introduction of machinery into one branch brings with it its introduction in other branches-as well as in other varieties of the same branch. For example machine spinning led to machine weaving; machine spinning in the cotton industry led to machine spinning in wool, linen, silk, etc. The increased employment of machinery in coal mines, cotton factories, etc., made necessary the introduction of the large-scale mode of production in machinebuilding itself. Apart from the increased means of transport required by this mode of production on a large scale, it is only the introduction of machinery in machine-building itself-in particular the Cyclopean PRIME MOTOR, etc.-which made possible the introduction of steamships, steam vehicles and railways (in particular it revolutionised the whole of the shipbuilding industry). The introduction of large-scale industry throws such masses of human beings into the branches not yet subjected to it, or creates in those branches such an amount of relative surplus population as is required for the transformation of the handicrafts or of small, formally capitalist, enterprise into large-scale industry; the industry then passes in turn through the various stages-and at the same time constantly releases capital. Actually the whole of this discussion does not belong here.⁷⁸ But it is necessary briefly to indicate, as we have just done, the way large-scale industry seizes hold of all around it, and point to its gradual conquest of all the spheres of production. (Railway construction itself-we mean the building of the railway lines-displays merely the form of the concentration of capital, on the one hand, and the cooperation of workers, on the other hand. The employment of machinery itself is very slight here.)

(Price of labour. Price of labour, not value of labour, is the correct expression when one is speaking of labour itself, rather than of labour capacity. What the worker really provides is a particular quantity of labour, since it is only therein that the use value of his labour capacity finds expression, or rather exists. And this quantity of labour, labour measured by time, is what the capitalist receives, and the only thing that interests him in the transaction. The wage therefore appears to the capitalist, as to the worker himself, as the price of the labour itself. And it is this in so far as the amount of money paid for any commodity is its price. But the price of a commodity—in so far as we are not dealing here with the accidental quantity of money for which a commodity is exchanged in accidental transactions—is above all (the more developed forms of market price, etc., can themselves only be explained in this way) nothing but its value, which is represented

as value, separately from its use value, in the money form, its value itself being expressed in the material of money. Although this is the case, there is contained in the price, in and for itself, something we discussed earlier in dealing with money, the possibility that price and value may not correspond.^a The price of a commodity does not need to correspond to its value. The value of a commodity is the adequate expression of this value. But price-or the money form of the value—contains two moments, 1), that the value of the commodity receives a particular qualitative expression, that the labour time contained in it is expressed as general social labour time, i.e. in a form common to all commodities as values-in the measure of values, in the money form; and 2), that the amount of value-the quantitative expression-is expressed similarly, hence the commodity is expressed in a quantity of money of the same magnitude of value, in an equivalent-because this is the expression of the value of the commodity in the use value of another commodity-not its direct, unmediated expression. Therefore, because it is inherent in price that the commodity takes on a converted form, passes through a process of alienation, first ideally then in reality, it lies in the nature of this process that value and price may [XXI-1313] diverge. E.g., if a yard of linen has a value of 2s. and a price of 1s., the magnitude of its value is not expressed in its price; and its price is not an equivalent, not the adequate monetary expression, of its value. Nevertheless, it remains the monetary expression of its value—the value expression of the yard of linen-in so far as the labour contained in it is represented as general social labour, as money. Owing to this incongruence between price and value it is possible to speak directly of the price of an object, although one cannot speak directly of its value. Initially, to be sure, this concerns only the possible incongruence between the magnitude of value of a commodity and the amount of value expressed in its price. But price can also become an irrational expression,⁷⁹ namely a monetary expression for objects which have no value, although price is in and for itself the expression of an object as money and therefore qualitatively (if not necessarily quantitatively) as value. E.g. a false oath can have a price, although it has no value (viewed economically; we are not speaking of use value here). For if money is absolutely nothing but the *converted form* of the exchange value of a commodity, exchange value represented as exchange value, it is on the other hand a definite quantity of a commodity

^a See present edition, Vol. 29, pp. 307-08.- Ed.

(gold, silver or the representatives of gold and silver), and anything can be exchanged for anything, the birthright can be exchanged for a mess of pottage.^a The price relation is the same as the irrational expression in algebra, as $\frac{0}{0}$, etc. It can be found by further investigation whether or not a rational relation lies hidden behind this irrational expression, i.e. whether or not there is a real value relation. Since the monetary expression or the price of a commodity, of a thing, is an expression in which the use value of the object is completely extinguished, which also means the extinction of the connection existing between the use value of this commodity and its value, i.e. the labour contained in it, which obtains an abstract expression in exchange value, abstraction from the use value or the nature of the object can proceed further, to the point where abstraction is made from whether it is expressed according to its nature as *value*, i.e. whether it is a use value which contains and can contain objectified labour. Things which have no value may have a price. If one now asks further what value relation lies at the basis of this price of labour which appears in practice-or one asks, as Adam Smith does, what is the natural price of labour^b—it turns out that the *regulating price* of labour is determined by the value of labour capacity, and is nothing but a derivative expression of the latter. Let the quantity of money which is paid as the price of a working day of 12 hours be=3s. or 36d. If necessary labour time=6 hours, 3s, is thus the value of the daily labour capacity which is consumed for 12 hours every day. This sum of money, in which 6 hours are realised, is expressed here as the *price* of a working day of 12 hours because the worker must work for 12 hours in order to obtain the monetary expression of 6 hours of labour time, and he in fact receives in exchange for 12 hours this price, this sum of money, alone. This price is therefore not the expression of the value of his labour-this is something one cannot speak of at all-but rather the value of his labour capacity, which requires 6 hours of labour a day for its reproduction. How this price relates to the value of the labour capacity, and secondly to the daily value in which the use of this labour capacity, daily labour, is realised, depends on the one hand on the value of labour capacity, and on the other hand on the daily duration of its use or, in other words, the length of the normal working day. But this relation to the value of labour

^a Genesis 25:29-34. Cf. also K. Marx, Capital, Vol. I, Part III, Ch. X .- Ed.

^b See present edition, Vol. 30, pp. 401-03, Vol. 31, pp. 529-32, and Vol. 32, p. 36.—*Ed.*

capacity and therefore the relation of necessary labour to surplus labour is completely extinguished in the price of labour. If the price of the working day of 12 hours=3s., the price of 6 hours= $1^{1}/_{2}$ s., and the price of one hour=3d. Thus the whole of the labour time appears as paid. No distinction between paid and unpaid labour is expressed here. And it does in fact look as if the 3s. are the value created by 12 hours of labour, although they are only half of that value; this is how the expression value of labour arose. Here, value of labour as distinct from price of labour means nothing but what Adam Smith calls the natural price of labour, i.e. its regulating price, determined by the value of labour capacity, as distinct from its accidental prices. This wholly irrational expression, value of labour, leads on the one hand to a confusion [XXI-1314] between the determination of the value of commodities by the labour time contained in them, and the determination of their value by the price of labour, two expressions which have absolutely nothing in common, since the value of a commodity is determined by the total amount of labour time contained in it, whereas the price of labour expresses only the part of this total amount paid to the worker. On the other hand, those political economists, such as Ricardo, who found this out,^a used very clumsy methods to contradict this contradiction. Nevertheless, the relation of the price of labour to the value of labour capacity makes itself felt in practice even in individual cases. Thus for example in the polemic of the London BUILDERS, etc., in 1860 and subsequently against the introduction of wages by the hour instead of a daily wage.^{b 80} If, e.g., the worker is only employed for 6 hours, and on the above assumption the following calculation is made: 3s.=the price of 12 hours of labour, hence $1^{1}/_{2}$ s. is the price of 6, or 3d. is the price of 1 hour of labour, a worker would provide e.g. $1^{1}/_{2}s$. of surplus labour, or 3 hours, while he would not be paid for his necessary labour of 6 hours. In order to squeeze out 3 hours of surplus [labour], the master must allow him to work 6 hours of necessary labour for himself. In the long run, of course, it is impossible to continue this attempt to squeeze out SURPLUS labour without allowing the worker to work the necessary labour. But the BUILDERS perceived very clearly, as one can see from their polemical publications, that at least in the medium term these methods of payment made possible an attempt of this kind on the part of the MASTERS, and that it was, on the other hand, a very

^a See present edition, Vol. 32, pp. 36-39, 52.- Ed.

^b Ibid., Vol. 30, p. 193.— Ed.

clever method of reducing the average wage, of depreciating labour capacity. The value of labour capacity expressed in money is the price paid to the worker for the whole working day, and it appears as the direct price of the whole working day, since although the sale and purchase of this commodity occurs before the labour is performed, payment takes place only after it has been performed.)⁸¹

The point we analysed in dealing with relative surplus value, namely that the value of labour capacity stands in an inverse relation to the productivity of labour, and falls to the same degree as the productivity of labour develops,^a is nothing other than an individual application of the general rule that the value of a commodity is determined by the quantity of labour, or the magnitude of the labour time, which is realised in it, that its value falls in the proportion to which it can be produced with less labour, and that the development of the productive power of labour means absolutely nothing but the development of conditions under which the same quantity of labour; hence that the value of a commodity falls with the development of the productive power of the labour which produces it.

TRANSITIONAL FORMS

I am not speaking here of forms transitional between the formal subsumption of labour under capital and its real subsumption under capital, and thereby of forms leading to the specifically capitalist mode of production; but of forms in which the capital-relation does not yet exist formally, i.e. under which labour is already exploited by capital before the latter has developed into the form of productive capital and labour itself has taken on the form of wage labour. Such forms are to be found in social formations which precede the bourgeois mode of production; on the other hand they constantly reproduce themselves within the latter and are in part reproduced by the latter itself.

//Forms transitional to capitalist production. One can only speak of transitional forms of this kind where the relation of buyer or seller (or, in modified form, of borrower and lender) prevails formally between the real producer and the exploiter, in general where the content of the transaction between the two PARTIES is not

^a See present edition, Vol. 30, pp. 233-54, and Vol. 33, pp. 474-78.-Ed.

conditioned by relations of servitude and domination, but they confront each other as formally free. The two forms in which capital appears (this will be discussed in more detail later, in Section III⁸²) before it takes control of the direct relation of production—becoming in this sense productive capital—and therefore appears as the relation which dominates production, are *trading capital* and *usurers' capital* (*interest-bearing capital*). Both kinds of capital, which appear within capitalist production as a special and derivative form of capital, but in previous forms of production as the sole and the original forms of capital, may enter into such relations to the actual producer that they either appear as antediluvian forms of capital, or, in the capitalist mode of production itself, as transitional forms, and are in part called forth by the capitalist mode of production in modes of production that have not yet been subordinated to the former.

[XXI-1315] For example, in India the usurer (who de prime abord^a makes the RYOT mortgage HIS FUTURE CROP to him BEFORE IT IS GROWN) advances to the RYOT the money he needs to plant the cotton. The RYOT has to pay 40-50% per annum. Here labour is not yet formally subsumed under capital. IT [capital] DOES NOT EMPLOY THE RYOT AS LABOURER; he is not a wage labourer, any more than the usurer who employs him is an industrial capitalist. The product is not the property of the usurer, but it is mortgaged to him. The money the RYOT converts into means of production is admittedly alien property, but he disposes of it as his own, SINCE it has been lent to him.

The RVOT is HIS OWN EMPLOYER, and his mode of production is the traditional one of the independent, small, SELF-SUSTAINING PEASANT. He does not work under alien direction, for another and under another, and thus he is not subsumed as a wage labourer to the owner of the conditions of production. These therefore do not confront him as capital. Thus even the *formal capital-relation* does not take place, still less the specifically capitalist mode of production. And yet the usurer appropriates not only the whole of the surplus value created by the RYOT, i.e. all the surplus PRODUCE over and above the means of subsistence necessary for his reproduction, but he also takes away from him part of the latter, so that he merely vegetates in the most miserable manner. The usurer functions as a capitalist in so far as the valorisation of his capital occurs *directly* through the appropriation of alien labour,

^a First of all.-Ed.

but in a form which makes the actual producer into his debtor, instead of making him a seller of his labour to the capitalist. This form heightens the exploitation of the producer, drives it to its uttermost limits, without in any way, with the introduction of capitalist production—even if at first with the merely formal subsumption of labour under capital-introducing the resulting heightened productivity of labour and the transition to the specifically capitalist mode of production. It is rather a form which makes labour sterile, places it under the most unfavourable economic conditions, and combines together capitalist exploitation without a capitalist mode of production, and the mode of production of independent small-scale property in the instruments of labour without the advantages this mode of production offers for less developed conditions. Here in fact the means of production have ceased to belong to the producer, but they are nominally subsumed to him, and the mode of production remains in the same relations of small independent enterprise, only the relations are in ruins. We find the same relation between e.g. the patricians and plebeians of Rome, or the peasants owning small parcels of land and the usurers. And at the same time it is a form in which the capital of the Jews was created everywhere in the Middle Ages, where they appear as money-lenders in the pores of purely agricultural peoples. (* Debt slavery in distinction to wage slavery.*)

We find further in India, where the old communities have dissolved, that this money-lending is replaced by the loan of the instruments of labour, e.g. looms, at an interest of 50-100%. In England, on the other hand, this is reproduced in e.g. the shape taken on by DOMESTIC INDUSTRY under the impact of large-scale industry; e.g. among the stocking weavers, etc. The mass of people thrown out through the introduction of machinery, robbed of their means of production, continue to be exploited by the owners of the means of production in this caricatured form of domestic industry, although those means of production do not develop into capital, and labour does not develop into wage labour. What appears here in the form of interest is not only the total surplus value, it is also a part of the normal wage of labour. A critique on the level of Mr. Carey's would be needed to calculate the rate of interest in a country from such relations.⁸³ (See the Court of Exchequer case cited in another Notebook.^a) This form can be

^a See present edition, Vol. 33, p. 349.-Ed.

transitional to the capitalist mode of production. It is itself the EXTRANEOUS PRODUCE of the capitalist mode of production.

What we have said of usurers' capital is true of merchants' capital. It can equally be a form transitional to the subsumption of labour under capital (initially its formal subsumption). This is the case wherever the merchant as such plays the role of MANUFACTURER. He advances the raw material. He appears originally as the buyer of the products of independent industries. But this point should be presented in more detail in the next section.⁸⁴

Yet it should only be presented in the next section in so far as it is a *form transitional to* capitalist production, and displays the alienation of the conditions of labour as a process of development of capitalist production with reference to an historical example.

On the basis of capitalist production, however, this form, in the changed shape in which it reproduces DOMESTIC INDUSTRY, is reproduced as one of the most dreadful forms of production existing, a form which is only brought to an end by the introduction of machinery, and in comparison with which the formal subsumption of labour under capital appears as a redemption. [XXI-1316] The immense surplus POPULATION created by large-scale industry in agriculture and the factory system is exploited here in a way which saves the "capitalist" a part of the production costs of capital, and allows him to speculate directly upon the misery of the workers. It is so in JOBBING WORK, the system under which some of the tailors, cobblers, NEEDLEWOMEN, etc., are employed in London. The surplus value created here depends not only on overwork and the appropriation of surplus labour, but also directly on deductions from wages, which are forced down far below their normal average level.

The system of *MIDDLEMEN* and *SWEATERS* follows on from this one. The actual "capitalist" distributes among the *MIDDLEMEN* a certain quantity of raw material which is to be worked on, and they in their turn distribute these materials among those unfortunates, living in cellars, who have sunk down below the average level of the normal workers who are combined together in TRADE UNIONS, etc., etc. Thus the profit of these MIDDLEMEN, among whom there are often in turn further MIDDLEMEN, consists exclusively of the difference between the normal wage they let themselves be paid, and the wage they pay out, which is less than normal. Once a sufficient number of workers of the latter kind is organised through this system, they are often directly employed by capitalist No. I on the same conditions as those under which the MIDDLEMEN employed them. This is a shining example of the *travail de* direction.^a Colossal fortunes are made in this way. (See the example of the NEEDLEWOMEN cited in the other Notebook.^b)

* "In wages, besides the rate of wages, which results from the demand for it in proportion to its supply, there is a *lower rate* which may be the result of the necessities of the workmen. For example, in those trades where there is what is called the 'Sweating System' practised, the fair result of the demand and supply rate of wages is represented by the amount received by the 'sweater'" (*Trades' Unions and Strikes: Their Philosophy and Intention*, by T. Dunning etc., London, 1860, [p.] 6).* "A 'sweater' is one who takes out work to do, at the usual rate of wages, and who gets it done by others at a lower price; the *difference*, which is his profit, being 'sweated' out of those who execute the work" (I.c., [p.] 6, note).// c

k) PRODUCTIVITY OF CAPITAL, PRODUCTIVE AND UNPRODUCTIVE LABOUR

(To be cited in addition to the above on the subsumption of the different spheres of production under capital:

"In the good old times, when 'Live and let live' was the general motto, every man was contented with one avocation. In the cotton trade, there were weavers, cotton-spinners, bleachers, dyers, and several other independent branches, all living upon the profits of their respective trades, and all, as might be expected, contented and happy. By and by, however, when the downward course of trade had proceeded to some extent, first one branch was adopted by the capitalist, and then another, till in time, the whole of the people were ousted, and thrown upon the market of labour, to find out a livelihood in the best manner they could. Thus, although no charter secures to these men the right to be cotton-spinners, manufacturers, printers, finishers, etc., yet the course of events has invested them with a monopoly of all... They have become Jack-of-all-trades, and as far as the country is concerned in the business, it is to be feared, they are masters of none" (*Public Economy Concentrated etc.*, Carlisle, 1833, p. 56).

* "One of two things *ought* to have resulted from the use of machinery, either that men should have laboured *less*, or that they should have *more* comforts. Unfortunately, neither of those things have happened. Men's comforts have been lessened since the introduction of machinery; they have had to work double time, and infant labour has been called in to aid them, and even to work for their own daily bread... The Jewish historian has remarked upon the overthrow of Jerusalem, by Titus, that it was no wonder [that] it should have been destroyed, with such a signal destruction, when *one* inhuman mother sacrificed her offspring to satisfy the cravings of absolute hunger" * (l.c., [p.] 66).)

[XXI-1317] We have seen not only how capital produces, but how it is itself produced, and how it emerges from the production process as a relation changed in essence, how it develops in the production process. On the one hand it transforms the mode of

^a Work of superintendence.--- Ed.

^b See present edition, Vol. 33, p. 350.-Ed.

^c See this volume, pp. 343-44.-Ed.

production, on the other hand this changed shape of the mode of production, as well as the attainment of a specific level of development of the material forces of production, is the foundation and the condition—the presupposition—of capital's own formation.

Since living labour is incorporated into capital—through the exchange between capital and the worker—since it appears as an activity belonging to capital, as soon as the labour process starts, all the productive powers of social labour present themselves as productive powers of capital, just as the general social form of labour appears in money as the quality of a thing. Thus the productive power of social labour, and the specific forms of it, now present themselves as productive powers as productive powers and forms of capital, of *objectified* labour, of the objective conditions of labour, which—as such an independent entity—are personified in the capitalist and confront living labour. Here once again we have the inversion of the relation, the expression of which we have already characterised as *fetishism* in considering the nature of money.^a

The capitalist himself only holds power as the *personification of* capital. (In double-entry book-keeping this role he has as capitalist, as capital personified, is constantly counterposed to his existence as a mere person; in the latter capacity he only appears as a private consumer and debtor to his own capital.)

The productivity of capital consists first of all, even when it is only the *formal* subsumption of labour under capital that is being considered, in the *compulsion to perform surplus labour*; to work beyond the individual's immediate needs. The capitalist mode of production shares this compulsion with previous modes of production, but exerts it, carries it out, in a manner more favourable to production.

Even from the point of view of this merely formal relation—the general form of capitalist production, which has its less developed mode in common with the more developed—the means of production, the objective conditions of labour—material of labour, means of labour (and means of subsistence)—do not appear as subsumed under the worker; rather, he appears as subsumed under them. He does not employ them, they employ him. And they are thereby capital. CAPITAL EMPLOYS LABOUR.⁸⁵ The means of production are not means by which he can produce products, whether in the form of direct means of subsistence, or as means of

^a See present edition, Vol. 29, pp. 289, 387 and Vol. 32, pp. 449-64, 482-98.--- Ed.

exchange, as commodities. He is rather a means for them, partly to preserve their value, partly to valorise it, i.e. to increase it, to absorb surplus LABOUR.

Even this relation in its simplicity is an inversion, a personification of the thing and a reification of the person, for what distinguishes this form from all previous ones is that the capitalist does not rule the worker in any kind of personal capacity, but only in so far as he is "capital"; his rule is only that of objectified labour over living labour; the rule of the worker's product over the worker himself.

But the relation becomes still more complex—and apparently more mysterious—in that, with the development of the specifically capitalist mode of production, not only do these directly material things-all of them products of labour, viewed from the angle of use value the objective conditions of labour as well as the products of labour, viewed from the angle of exchange value objectified general labour time, or money-stand on their hind legs vis-à-vis the worker and confront him as "capital", but also the forms of socially developed labour, cooperation, manufacture (as a form of the division of labour), the factory (as a form of social labour organised on the material basis of machinery) appear as forms of the development of capital, and therefore the productive powers of labour, developed out of these forms of social labour, hence also science and the forces of nature, appear as productive forces of capital. In fact, unity in cooperation, combination in the division of labour, the application of the forces of nature and science, as well as the products of labour in the shape of machinery, for the purpose of production, are all things which confront the individual workers themselves as alien and objective, as a mere form of existence of the means of labour which are independent of them and rule over them-just as the means of labour, in their simple visible shape as material, instrument, etc., confront the workers as functions of capital and therefore functions of the capitalist. The social forms of their own labour, or the form of their own [XXI-1318] social labour, are relations constituted quite independently of the individual workers; the workers as subsumed under capital become elements of these social constructions, but these social constructions do not belong to them. They therefore confront the workers as shapes of capital itself, as combinations which, unlike their isolated labour capacities, belong to capital, originate from it and are incorporated within it. And this assumes a form which is the more real the more, on the one hand, their labour capacity is itself modified by these forms, so that it becomes

powerless when it stands alone, i.e. outside this context of capitalism, and its capacity for independent production is destroyed, while on the other hand the development of machinery causes the conditions of labour to appear as ruling labour technologically too, and at the same time to replace it, suppress it, and render it superfluous in its independent forms. In this process, in which the *social* characteristics of their labour confront them as *capitalised* to a certain extent—in the way that e.g. in machinery the visible products of labour appear as ruling over labour-the same thing of course takes place for the forces of nature and science, the product of general historical development in its abstract quintessence: they confront the workers as powers of capital. They become in fact separated from the skill and knowledge of the individual worker, and although-if we look at them from the point of view of their source-they are in turn the product of labour, they appear as incorporated into capital wherever they enter the labour process. The capitalist who employs a machine does not need to understand it (see Ure^a). But vis-à-vis the workers, realised science appears in the machine as capital. And in fact all these applications of science, of the forces of nature and of large masses of products of labour-applications based on social labour-appear only as means of exploitation of labour, means of appropriating surplus labour, hence, vis-à-vis labour, as forces belonging to capital. Capital naturally employs all these means only to exploit labour, but in order to exploit labour, it must employ them in production. And thus the development of the social productive powers of labour and the conditions for this development appear as the work of capital, and not only does the individual worker relate passively to this work, it also takes place in antagonism to him.

Capital itself is dual since it consists of commodities.

Exchange value (money), but self-valorising value, value which creates value, grows as value, obtains an increment, through the fact that it is value. This can be reduced to the exchange of a given quantity of objectified labour for a greater quantity of living labour.

Use value, and here capital appears according to its particular situation in the labour process. But precisely here it does not just remain material of labour, means of labour to which *labour* belongs, and which have incorporated labour, but involves also, along with labour, its *social combinations* and the development of

^a A. Ure, The Philosophy of Manufactures..., London, 1835, p. 43.--Ed.

the means of labour which corresponds to these social combinations. Capitalist production first develops the conditions of the labour process on a large scale—first develops them separately from the single independent worker—developing both its objective and its subjective conditions, but developing them as powers which dominate the *individual worker* and are *alien* to him.

Thus capital becomes a very mysterious being.

Our investigation of profit⁸⁶ differs from our investigation of surplus value in this way, among others: If surplus labour remains the same, profit may rise owing to the economical utilisation of communal conditions of labour, of which there are many kinds, e.g. savings on building costs, heating, lighting, etc.; or because the value of the PRIME MOTOR does not rise in the same measure as its power increases, so that the value of the PRIME MOTOR is not so costly for big factories as it is for scattered small workshops; economies in the prices of raw materials by purchase on a large scale (a point we shall not examine any further, since it presupposes the development of relations which do not come into consideration here, where we presuppose the value of the commodity as given, rather than market prices); savings where the transmission machinery is on a large scale; or due to the fact that waste products occur in such amounts that these excrements of production themselves again become saleable commodities (or [XXI-1319] are able to enter afresh as means of production into the reproduction of the same sphere of production or of another one); or savings deriving from a reduction in administration costs or from the fact that the masses of commodities concentrated in the warehouses do not become dearer in the same proportion but rather become relatively cheaper, etc. The whole of the economy in the use of these conditions of labour, all this relative cheapening of constant capital, while its absolute value increases and its ratio to variable capital grows, rests on the fact that the conditions of labour, raw material as much as the means of labour, etc., are employed communally, and this communal utilisation //concentration in a smaller space is one of the essential points here// has as its absolute presupposition the *communal* cooperation of a conglomeration of workers. This conglomeration of human beings involves the concentration of the conditions of labour, and the latter involves the relative cheapening of these conditions. Hence the relative cheapening of constant capital-which raises the profit when the surplus value is given-//the replacement of the means of transport, etc., must be added to this, as also that of the means of storing the commodities required for production//-is

itself only an objective expression of the productive power of social labour, and follows from the social combination of labour alone. //And apart from this economy in the direct production process there is only one more CHANGE possible, a second change, in the value of the constant capital. This change proceeds from the cheapening of the elements of constant capital which are supplied to it from outside; an economising which is therefore not a result of the organisation of the labour process into which these commodities enter as elements. But these commodities are the result of another labour process in another sphere of production.// They appear, however, as independent of surplus LABOUR and SURPLUS value, since these are presupposed to them as given. That the worker delivers more of the product in the same time, on the other hand, is a result of cooperation, of the division of labour, and lastly of the association of his labour with machinery (natural forces) and methods of work (science). Machinery itself (just like chemical processes, etc.) is initially only the visible product of a combination of labour by head and hand; but in its employment it is the employment of combined labour, and it only produces surplus value as a means of exploiting to a higher degree the worker's powers of labour and the combination of workers.

Science, the general intellectual product of social development, equally appears here as directly *incorporated* into capital (and the application of science as science to the material processes of production, separated from the knowledge and skill of the individual worker, proceeds from the *social* form of labour alone) as the forces of nature as such and the natural forces of *social* labour itself. Because it is exploited by capital against labour, because it acts as a productive power of capital over against labour, the general development of society as such equally appears as the *development of capital*, and the more so because the emptying of *labour capacity* [of all content], at least of the vast majority of labour capacities, proceeds at the same pace.

The material result of capitalist production—apart from the development of the productive powers of social labour itself, which here appear to be merely means for the exploitation of labour—is an increase in the amount of products, and all these means for the exploitation of labour equally appear to be means for the multiplication and diversification of products, since the increased productivity of labour is expressed in this increased production. Yet seen from this angle, capitalist production appears to be the rule of things over people. For the creation of great material wealth—appears as the purpose for which the labour capacities are only means, and a purpose which can only be attained by their own restriction to a single activity and deprivation of humanity.

Machinery.

* "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 amount* [XXI-1320] of that fund, and hence to increase the quantity of employment"*. (*The Westminster Review*, January 1826, [p.] 123).⁸⁷

"The class of capitalists, considered as a whole, is in a normal position in that its well-being follows the course of social progress" (Cherbuliez, Riche[sse] et pauvre[té], [Paris, 1841, p.] 75).^a "The capitalist is the social man par excellence, he represents civilisation" (l.c., [p.] 75).^a "The PRODUCTIVE POWER OF CAPITAL can only mean the quantity of real productive power which the capitalist, by means of his capital, can command" (J. St. Mill, Essays on Some Unsettled Questions of Political Economy, London, 1844, p. 91). * "Capital is ... collective force" * (John Wade, History of the Middle and Working Classes etc., 3rd ED., London, 1835, [p.] 162). "Capital is only another name for civilisation" (l.c., [p.] 164).

//Economy in the use of the conditions of production depends entirely on their *communal use* by the concentrated and cooperating mass of workers-hence it depends on this social character of their labour. The conditions of labour, as the conditions of the labour of many people acting in cooperation, are cheaper than the scattered conditions, repeated on a small scale, of the labour of the isolated individual worker or small groups of workers; they are cheaper as conditions of combined labour than as those of fragmented labour. More precisely: 1) a saving in the "subjective" conditions of labour communally required by many people, such as buildings, heating, light; 2) a saving that arises from the concentration of the instruments of production, hence a saving in the machinery of transmission; 3) economy in the use of the POWER which sets in motion the PRIME MOTORS. Other ways of making things cheaper depend on inventions, and belong to the second kind of cheapening of constant capital-namely a cheapening which arises not from the arrangements directly made for its use, but from the development of the productivity of labour in spheres of production of which it is the result.

Nevertheless, capitalist production does not limit itself to these economies which arise from the concentration of workers and of the means of labour. A second kind of economy proceeds from

^a Marx quotes in French.-Ed.

the contempt with which human material "which does not cost anything" is treated; thus it is packed together in confined and badly ventilated rooms, and rules of safety and comfort are ignored, as with the failure to FENCE in dangerous machinery, and the inadequate numbers of shafts, etc., in the mines. These points must be backed up with a few examples later on.⁸⁸//

Capital is therefore productive:

1) as the compulsion to do surplus labour,

2) as absorbing within itself and appropriating the productive powers of social labour and the social powers of production in general, such as science.

The question is, how or through what means does labour appear productive towards capital, or as *productive labour*, since the productive powers of labour are transposed into capital? And can the same productive power count twice, once as productive power of labour and once as productive power of capital? //Productive power of labour=productive power of capital. But *labour capacity* is productive owing to the *difference* between its *value* and its *valorisation.*//

Only bourgeois narrowness, which considers the capitalist forms of production to be the latter's absolute forms—and therefore the eternal natural forms of production—is able to confuse the question of what *productive labour* is from the standpoint of capital with the question of what labour is productive in general, or what productive labour is in general, and therefore esteem itself very wise in giving the reply that all labour which produces anything at all, results in anything whatsoever, is *eo ipso*^a productive labour.

[Firstly:] Only labour which is converted directly into capital is productive; hence only labour which posits variable capital as variable, and therefore $= C + \Delta$. If the variable capital = x before its exchange with labour, so that we have the equation y = x, that labour is productive labour which converts x into x + h and therefore makes y = x into y' = x + h. This is the sole point that needs to be discussed. Labour which posits surplus value, or serves capital as an AGENCY for the positing of surplus value and therefore enables it to posit itself as capital, as self-valorising value.

Secondly: The social and general productive powers of labour are productive powers of capital; but these productive powers concern the labour process alone, or affect use value alone. They appear as qualities capital possesses as a thing, they appear as its

^a By that very fact.— Ed.

use value. They do not directly affect *exchange value*. Whether 100 work together or each of the 100 works in isolation, the *value* of their product=100 working days, whether this is represented by many products or a few. That is to say, the productivity of labour is irrelevant to exchange value.

[XXI-1321] There is only one way in which differences in the productivity of labour affect exchange value.

If the productivity of labour develops e.g. in a single branch of labour-if e.g. weaving with POWERLOOMS instead of handlooms ceases to be an exception-and if the weaving of a yard with the POWERLOOM requires only half as much labour time as with the HANDLOOM, the 12 hours of the HANDLOOM WEAVER are no longer represented in a value of 12 hours, but in a value of 6, since necessary labour time has now become 6 hours. The 12 hours of the HANDLOOM WEAVER now only=6 hours of social labour time, although he continues to work for 12 hours, as before. But this is not the point under discussion. If we take a different branch of production, in contrast, such as typesetting, in which no machinery is yet employed, 12 hours in this branch will produce just as much value as 12 hours will in branches of production where machinery, etc., has been developed to the uttermost extent. As productive of value, therefore, labour always remains the labour of the individual, only expressed generally. Productive labour-as valueproducing labour-therefore always confronts capital as the labour of the individual labour capacity, of the isolated worker, whatever social combinations these workers may enter in the production process. Whereas capital thus confronts the worker as the social productive power of labour, the productive labour of the worker never represents towards capital anything more than the labour of the isolated worker.

Thirdly: If it appears as a natural quality of capital—and therefore as a quality which gushes forth from its use value—that it compels the performance of surplus labour and claims the social productive powers of labour as its own, it appears, conversely, as a natural quality of labour that it posits its own social productive powers as productive powers of capital and its own surplus as surplus value, as the self-valorisation of capital.

These 3 points must now be developed and the distinction between productive and unproductive labour derived from them.

Ad 1. The productivity of capital consists in positing labour as wage labour towards itself, and the productivity of labour consists in positing the means of labour as capital towards itself.

We have seen that money is converted into capital, i.e. a given

exchange value is converted into self-valorising exchange value, into value+surplus value, by the conversion of a part of the money into such commodities as serve labour as means of labour (raw materials, instrument, in short the material conditions of labour), and the employment of another part of the money for the purchase of labour capacity. However, it is not this first exchange between money and labour capacity, or the mere purchase of the latter, which converts money into capital. This purchase incorporates into capital the USE of labour capacity for a certain period of time, or, in other words, it makes a definite quantity of living labour into one of the modes of existence of capital itself, its entelechy so to speak. In the real production process, living labour is converted into capital by on the one hand reproducing the wage—hence the value of the variable capital—and on the other hand positing a surplus value, and through this process of conversion the whole sum of money is converted into capital, although the only part which varies directly is that which is laid out in the wage. If the value was = c + v, it now = c + (v + x), which is the same thing as=(c+v)+x, or, in other words, the original sum of money, magnitude of value, has valorised itself, has been posited at the same time as self-preserving and self-multiplying value.

(The following should be noted: The circumstance that only the variable part of the capital brings forth its INCREMENT changes absolutely nothing in the fact that by means of this process the whole of the original value is valorised, is increased by a surplus value; that therefore the whole of the original sum of money has been converted into capital. For the original value=c+v (constant and variable capital). It becomes in the process c+(v+x); the latter is the reproduced part, which arose through the conversion of living into objectified labour, a conversion which is conditioned and introduced by the exchange of v for labour capacity or its conversion into wages. But c+(v+x)=c+v (the original capital)+x. Apart from this the conversion of v into v+x, hence of (c+v) into (c+v)+x, could only occur through the conversion of a part of the money into c. One part can only be converted into variable capital through the conversion of the other into constant *capital*.

In the real production process labour is converted *in reality* into capital, but this conversion is conditioned by the original exchange between money and labour capacity. It is only through this *direct* conversion of labour into *objectified* labour which belongs not to the worker but to the capitalist that the money is converted into capital, including the part which has taken on the form of the means of production, the conditions of labour. Previously money was only capital *in itself*,^a whether it existed in its own form or in the form of commodities (products) which possessed a shape enabling them to serve as the means of production for new commodities.

[XXI-1322] It is only this particular *relation* to labour which converts money or commodity into capital, and that labour is *productive labour* which—by means of this relation it has to the conditions of production, to which there corresponds a particular position in the real production process—converts money or commodity into capital, i.e. preserves and increases the value of the *objective labour* which has attained an independent position vis-à-vis labour capacity. Productive labour is only an abbreviation for the whole relation in which, and the manner in which, labour capacity figures in the capitalist production process. It is however of the highest importance to distinguish between this and *other* kinds of labour, since this distinction brings out precisely the determinate form of labour on which there depends the whole capitalist mode of production, and capital itself.

Productive labour, therefore, is labour which—in the system of capitalist production—produces *surplus value* for its EMPLOYER or which converts the objective conditions of labour into capital, and their owners into capitalists, hence labour which produces its own product as capital.

Hence in speaking of *productive labour* we are speaking of *socially determined* labour, labour which implies a highly definite relation between the buyer and the seller of labour.

Although the money in the possession of the buyer of labour capacity—or, as a commodity, the buyer of means of production and subsistence for the worker—only becomes capital through the process, is only converted into capital in the process, and therefore these things are not capital before their entry into the process, but are only about to become capital, they are even so capital *in themselves*; they are capital through the independent shape in which they confront labour capacity and in which labour capacity confronts them, a relation which conditions and ensures the exchange with labour capacity and subsequent process of the real conversion of labour into capital. They already possess at the outset the *social determinacy* vis-à-vis the workers which makes them into capital and gives them command over labour. They are therefore *posited in advance* as capital vis-à-vis labour.

^a See present edition, Vol. 28, pp. 171-204.-- Ed.

Productive labour can therefore be characterised as labour which exchanges directly with money as capital, or, and this is merely an abbreviated expression of the same thing, labour which exchanges directly with capital, i.e. with money which is in itself capital, has the determination of functioning as capital, or confronts labour capacity as capital. The expression "labour which exchanges directly with capital" means that labour exchanges with money as capital and converts it actu^a into capital. What the determination of immediacy implies will soon become more clearly apparent.

Productive labour is therefore labour which reproduces for the worker only the previously determined value of his labour capacity, but at the same time, as value-creating activity, it valorises capital or places the values created by labour in confrontation with the worker himself as capital.

In examining the exchange between capital and labour, as we saw in considering the process of production,^b two moments need to be distinguished, which are fundamentally distinct, although they condition each other.

Firstly: The first exchange between labour and capital is a formal process, in which capital figures as money and labour capacity figures as commodity. The sale of labour capacity takes place notionally or legally in this first process, although the labour is paid for only after it has been done, at the end of the day, of the week, etc. This does not change anything in this single transaction in which labour capacity is sold. What is sold here directly is not a commodity in which labour has already been realised but the use of labour capacity itself, hence in practice labour itself, since the USE of labour capacity is its ACTION-labour. It is therefore not an exchange of labour mediated through the exchange of commodities. If A sells boots to B, they both exchange labour, the first labour realised in boots, the second in money. But here objectified labour in its general social form, i.e. as money, is exchanged for labour which exists as yet only as a capacity, and what is bought and sold is the use of that capacity, hence labour itself, although the value of the commodity that has been sold is not the value of labour (an irrational expression) but the value of labour capacity. A direct exchange therefore takes place between objectified labour and labour capacity which de facto amounts to living labour; hence an exchange between objectified labour and living labour. The

^a By that action.-- Ed.

^b See present edition, Vol. 30, pp. 33-42.- Ed.

wage—the value of labour capacity—therefore presents itself, as explained previously,^a as the direct purchase price, the *price of labour*.

The relation between worker and capitalist in this first moment is the relation between the seller of a commodity and its buyer. The capitalist pays the *value* of the labour capacity, hence the *value* of the commodity, which he is buying.

At the same time, however, the labour capacity is only bought because the labour it can perform, and enters into an obligation to perform, is greater than the labour required for the reproduction of this labour capacity, and is therefore represented by a value greater than the value of the labour capacity.

[XXI-1323] Secondly: The second moment of the exchange between capital and labour has in fact nothing to do with the first, and strictly speaking is not an exchange at all.

In the first moment an exchange of money and commodity takes place-an exchange of equivalents-and the worker and the capitalist confront each other solely as the owners of commodities. Equivalents are exchanged (i.e. the relation is not affected at all by the time when they are exchanged, and whether the price of labour stands above or below the value of labour capacity or is equal to it changes nothing in the transaction. It can therefore take place according to the general law of the exchange of commodities.) In the second moment no exchange at all takes place. The owner of money has ceased to be the buyer of a commodity, and the worker has ceased to be the seller of a commodity. The owner of money now functions as a capitalist. He consumes the commodity he has bought, and the worker provides it, since the use of his labour capacity is his labour itself. Labour has itself become a part of objective wealth through the earlier transaction. The worker performs the labour, but it belongs to capital and is now nothing more than a function of the latter. It therefore occurs directly under capital's control and direction, and the product in which it is objectified is the new shape in which capital appears, or rather the shape in which it *realises* itself *actu^b* as capital. Labour therefore directly objectifies itself in this process, converts itself directly into capital, after it has already been incorporated formally into capital through the first transaction. And indeed more labour is here converted into capital than was previously laid out as capital in the purchase of labour capacity. A portion of unpaid labour is

^a See this volume, pp. 61-86.-Ed.

^b In effect.—Ed.

appropriated in this process, and only in this way is money converted into capital.

Although no exchange in fact takes place here, the result, if one disregards the intervening stages, is that in the process-taking both moments together-a definite quantity of objectified labour has exchanged for a greater quantity of living labour, which is expressed in the result of the process in the following way, that the labour which has increased its size in its product>than the labour which is objectified in labour capacity, and therefore>than the objectified labour which is paid to the worker, or that in the real process the capitalist receives back, hence obtains, not only the part of the capital he laid out in wages, but also a surplus value, which costs him nothing. Here the *direct* exchange of labour for capital means 1) the direct conversion of labour into capital, the objective component of capital in the production process, 2) the exchange of a definite quantity of objectified labour for the same quantity of living labour+a surplus quantity of living labour, which is appropriated without exchange.

The statement that *productive labour* is labour which exchanges *directly* with *capital* comprises all these moments, and is only a derivative formula for the fact that it *is labour* which converts money into capital, exchanges with the conditions of production as *capital*, and therefore by no means relates to the former as simple conditions of production, does not relate to them as *labour* in the absolute sense, without any specific social determinateness.

This implies 1) the relation of money and labour capacity to each other as commodities, sale and purchase between the owner of money and the owner of labour capacity; 2) the direct subsumption of labour under capital; 3) the real conversion of labour into capital in the production process, or, and this is the same thing, the creating of surplus value for capital. A *twofold exchange between labour and capital* takes place. The first merely expresses the purchase of labour capacity and therefore, *actu*, of labour, hence of its product. The second expresses the direct conversion of *living* labour into capital, or its objectification as the realisation of capital.

The result of the capitalist production process is neither a mere product (use value) nor a *commodity*, i.e. a use value which has a particular exchange value. Its result, its product, is the creation of *surplus value* for capital, and therefore in fact the *conversion* of money or a commodity into capital; whereas before the production process these were capital merely in intention, in themselves, in terms of their determination. More labour is absorbed in the production process than was bought, and this absorption, [XXI-1324] this appropriation of alien unpaid labour, which is accomplished in the production process, is the *immediate purpose* of the capitalist production process, for what capital wants to produce as capital (hence the capitalist as capitalist) is neither direct use value for its own consumption, nor a commodity to be converted first into money and later into use values. Its purpose is *enrichment*, the *valorisation of value*, its *magnification*, hence the preservation of the old value and the creation of surplus value. And it achieves this *specific product* of the capitalist production process only in the exchange with labour, which for that reason is called *productive labour*.

In order to produce *commodities*, labour must be useful labour, it must produce use values, it must be represented in use values. And therefore only labour which is represented in *commodities*, hence in use values, is able to make the exchange with capital. This is a presupposition which goes without saying. But it is not this concrete character of the labour, its use value as such, the fact that it is e.g. tailoring, cobbling, spinning, weaving, etc., which forms its specific use value for capital, stamps it therefore as productive labour in the system of capitalist production. Its specific use value for capital consists not in its particular useful character, any more than in the specific useful features of the product in which it is objectified. It is rather its character as the element which creates exchange value, abstract labour; not in the sense that it represents any particular quantity of this general labour, but that it represents a greater quantity than is contained in its price, i.e. in the value of the labour capacity. The use value of labour capacity is for it the excess amount of labour it provides over and above the labour which is objectified in it, and is therefore required for its reproduction. It naturally provides this quantity in the particular form appropriate to it as a specific kind of useful labour, as the labour of spinning, of weaving, etc. But this concrete character of labour, which generally enables it to be represented in a commodity, is not its specific use value for capital. This consists for capital in its quality of being labour in general, and in the difference between the quantity of labour it performs and the quantity of labour it costs, in the fact that the former is greater than the latter.

A particular sum of money, x, becomes capital through the fact that it is represented in its product as x+h; i.e. the fact that the quantity of labour contained in it as a product is greater than the quantity of labour originally contained in it. And this is the result of the exchange between money and productive labour, or, in other words, only that labour is *productive* which enables objectified labour to be represented in the exchange with it as an increased quantity of objectified labour.

The capitalist production process is therefore not merely the production of commodities. It is a process which absorbs unpaid labour, a process which makes the material and means of labour—the means of production—into means for the absorption of unpaid labour.

It emerges from what has been said so far that to be *productive labour* is a determination of labour which has at first absolutely nothing to do with the *particular content* of the labour, its specific utility or the peculiar use value in which it is represented.

The same kind of labour can be productive or unproductive.

E.g. Milton, who DID THE Paradise Lost FOR £5, was an unproductive worker. But a writer who does factory labour for his publisher is a productive worker. Milton produced Paradise Lost for the same reason as a silkworm produces silk. It was an expression of his own nature. Later on he sold the product for £5. But the Leipzig proletarian of literature who assembles books (such as compendia of political economy) under the direction of his publisher is a productive worker, for his production is from the outset subsumed under capital, and only takes place so that capital may valorise itself. A singer who sells her songs on her own account is an unproductive worker. But the same singer, engaged by an impresario, who has her sing in order to make money, is a productive worker. For she produces capital.^a

[XXI-1325] There are various questions to be distinguished here.

Whether I buy a pair of trousers, or I buy some cloth and take a journeyman tailor into the house, paying him for his *service* (i.e. his tailoring labour) of converting this cloth into trousers, is a matter of complete indifference to me, in so far as only the trousers are at stake. I buy the trousers from the MERCHANT TAILOR, instead of operating in the second way, because the latter way of doing things is dearer, and the trousers cost less labour, and are therefore cheaper if the CAPITALIST TAILOR produces them than if I have them produced in the latter manner. But in both cases I do not convert the money with which 1 buy the trousers into capital but into trousers, and what is important to me in both cases is to use the money as a mere means of circulation, i.e. to convert it

^a See this volume, p. 448.-Ed.

into this particular use value. Here, therefore, the money does not function as capital, although in one case it is exchanged for a commodity, and in the other case it buys labour itself as a commodity. It functions only as money, and more precisely as means of circulation. On the other hand, the journeyman tailor is not a productive worker, although his labour provides for me the product. the trousers, and for him the price of his labour, the money. It is possible that the quantity of labour provided by the journeyman is greater than the amount contained in the price he receives from me. And indeed this is likely, since the price of his labour is determined by the price received by the productive journeymen tailors. But this is a matter of complete indifference to me. Whether he works 8 or 10 hours, once the price has been fixed, is completely indifferent to me. The only thing at stake here is the use value, the trousers, in which connection I naturally have an interest in paying as little as possible for them, whether I buy them in one way or the other; but I am not concerned to pay more or less in one case than in the other-or only to pay the normal price for them. This is an outgoing for the purpose of my consumption, not an increase of my money but a lessening of it. It is definitely not a means of enrichment, just as little as any other kind of expenditure of money for my personal consumption is a means of enrichment. One of the savants of Paul de Kock⁸⁹ may tell me that I cannot live without this purchase, just as I cannot live without the purchase of bread, hence I also cannot enrich myself, that it is therefore an indirect means-or at least a condition-for my enrichment. The circulation of my blood and my respiration would in the same way also be conditions for my enrichment. But neither the circulation of my blood nor my respiration in themselves enrich me on that account; both of these processes rather presuppose a costly metabolism without whose necessity there would be no poor devils at all. The mere direct exchange of money for labour therefore does not convert money into capital or labour into productive labour. What then is the characteristic feature of this exchange? What distinguishes it from the exchange of money with productive labour? On the one hand the fact that the money is expended as money, as the independent form of exchange value, which is to be converted into a use value, into means of subsistence, an object of personal consumption. Therefore the money does not become capital but rather the reverse, it loses its existence as exchange value so as to be consumed as use value. On the other hand, labour only interests me as a use value, as a service by means of which cloth is turned


into trousers; the service which it performs for me thanks to its particular useful character. But when the journeyman tailor is employed by a MERCHANT TAILOR, the service he performs for this capitalist by no means consists in his converting cloth into trousers, but rather in the fact that the necessary labour time which is objectified in a pair of trousers=12 hours of labour, and the wage the journeyman receives=6 hours. The service he performs for the capitalist therefore consists in the fact that he works 6 hours for nothing. That this occurs in the form of the making of trousers only conceals the real relation. Hence as soon as the MERCHANT TAILOR is able to do this, he endeavours to convert the trousers back into money again, i.e. into a form in which the particular character of tailoring has completely disappeared, and in which the service performed is expressed in such a way that instead of a labour time of 6 hours, which [XXI-1326] is expressed in a particular amount of money, a labour time of 12 hours is available, which is expressed in twice the amount of money.

I buy the work of the tailor on account of the service it performs as *tailoring*, which is to satisfy my need for clothing, hence to serve one of my *needs*. The MERCHANT TAILOR buys it as a means of making two thalers out of one. I buy it because it produces a certain use value, performs a certain service. He buys it because it provides more exchange value than it costs, he buys it merely as a means of exchanging less labour for more labour.

Where money is exchanged directly for labour, and the latter does not produce any capital, hence is not productive labour, it is bought as a service; this is nothing more than an expression for the particular use value provided by labour, just like every other commodity; but it is a specific expression for the particular use value of labour, in so far as labour does not provide services as an object but as an activity, which however by no means distinguishes it e.g. from a machine, e.g. a clock. Do ut facias, facio ut facias, facio ut des, do ut des^a are here completely indifferent forms of the same relation, whereas in capitalist production the do ut facias expresses a very specific relation of the objective value, which is given, and the living activity, which is appropriated. Thus, because the specific relation of labour and capital is not contained at all in this purchase of services, because it has either been completely extinguished or was never present, it is naturally the favourite

^a "I give that you may make", "I make that you may make", "I make that you may give", "I give that you may give"—contractual formulas in Roman law (*Corpus iuris civilis*, Digesta XIX, 5.5). Cf. present edition, Vol. 28, p. 393.—*Ed.*

form used by Say, Bastiat and their associates to express the relation of capital and labour.^a

How the *value* of these services is regulated, and how this *value* is itself determined by the laws of wages, is a question which has nothing to do with the investigation of the relation currently under discussion, and which belongs to the chapter on wages.

The result is that the mere exchange of money for labour does not convert the latter into *productive labour*, and that the *content* of this labour, on the other hand, is initially a matter of indifference.

The worker himself can buy labour, i.e. can buy commodities which are provided in the form of services, and when he expends his wage in such services this expenditure does not differ in any respect from the expenditure of his wage to buy any other commodity. The services he buys may be more or less necessary, e.g. he can buy the service of a doctor or a priest, just as he can buy bread or spirits. As a buyer-i.e. a representative of money towards the commodity-the worker is in exactly the same category as the capitalist, when the latter steps forward as buyer alone, i.e. when it is only a matter of transferring money into the form of a commodity. How the price of these services is determined, and what relation it has to the actual wage, how far it is regulated by the laws governing the latter, and how far not, are questions which should be treated in a discussion of wages and are a matter of complete indifference for the present investigation.90

If the mere exchange of money and labour does not convert the latter into *productive labour*, or, and this is the same thing, does not convert the former into capital, the *content*, the concrete character, the particular utility of the labour, also appears at first to be a matter of indifference; as we have just seen, the same labour of the same journeyman tailor appears as in one case productive, in another case not.

Some services or use values, the results of certain activities or kinds of labour, are incorporated in commodities; others, however, leave behind no tangible result as distinct from the persons themselves: or they do not result in a saleable commodity. E.g. the service a singer performs for me satisfies my aesthetic needs, but what I enjoy exists only in an action inseparable from the singer himself, and once his work, singing, has come to an end, my enjoyment is also at an end; I enjoy the activity itself—its

^a See present edition, Vol. 28, pp. 175, 180-81, Vol. 30, pp. 114, 148, and this volume, pp. 152-54.—*Ed.*



REVERBERATION in my ear. These services themselves, just like the commodities I buy, may be necessary or merely appear necessary, e.g. the service of a soldier, or a doctor, or a lawyer, or they may be services which provide me with pleasure. This does not change their economic determination in any way. If I am healthy and do not need a doctor, or I am fortunate enough not to have to engage in any lawsuits, I avoid like the plague the expenditure of money for medical or legal services.

 $[XXI-1328]^{91}$ One can also have services thrust upon one, the services of officials, etc.

If I buy the services of a teacher, not in order to develop my own capacities, but to acquire skills with which I can earn money—or if other people buy this teacher for me—and if I really learn something—which is in itself entirely independent of my paying for his services-these costs of learning form as much a part of the costs of production of my labour capacity as do my subsistence costs. But the particular utility of this service changes nothing in the economic relation; and this is not a relation in which I convert money into capital, or by which the performer of the service, the teacher, converts me into his capitalist, HIS MASTER, Whether the doctor cures me, the teacher is successful in instructing me, or the lawyer wins my case, is therefore a matter of complete indifference for the economic determination of this relation. What is paid for is the performance of a service as such, and its result cannot by its nature be guaranteed by the person performing it. A large part of services belong to the costs of consumption of commodities, as with cooks, maids, etc.

It is characteristic of all unproductive labours that they are only at my disposal in the same proportion as I exploit productive workers—as is the case with the purchase of all other consumption commodities. It is the productive worker, therefore, who of all persons has the least command over the services of unproductive workers, although he has to pay the most for involuntary services (the state, taxes). Inversely, however, my ability to employ productive workers does not at all grow in the proportion to which I employ unproductive workers; it is rather the reverse, it declines in the same proportion.

Productive workers may themselves be unproductive workers as far as I am concerned. If e.g. I have my house decorated, and these decorators are the wage labourers of a MASTER, who sells me this function, it is the same for me as if I had bought a readydecorated house, expended money for a commodity I intend to consume, but for the MASTER who sets these workers to decorating, they are productive workers, for they produce surplus value for him.

But what is the situation with independent handicraftsmen or with peasants who do not employ any workers, hence do not produce as capitalists? Either they are producers of commodities, as always in the case of peasants //but not e.g. in the case of a gardener I take into my household//, and I buy the commodities. from them, in which connection it makes no difference e.g. that the handicraftsman supplies the commodities to order, whereas the peasant delivers his supply according to the measure of his means of producing it. In this relation they meet me as sellers of commodities, not as sellers of labour, and this relation therefore has nothing to do with the exchange between capital and labour, hence it also has nothing to do with the distinction between productive and unproductive labour, which depends merely on whether the labour is exchanged for money as money or for money as capital. They therefore belong neither to the category of productive workers nor to that of unproductive workers, although they are producers of commodities. Their production is not subsumed under the capitalist mode of production. These producers, who work with their own means of production, may not only reproduce their labour capacity, but also create surplus value, in that their position allows them to appropriate their own surplus labour, or a part of it (for a part is taken away from them in the form of taxes, etc.). And here we meet with a peculiarity characteristic of a society in which a determinate mode of production predominates, although all relations of production have not yet been subjected to it. In feudal society, for example, which can best be studied in England, because here the system of feudalism was introduced in finished form from Normandy, and its form was imprinted upon a social foundation which differed in many respects, relations which are far from belonging to the essence of feudalism also take on a feudal expression. Such is the case with e.g. purely monetary relations, where there is no element at all of reciprocal personal services between suzerain and vassal. E.g. the fiction that the small peasant possesses his farm as a fief. It is exactly the same with the capitalist mode of production. The independent peasant or handicraftsman is cut into two.

"In the small enterprises ... the entrepreneur is often his own worker" (Storch, Vol. I, St. Petersburg edition, [p.] 242).^a

^a Marx quotes in French.--- Ed.

As owner of the means of production he is a capitalist, as worker he is his own wage labourer. He therefore pays himself his wages as a capitalist and draws his profit from his capital, i.e. he exploits himself as wage labourer and pays himself in surplus value the tribute labour owes to capital. Perhaps he pays himself yet a third part as landowner (rent), just as the industrial capitalist, as we shall see later,^a when he works with his own [XXI-1329] capital, pays himself interest and regards this as something he owes himself not as industrial capitalist but as capitalist in the absolute sense. The social determinacy of the means of production in capitalist production-so that they express a particular relation of production-is so intertwined with, and in the understanding of bourgeois society so inseparable from, the material existence of these means of production as means of production, that that determinacy (categorial determinacy) is applied even where the relation directly contradicts it. The means of production only become capital in so far as they achieve an autonomous position as an independent power vis-à-vis labour. In the given case, the producer-the worker-is the owner, the proprietor of his means of production. They are therefore no more capital than he is a wage labourer vis-à-vis them. Nevertheless, they are considered to be capital, and he himself is split in two, so that he as capitalist employs himself as wage labourer. In fact this way of presenting the matter, irrational as it may be ON FIRST VIEW, is nevertheless correct so FAR: The producer admittedly creates his own surplus VALUE in the given case //assuming that he sells his commodity at its value//, or the whole product objectifies his own labour alone. But he owes his ability to appropriate for himself the whole product of his own labour, whereby the excess of the value of his product over the average price 92 FOR INSTANCE of his day's labour is not appropriated by a third MASTER, not to his labour-which does not distinguish him from other workers-but to his ownership of the means of production. It is therefore only through ownership of the latter that he obtains control of his own surplus labour, and thus he relates to himself as wage labourer as his own capitalist. The *separation* of the two appears as the normal relation in this society. Therefore where it does not take place in practice it is assumed, and, as we have just shown, so FAR correctly; for (unlike e.g. the conditions of ancient Rome or Norway) (or American conditions in the North West of the UNITED STATES) the unification

^a See K. Marx, *Capital*, Vol. III, Part V, Ch. XXIII (present edition, Vol. 37).—*Ed.*

of the two appears here as accidental, their separation as normal, and therefore the separation is retained as the relation, even when one person unites the different functions. It emerges in very striking fashion here that the capitalist as such is only a function of capital, and the worker a function of labour capacity. Then there is also the law that economic development divides the functions among different persons, so that the handicraftsman or peasant who produces with his own means of production is either turned little by little into a small capitalist who also exploits alien labour, or loses possession of his means of production //at the outset this may occur even though he remains their nominal owner, as with the mortgage system// and is turned into a wage labourer. This is the tendency in the form of society in which the capitalist mode of production predominates. In considering the essential relations of capitalist production, therefore, it can be assumed //since this tends to occur more and more, is the principal purpose, and the productive powers of labour are developed to the highest point in this case alone// that the whole world of commodities, all the spheres of material production-the production of material wealth-have been subjected (either formally or really) to the capitalist mode of production. In this presupposition, which expresses the LIMIT, and therefore approximates ever more closely to exact accuracy, all the workers engaged in the production of commodities are wage labourers and the means of production confront them as capital in all spheres of production. It can then be described as the characteristic feature of productive workers, i.e. of workers producing capital, that their labour is realised in commodities, material wealth. And thus productive labour would have obtained a second, subsidiary determination distinct from its decisive characteristic, for which the content of the labour is a matter of complete indifference and which is independent of that content.

With non-material production, even when it is conducted purely for exchange, hence produces *commodities*, two things are possible: 1) It results in *commodities*, use values, which possess an independent shape separate from the producers and consumers; hence may exist in the interval between production and consumption, may circulate in this interval as *saleable commodities*, as in the case of books, paintings, in short all the products of artistic creation, which are distinct from the artistic performance of the executant artist. Here capitalist production is only applicable to a very limited degree. To the extent that e.g. the writer of a joint work—encyclopaedia—e.g. exploits a number of others as hacks.

[XXI-1330] Here things usually remain at the level of the forms transitional to capitalist production, where different scientific or artistic producers, artisanal or professional, work for a common merchant capital, the publisher; a relation which has nothing to do with the capitalist mode of production proper, and is itself not yet formally subsumed under it. The fact that the exploitation of labour is at its worst precisely in these transitional forms does not change anything in the situation. 2) The product^a is not separable from the act of producing, as with all executant artists, orators, actors, teachers, doctors, clerics, etc. Here too the capitalist mode of production only occurs to a slight extent, and can in the nature of things only take place in certain spheres. E.g. teachers in educational institutions may be mere wage labourers for the entrepreneur who owns the institution; there are many such education factories in England. Although they are not productive workers vis-à-vis the pupils, they are such vis-à-vis their employer. He exchanges his capital for their labour capacity, and enriches himself by this process. Similarly with enterprises such as theatres, places of entertainment, etc. Here the actor's relation to the public is that of artist, but vis-à-vis his employer he is a productive worker. All the phenomena of capitalist production in this area are so insignificant in comparison with production as a whole that they can be disregarded entirely.

With the development of the specifically capitalist mode of production, in which many workers cooperate in the production of the same commodity, the direct relations between their labour and the object under production must of course be very diverse. E.g. the assistants in the factory, mentioned earlier,^b have no direct involvement in the treatment of the raw material. The workers who constitute the overseers of those who are directly concerned with this treatment stand a step further away; the engineer in turn has a different relation and works mainly with his brain alone, etc. But the whole group of these workers, who possess labour capacities of different values, although the total number employed reaches roughly the same level, produce a result which is expressed, from the point of view of the result of the pure labour process, in commodities or in a material product, and all of them together, as a workshop, are the living production machine for these products, while, from the point of view of the production process as a whole, they exchange their labour for capital, and reproduce the

^a Marx has "production".-- Ed.

^b See present edition, Vol. 33, pp. 483-84.-Ed.

money of the capitalist as capital, i.e. as self-valorising value, self-multiplying value. It is indeed the peculiarity of the capitalist mode of production that it separates the different kinds of labour, hence also brain and hand labour-or the kinds of labour in which one or the other aspect predominates-and distributes them among different people, although this does not prevent the material product from being the common product of these persons or their common product from being objectified in material wealth. Nor, on the other hand, does this prevent, or change in any way, the fact that the relation of each individual person is that of a wage labourer to capital, and in this eminent sense it is the relation of the productive worker. All these people are not only employed *directly* in the production of material wealth, they exchange their labour *directly* for capital's money, and therefore, as well as directly reproducing their wage, they create a surplus value for the capitalist. Their labour consists of paid labour+unpaid surplus labour.

In addition to extractive industry, agriculture, and manufacturing, there exists yet a fourth sphere of material production, which also passes through the different stages of the handicraft system. the system of manufacture, and mechanised industry; it is the transport industry, transporting human beings, it may be, or commodities. Here the relation of the productive worker, i.e. the wage labourer, to capital is exactly the same as in the other spheres of material production. Here too the object of labour undergoes a material alteration—a spatial alteration, or change of place. In regard to the transport of human beings, this appears merely as a service, performed for them by an entrepreneur. But the relation between the buyer and the seller of this service has no more to do with the relation of the productive worker to capital than the relation between the buyer and the seller of twist. If, however, we look at the process in regard to commodities, [XXI-1331] we find that there does occur an alteration to the object of labour, the commodity, in the course of the labour process. Its spatial location is altered, and a change in its use value accompanies this, in that the spatial location of this use value is altered. Its exchange value increases in the measure to which this alteration in its use value requires labour, a total amount of labour which is in part determined by the depreciation of the constant capital, hence the amount of objectified labour which enters into it, in part by the amount of living labour, as in the valorisation process of all other commodities. Once the commodity has arrived at its destination, this alteration which has taken place to its use value disappears, and is now expressed only in its increased exchange value, in the greater dearness of the commodity. Although the real labour has here left behind no trace in the use value, it has nevertheless been realised in the exchange value of this material product, and thus it is true of this industry, as of the other spheres of material production, that it is embodied in the *commodity*, although it has left behind no visible trace in the use value of the commodity.

Here we are still only concerned with *productive capital*, i.e. capital employed in the *direct production process*. We shall come later to capital in the *circulation process*, and in view of the particular shape capital assumes as *mercantile capital* it will only be later that we can answer the question as to how far the workers employed by it are productive or not productive.^a

"The PRODUCTIVE LABOURER" he that "DIRECTLY" increases "HIS MASTER'S WEALTH" (Th. R. Malthus, *Principles of Political Economy*, 2ND ed., London, 1836, [p.] 47 [note]).^b

[ADDENDA]

//Application of large-scale industry, cooperation and machinery to industry.

"Division of labour cannot be pushed at all to the same extent in agriculture as in manufactures * because in the one all the necessary operations can be carried on simultaneously by different individuals, in the other, they must follow in rotation, according to the change of seasons" (G. Ramsay, An Essay on the Distribution of Wealth, Edinburgh, 1836, [p.] 332, note). *"Under a system of spade husbandry, a larger produce can be raised, and hence a more numerous population supported, from the growth of the soil of any particular country, than by any other plan of agriculture" * (l.c., [p.] 339). Although the GROSS PRODUCE is greater with small-scale agriculture, *"labour is less productive—a waste of labour. If the gross produce of the soil be greater, there will on the other hand be a deficiency in every thing else" * (l.c., [p.] 337).

In 1390 A FARM of 57 ACRES YIELDED 6 BUSHELS OF WHEAT //32 BUSHELS is the AVERAGE in England now// and another, 5 BUSHELS OF OATS, TO THE ACRE. At that time the population did not exceed $2,353,102^{\circ}$ souls (*Eden*⁹⁴). *"We know very well that to secure the grain is as important as to raise it, and that if it were not

^a See K. Marx, *Capital*, Vol. III, Part IV, Ch. XVII (present edition, Vol. 37).— *Ed.*

^b This quotation was crossed out by Marx.⁹³-Ed.

^c In the source used by Marx: 2,353,202.-Ed.

possible to obtain the necessary assistance at harvest time, much of that which had been raised would be lost.* In the SOUTHERN STATES the *planter [is] compelled to limit his cultivation within the power[s] of his people to make his harvest.* In 1389 (according to *Eden*) *in securing the crop of corn of 200 acres,* there were employed 250 REAPERS and THATCHERS ON ONE DAY, and 200 on another. On another day in the same year, 212 were * hired for one day, to cut and tie up 13 acres of wheat and one acre of oats* (*Eden*). At that time 12 BUSHELS TO AN ACRE were considered an AVERAGE CROP, so that 212 PERSONS were employed * to harvest 168 bushels of grain, an operation* which could be accomplished with ease, in our time, by 6 persons" (Carey, *Principles of Political Economy*, Philadelphia, 1837, [pp.] 58 sqq.). Once the spade has replaced the stick, * "he can now make holes four inches deep with less labour than with his stick he could make those of two" (H. C. Carey, *The Past, the Present, and the Future*, Philadelphia, 1848 [pp. 10-11]).

"In all cases we mark the pioneers gladly seizing on the *clear dry land of the hillsides*, in preference to the rich and highly wooded land of the river bottoms. Everywhere we see them, as population gradually increases, descending equally gradually the sides of the hills and mountains towards the rich lands at their feet: and everywhere, [XXI-1332] with the growth of numbers, penetrating the earth to reach the lower soils, to enable them to combine the upper clay, or sand, with the lower marl or lime, and thus *compounding for themselves*, out of the various materials ... a soil capable of yielding a larger return than that upon which they were at first compelled to expend their labours. Everywhere, with increased power of men, we see them exercising increased power over land. Everywhere, as the new soils are brought into activity, and as they are enabled to obtain larger returns, we find more rapid increase of population, producing [an] increased tendency to *combinations of exertion*, by which the powers of the individual labourer are trebled, etc." * (l.c., [pp.] 48, 49).⁹⁵

"In 1760, the POPULATION of England and Wales was 6,479,000. The total quantity of GRAIN produced in the former period was estimated at 15,349,000 grs, and the EXPORTS EXCEEDED THE IMPORTS by 400,000 qrs. The whole QUANTITY OF LAND is about 37,000,000 ACRES. The QUANTITY OF LAND NOW IN CULTIVATION is, at the lowest calculation, twice as great as at the ACCESSION of George III. * With this extension over the surface, there has been a corresponding descent into the bowels of the land, and the lower soils have been to a wonderful extent combined with the superficial ones. The underlying marl of Norfolk and Lincoln has been combined with the sand, and throughout the kingdom, lime has been to an extent not to be estimated combined with the *clay*, the power to accomplish which has resulted from the cultivation of the iron and coal soils, always among the last to be brought into full activity. The effect of this may be judged from the fact that the same land which in the former period yielded in addition to the grain, but about 40 tons of straw, now yields the same grain and more than 500 tons of straw, hay and turnips, as food for the cattle required to meet the demands of the meat markets ... demands 3 times exceeding those of the former period. The weight of food per acre is considerably more than twice as great as was then obtained, and the number of acres being doubled, we have 5 times the quantity of food to be distributed, while the population has increased but 150%"* (l.c., [pp. 51-]52). "In the 14th century the RETURN to the HUSBANDMEN averaged less than 1 qr to the ACRE and IF FROM THIS be DEDUCTED 2 BUSHELS FOR the SEED, we have 6 BUSHELS as the PRODUCT OF LABOUR. The POPULATION is now about $6^{1}/_{2}$ times greater, but the NUMBER OF PERSONS WHO LIVE BY THE LABOUR OF THE FIELD is not 3 times greater, WHILE THE LAND IN CULTIVATION IS PROBABLY 10 times as great; and the $\overline{*}$ average yield per acre, estimating green crops as beef and mutton, and looking to the vast yield of

potatoes and various other articles of vegetable food, is at least * 6 times as great" (l.c., [p.] 54).//

It is quite correct that, as Carey says (l.c., [pp.] 48, 49), the "POWERS OF THE INDIVIDUAL LABOURER ARE TREBLED and MORE" with "COMBINAtions of exertion". But the value of the individual labour capacity is not increased as a result of this development of the social powers of LABOUR, but on the contrary lessened, lessened absolutely. And what he sells to capital continues to be, as before, his INDIVIDUAL labour capacity in the form in which it is enmeshed in his person, not his labour as a factor of that social power of combined LABOUR. As we have seen.^a this latter combination is a form alien to the individual workers, it is a form of capital, for which reason the PRODUCTIVE powers of this combination also appear as productive powers of capital and not of labour. In so far as what is involved here is the value of labour capacity, which determines the price of labour (not, therefore, the particular circumstances which determine the rise or fall of this price above or below that value, whatever oscillations there may be), this must necessarily be reduced by the development of the productive powers of labour, in the same way as is the value of every other commodity. It can only be raised to the extent that the development of the capitalist mode of production demands the formation of labour capacities whose more complex labour makes necessary a higher individual development of these labour capacities, with the result that the amount of value (labour) required for their production is greater. This does not affect the great mass of workers, on whom the capitalist mode of production has rather the opposite effect.

[XXI-1333] On the above remarks about PRICE OF LABOUR and VALUE OF THE LABOURING POWER: //The value of a steam engine does not grow because its productive capacity increases, and this also applies to that of the LABOURING POWER.//

* "It is true that the causes which raise the amount of the labourer's wages often raise the capitalists' profits. If, by increased industry, one man performs the work of two, both the amount of wages and the rate of profits will generally be raised. But the rate of profits will be raised not by the rise of wages but in consequence of the additional supply of labour having diminished its price, or having diminished the period for which it had previously been necessary to advance that price" * (N. W. Senior, Three Lectures on the Rate of Wages, London, 1830, [p.] 14 sqq.).^b

This is correct for the *RATE OF SURPLUS VALUE*. As regards the RATE OF PROFIT, it may rise without any reduction in the price of labour.

^a See present edition, Vol. 30, pp. 259-64, 278-79.- Ed.

^b See this volume, p. 349.-Ed.

PRODUCTIVE LABOURER.

From the point of view of capitalist production, a worker who admittedly produces saleable commodities, but merely to an amount equal to his own labour capacity, i.e. a worker who produces no surplus value for capital, is *not productive*. How strongly this is maintained can already be seen from passages in Ricardo, saying that the VERY EXISTENCE OF SUCH PEOPLE is A NUISANCE.^a This is the theory and practice of capital.

*"Both the theory relative to capital, and the *practice of stopping labour at that point* where it can produce, in addition to the subsistence of the labourer, a *profit* to the capitalist, seem opposed to the natural law which regulates production"* (Th. Hodgskin, *Popular Political Economy*, London, 1827, [p.] 238).

* "He"* (the worker) * "will work a for b wages; but not 2a for 2b wages. Then if you give him 2b for 1a, may it not follow that he will be content with less, and therefore not work even a?"* (An Inquiry into those Principles respecting the Nature of Demand etc., [London, 1821, p.] 97).

PRICE OF LABOUR, like PRICE OF LAND, are imaginary expressions like $\frac{0}{0}$ or $\sqrt{-2}$.

The following passage is already very good—although INVOLUN-TARILY—on how *money* which is exchanged for labour is expended by its owner as capital, and received by the worker merely as money:

"How much private good money doth to merchants, tradesmen, husbandmen, and others that both mayntaine and inrich themselves by setting the poore on worke for money. How much private good to all those poor people, who onely live by labouring for that money" (Usurie Arraigned and Condemned etc., London, 1625, [p.] 3).

Also cited, earlier, is an example of modern agriculture in order to illustrate surplus value; the one given here is one ABOUT 100 years older. This is *BARLET* (the 2nd year of a rotation which extends over 4 years, with 1 year TURNIPS, 2nd year BARLEY, III CLOVER, IV wheat). The calculation is per ACRE:

^a See D. Ricardo, On the Principles of Political Economy, and Taxation, pp. 415-17.- Ed.

Constant Capital a Variable Capital (Surplus Value Product

Constant Capita		variable Capita	1, 3	ourplus runne	1,00000	2 5.		
We find: SEED 3 BUSHELS WEAR AND TEAR	9 1	Wage for PLOWING,	,	Rent 12s.6d. TYTHE 3 RATES 1 6	4 qrs at 24s.	=4 16	Her tota	ice the l
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	12s.	ROWING,		8		$5\ 13\ 6$		
		MOVING,		348 ª				
		CARTING						
		AND STACK-						
		ING, THRESH-						
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		TO MARKET						

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([J. Arbuthnot,] An Inquiry into the Connection between the Present Price of Provisions and the Size of Farms, etc. [XXI-1334] By a Farmer, London, 1773, (pp. [104-]107 sqq.) This pamphlet must be cited later in connection with the rent of land as an example of how AGRICULTURAL PROFIT has fallen and rents have risen.

Simple cooperation:

* "There will be a greater increase of produce by their (the ex-cottagers') joint labours in one farm, than when each is to toil for himself on a little spot" (l.c., [p.] 128).

"There is also an advantage in the proportion of servants" * (if the same number of people are concentrated by 1 FARMER on 300 ACRES, instead of being employed on 100 ACRES each by 3 FARMERS) * "which will not easily be understood but by practical men; for it is natural to say, as 1 is: 4, so are 3:12; but this will not hold good in practice; for, in harvest-time and many other operations which require that kind of dispatch, by the throwing many hands together, the work is better, and more expeditiously done: f.e., in harvest, 2 drivers, 2 loaders, 2 pitchers, 2 rakers, and [the] rest at the rick, or in the barn, will dispatch double the work that the same number of hands would do, if divided into different gangs on different farms" (l.c., [pp.] 7-8).

"Suppose he should have a flock of 100 sheep, which is a great many for such a farm (of 100 acres), that flock will not maintain a shepherd, though it requires as much care and attendance as triple the number, which would be very easily tended by 1 man"* (l.c., [pp.] 9-10).⁹⁶

Natural productivity of the land.

Where capitalist production has developed, THE DIFFERENCES OF NATURAL PRODUCTIVITY—SOIL, and CLIMATE, and everything connected with this—make a DIFFERENCE IN THE RESPECTIVE PRODUCTIVITY OF THE CAPITAL EMPLOYED, since the natural productivity of labour, just like its social productivity, appears as *productivity of capital*, hence the degree of this productivity also appears as a degree of the productivity of

^a Should be $\pounds 3$ 5s.—Ed.

capital. The converse, however, does not hold. It is not this natural productivity which favours the development of capital, or solicits it in proportion to itself. This gives us a deep insight into the nature of surplus value (=surplus labour) as, at once, imagined by the Physiocrats (and Smith in part) and propounded, for the apologetic purposes of landed property, by Malthus-the view that this surplus value is anyhow a gift of nature. There may be a great amount of game in a country. If a hunter restricts himself to shooting or catching only as much as comes his way, he does not produce a surplus of game. And if a human being in general restricts himself to appropriating as much of the SPONTANEOUS PRODUCTIONS of an abundant nature as he needs for the satisfaction of his necessary requirements, he does not produce any capital in this way. The wealth of the country may enable him to work little, to extend the AREA of his work over $\frac{1}{40}$ of an acre. He does not produce any more surplus in this way than if he worked the whole day to cultivate 40 ACRES of BARREN LAND. Nowhere does production begin with capital. Capital begins where an industrial population has already developed under other modes of productionwhatever they be - and this depends on the amount of NATURAL WANTS and therefore on the natural incentive to industry. This stands in an inverse ratio to the natural productivity of the soil. It stands in a direct ratio to the necessity OF ACTION; to the resistance to be overcome. Of course, if the ground and the climate are too infertile, the result is the same as when they are too fertile.

* "Nor can I conceive a greater curse upon a body of people, than to be thrown upon a spot of land, where the *productions for subsistence and food* were, in great measure, *spontaneous*" *

//hence not a result of labour, not an incentive to the development of human [XXI-1335] activity//

* "and the climate required or admitted little care for raiment and covering ... there may be an extreme on the other side. A soil incapable of produce by labour is quite as bad as a soil that produces plentifully without any labour"* ([N. Forster,] An Enquiry into the Present High Price of Provisions etc., London, 1767, [p.] 10).

Machinery.

*"Were the hands which are spared by such improvements" * (machinery and *all kinds of improvements and inventions for *lessening the quantity of labour*) "to remain absolutely idle, ... they would be real evils. For want of labour is amongst the worst of evils. On the other hand, the benefits of these inventions are obvious and considerable, and always *tend in their consequences to lessen*, if not entirely remedy, *the evils which they at first occasion*. Manufactures are brought to market at a cheaper rate; the manufacture is thereby extended, and more hands employed. The lands produce more plentifully, and at less expense. The consequence is, a greater plenty of provisions and a lower price of them" * (l.c., [p.] 21, note). PRICE OF LABOUR. Where the expression price is prima facie original and irrational, hence expresses not merely an incongruence with the magnitude of value of an object expressed in money, but also an incongruence with the concept of value itself, we are certain always to find two things:

Either the *price* expresses a purely accidental relation, i.e. an equation between 2 things, an exchange relation between two things which are in themselves incommensurable. Such *prices*, however characteristic they may be of the condition of the society, cover a range of things of infinitesimal significance from the point of view of political economy. The only problem in this case is to find where the *buyers* come from, *able to put such prices on things which have no value.*

Or the price is the form of appearance of a value relation hidden behind it, which is in this form not directly perceivable. The question of the AVERAGE PRICE then leads to the real problem. Only this 2nd irrational form of price offers real problems for political economy. Price of labour and price of land (or the forces of nature altogether) are the only two irrational expressions of this kind. The price of land is irrational, *since the adequate price is the monetary expression of value, and there can be no value where there is no labour materialised in the thing.* Hence the investigation of the secrets of this price is one of the main problems of political economy.

Similarly irrational is the expression: price of labour. And in this case, as with the price of land, the expression expresses a real relation. Price is the MONETARY EXPRESSION OF VALUE. The value of a given amount of money is determined by the quantity of labour contained in it. A given quantity of labour therefore results in the value of a given amount of money, but this amount of money is not the price of the labour contained in the money; it is rather that the money only has value as an expression of this quantity, SINCE it thereby appears as the expression of the same energy which measures all other commodities. The price of labour does not even mean this. It means the amount of money with which a particular quantity of labour is bought, as opposed to the amount of money in which the same amount of labour is expressed. The price of labour, therefore, does not express the value of the money in which the labour is expressed, but a quantity of money which differs from this. This is therefore, prima facie, an irrational expression which contradicts the concept of value and therefore price itself, *which [is] only [the] monetary expression of value-whether it be adequate or not to the magnitude of that value.* If, however, one asks further what is the AVERAGE OR NATURAL PRICE OF LABOUR, the answer is: the value of labour capacity. The price of labour is therefore merely the price of labour capacity, and it is paid for a greater quantity of labour than is contained in the labour capacity.

[XXI-1336] Production process of capital.

We have seen: This production process is not only the process of producing commodities, but the process of producing surplus value, absorption of surplus labour, and therefore the process of producing capital.^a The first formal act of exchange of money and labour-or capital and labour-is only potentially the appropriation of alien living labour by objectified labour. The real appropriation process first occurs in the real production process, which is preceded by that first formal transaction in which capitalist and worker confront each other purely as commodity owners, relate to each other as buyer and seller. For this reason, all the vulgar economists, such as Bastiat," remain stuck at that first formal transaction, precisely in order to swindle away the specific relation. The difference is shown strikingly in the exchange between money and unproductive labour. Here, money and labour are exchanged for each other exclusively as commodities. This exchange, therefore, is an expenditure of income instead of a formation of capital.

Rent of land.

//Malthus says, in An Inquiry into the Nature and Progress of Rent etc., London, 1815:

*"A fair profit on the stock employed, including, of course, the payment of labour, will always be a sufficient inducement to cultivate" * ([p.] 3, note).

Nothing could be more correct. And so for the worker who possesses his own instruments of labour it is a sufficient inducement to SPIN OR WEAVE if only he receives FAIR WAGES, and often very UNFAIR WAGES, as we see with all handicraftsmen who have to compete with manufacture or the mechanical workshop. For the same worker, COTTAGER OR SMALL TENANT, it is a *sufficient inducement to cultivate*, if he receives wages, in a favourable case some surplus over the AVERAGE WAGES, i.e. if he is able to appropriate a part of his own surplus LABOUR, not to speak of the cases (Ireland, etc.) where, despite his LITTLE STOCK, WHICH IS NO CAPITAL, he decides to cultivate for the

^a See present edition, Vol. 30, pp. 92-106.- Ed.

^b See present edition, Vol. 28, pp. 175, 180-81, Vol. 30, pp. 114, 147-48, and this volume, pp. 138-39.—*Ed.*

(physical) minimum, which stands below the AVERAGE WAGES. Hence if the sole reason for the nonexistence of rent were the circumstance that ground which only yields a **PROFIT** (the production price) forms "A SUFFICIENT INDUCEMENT" to CULTIVATE, the fact that the cost price⁹⁷ (as opposed to the production price) forms a sufficient inducement for the WORKMAN TO WORK would be just as much a reason for the nonexistence of profit. Just as the latter does not thereby obtain disposition over capital, so equally the former does not obtain disposition over the land. For the land to be tilled by FARMER-CAPITALISTS, the price of its product must form a surplus over the production price, a surplus profit. For the land to be tilled by SMALL TENANTS and COTTIERS, on the other hand, it is enough that it form a surplus over the cost price, hence that a part of the surplus value be converted into rent instead of being converted into profit. This does not then form a surplus over the profit, but the same surplus value, which is otherwise called profit, is now called rent, or a part of the profit goes to the owner of the land, instead of going to the possessor of the SMALL STOCK. The whole mistake of the Physiocrats //only further compounded: since with them profit is posited as equal to wages, and surplus labour and surplus produce are therefore only expressed in rent// is fully expressed in the following utterances by PARSON Malthus:

"We still want to know why the consumption and supply" (in the case of *raw produce) "are such as to make the price so greatly exceed the cost of production, and the main cause is evidently the fertility of the earth in producing the necessaries of life. Diminish this plenty, diminish the fertility of the soil, and the excess will diminish; diminish it still further, and it will disappear. The cause of the high price of the necessaries of life above the cost of production is to be found in their abundance, rather than scarcity" (l.c. [p.] 13). "If f.i. the soil of the earth had been such, that, however well directed might have been the industry of man, he could not have produced from it more than was barely sufficient to maintain those, whose labour and attention were necessary to its products; though, in this case, food and raw materials would have been evidently scarcer than at present, and the land might have been, in the same manner, monopolised by particular owners; yet it is quite clear, that neither rent, nor any essential surplus produce of the land in the form of high profits could have existed"* ([p.] 9).

D'abord,^a if the labour of a man on the land only brought forth enough for his existence (HIS FAMILY INCLUDED, as long as they are not capable of working) the land could not be *MONOPOLISED* among PARTICULAR OWNERS, because exactly the same number of owners as cultivators could exist. "MONOPOLISING" here would mean: appropriation through labour, hence in Locke's sense.^b The sphere of this

^a First of all.-Ed.

^b See this volume, pp. 87-89.—Ed.

"monopoly" would extend exactly as far as the individual labour of each individual. Hence this is already a foolish hypothesis. But what is the upshot of the whole thing? If the whole of a man's labour were required for the reproduction of his own labour capacity, there would be no *surplus LABOUR* and HENCE no *surplus PRODUCE* [XXI-1337] for it to realise itself in. Then there would be neither profit nor rent, since both are merely forms of the appropriation of *surplus LABOUR* and therefore merely categories of *surplus value*. The Physiocrats, who assume, as Malthus himself says (p. 16), that profit is nothing but the wages of the capitalists, i.e. is

* "proportioned to the wants and necessities of the owners of capital" *,

i.e. merely reproduces the means of subsistence necessary for the reproduction of their own labour capacity, therefore correctly assert that rent is the sole surplus PRODUCE, i.e. the sole form of surplus value, of surplus labour, since it alone would represent a surplus of labour over the amount necessary for the subsistence of the workers. To that extent, therefore, rent, like profit, in short surplus value and surplus produce, rests on the FERTILITY of the soil, i.e. on the naturally originating productivity of labour, which produces more than the absolutely necessary subsistence of the worker, a natural productivity which of course rests on qualities of its inorganic nature-qualities of the soil, etc. But what has this FERTILITY of the soil to do with *"making the price so greatly exceed the cost of production" *? In proportion as the natural productivity of labour and the NATURAL FERTILITY of the soil grow, a given quantity of labour is expressed in a greater quantity of product. The same quantity of labour is expressed in the same value, hence the total product is also expressed in the same total price. But the price of the individual product falls. Instead of being expressed in a high price of A qr of wheat, this fertility is expressed in A LOW PRICE of the gr of wheat. To be sure-and here the Physiocrats become confused—this FERTILITY is expressed in the low value of labour capacity, and the relatively short duration of the necessary labour time. Therefore, if the same labour time is worked, the same quantity of labour provided, the surelus labour (and the SURPLUS PRODUCE) grows in the same proportion as the necessary part of the working day and therefore the value of the NECESSARY PRODUCE fall. This SURPLUS PRODUCE would therefore have a higher value, not because the price of the individual product has risen, but because it has fallen, and the total price of the total amount would either have remained the same or fallen if the same number of hours were no longer worked. If the necessary labour was=6, the working

day=12, and the result of greater FERTILITY is that necessary labour=3, and surplus labour=7, the value of the total product will have fallen by $\frac{1}{6}$, the price of the commodity by twice that amount, and the value of the surplus PRODUCE will have risen by $\frac{1}{6}$. This rise in surplus value or SURPLUS PRODUCE depends solely on the increased appropriation of alien labour, which is only possible precisely because the value of the commodity has fallen. Not only the quantity but the value of the surplus PRODUCE rises; this bewilders the Physiocrats, who do not see that if the total labour time was reduced in proportion to the [growth in the] productivity of labour, the value of the SURPLUS PRODUCE would fall. E.g. if in the above case the worker now only worked for 6 hours instead of 12, he would receive as much for 3 hours as previously for 6, and similarly the appropriator of the surplus labour of 3 hours. But the value of the total product, and along with that the value of the SURPLUS PRODUCE would have fallen by half. The fact that the quantity of labour-e.g. 12 hours a day-remains the same, whatever the change in the productivity of labour, appears to the Physiocrats to be an "institution of nature", and to Malthus to be A "GIFT OF NATURE TO MAN" (l.c., [pp. 8-]9), namely A GIFT OF NATURE to the "NATURAL SUPERIORS OF MEN". The "HIGH PROFITS" of Mr. Malthus depend, to be sure, on this beneficent institution of nature. But the excess of rent over profit, or the "EXCESS OF PRICE OVER THE COST OF PRODUCTION" does not [p. 9]. If agricultural labour is more fruitful than other labour, this can only show itself in the fact that here less living labour is necessary in order to use the products of earlier labour (constant capital) for reproduction, to convert them into fresh products. Thus the value produced by a given capital in agriculture would be < than the value produced by the same capital elsewhere. Instead of an EXCESS of the price of the total product over the costs of production in other spheres there would be a minus.// //It is already apparent with Anderson^a that the law of differential rent can be discovered without a clear insight into the nature of value. In fact nothing is needed for this except the awareness that the average market price, or what one may call the market value-without knowing how this market value is determined and how it is related to the determination of the values of commodities—is the same for RAW PRODUCE which has been produced by means of labour the productivity of which varies thanks to the different ADVANTAGES of the kinds of soil which produce the same

^a Jt Anderson, An Enquiry into the Nature of the Corn Laws..., Edinburgh, 1777. See also present edition, Vol. 31, pp. 268, 322, 344-47, 371-75, 387, 457-64, 532.— Ed.

sort of RAW PRODUCE. Where Malthus appropriates what he finds in Anderson (leaving aside the fact that he falsifies this by amalgamating it with the Physiocrats and Adam Smith), he develops or confuses matters on the basis of his false theory that the *value* of a commodity (HENCE its price; as MONETARY EXPRESSION OF VALUE) is determined by the *QUANTITY OF LABOUR* it can command. His presentation is as confused as one can possibly imagine. He says:

[XXI-1338] * "But the accumulation of capital beyond the means of employing it on land of the greatest natural fertility, and the greatest advantage of situation, must necessarily lower profits, while the tendency of population to increase beyond the means of subsistence, must, after a certain time, lower the wages of labour" * (Inquiry into etc. Rent, [p.] 17).

If wages fall owing to the "tendency of population", $profit^{a}$ therefore rises. And thereby, for NON-AGRICULTURAL CAPITAL, an increase in the price of RAW PRODUCE (profit would in turn be altered by constant capital's becoming dearer) would initially bring about a RISE in profit instead of a fall in profit (for surplus value). The rate of surplus value would increase even if there was a fall in the quantity of corn, etc., it was able to command, owing to an increase in the price of corn. In so far as this increase in profit is conditioned by the FALL OF WAGES, it would also take place for the capital which cultivated the worst soil, and yielded no rent. This profit would of course be represented in a lesser quantity of raw PRODUCE. On the better lands, a part of the profit would be separated off as surplus profit, and therefore IN THE SHAPE OF RENT. Rent would be formed, not through a fall, but through a rise in the rate of profit, on the best lands. If an increase in the price of the RAW PRODUCE brings a fall in the rate of surplus value—and we can say here the rate of profit, since Malthus, like Ricardo, etc., lumps together both of them, and for him they are therefore identical—this can only arise from the fact that a great quantity of necessary labour time is required on the worst lands, and therefore a small quantity of surplus labour is left over (if the length of the working day remains the same). And since the price of corn, etc., would have risen in general, the worker would everywhere have to work a longer necessary time in order to obtain the same wage. Surplus labour, and therefore SURPLUS value, would therefore fall in all branches of production, HENCE profit would fall. For the farmer of the better lands this would be nominal, if he retained the whole of the product, since a smaller part of his product would now have

^a Here the words "surplus value" are written under the word "profit" in the manuscript.— Ed.

a greater value than previously—and the value of his total product would have risen. But if we assume with Malthus that the wAGES OF LABOUR fall, because more labour is required to produce them, how can the rate of profit be reduced thereby? And now he continues:

"The expense of production will thus be diminished, but the value of produce, that is, the quantity of labour, and of the other products of labour besides corn which it can command, instead of diminishing will be increased. There will be an increasing number of people demanding subsistence, and ready to offer their services in any way in which it can be useful. The exchangeable value of food will, therefore, be in excess of the cost of production, including in the cost the full profits of the stock employed upon the land, according to the actual rate of profits at the time being. And this excess is rent" ([pp.] 17, 18).

Hence the EXPENSE OF PRODUCTION falls and the VALUE OF PRODUCE rises. And why does the EXPENSE OF PRODUCTION fall? Malthus understands by expense of production wages+profit, besides the value of the stock EMPLOYED, which he does not mention as being irrelevant in his version. This amount falls. Why? Because wages fall and profit falls. And why do wages fall? Because the corn has become dearer. And why has the corn become dearer? Because the EXPENSE OF PRODUCTION on the worst lands has risen. If the worker continued to receive as much corn, etc., as before, his wage would have to rise, i.e. its value would have to rise, because he would have to work for himself a greater part of the day in order to reproduce the same quantity of means of subsistence. If the value of his wage falls, therefore, it is because the quantity of corn he receives is less, on account of the TENDENCY of the population. If the corn has become dearer by $\frac{1}{3}$, and he receives $\frac{1}{3}$ less corn, he continues to work the same surplus labour time for his EMPLOYER. The same labour time would admittedly be represented by a smaller quantity of corn, but the EMPLOYER would obtain from this smaller quantity a portion of value as large as before. (Apart from this, this method of proceeding cannot explain why the inferior land would be cultivated, since the growth of population would rather involve, not the production of more corn, but placing the people on a more exiguous diet.) The rate of profit would thus remain the same, and therefore the EXPENSE OF PRODUCTION for the EMPLOYER would remain the same. But in relation to the corn the expense of PRODUCTION would have risen, SINCE the same quantity of labour, still divided in the same manner as previously, would be represented by a smaller quantity of corn, and the value or price of the individual quantity of corn would therefore have risen. This increased value of corn would not however represent an excess of VALUE OVER THE EXPENSE OF PRODUCTION on the worst land, since the value

of profit and wages would=the value of corn, hence the EXPENSE OF PRODUCTION [XXI-1339] would=the value of the produce. And Malthus concedes this, since the worst land bears no rent, hence the value of its produce=the cost of production, paying only wages and profit. Hence if wages have fallen, the rate of profit at least has remained the same. Indeed, it would have risen if the value of labour had fallen, i.e. if the fall in wages were related not just to the fall in the quantity of use values. A smaller quantity of corn would now command the same quantity of labour as before: the same quantity of corn would therefore command a greater quantity of labour than before. But this would not create any excess of the VALUE OF PRODUCE OVER THE EXPENSE OF PRODUCTION. It would not at all affect the identity between value of produce and expense of production, but would only have the result that the relation of wages and profit remained the same. Nor would anything be changed by the fact that the price of corn would have risen in comparison with that of the other products, and therefore that a small quantity of corn would command a greater quantity of the other products.

So where would the rent on the better lands come from? The EXCESS OF VALUE OF PRODUCE OVER THE COST OF PRODUCTION? It would simply come from this, that they would sell their product over its cost of PRODUCTION, would sell it at the cost of production of the inferior land. Here, therefore, there would be a double rise in profit. Firstly because wages would have fallen, and secondly because the product would be sold over its value. But in fact an excess of value is created here, because the cost of production on the worst lands would have risen, and therefore the price of corn on all the lands would have risen, while the real COST OF PRODUCTION ON the better lands has remained the same. The value would have risen in comparison with the better lands' COST OF PRODUCTION, because it would be measured not according to their COST OF PRODUCTION but according to that of the worst land. Because their nominal value would thus have risen, their cost of production would have fallen (fallen because the cost of PRODUCTION would have risen for the corn produced on the bad SOIL), yet their nominal value did not rise because the COST OF PRODUCTION fell, but the other way round. They sell corn which costs them f_1 the gr at e.g. f_3 , but only because the same gr of corn costs f_{3} on the bad soil. Because the nominal value of their corn rises to $\pounds 3$, its cost of $\pounds 1$, which has remained constant, falls relatively, but its nominal value does not rise because the cost of **PRODUCTION** has fallen. This distortion is committed by Mr. Malthus in order to maintain his first proposition, that rent is A GIFT OF NATURE, Physiocratically expressed, and corn is dear because

PLENTIFUL, the productivity of agriculture being the reason for the high price of its product. Hence with him the value of the product must rise, because its cost of production falls. This has absolutely nothing to do with the fact that the same quantity of corn * "commands a greater quantity of labour, and of the other products besides corn".* For on the Malthusian presupposition the wage also sinks on the worst soil, and how could it not do so, since the wage is the same for all kinds of soil? And the corn on the worst soil also very definitely commands more other products besides corn, in so far as their value has remained the same, and they have not become dearer simultaneously with the corn. However, these circumstances create no rent on the bad soil. They therefore have absolutely nothing to do with the formation of rent. Incidentally, according to Malthus the rate of profit would not fall, but rent would only prevent it from rising on the better land. The rate of profit cannot fall because the same quantity of corn commands more surplus labour, it can only fall because it commands less, because the worker must work more of the total working day for himself, in order to reproduce the same quantity of corn, or its value. Here, therefore, it is evident-in the nonsensical way Malthus lets the COST OF EXPENSE fall and the value of the product rise-that he has not understood the theory of differential rent. He admittedly says at another point, in order to show that RENT is not a monopoly:

"It follows then, that the price of raw produce, in reference to the whole quantity raised, is sold at the natural or necessary price, that is, at the price necessary to obtain the actual amount of produce, although by far the largest part is sold at a price very much above that which is necessary to its production, owing to this part being produced at less expense, while its exchangeable value remains undiminished" ([p.] 36).

The reverse. *Owing to this part being produced at less expense, because its nominal value is raised above its former standard!* And how the whole QUANTITY is to be sold AT ITS NECESSARY PRICE when BY FAR THE LARGEST PART OF IT IS SOLD ABOVE ITS NECESSARY PRICE, is impossible to conceive. The whole is rather sold *at the necessary price for producing the smallest part of it, therefore at a difference between its real and its nominal value.*//

[XXI-1340] //Both Malthus and the others think that *RENT* is merely $\hat{\lambda}$ CERTAIN SHAPE WHICH THE SURPLUS assumes.

"The more general surplus ... is meant to include the profits of the farmer, as well as the rents of the landlords" (Malthus, Inquiry etc. into etc. Rent, [p.] 16). "This surplus produce (under * certain circumstances) ... shows itself chiefly in extraordinary high profits, and extraordinary high wages, and appears but little in the shape of rent" (l.c., [p.] 17). "Nor is it possible that rent should permanently remain as part of the profits of stock, or of the wages of labour ... essential separation (of rent) from profits. If the general profits of stock were 20 p.c. and particular portions of land would yield 30 p.c. on the capital employed, 10 p.c. of the 30 would obviously be rent, by whomsoever received" (l.c., [pp.] 18-19). "...As a nation reaches any considerable degree of wealth, etc. ... the separation of rent, as a kind of fixture upon land of a certain quality, etc." (l.c., [p.] 20.// //"Rent ... has been found to commence its separation from profits, as soon as profits and wages fall, etc." (l.c., p. 20 [-21]).//.

Wages. Average and MOVEMENT.

* "There is nothing so absolutely unavoidable in the progress of society as the fall of wages, that is such a fall as, combined with the habits of the labouring classes, will regulate the progress of population according to the means of subsistence"* (Malthus, Rent, [p.] 19).

In his Observations on the Effects of the Corn Laws etc., 3rd ED., London, 1815, Mr. Malthus asserts in opposition to Adam Smith (hence in opposition to his own false assumptions in the Essay on Population):

*"It is manifest ... that the whole of the wages of labour can never rise and fall in proportion to the variations in the price of corn" * (l.c., p. 6).

The same chap says in Grounds of an Opinion etc., London, 1815:

* "These wages will finally be determined by the usual money price of corn, etc." * ([p.] 26).

And the same view is upheld in the Inquiry into Rent, in order to show the necessity for the SEPARATION OF RENT from PROFITS and WAGES. Why then does the fellow, in the Observations on the Effects of the Corn Laws, contest this view, inherited by him from Adam Smith and otherwise asserted by him, if in a one-sided and blinkered manner quite different from Adam Smith's? Answer in James Deacon Hume's Thoughts on the Corn-Laws etc., London, 1815:

* "Mr. Malthus has taken much pains to refute Adam Smith's proposition 'that the price of labour is governed by the price of corn'... it is the very life-blood of the question, and the manner in which it has been treated by Mr. Malthus leaves him open to suspicion that he is labouring to furnish hints and arguments upon which others may support the extravagant pretensions of the agricultural interest without incurring the direct odium of doing so himself" * (l.c., [p.] 59).

(Malthus is always a low sycophantic dog.)

 $//M_R$. Ireland, SECRETARY of the BRITISH CO-OPERATIVE SOCIETY, said at the society's third ANNIVERSARY, at the end of May 1863:

*"Abundant evidence from government returns and other authentic sources proved that the working man gave for the use of land, machinery, *superintendence*, and *liberty to work*, for distribution and protection, 8 hours labour out of every 12: to the landlord and capitalist, 6 hours; to the retailer, one hour; and to the government, 1 hour; leaving only 4 hours for himself."//

"The price of the necessaries of life is, in fact, the cost of producing labour"* (Malthus, Inquiry into etc. Rent, [p.] 48, note).⁹⁸

Malthus concedes that wages (daily wages) fell with the development of TASK WORK. This took place (and on the land in particular) after the end of the 18th century, with the rise in the price of grain and the DEPRECIATION of banknotes, hence 2 circumstances which equally had the effect of forcing down wages. It is [XXI-1341] one of the almost incomprehensible BLUNDERS of Ricardo, who lived precisely at this time, that he assumed the working day as fixed, and therefore did not see how the rate of surplus value could rise, or at least remain the same, in spite of the rise in the price of the necessary means of subsistence, and disregarding a DESCENDING MOVEMENT in the value of labour capacity.

*"Corn and labour rarely march quite abreast; but there is an obvious limit, beyond which they cannot be separated. With regard to the unusual exertions made by the labouring classes in periods of dearness, which produce the fall of wages noticed in the evidence //before the Parliamentary Committees//, they are most meritorious in the individuals, and certainly favour the growth of capital. But no man of humanity could wish to see them constant and unremitted. They are most admirable as a temporary relief; but if they were constantly in action, effects of a similar kind would result from them, as from the population of a country being pushed to the very extreme limits of its food... I own I do not see with pleasure the great extension of the practice of task-work. To work really hard during 12 or 14 hours in the day, for any length of time, is too much for a human being" * (Malthus, l.c., [p.] 48, note).

According to Eden^a the NECESSARIES IN A LABOURER'S FAMILY OF ABOUT AN AVERAGE SIZE can be divided into ROUGHLY 5 parts, $^{2}/_{5}$ flour or bread, $^{2}/_{5}$ *house rent, fuel, soap, candles, tea, sugar, clothing, $^{1}/_{5}$ meat, milk, butter, cheese and potatoes* //Malthus, *Observations on the Effects of the Corn Laws etc.*, 3rd ED., London, 1815 [pp. 5-6]//. //Thus even according to this calculation, $^{3}/_{5}$ are directly AGRICULTURAL NECESSARIES.//

"When Smith speaks OF 'CORN', he means *'food', because value of all agricultural produce ... has a natural tendency to equalise itself; as the farmer will seek every opportunity of growing that which pays best, etc."* (James D. Hume, *Thoughts on the Corn-Laws etc.*, London, 1815, [p.] 59). "As far as the articles * house rent, fuel, soap, candles, tea, sugar, and clothing * are concerned ... * much of the price of almost all these articles consists of *taxes* as well as *labour*" (l.c., [p.] 60). "Bread and meal form a much greater proportion than 2/5 of the subsistence of the common labourer" (l.c., [p.] 60).^b

"It has been endeavoured to be proved that labour is not influenced by the price of subsistence, but that, on the contrary, it is always cheapest when grain is dearest. In support of this brilliant discovery, which would have undoubtedly entitled the Author to a chair in the university of Laputa,⁹⁹ no example could be adduced but from the cotton manufactory, in the infancy of which wages were far beyond the rates of

^a F. M. Eden, The State of the Poor: or, an History of the Labouring Classes in England, from the Conquest to the Present Period... In three volumes, Vol. I, London, 1797.— Ed.

^b Cf. present edition, Vol. 32, p. 38.-Ed.

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common labour; and where from this cause and other improvements in machinery they have always had a tendency to diminish. The real earnings of the cotton-weaver are now far less than they were: his superiority over the common labourer, which at first was very great, has now almost entirely ceased. Indeed, whether from the increase in the price of ordinary labour, or from the freer circulation which has been produced by the alteration in the laws of settlement and apprenticeship, the difference in the wages of skilful and common labour is far less now than at any former period"* (Remarks on the Commercial Policy of Great Britain, principally as it Relates to the Corn Trade, London, 1815, [p.] 48).

[XXI-1342] (Locke, Ogilvie and Spence are very important for the history of views on landed property in the 18th century.)¹⁰⁰

The only correct point in the theory of population is that the development of capital throws the mass of the population into conditions in which their reproduction meets with no limit except for the *NEGATIVE CHECKS*, just as is the case with animals and plants. The wretched human being reproduces more rapidly than the *travailleur dans ses conditions naturelles*^a—because the conditions for his reproduction are of infinitesimal size. Poverty *pullule*^b; just as in the animal kingdom, the smaller the class the more massive its reproduction.

Capital Capital as person with Adam Smith too.

* "Stock cultivates land; stock employs labour" (Wealth of Nations, BOOK V, CH. II, ED. Buchanan, Vol. III, 1814, p. 309).

Productive and unproductive labour. Buchanan (2) (3).¹⁰¹

Increase in wages resulting from cheapening of commodities.

"It is not ... accurate to say, that either rent, profit, or wages are increased, because they purchase more of a cheaper article" (Wealth of Nations, Vol. I, p. 417, note by Buchanan).

Shortening of labour time by machinery. Boxhorn says, referring to the introduction of the ribbon-loom in Leyden // Institutiones Politicae, Amsterdam, 1663//:

"In this town about twenty years ago certain people invented an *instrument* for weaving, with which a single person could weave more cloth, and more easily, than many others in the same length of time. As a result there arose disturbances and complaints from the weavers, until the town council finally prohibited the use of this instrument" (Beckmann, Zur Geschichte der Erfindungen, Vol. 1, [p.] 127).^c

Labour and capital.

"It is a mistake to suppose that the rich man maintains his servants, tradesmen, tenants, and labourers: the truth is, they maintain him" ([W.] Paley [Moral and Political Philosophy. In: The Works, Vol. I, London, 1837, p. 144]).

USUAL and AVERAGE PRICE OF CORN AND LABOUR.

^a Labourer in his natural conditions.-- Ed.

^b Pullulates.— Ed.

^c Marx quotes in Latin.- Ed.

* "There is a difference between what may be called the usual price of corn and the average price... Let us suppose the common price of corn for 4 years out of 5 to be about $\pounds 2$ a qr, and during the 5th to be $\pounds 6$. The average price of the 5 years will then be $\pounds 2$, 16s.; but the usual price will still be about $\pounds 2$, and it is by this price, and not by the price of a year of scarcity, or even the average including it, that wages are generally regulated" * (Malthus, The Grounds of an Opinion on the Policy of Restricting the Importation of Foreign Corn etc., London, 1815, [p.] 26).

Cooperation.

* "Whether the united skill, industry and emulation of many together on the same work be not the way to advance it? And whether it had been otherwise possible for England to have carried on her Woollen Manufacture to so great a perfection?" ([G. Berkeley,] The Querist etc., London, 1750, Q. 521).

"Whether the Woollen Manufacture of England is not divided into several parts or branches appropriated to particular places, where they are only, or principally manufactured; fine cloths in Somersetshire, coarse in Yorkshire, long Ells at Exeter, Saies at Sandbury, Crapes at Norwich, Linseys at Kendal, Blankets at Whitney, and so forth?" (l.c., Q. 520).*

Machinery and AVERAGE WAGES.

* "Wages are decreased in the same proportion as the powers of production increase. Machinery, it is true, cheapens the necessaries of life, but it also cheapens the labourer" (A Prize Essay [XXI-1343] On the Comparative Merits of Competition and Cooperation etc., London, 1834, [p.] 27).

"The moment the machine comes into competition with human labour, the wages of that labour begin to adjust themselves to the lesser cost of production by [the] machine. The Rev. Mr. Turner was in 1827 rector of Wilmstowe, in Cheshire, a manufacturing district. The questions of the Committee of Emigration, and Mr. Turner's answers shew how the competition of human labour is maintained against machinery. Question. 'Has not the use of the power-loom superseded the use of the hand-loom?' Answer. 'Undoubtedly; it would have superseded them much more rapidly than it has done, if the hand-loom weavers were not enabled to submit to a reduction of wages.' Question. 'But in so submitting he has accepted wages which are insufficient to support him...' Answer. '...in fact the competition between the hand-loom and the power-loom is maintained out of the poor-rates.' Thus ... degrading pauperism or expatriation, is the benefit which the industrious receive from the introduction of machinery, to be reduced from the respectable and in some degree independent mechanic, to the cringing wretch who lives on the debasing bread of charity. This they call a 'temporary inconvenience'" (l.c., [p.] 29).

"Thus does this advocate of machinery"* (this applies to Ure as well^a) "by allowing that a check to improvement would be beneficial to the working man ... admit, that the malformation of society renders mechanical improvement detrimental. Shame to the advocates of a system which makes us lament the progress of human ingenuity" ([p.] 30).

"It" (machinery) "enables the labourer to purchase more with his income ..., if that income be fixed; but if it deprive him of employment, it also deprives him of that income, and those labourers who are not employed, compete with those who are" ([p.] 27).

"Besides that machinery lessens the wages of the labourer, it also obliges him to

^a See K. Marx, Capital, Vol. I, Part IV, Ch. XV, Sect. 5 (present edition, Vol. 35).— Ed.

work longer, even for these decreased wages. Formerly he employed about 9 hours of the 24 in his occupation; he also had a greater number of local holidays" * ([p.] 30).

Quotes Malthus:

* "They see invention after invention in machinery brought forward, which is seemingly calculated in the most marked manner to abate the sum of human toil. Yet with these apparent means of giving plenty, leisure, and happiness to all; they still see the labours of the great mass of society undiminished, and their condition if not deteriorated, in no very striking manner improved" (*Principle of Population*, 5TH ED., VOL. II [pp. 272-73]).

Accumulated labour.

"Nonsensical phrase as capital being accumulated labour. Talk of accumulated knowledge, accumulated skill, and it may be understood, but then we shall see that this accumulated knowledge and skill, as far as the creation of wealth is concerned, cannot be separated from the arm of the labourer"* (Hodgskin, The Natural and Artificial Right of Property Contrasted etc., London, 1832, [p.] 153, note).

The pamphlet An Essay on the Political Economy of Nations etc., London, 1821, contains a number of very good original POINTS.

Firstly, on the origins of capital, in so far as this coincides with the building up of reserve supplies:

* "The chief productions of nature are *periodical*, and require to be reserved for gradual consumption during the intervals of harvests. This is the prime source of capital" (p. 3).

"The profit of capital varies, and under that term is usually included both interest and the wages of the undertaker" ([p.] 8).

[XXI-1344] "Be it what it may intermediately, a *product* is ultimately exchanged against ... *labour*"* ([p.] 13).

(This applies only to variable capital.)

Difference between the mere preservation of constant capital and the reproduction of variable capital:

* "The only proper reproductive consumption is the final one, that which labour gives against a commodity, a new creation for one extinguished. The whole of production seems comprised in the mind in passing by all intermediate exchanges and processes, and going at once with the commodity to the labour which returns, agricultural or manufacturing, a new value, either in entire creation or addition of improvement to one begun" ([pp.] 13-14). "Productions become capital merely when given for reproductive consumption (ultimately and not intermediately, as indigo assimilated with the cloth) as food, clothing, or shelter to the labour which returns the value" * ([p.] 67).

Capital in relation to reproduction.

*"Capital may be defined to be that part of periodical production which is employed to obtain the next reproduction" * ([p.] 24).

Difference between productive and COMMERCIAL CAPITAL.

* "In agriculture and manufacture, capital is exchanged directly against the services of labour. In commerce, capital is often exchanged against capital; this is mere speculation, reckoning on supply and the different sources of demand"* ([p.] 43).

Absolute surplus labour. Relative surplus value:

* "The labour, that is the economic time of society, is a given portion, say ten hours a day of a million of people, or ten million hours" ([p.] 47).

"Capital has its boundary of increase. This boundary may, at a given period, be attained in the actual extent of economic time employed, although the productive powers of the community might be still susceptible of improvement. A society can increase by extending the quantity of labour, or making it more effective: in other terms, augmenting population, division of labour, machinery, scientific knowledge" ([p.] 49). "If capital cannot receive more than the equivalent or value, rendered by the labour in activity"* (hence if the ECONOMIC TIME or the working day is given); * "if this be its boundary, impossible at the moment, in the existing state of the society to pass, then the more the assignment to wages, the less the profit. This is a general principle, and does not take place in detailed instances, because there increased wages are usually the consequence of particular demand, which gives always increased value in relation to other commodities and their profit"* ([p.] 49).

//The profit—and even the rate of surplus value—may rise IN A PARTICULAR BRANCH above the GENERAL LEVEL, despite a simultaneous rise in wages in this BRANCH above the GENERAL LEVEL. If, however, the capitalist (leaving aside the other circumstances which determine profit) were to pay as much more for wages as the demand for the commodity rose above the average, his profit would not grow. This * rise or fall of profits and wages, in a particular branch, over the general level,* has absolutely nothing to do with the general relation.//

[XXI-1345] * "Beyond the time is to be considered its effectiveness, which arises from division of labour, the intenseness of the exertion, and machinery" ([p.] 54).

"In the cotton manufacture ... it is division of labour, but union of capital"* ([p.] 51).

Value of labour capacity. Average wages. TASK-WORK. DAY-WORK.

If we consider the total capital in relation to the value of labour capacity as given—or, popularly speaking, the average wage of labour as given—this quality of being given—the LIMIT of the wage—is a presupposition which every individual capitalist takes as his starting point in the conversion of money into capital. He meets with certain AVERAGE WAGES in each branch of industry. Whether they are high or low, his money is not converted into capital in so far as he does not receive in RETURN A SURPLUS over this value of labour capacity.

It is one of the tasks of the *TRADES'* UNIONS to keep this AVERAGE in existence, whereas the individual capitalist acts against the maintenance of the AVERAGE, in order to force the individual worker's wages down below the AVERAGE.

This must all be brought in here, in order to show the importance of this AVERAGE, in practice as well. Important for all this is:

Trades' Unions and Strikes: Their Philosophy and Intention. By T. J. Dunning, Secretary to the London Consolidated Society of Bookbinders,¹⁰² London, 1860.^a

*"What is termed an *uniform rate*" (of wages) "can only mean what is applicable to the general run of men, and in point of fact a *minimum* rate as regarded by the men, and an '*uniform rate*' as regarded by the masters" ([p.] 17).

Task-work, day-work, minimum.

"Where the work in any trade is paid for by the 'piece' at so much per job—as, f.i., among the compositors, the type, in London, is for the most part comprised at so much per 1,000 letters—there is no uniform rate received by the workmen. There is generally an uniform rate, or nearly so, of the price of the various jobs; but, as workmen of different quickness and skill will do more or less work at the same price per job, their wages may very materially differ in amount" ([p.] 17). "But in work by the day there is generally an uniform rate ... recognised by both employer and employed as the standard of wages for the general run of workmen in the trade ... some men will be worth more and some worth less than its amount ... the employer likes to reap the benefit arising from the man being worth more, and is also afraid that if he increased this man's wages, he would probably be called upon to raise the others; and the men, on the other hand, would be against the man who was not worth the regular rate taking less, lest the others might be reduced to it" * ([pp.] 17-18).

But since the EMPLOYERS always DISCHARGE inferior WORKMEN as soon as possible, they have on the whole nothing but SUPERIOR WORKMEN AT THAT UNIFORM RATE ([p.] 18).

[XXII-1346] (The UNIONS never allow their MEMBERS to work for less than this AVERAGE RATE.)

*"All men in trade are supposed to be competent to earn and to receive *the standard rate of wages*"* (in the specific *trade) ... "the fact is, that, taken as a whole, they are all competent, the exceptions being too few to be appreciable"* ([p.] 20).

If one worker does much more in a day than another, in the same trade, where day time is paid,

*"the employer mostly likes to reap the benefit of such quickness himself; which generally results in the quick hand subsiding into the *regular quantity of* work".*

If the wORKMAN were particularly outstanding

* "he would be paid no more, or, if he were, it would be by no means in proportion to the additional work he got through. This is the true reason why the workmen are accused of not wishing to do more than a *certain quantity of work* ...

^a See this volume, pp. 342-43.-Ed.

To expect them to do more, is to desire virtually a reduction of wages, which have before been shown to be at the bottom of all these complaints at the uniform rate of wages" ([pp.] 20-21).

Work by day and work by piece.

"The compositors of London, as a general rule, work by the piece, timework being the exception; while those in the country work by the day, the exception being work by the piece. The shipwrights of the Port of London work by job or piece, while those of all other ports work by the day. Indeed, the main objection in different trades to working by the piece is the complaint that, when the men are found to earn good wages at it, the employer wishes to reduce the price of the work, and that it is so often made use of as a means of reducing wages" * ([p.] 22).

Dunning is very good on the risk of the EMPLOYER (Notebook, pp. 17 sqq.).¹⁰³

Wages.

* "As the social position of workmen depends entirely upon the wages they obtain, it is felt by the majority of them to be a sacred duty to adopt this means" (Trade societies) "of protecting their wages" * ([p.] 7).

[HISTORICAL:] PETTY

1) A Treatise of Taxes and Contributions, London, 1667.

Our friend Petty has quite a different "population theory" from Malthus. According to him *a check ought to be put upon the "breeding" faculties of parsons, and the "Coelibat" again put upon them.*

All this belongs to [the section on] productive and unproductive LABOUR.^a

a) **PARSONS**:

* "Forasmuch as there be more males than females in England ... it were good for the ministers to *return to their Coelibat*; or that none should be ministers, whilst they are married... And then our *unmarried parson* might live as well *with half*, as now with the whole of his benefice" * (pp. 7-8).

b) Merchants and RETAILERS:

* "A large portion of these also might be retrenched, who properly and originally earn nothing from the publick, being only a kind of gamesters, that play with [XXII-1347] one another for the labours of the poor; yielding of themselves no fruit at all, otherwise than as veins and arteries, to distribute forth and back the blood and nutritive juyces of the body politick, namely the product of husbandry and manufacture" * ([p.] 10).

c) Lawyers, physicians, officials, etc.:

^a See this volume, pp. 123-46.-Ed.

Relative Surplus Value. Petty

* "If the numerous offices and fees relating to the government, law, and Church, and if the number of divines, lawyers, physicians, merchants and retailers were also lessened, all which do receive great wages for little work done to the publick, with how much greater ease would common expenses be defrayed?" ([p.] 11).

d) Paupers (supernumeraries):

"Who shall pay these men? 1 answer, everybody... I think 'tis plain, they ought neither to be starved, nor hanged, nor given away" * [to another nation], etc. ([p.] 12). Either they are given * "the superfluity",* or if there is none, * "in case there be no overplus ... 'tis fit to retrench a little from the delicacy of others feeding in quantity or quality" * ([pp.] 12-13). The labour imposed on them (the *supernumeraries*) may be of any kind; only it must be * "without expense of foreign commodities*; the important thing is * to keep their minds to disciplined obedience, and their bodies to a patience of more profitable labours when need shall require it" * ([p.] 12).

Population --- wealth:

* "Fewness of people is real poverty; and a nation wherein are 8 millions of people, are more than twice as rich as the same scope of land wherein are but few a" * ([p.] 16).

Ad (a) above (*PARSONS*). Petty handles the clergy with EXQUISITE irony:

* "Religion best flourishes when the priests are most mortified, as ... the law ... best flourishes when lawyers have least to do" * ([p.] 57). He advises the * parsons * in any case * "not to breed more churchmen than the benefices, as they now stand shared out, will receive".* For example, with 12,000 * benefices * in England and Wales, * "it will not be safe to breed up 24,000 ministers".* For then the 12,000 unprovided for will enter into competition, * "which they cannot do more easily than by persuading the people, that the 12,000 incumbents do poison or starve their souls" * (an allusion to the English Convocation of the Clergy) * "and misguide them in their way to heaven" * ([p.] 57).

Origin of SURPLUS VALUE and how to compute it. His treatment is somewhat confused, but in all the grappling with ideas he hits the nail on the head here and there.

Petty distinguishes between NATURAL PRICE, POLITICAL PRICE, TRUE PRICE CURRENT ([pp.] 66, 67). By NATURAL PRICE he means in fact VALUE, and it is only this that concerns us here, since [XXII-1348] the determination of SURPLUS VALUE depends on the determination of value.

In this treatise he in fact determines the value of commodities by the comparative quantity of labour they contain.

* "But before we talk too much of rents, we should endeavour to explain the mysterious nature of them, with reference as well to money, the rent of which we call usury, as to that of lands and houses" * ([p.] 23).

^a Petty has: "...but four".— Ed.

The first question is, what is the value (in money or a commodity) specifically of corn?

 α) * "If a man can bring to London an ounce of silver out of the earth in Peru, *in the same time* that he can produce a bushel of corn, then one is the natural price of the other; now if by reason of new and more easier mines a man can get two ounces of silver as easily as formerly he did one, then corn will be as cheap as ten shillings the bushel, as it was before at 5s., *caeteris paribus*^a" ([p.] 31). "Let the production of a bushel of corn be supposed of equal labour to that of producing an ounce of silver" * ([p.] 66).

This is, in the first place, the * "real and not [an] imaginary way of computing the prices of commodities" * (l.c., [p.] 66).

 β) The second point, which has now to be examined, is the value of labour.

* "The law ... should allow the labourer but just wherewithal to live; for if you allow double, then he works but half so much as he could have done, and otherwise would; which is a loss to the public of the fruit of so much labour" * ([p.] 64).

The value of labour is therefore determined by the necessary means of subsistence. The labourer is impelled to surplus production and surplus labour only by being forced to use the whole of the labour power within his capacity in order to get even as much as he *just needs to live*. However, the cheapness or dearness of his labour is determined by 2 factors: natural fertility and the standard of expenditure (needs) conditioned by the climate.

*"Natural dearness and cheapness depends upon the few or more hands requisite to necessaries of nature: As corn is cheaper where one man produces corn for ten, than where he can do the like but for six; and withal, according as the climate disposes men to a necessity of spending more or less" * ([p.] 67).

 γ) For Petty the *surplus* exists only in 2 forms: *RENT OF LAND* or *RENT OF MONEY* (USURY). The latter he derives from the former. For him, as later for the Physiocrats, the first is the *true form* of sURPLUS VALUE (but at the same time he explains that CORN is intended to cover

* "all necessaries of life,* as in the *Lord's Prayer* (Our Father) * the word Bread doth" *).

In developing his ideas he presents rent (the surplus) not as the excess drawn by the EMPLOYER beyond the NECESSARY TIME OF LABOUR, but as the excess of surplus LABOUR of the producer himself over his wages and the replacement of his own capital.

* "Suppose a man could with his own hands plant a certain scope of land with corn, that is, could dig, or plough, harrow, weed, reap, carry home, thresh and winnow so much as the husbandry of this land requires; and had withal seed wherewith to sow the same. I say, that when this man had subducted his seed out of

^a Other things being equal.— Ed.

the proceed of his harvest"* (that is, in the first place deducted from the product an amount equivalent to the constant capital) [XXII-1349] *"and also what himself had both eaten and given to others in exchange for clothes and other natural necessaries; that the remainder of corn, is the natural and true rent of the land for that year; and the medium of seven years, or rather so many years as makes up the cycle within which dearths and plenties make their revolution, doth give the ordinary rent of the land in corn"* ([pp. 23-]24).

In fact for Petty, therefore, since the value of corn is determined by the labour time contained in it, and the rent=the total product minus wages and SEED, rent=the SURPLUS PRODUCE in which the surplus LABOUR is objectified. Rent here includes profit; the latter is not yet separated from rent.

In the same ingenious way Petty goes on to ask:

* "But a further, though collateral question may be, how much English money the corn or rent is worth? I answer, so much as the money which another single man can save within the same time, over and above his expenses if he employed himself wholly to produce and make it; viz. let another man go travel into a country where is silver, there dig it, refine it, bring it to the same place where the other man planted his corn, coin it, etc., the same person, all the while of his working for silver, gathering also food for his necessary livelihood, and procuring himself covering, etc., [the silver of the one] must be esteemed of equal value with the corn of the other: the one being perhaps twenty ounces and the other twenty bushels. From whence it follows that the price of a bushel of the corn be an ounce of silver" * ([p.] 24).

The difference in the kind of labour, Petty expressly notes, is here quite immaterial; all that matters is the *labour time*.

"And forasmuch as possible there may be more art and hazard in working about the silver, than upon corn, yet all comes to the same pass; for let a hundred men work ten years upon corn, and the same number of men, the same time, upon silver; I say, that the neat proceed of the silver is the price of the whole neat proceed of the corn, and like parts of the one, the price of like parts of the other" ([p.] 24).

After thus explaining *rent*—which here is equivalent to the total *surplus value*, **PROFIT INCLUDED**—and its expression in money, he then sets out, again in a very brilliant way, to determine the *money value* of land.

*"Wherefore we would be glad to find the natural value or fee simple of land,^a though but no better than we have done that of the usus fructus above mentioned" ([p.] 25). "Having found the rent or value of the usus fructus per annum, the question is, how many years purchase (as we usually say) is the fee simple naturally worth? If we say an infinite number, then an acre of land would be equal in value to a thousand acres of the same land; which is absurd, an infinity of units being equal to an infinity of thousands. Wherefore we must pitch upon some limited number, and that I apprehend the number of years, which I conceive one man of 50 years old, another of 28, and another of 7 years old, all being alive together may be

^a Petty has: "...the natural values of the fee simple of land".--Ed.
thought to live; that is to say, of a grandfather, father, and child; few men having reason to take care of more remote posterity... Wherefore I pitch the number of years purchase, that any land is naturally worth, to be the ordinary [XXII-1350] extent of three such persons their lives. Now in England we esteem three lives equal to one and twenty years, and consequently the value of land, to be about the same number of years purchase"* ([pp. 25-]26).

After resolving rent into *surplus labour* and consequently *surplus value*, Petty explains that land is nothing but the capitalised rent, that is to say, a *definite number* of *years' rent* or the total amount of the rents for a definite number of years.

In fact, rent is capitalised or reckoned as the value of land in this way:

Let one ACRE yield an annual rent of £10. If the rate of interest=5%, then £10 represents the interest on a capital of £200, and, as the interest at 5% replaces the capital in 20 years, the value of the ACRE would=£200 ($20 \times 5 \times 2$). The capitalisation of rent therefore depends on the rate of interest. If the rate of interest were=10%, it would represent the interest on a capital of £100 or 10 YEARS PURCHASE.

But as Petty starts from the RENT OF LAND as the general form of surplus value, which includes profit, he cannot take interest on capital as something given; on the contrary, he has to deduce it from rent as a special form (as Turgot also does^a—quite consistently from his own standpoint). In what way then is he to determine the number of years—the number of years' rent which forms the value of land? A man is only interested in buying as many yearly rentals as the number of years during which he has "to take care" of himself and his immediate POSTERITY; that is, as long as an average man, grandfather, father and child, lives, and on the "English" reckoning this is 21 years. Therefore what lies beyond the 21 years' "usus fructus" has no value for him. Consequently he pays for the usus fructus for 21 years, and this constitutes the value of the land.

In his ingenious way he gets himself out of the difficulty; but the important thing here is,

firstly, that *rent*, as the expression of the total *AGRICULTURAL SURPLUS VALUE*, is derived not from the land but from labour, [and is presented as] the surplus of labour in excess of what is necessary for the subsistence of the labourer;

secondly, that the value of land is nothing but the rent purchased in advance for a certain number of years—a transmuted form of rent itself, in which for example 21 years' surplus VALUE

^a See present edition, Vol. 30, pp. 356, 362-63, 366.- Ed.

(or labour) appears as the value of the land; in a word, the value of land is nothing but capitalised rent. Such is Petty's deep insight into the matter. From the standpoint of the buyer of rent (i.e. of land) rent thus appears merely as the interest on the capital he has used to buy it; and in this form rent has become completely unrecognisable and appears as interest on capital.

After Petty has thus determined the value of land and the value of the annual rental, he is able to derive the RENT OF MONEY OF USURY as a secondary form.

* "As for usury, the least that can be, is the rent of so much land as the money lent will buy, where the security is undoubted" * ([p.] 28).

Here interest is presented as determined by the price of rent, whereas on the contrary the price of rent or the purchase value of land is determined by interest. But this is quite consistent, as rent is presented as the general form of SURPLUS VALUE and therefore interest on money must be derived from it as a secondary form.

Differential rent. Of this too the first notion is to be found in Petty. He derives it not from the different fertility of pieces of land of the same size, but from the different position, distance from the market, of pieces of land of equal fertility, which as we know is one element in differential rent. He says:

[XXII-1351] * "As great need of money heightens exchange, so doth great need of corn raise the price of that likewise, and consequently of the rent of the land that bears corn" *

(here therefore he says explicitly that the *price* of corn determines rent, it being implicit in the earlier analysis that rent does not determine the *value* of corn),

* "and lastly of the land itself, as for example, if the corn which feeds London, or an army, be brought 40 miles thither, then the corn, growing within a mile of London, or the quarters of such army, shall have added unto its natural price, so much as the charge [of] bringing it thirty nine miles does amount to... Hence it comes to pass, that lands intrinsically alike near populous places, such as where the perimeter of the area that feeds them is great, will not only yield more rent for these reasons, but also more years purchase than in remote places",* etc. ([p.] 29).

Petty also mentions the second cause of differential rent—the *differing fertility* of land and therefore the *differing productivity* of labour on equal areas of land:

"The goodness or badness, or the value of land depends upon the greater or lesser share of the product given for it in proportion to the simple labour bestowed to raise the same product" ([p.] 67).

Petty's exposition of differential rent is therefore better than that of Adam Smith.

//Economy in constant capital aimed at raising the rate of profit (collieries).

*"Under the competition which exists among the coal owners and coal proprietors in each district for the supply of their several markets, no more outlay is incurred than is sufficient to overcome the most obvious physical difficulties; and under that which prevails among the labouring colliers, who are ordinarily more numerous than the work to be done requires, a large amount of danger and of exposure to the most numerous influences will gladly be encountered for wages a little in advance of the agricultural population round them, in an occupation, in which they can moreover make a profitable use of their children. The double competition is quite sufficient ... to cause a large proportion of the pits to be worked with the most imperfect drainage and ventilation; often with ill constructed shafts, bad gearing, incompetent engineers; and ill constructed and ill prepared bays" //recesses in which it is hewn// "and roadways; causing a destruction of life, and limb, and health, the statistics of which would present an appalling picture" * (First Report of the Children's Employment Commissioners in Mines and Collieries etc., April 21, 1841, [p.] 102).// 33

[XXII-1352] // Child labour. Overwork.

"While factory labour hinders the development of children's muscles, work in coal mines has the opposite effect. With workers, especially children and young persons, the *effects of overworking* are *extraordinary muscular development, stunted growth, crippled gait, irritation of the head, back, etc." * (l.c., *First Report etc.*, [p.] 134).

The colliers' excessive muscular exertion in childhood produces

"a preternatural muscular development. Such a disproportionate muscular development, instead of being an indication of sound and robust health, is really a proof that the general system is starved by the overnourishment of this one particular part of it; and that the system is weakened, not strengthened by this undue expenditure of its nutriment upon the muscles, is shown by the evidence now collected, which proves indubitably that the body in general is stunted in its growth, peculiarly prone to disease, and that it prematurely decays, and perishes ... in the coal mines. The employment of children *protracts the period of childhood, shortens the period of manhood, and anticipates the period of old age, decrepitude, and death" (l.c. [p.] 134). "The employment of the adult colliers is almost exclusively in the 'getting' of the coal from its natural resting place, of which there are various methods, according to the nature of the seams and the habits of the several districts. That of the children and young persons consists principally, either in handling the airdoors where the coal carriage must pass through openings the immediately subsequent stoppage of which is necessary to preserve the ventilation in its proper channels, or in the conveyance of the coal from the bays or recesses in which it is hewn, along the subterranean roadways, to the bottom of the pit shaft; a distance varying from absolute contiguity even to miles in the great coalfields of the North of England, where the depth requires that the same expensive shaft shall serve for the excavation of a large tract of coal" ([p.] 107). "Startling as the fact may appear, it is into the pits, which never can be worked without inflicting great and irreparable injury on the health of children, that children are taken at the earliest ages, if only to be used as living and moving candlesticks" * (cf. Diodorus^a), * "or to keep

^a See present edition, Vol. 30, p. 253.- Ed.

rats from a dinner; and it is a part of this worst character too, in which *female* children are employed"* (l.c.).

The terrible hue and cry raised against the MANUFACTURERS called forth counter-denunciations on their part, and they had the satisfaction of seeing the * commission for inquiry into the children's employment* demonstrate that children were being exploited by capital in the same manner, or even worse, in many other branches, particularly in the COAL MINES.//

//The approximate relation of COMMON LABOUR to the LABOUR CLASS in general can be seen from the following estimate in Samuel Laing's National Distress; its Causes and Remedies, London, 1844. He puts the * total of population dependent on ordinary labour* at 11,300,000 //including domestic servants//.

MIDDLE CLASS (including the MEMBERS OF THE LOWER BRANCHES in the PROFESSIONS, LITERATURE, COMMERCE, etc., SHOPKEEPERS and RETAIL TRADESMEN of every kind, farmers, artisans and the aristocracy of the working class proper) totalling 4,650,000. 1,000,000 for the GENTEEL POPULATION (capitalists, aristocracy and HIGHER PROFESSIONALS). And the PAUPERS, criminals, PROSTITUTES, vagrant POPULATION amount to 1,500,000. But he says himself that the calculation is inaccurate, the last group numbering 2,000,000 to 2,500,000 $(^{1}/_{7^{-1}}/_{8})$ of the TOTAL POPULATION) (pp. 52-53).^a//

^a Cf. K. Marx, *Capital*, Vol. I, Part III, Ch. VII, Sect. 2, note (present edition, Vol. 35).— *Ed.*

[XXII-1353] 4) RECONVERSION OF SURPLUS VALUE INTO CAPITAL

α) RECONVERSION OF SURPLUS VALUE INTO CAPITAL

The first result of the capitalist production process-of the absorption of unpaid labour or surplus labour by capital in this process-is that the product contains a higher value than the capital contained before its entry into the process. We shall assume that the product is sold, converted back into money. The closer investigation of this process belongs to the section which follows, on the process of circulation.^a For the present investigation this is presupposed. If the capital was=5,000, the constant capital=4,000, and the variable capital=1,000, and if the rate of surplus value amounted to 100%, the product would now=6,000 (presupposing that the whole of the capital had entered into the valorisation process). If the original value of the capital advanced was 5,000, the value is now 5,000+1,000=6,000. And if we presuppose that it has been reconverted into money, £5,000 represents the capital which has been replaced and preserved, and $\pounds 1,000$ the surplus value which has been turned into gold. The £5,000 has proved itself as capital precisely by preserving and increasing itself as self-valorising value; not only is the $\pounds 5,000$ there again, over and above this it has, unlike itself as the original capital, posited a surplus value of $\pounds 1,000$.

The capitalist—who is not just capital—will consume a part of this surplus value, i.e. he will expend it as means of circulation, so as to convert it into means of subsistence for his own use, and it is a matter of complete indifference whether he also buys "services" on top of the commodities, i.e. whether he buys labour which he needs for the satisfaction of needs of whatever kind, but which is

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^a See K. Marx, Capital, Vol. 11, Part I (present edition, Vol. 36).- Ed.

bought for the sake of its use value, not as an element positing exchange value.

Here we shall leave out of account the part of the surplus value which the capitalist expends in this way for the satisfaction of his needs. All that needs to be noted is that in this way the capitalist can expend a certain sum of money or amount of value every year without any resulting reduction in the size of his capital. What he expends here is a part of the surplus value he has appropriated the objectified unpaid labour—and it does not affect the capital itself. The money is an evanescent form here. The surplus value is represented by a *surplus product*, a *surplus of commodities*, which the capitalist can consume entirely or in part without touching his own capital; without being prevented from perpetuating the same sum of $\pounds 5,000$ as capital, i.e. preserving it, and making it produce a surplus value, through another exchange with labour.

The capitalist alone is the active representative of capital. As such, his purpose is not enjoyment, not use value, but the increasing of exchange value. Like the hoarder, he represents the absolute drive for self-enrichment, and any definite limit to his capital is a barrier which must be overcome. We shall see later on that in addition the constant magnification of capital, not merely its preservation, is a *necessity* for capitalist production—a condition for it.^a

For the point we are considering here we can entirely make abstraction from the part of the surplus value that is consumed by the capitalist. We are only concerned with the part that enters anew into capitalist production.

capital was originally= $\pm 5,000$, and the If the surplus value=1,000, hence the total value=6,000, the \pounds 5,000 have been converted into capital by positing a surplus value, distinct from the original sum, of $\pounds 1,000$, through the exchange of the variable capital with labour. If the \pounds 1,000 were entirely consumed, the capital entering anew into production would be as before £5,000. But the capital itself would not have been increased. The $f_{5,000}$ would [XXII-1354] have become capital by positing, by producing, a surplus value of $\pounds 1,000$, and by repetition of this process it could constantly preserve itself as capital, as the same capital; but for this capital to be able to enter into the production process as a larger capital, hence-at a given level of production-to create a still larger surplus value, a new process must take place in

^a See this volume, pp. 183-87.-Ed.

addition. The surplus value itself (disregarding the part that is consumed) must again be converted into capital.

How, then, is the surplus value converted into capital? The conditions of this process will be examined in more detail in the next section.^a Here we shall only establish the purely formal aspect.

The surplus value is not distinguished in any way from the original capital in so far as it is considered from the material point of view. It is the same product; one part of it replaces the original capital, and another part represents surplus product, surplus value, surplus labour. The difference between the two parts is not material, but consists in the fact alone that one part represents an equivalent for paid-objectified and living-labour, the other for unpaid labour. If the product is e.g. twist or corn, and if the surplus value= $\frac{1}{3}$ of the product, this $\frac{1}{3}$ can be represented just as well in corn or twist as the other $^{2}/_{3}$, which replaces the capital. And similarly, once the product has been converted into money (whether actual money or tokens of value) there exists absolutely no difference of form between the part of the money that represents the capital and the part that represents the surplus value. If the value of the capital was 100 and the value of the product is 150, 100 thalers represent the capital and 50 the surplus value, but the one is composed of thalers just as much as the other. The surplus product exists in the same manner as the part of the product that replaces the capital, originally in the shape of the commodity that has been produced, then, once the sale has taken place, in the form of money. (If money functions as means of payment, both can exist in the form of a title to a debt.)

Hence for the *surplus value* to be converted into capital no other conditions whatever are required except those that were originally required for a *given value*, hence *money*, to be converted into capital or to produce a surplus value. In order to convert the surplus value into capital, its owner must find available the conditions he needs to exchange it for labour capacity, i.e. he must find on the commodity market on the one hand the objective conditions of labour—the raw materials, the means of labour, etc.—in short the objective conditions of labour available as purchaseable commodities, and on the other hand the subjective condition of labour, purchaseable labour capacities. If, e.g., the capitalist is a cotton spinner, he must find for his surplus value of

^a See K. Marx, *Capital*, Vol. I, Part VII, chapters XXIV, XXV (present edition, Vol. 35), Vol. II, Part III (present edition, Vol. 36).—*Ed.*

 \pounds 1,000 additional cotton available on the market, additional machinery (unless labour time is prolonged or intensified), etc., and additional spinners. If the working day can neither be increased in intensity nor extended, the number of spinners alone must be increased. If the population does not grow sufficiently for this, the conversion is impossible. On the other hand, the same would apply if he found no additional cotton available, at least in this branch. Similarly if additional machinery is required. However, in cotton spinning, for example, it may be sufficient to extend the machinery and increase the raw material, without any need for new workers. In agriculture new workers alone are necessary, and instruments [too], not more raw materials (seed), etc. But all this does not concern us here. We are not concerned with the conditions which make it possible to convert surplus value into capital, or to convert an additional value into capital, to convert a greater amount of value into capital, i.e. to exchange it for labour capacity and the conditions for the latter's exploitation. We assume, as with the original conversion of money into capital, that they are available on the market.

With this presupposition, then, the capitalist will now exchange, apart from the old amount of value, the sum of money which=the surplus value, for the conditions of labour (material of labour, means of labour) and for labour capacity itself. And the relations within which this occurs are given by the technological conditions, i.e. the ratio in which the additional money is exchanged for the different elements of production. [XXII-1355] If the surplus value were not big enough to buy the different elements-in their given ratio to each other-it could not be converted into capital (in this sphere). It would be possible, for example, for the surplus value to be big enough to employ 10 new workers, but not big enough to buy the material they require, etc. Or, for the employment of a number of new workers to require an increase in the size of the enterprise as a whole, for which the surplus value was insufficient. Thus if this conversion of surplus value into capital may meet a barrier in the available population, it may equally meet a barrier in its own size and the technological conditions of the employment of more capital. This capitalist would then be unable in his own sphere to reconvert the surplus value into capital. On the other hand, the capitalist might perhaps e.g. improve the machinery alone, add new parts, etc., to make it more effective, without being obliged to employ more labour than before. Or he might in agriculture buy more cattle without needing to employ more workers, etc. Or he might replace his old steam engine with A MORE POWERFUL ONE. In this case *relative* surplus value might as a result be increased, because the workers would become more productive without any increase in the quantity of labour. The way this would be expressed initially in the case of a single capital would be that the individual value of its commodity would stand *below* its social value, and therefore the *value of labour capacity* would *thus* be reduced relatively for that capitalist.

All these cases and possibilities should be considered under the *real reproduction process*. For the capitalist to convert *surplus value* into capital he must be just as able to exchange it for *more labour* as he could the original capital, hence set in motion AN ADDITIONAL QUANTITY OF LABOUR, whether by squeezing out a *greater quantity* of labour from the *old workers* through the payment of an increased wage, or by employing an *ADDITIONAL NUMBER OF WORKMEN*. And this is the *presupposition* from which, as a FACT, we must proceed in considering the *conversion of surplus value* into *capital*. The special circumstances and modifications which enter here are to be considered later.¹⁰⁴

It is assumed, therefore, that surplus value is converted into capital in the same manner as money was originally converted into value that posits surplus value. One part of the surplus value is converted into constant capital, the other into variable; i.e. one part buys commodities which figure in the production process as material and instrument, another part buys labour capacity. It is only this latter part which posits surplus value, in exactly the same way as previously, namely by the fact that it is exchanged for more living labour than the amount of objectified labour it contains. The difference between this and the earlier process is that all the elements of the capital now consist of unpaid labour, and the original formation of surplus value, i.e. the appropriation of alien labour without equivalent, appears as a means by which it appropriates more surplus value, appropriates more alien labour without equivalent. This original process of enrichment appears as the means and condition of this kind of enrichment on an increased scale.

In the first process, by which money is converted into capital, hence in the first process of capital formation, the capital advanced appears as itself independent of the labour capacities for which it is exchanged. It is the surplus value alone which consists of unpaid labour. In this process, the capitalist's money was exchanged partly for the means of labour, for equivalents, partly for labour capacities, which were bought at their value. And thus both parts of the money, the constant and the variable, only represented commodities which were exchanged for equivalent commodities, and both of which existed independently of the workers, as the *property* of the [XXII-1356] capitalist, who laid out his money in this form. This original sum of money, which was converted into capital, was present independently of the worker, like all the other commodities in the possession of their owners, and in exactly the same way as his own commodity, labour capacity, independently confronted these conditions of its realisation. It was the *surplus value* alone which represented alien *unpaid* labour appropriated by the capitalist.

Now, in this second process, *capital* itself, the money that is converted into capital anew, appears as *objectified alien unpaid* labour which serves as a means of appropriating more surplus labour. The money with which the capitalist now buys the *objective conditions of labour*, the means of labour and material of labour, represents surplus value alone, is only *surplus value converted* into money.

Whether the capitalist exchanges the surplus value-in so far as it has been converted into variable capital-as capital with the same workers or with additional new workers makes no difference at all to the relation. It does not alter the situation at all. The money with which he buys the new conditions of labour, just like the money with which he buys the new labour capacities, represents unpaid labour which he has appropriated in the exchange with the old labour capacities, and which he now makes into the means of purchasing more labour, hence more surplus labour. If we consider the whole of the capitalist class on one side-i.e. capital-and the working class on the other side-i.e. the worker as a collective person-the product of the worker's own unpaid labour confronts him now as capital, as the objective power over his labour, as alien wealth, of which he can only re-appropriate a part, by buying back this part with more labour than is present within it, and thus valorising it afresh as capital.

Let us assume that the capital was originally= $\pounds 5,000$, and the surplus value= $\pounds 1,000$. If the capitalist consumes $\pounds 500$ a year and if he converts 500 into capital every year, in 10 years he will have eaten up $\pounds 5,000$, i.e. his original capital; but he now finds himself in possession of a capital of $\pounds 10,000$. And the amount of surplus value he has appropriated in 10 years= $\pounds 10,000$. His total capital therefore now in fact represents nothing other than surplus value converted into capital, i.e. *objectified unpaid alien labour*, which, in proportion as its amount grows, continuously appropriates growing amounts of alien labour afresh. If the capitalist were to consume only $\pounds 200$ a year, the only resulting change would be

that he would expend his original capital in 25 years, and then his capital of $\pounds 25,000$ would represent nothing but surplus value. Thus every capital must after a certain time represent nothing but surplus value. If a worker saves £1,000 and himself becomes a capitalist, making £200 of surplus value every year, of which he consumes 100, in 10 years the surplus value he has saved = $f_{1,000}$, i.e.=his total capital. The notion that he consumes the surplus value, and not his original capital, instead retaining the latter, naturally does not change in any way the fact that the amount of capital he possesses at the end of the 10 years=the amount of the surplus value he has appropriated, and the amount he has consumed=the amount of his original capital. The expression all political economists are so fond of, that all existing capital is to be viewed as interest and interest on interest, means nothing more than that it is capitalised surplus value, surplus value converted into capital, and that all capital ultimately appears to be a mere form of existence of surplus value. This particular form of surplus value-interest-this name, does not change the situation at all. And here, where we are considering surplus value in general, it is not of course necessary to examine this particular form, the form in which the political economists express capital as a mere form of existence of surplus value, i.e. of unpaid alien labour.¹⁰⁵

[XXII-1357] The conversion of surplus value into capital is definitely not distinct from the original conversion of money into capital. The conditions are the same, namely: that a definite amount of value (hence value expressed independently, money, whether this functions as money of account or actual money is irrelevant), a sum of money, is converted into capital through the exchange with the conditions of labour and labour capacity. The distinction does not lie in the process itself—for it is the *identical process*, the conversion of money into capital. The distinction lies in this alone, that the money which is converted into capital in this second process of capital formation represents nothing but surplus value, i.e. surplus labour, i.e. objectified unpaid alien labour. This conversion of surplus value into capital is called the accumulation of capital.

So far we have noted two points:

1) The whole of the value of the capital into which the *surplus* value has been reconverted consists of unpaid, alien labour, consists precisely of the surplus labour which was appropriated in the capitalist production process.

2) The value of each capital must represent mere capitalised surplus value after a certain period of time, since after a certain

number of years the original amount of value of the capital has been consumed by the capitalist. Here the value alone is to be considered. Therefore the fact that the capitalist imagines that he only consumes a part of the surplus value every year, retaining his capital in contrast, makes no difference here. It does not change in any way the fact that the *amount of value* of each capital, after a certain number of years,=the accumulated surplus value which has been reconverted into capital, and not an atom of the value of the old capital exists any more.

This second process of capital formation is rightly regarded as so essential and characteristic of capital that capital is depicted, unlike other forms of wealth, as *"wealth saved from revenue (profit) with a view to, etc." * (See *R. Jones*, etc.)¹⁰⁶

Originally, therefore, the labour capacities, or the workers, were confronted with the objective conditions of labour, i.e. objectified labour, in the form of conditions of production (the material of labour and the means of labour) and means of subsistence, as alien commodities in the possession of the keepers of commodities, who are converted into capitalists precisely through the fact that they confront living labour as the personified existence of objectified labour. But now, with this second process of capital formation, the workers are faced with their own labour, objectified in conditions of production and means of subsistence which are capital, i.e. alien property, which confronts labour as a means for the exploitation of labour.

When considering the capitalist production process we saw that 1) absolute surplus value can only be increased at a given stage of the development of production, i.e. at a given level of the productive forces, either by increasing the intensity of labour or extending the working day, or, presupposing both of these as given, by increasing the number of workers employed; in all of which cases the magnitude of the capital laid out must grow; and that 2) relative surplus value can only be increased through the development of the productive power of labour, through cooperation, division of labour, employment of machinery, etc.; all these things again presuppose a growth in the magnitude of the capital laid out. The magnitude of the capital laid out is increased through the reconversion of surplus value into capital, or, what is the same thing, the accumulation of capital, [XXII-1358] since now the *capital* is formed of the *original amount of* value plus the surplus value (namely the part of the latter which is reconverted into capital), or the product which represents the original capital plus the surplus product; the surplus value as such is no longer distinct from the capital but is instead added to

it as additional capital. Or the formation of surplus value now presents itself as an increase in the magnitude of the capital which enters into the production process. This therefore fulfils the condition that both the quantity of labour employed should be increased and the productive power of the labour should be increased. The objective conditions under which labour develops its social powers of production to a heightened degree [are thereby given]. Production on an increased scale therefore takes place, as regards both the quantity of labour employed and the development of the means of production, of the conditions of production, under which this labour presents itself socially. If, therefore, the capitalist mode of production on the one hand increases the conditions for the creation of surplus value for surplus labour, on the other hand, inversely, the reconversion of surplus value into capital, or the accumulation of capital, is a condition for the development of the capitalist mode of production, of the scale of production, of the growing amount of labour which is exploited, and of the material conditions for the development of the productive powers of social labour.

We saw at the same time a how the capitalist mode of production continuously produces a *relative surplus POPULATION*, i.e. it sets free, *renders disposable* a definite number of labour capacities, ejects them from the different spheres of production as superfluous labour power. Capitalist accumulation, therefore, is not conditioned by the purely natural progress of POPULATION; it produces a larger or smaller quantity of disposable labour capacities for the already available new capital and the capital which is constantly being formed; these labour capacities can be re-absorbed either by the extension of the old branches of production or by the formation of new branches, depending on whether the additional capital into which the surplus value has been reconverted is used in one way or the other.

If the original capital was= $\pounds 6,000$, and the surplus value is= $\pounds 1,000$, there is no distinction between them, in terms of substance, before they are reconverted into money, for both exist as parts of the same product, in the same commodity form; just as little is there any distinction once they have been converted into money. The conversion of the $\pounds 1,000$ into capital is therefore not at all different from the point of view of its conditions from the conversion of the original $\pounds 6,000$ into capital. The only distinction is that in the $\pounds 1,000$ the workers are now confronted with their

^a See this volume, pp. 8-61.-Ed.

own unpaid labour or the product of their own unpaid labour as capital. This is No. 1.

The £6,000 has been converted into capital through producing £1,000 as surplus value, as its valorisation, which differs from its original amount of value. Through the reconversion of the £1,000 into capital this formal antithesis ceases to exist. A capital of £7,000 is now available instead of one of £6,000; i.e. a capital which has grown by $^{1}/_{6}$. Or both amounts function as two capitals, one of them as a capital of 6,000, the other as a capital of 1,000. This does not alter the fact that the total capital has increased by $^{1}/_{6}$. It merely expresses the fact that the additional $^{1}/_{6}$ functions as capital in another sphere of production, or is employed by another capitalist in the same sphere of production. But the one common characteristic remains: what was surplus value as distinct from capital now itself becomes capital, and proves itself to be such by producing surplus value for its part. The surplus value has been converted into additional capital.

The capital has therefore produced capital, by no means merely a commodity, or the capital-relation creates the capital-relation on an increased scale.

[XXII-1359] This increase of *capital*, i.e. of the amount of wealth produced, which confronts labour as *capital*, has the following results:

1) the *capitalist mode of production* is extended over spheres of production which were previously not subjected to capitalist production; i.e. *capital* increasingly seizes control of the totality of spheres of production;

2) it forms new spheres of production, i.e. it produces new use values and employs new branches of labour;

3) in so far as additional capital is employed in the same sphere of production by the same capitalist, partly to convert the formal subsumption of [labour under] capital into a real subsumption, partly to extend the scale of production, to develop the specifically capitalist mode of production, hence to work with a greater capital, a greater combination of the conditions of labour and the division of labour, etc., this accumulation presents itself as concentration; since a single capital commands more workers and more of the means of production, social wealth appears united in a single hand in greater quantities;

4) in *every* sphere of production, this formation of capital proceeds at *different* points on the surface of society. It is different, mutually independent commodity or money owners who first convert this money into capital through the exchange with

labour capacity, and then convert the *surplus value* back into capital or accumulate capital. A formation of *different* capitals therefore takes place, or there is an increase in the *number of capitalists* and *independent capitals*. Accumulation, as opposed to the *concentration* of capital or its attraction, presents itself as the *repulsion of capitals* from each other. The relation between these two opposed forms should not be developed here; it should rather be considered under the *competition of capitals*.¹⁰⁷ This much is clear. All accumulation of capital is concentration of the means of production in a single hand. But at the same time the *concentration* of capitals san a special process.

In considering the production of absolute surplus value, we saw this:

The value of the constant capital, i.e. of the material of labour and the means of labour, is simply preserved in the labour process; it appears again in the product, not because the worker performs a special kind of labour to preserve this value, but because these conditions of production as such are employed by the living workers. By the fact that the worker adds new labour to objectified labour, and more labour than is contained in his wages, he at the same time preserves the value of the constant capital, of the labour already objectified in the conditions of production. The value of the constant capital he preserves therefore stands in no relation at all to the *quantity* of labour he adds; it depends instead on the magnitude and therefore the extent of the value of the constant capital with which he works. The more productive his labour becomes, the greater e.g. the quantity of raw material treated by a given number of workers, the greater accordingly is the value of the part of the constant capital he preserves, or the part that re-appears in the product. On the other hand, this greater productivity of his labour is conditioned by the extent and therefore the amount of value of the communal means of production and conditions of production which support his labour, the machinery, draught animals, buildings, fertiliser. Drainage and irrigation canals, etc. This part of the constant capital-objectified labour-enters into the labour process in its entire extent as means of production and means for raising the productivity of labour, whereas it enters into the valorisation process only partially and by stages, over a lengthy period, hence does not raise the value of the individual product in the same degree as it does the amount of products, i.e. [XXII-1360] the productivity of labour. And in the same degree as the capitalist mode of

production develops, there develops the difference between the amount of constant capital, i.e. of means of labour and conditions of labour, which enters into the labour process, and the part of the value of the constant capital which enters into the valorisation process. The whole of the value of the constant capital-in so far as it consists of means of production-which does not enter into the valorisation process, whereas it does enter into the labour process, hence in its totality increases the productive power of labour, whereas only an aliquot part of it re-appears as value in the product and therefore raises the price of the product, thus performs exactly the same free services as the forces of nature, such as water, wind, etc., forces of nature which are not the product of human labour, and therefore have no exchange value, enter into the labour process without entering into the valorisation process. A machine, e.g., which serves for 15 years, its value therefore only entering into the annual product to an extent of 1/15, functions in the labour process not as $\frac{1}{1}_{15}$ but as $\frac{15}{15}$. The $\frac{14}{15}$ cost nothing. Thus the employment on a larger scale of past labour, or labour objectified in the means of production, increases the productivity of living labour. On the other hand, the amount of value which thus enters gradually into the product grows absolutely, although it does not grow at the same time to the same degree as this component of the value of the constant capital increases. It grows absolutely with the extent of the means of production employed. Labour thus preserves this greater part of the value, makes it re-appear in the product, in the same process by which it adds surplus value (and adds value altogether). Apart from this, it should be remarked that the labour process preserves not only the value which re-appears in the product, hence the part of the value of the constant capital which enters into the product, but also the value which does not enter into the valorisation process, but only into the labour process. We are not speaking here of the particular labour which is necessary for the cleaning of machines, buildings, etc. This falls under repair work, and is different from labour itself, which makes use of the machine. The cleaning of a spinning machine is a different kind of labour from spinning itself. In the latter case what is involved is only the preservation of the spinning machine through the fact that spinning is done with it, the fact that it functions as a spinning machine. The labour process itself preserves its use value as a machine and thereby also its exchange value. This conserving (value conserving) quality of labour, which should be regarded as a natural power of labour, itself costing no labour-i.e. in the given case no further, special labour in addition

to the labour of spinning is required to preserve the machineemerges doubly in times of crisis, i.e. in circumstances in which the machine does not function as a machine, in which the use value of its activity is suspended. Negatively, through the machine's deterioration. Positively, because at such times a certain number of hours are worked, merely to keep the machine functioning. // All this should be considered when dealing with the labour process and the valorisation process."// In the case of the soil, if we regard the land as an agricultural machine-and in the process it is nothing more than this, in the material that is worked on, the seed, the animals, etc.-the labour process not only preserves the exchange value given to it by the work done on it previously, but it also raises its use value, improves the machine itself (see Anderson and Carey^b), while the cessation of the labour process produces a dépérissement^c of its use value and of the exchange value which falls to its share as the physical existence of objectified labour. (The relevant passages are to be cited further below.)

Thus the matter can be presented from two sides:

1) α) As we showed in dealing with capitalist production, the productivity of labour develops with the employment of the means of production—of the objective conditions of labour—on a larger scale; it develops along with the extent of the latter.^d

But the accumulation of capital, i.e. the reconversion of surplus value into capital, expands, increases the extent of, the objectified means with which living labour functions.

[XXII-1361] β) The amount of past labour which enters into the labour process without entering into the valorisation process, hence the *unrecompensed function* of past labour in the production process, increases with the *development* of the capitalist *mode of production*, a development which is itself conditioned by the accumulation of capital. These two points are related to the *increase of constant capital*, the accumulation of which is posited with the accumulation of capital, or, in other words, they are related to the progressive conversion of a part of the surplus value into constant capital. The increase of *surplus value* as such is limited to the part of surplus value which is converted into *variable capital*, just as surplus value in general arises from variable capital.

The overall amount of produce, hence surplus produce as well, grows with the productivity of labour, even if *surplus value* remains

^a See present edition, Vol. 30, pp. 54-106.- Ed.

^b Ibid., Vol. 31, pp. 372, 579.- Ed.

^c Destruction.— Ed.

^d See this volume, pp. 19-21.-Ed.

constant; hence it grows with the productivity of labour. If necessary labour finds expression in a larger product, this is also true of surplus labour, which is after all not materially different.

2) The two above-mentioned points show how the capitalist mode of production, and therefore the productivity of labour, develops through the *entry of objectified labour* into the production process to a greater, growing extent; at the same time, as demonstrated previously, this brings about a growth in *surplus* value. On the other hand, the *capitalist mode of production* appears as the form of production in which, unlike all earlier forms, *objectified labour* can enter into the production process to an increasing extent.

Living labour reproduces the variable part of capital, irrespective of the surplus value, and therefore the surplus PRODUCE, it adds. This relation must be determined in more detail below.^a

What has to be noted here first of all is this:

The portion of the constant part of the capital which enters into the valorisation process—hence the whole of the raw material, all the matières instrumentales,^b whether they figure as matières instrumentales for the preparation of the raw material, or as accessory materials for the machinery, or the overall requirements of the workshop, such as heating, lighting, etc.—lastly all of the part of the means of production which is used up during the labour process—re-appears in the product through its contact with living labour. In addition to this the part of the value of the means of production which does not enter into the product is preserved.

This re-appearance is expressed doubly: the value of the total product is raised to the amount of this re-appearing part of the value. Secondly: a growing part of the increased quantity of products represents an *equivalent* for the growing amount of constant capital.

Irrespective, therefore, of the surplus value or the SURPLUS PRODUCE in which it is expressed, we can say that the greater the amount of objectified labour set in motion by a given quantity of living labour //the greater the objectified wealth which serves for reproduction// — the more abundantly the conditions of labour are available — the greater is the value of the total product (and the quantity of products in which this value is expressed) reproduced by the same amount of labour; although, if we presuppose the

^a See this volume, pp. 193-94.-Ed.

^b Instrumental materials.-Ed.

(extensive and intensive) magnitude of the working day as given, the same amount of labour only adds the same value to the product, hence e.g. a million workers working 12 hours a day add the same value independently of the level of productivity of their labour and the amount of the objective conditions of labour corresponding to this level of labour, or the extent of the material conditions of production corresponding to particular levels of the productivity of labour. The quantity of products depends of course on the level of productivity of labour. But this level of productivity is expressed in, and depends on, the extent of the material conditions [XXII-1362] presupposed when the labour is functioning.

Although under the presupposition mentioned the same amount of labour only adds the same value to the constant capital (necessary labour+surplus labour, and quite independently of the ratio in which the total working day is divided into these two parts), the value of the product (total product) created by the same amount of labour varies a great deal according to the amount of the value of the constant capital which is set in motion by the same amount of living labour. For the value of this product is determined by the total amount of labour contained in it, hence the sum of the objectified+the added living labour. And although the latter has remained the same according to the presupposition, the former has grown with the development of the extent and richness of the conditions of production. And the amount of the value of the constant capital which is preserved by the living labour does not depend on the quantity of living labour but on 2 circumstances, namely 1) the amount of the value of the constant capital which it sets in motion, an amount which grows as the volume of the constant capital grows (even if not in the same proportion, on account of the growing productivity of labour); and 2), the part of that amount of value which enters into the total product. (We should be able to dispense entirely with the 2nd condition if we assumed an epoch of production in which that amount of value entirely entered into the product.) With the growing amount of the value of the constant capital set in motion by it, the same labour therefore reproduces greater amounts of value of objectified labour, which re-appear in the product, greater amounts of value of the total product. However, the progressive conversion of surplus value into capital or the accumulation of capital-in so far as this is at the same time a progressive concentration of quantities of capital in the hands of individual capitalists, the development of the specifically capitalist mode of production-increases the amount of the value of constant capital which is set in motion by the same quantity of labour.

Ricardo is therefore wrong to say that 1 million human beings (under the restrictions mentioned earlier, but not made by him) always produce e.g. every year the same value, independently of the level of the productivity of labour. A million working with machinery, animals, fertiliser, buildings, canals, railways, etc., reproduce an incomparably higher value than 1 million whose living labour takes place without the assistance of this mass of objectified labour. And indeed for the simple reason that they reproduce an incomparably greater amount of objectified labour in the product, a reproduction which is independent of the amount of labour newly added.

Let us take e.g. an English worker who spins in a cotton factory. He spins more [than] 200 Indian or Chinese spinners, who work with distaff and spinning-wheel. And say he spins *Indian* cotton. One has to assume that the length and the average intensity of the working day are the same—for with comparisons between the working days of different nations modifications of the general law of value arise which we are leaving out of account here as irrelevant.

In this case it would be correct to say that 200 English workers do not create, add, any more value than 200 Indian. Nevertheless, the products of their labour would be very different in value, we mean the *total product*. Not just that the English spinner converts 200 times as much cotton into yarn as the Indian in the same time, hence creates 200 times as much use value in the same time, hence that his labour is 200 times more productive.

[XXII-1363] 1) The product of the English spinner's working day contains 200 times as much *cotton*, hence a *value* 200 times greater than that of the *Indian* spinner. 2) Admittedly, the quantity of spindles with which the English spinner spins does not contain more value in the same proportion as they exceed in *number* the one spindle set in motion by the Indian spinner, and the speed with which the English spinner's spindles wear out is not greater in the same proportion as the amount of their value is greater, for the one spindle is made of wood and the others are made of iron. Even so, an incomparably greater part of the value of the incomparably more valuable instrument of labour enters into the daily product of the English spinner than into that of the Indian. An incomparably greater amount of value is therefore *preserved* and in this sense *reproduced* in the Englishman's daily product than in the Indian's. It is precisely for this reason that the

part of the product which=the value of the constant capital (in so far as it has entered into the mass of products) can be exchanged again for an amount of machinery and raw materials which is 200 times greater than in the case of the Indian. He starts the new production or reproduction with an infinitely greater wealth of the objective conditions, because his labour started out from an incomparably greater amount of the conditions of production, incomparably more already objectified labour serves it as basis and point of departure and is preserved by the newly added labour. This is true of the product. But there is the additional factor that the use value, and therefore the value, of the instrument of labour preserved by the labour of the Englishman, without entering into the valorisation process, is disproportionately greater than that of the Indian's instrument, for through his labour the latter preserves only the value of his distaff, in so far it does not enter into the valorisation process. And the amount of this objective, past labour, past labour which as machinery, etc., cooperates in the Englishman's labour process for free (free namely for all those components of the machinery which do not enter into the valorisation process), is in turn the condition by which his daily product not only creates afresh an incomparably greater use value, but preserves, and therefore reproduces in the product, incomparably more value. Thus living labour preserves greater amounts of value, which exist as past labour, are objectified, the greater the amount of value of the past labour already is, past labour which enters in part as means of labour, in part as material of labour, into the labour process, whereas on the other hand the greater amount of exchange value and use value, of commodities it reproduces in this way, is in turn the condition and the presupposition of a richer reproduction. Under these conditions the amount of surplus value simultaneously rises. This is in part because the amount of variable capital rises, hence the number of workers employed, in part because the productivity of the workers rises, hence the rate of surplus value, and in part because with the productivity of labour there is a rise in the quantity of use values, the surplus produce in which the same surplus value is expressed. For all these reasons a large part of the surplus value can be reconverted back into capital, and this could occur even if the rate of surplus value remained unchanged; more capital can therefore be accumulated, and the objective conditions under which the work takes place, the means of labour and material of labourobjectified, past labour-can be extended, hence production on a larger scale can be repeated, quite apart from the fact that this

extension and greater scale of the conditions of labour is itself in turn a means of raising the *productivity of labour*. (An example from the *agriculture* of *Quesnay, exploitation riche et pauvre*,^a should also be quoted here.¹⁰⁸) The greater the amount of objective wealth living labour works with, the greater the extent to which *past labour* enters into the *living labour process* as an element of reproduction, the greater therefore is not only the quantity of use values, but also the amount of their *exchange value*, and the greater is the *INCREMENT of production* which enters or can enter during reproduction.

It is the *wealth* expressing the *past labour* which enters into the production process, that conditions the magnitude of the *wealth* created by living labour; even disregarding the growing surplus value [XXII-1364] *newly added* by living labour.

Although the quantity of product of the working day of the Englishman is so much more valuable than that of the Indian, because it reproduces a much greater amount of wealth, i.e. preserves it in the product and as the part of the means of labour which does not enter into the product, the *individual product*, the individual commodity, is much cheaper. For the Indian adds to perhaps 1 lb. of cotton as much labour time as the Englishman adds to 200 lbs. The Englishman therefore adds only $\frac{1}{200}$ of a working day to a lb., where the Indian adds a whole working day. If a greater depreciation of machinery is reproduced in the Englishman's daily product, this value is spread over 200 lbs, whereas the depreciation of the Indian's distaff enters in its entirety into 1 lb.

//The whole of the portion of the product which replaces capital can admittedly be resolved into variable capital, i.e. wages, and constant capital, both of which re-enter into the production process, and cannot therefore enter into the consumption of the capitalist, if the mode of production is to be continued on the same scale, and with other circumstances remaining the same. This is even disregarding the fact that this growing amount of the reproduced conditions of production, the growing amount of the reproduced conditions of production by the same amount of labour, in addition to which the use values in which the surplus product is expressed are increased and differentiated, multiplied. This circumstance, that living labour reproduces more capital in proportion to the increase in the basis of past labour on which it stands, i.e. that it produces more

^a Exploitation [by] rich and poor.-- Ed.

past labour in the form of means of production, is by no means irrelevant for the individual capitalist. The individual capitalist is a commodity owner; the whole capitalist class of course cannot sell its own capital, but the individual capitalist can and does, once he withdraws from business, and he can then expend the growing amount of value of his capital as wealth, if he wishes. For the individual capitalist, therefore, leaving aside surplus value, it is not a matter of indifference that his capital grows alongside surplus value.//

Quesnay, and following him his school, the Physiocrats, quite correctly call this growing weight with which *past labour* enters as an element into the living labour process richesses d'exploitation.¹⁰⁹ The greater these richesses d'exploitation, the extent of the value and use value of the past labour from which living labour proceeds as its presupposition, the greater the richesses d'exploitation it reproduces as its result, and the easier it is to extend the scale on which living labour can start the labour process afresh under ever richer objective conditions. The accumulation of capital can be resolved into the extension of the scale on which production can be repeated, into the growing wealth of the conditions, of the objective wealth, of the forces and means of production which have already been produced and which serve as living labour's inorganic body. But these richesses d'exploitation are not only such in Quesnay's sense, namely riches which serve as means of exploitation in agriculture, etc. They are at the same time richesses of exploitation of living labour, the growing extent of the means for its exploitation and the growing power of past labour over living. The fact that the development of the objective conditions of labour appears as a growing power of these objective conditions for and over living labour, instead of as a growing power of labour, is naturally alien to the production process as such. But it is characteristic of the capitalist production process, in which the objectified conditions of labour confront labour in alienated and independent form, as powers in their own right. On the other hand, it is within the capitalist mode of production that past labour first develops to this extent.

[XXII-1365] //Therefore, even if the *law* were correct, which as we shall see later on is *incorrect*, when it is expressed as a *permanent law*, namely, that as a result of the declining natural productivity of the *kinds of land* which enter the sphere of production the *products of the land serving as major food sources*, and a part of the *raw materials*, become dearer //no one has yet asserted that e.g.

cotton has become dearer in the same degree as the cotton industry has developed, or silk; the opposite is the case//, this would not prove that they cost more labour, although they have a higher value and although value is exclusively determined by the quantity of labour which is contained in a commodity. Let us take England, for example, The proportion of workers directly employed in agriculture has fallen since the 11th century from $^{9}/_{10}$ to at least $\frac{1}{5}$, hence $\frac{2}{10}$, and the number of workers as compared with the product continues to fall every day. Hence in so far as the number of workers *directly* employed in agriculture is concerned, it has fallen constantly and is still falling constantly. In 8 centuries it has fallen by at least $\frac{7}{10}$. Therefore, in so far as the labour of the agricultural workers comes into consideration, the value of the total product of agriculture has necessarily fallen by $\frac{7}{10}$; hence the value of a single item of the product, e.g. of 1 qr of wheat, has also fallen. And the relation between the England of the 19th century and that of the 11th century is the same as the present relation between England and other countries, e.g. Russia. Hence if the value of English corn rose continuously, this would only be possible because more objectified labour, and indeed labour of other spheres of production, had entered into it. It is asserted of these other spheres of production that the labour in them has become more unproductive, or that the same quantity of use value contains more labour and therefore more exchange value. Precisely the reverse. Nevertheless, if the value of the same quantity of corn, of e.g. a quarter, has risen, the quantity of labour contained in it must have increased. The quantity of living agricultural labour contained in it has not increased; hence the quantity of objectified labour coming to it from other spheres must have increased; within this there may also be a quantity of objectified labour which is itself a product of agriculture, such as e.g. *cattle*. More machinery is necessary, for example, more drainage canals, etc. A greater part of value for machinery, etc., therefore enters into a qr of corn. But the value which is present in the machinery does not consist only of the labour the machine costs, but also of the past labour which is reproduced, contained, in it as a product; and this part of the value which is contained in it does not depend for its reproduction-presupposing that there is no change in the development of the forces of production-on living labour, but on the amount of past labour which enters into the production of a machine and is preserved in it. Similarly with the cattle. If more past labour exists in this form, a greater value component enters into the product for it, although the quantity of living labour

remains the same. The value of the means of production which enter into agriculture can therefore increase without any increase in the living labour necessary for agricultural production, because this living labour reproduces more value in the product, without any contribution on its part, than if it had worked with poorer conditions of production. Thus the value of the individual commodity [XXII-1366] of a single, particular sphere of production could increase, hence e.g. a quarter of corn could be dearer in England than in poorer countries-entirely disregarding differences in the value of gold and silver in poorer and richer countries, which are not to be considered here-even though in fact the quarter of wheat was produced more cheaply in England than in countries where it is cheaper-cheaper, in so far as living labour comes into consideration. One cannot draw from this the ridiculous conclusion that all commodities may be dearer in one country, although they are produced more cheaply. For the entry of past labour into the labour process in general on a larger scale is only possible at all—the replacement of *past* labour by a larger part of the total product is only possible-because living labour has become more productive, hence a larger part of the product can go into production instead of going into consumption. If, e.g., with the increase in the machinery, a corresponding, equally increased part of its value entered into the individual commodity, a simple transposition of living labour would take place. More labour would be necessary to produce the machine in the same degree as less labour was necessary to employ the machine. A greater part of the value of the machinery would be used up to the same extent as more machinery was employed, and it would therefore have to be reproduced. Exactly as many more machine workers would be needed as e.g. fewer spinners. What would be won on one hand would be lost on the other. Machine labour would therefore be unable to drive out hand labour, as both would produce equally dearly. There would therefore be produced neither more use values nor more surplus value, surplus PRODUCE, and it would be impossible for more capital to enter the production process in the form of *past labour* instead of being laid out as variable capital, i.e in wages; or it would only enter the process in this form because more living labour was employed in this sphere of machine production. However, if in *industry* proper the productivity of labour grows, hence the quantity of the products of labour which can be converted into means of labour also grows, owing e.g. to a concentration of workers and the implements of labour-a concentration of the latter which also

appears *physically* in machinery—and therefore there is a growth in the objective wealth with which the same quantity of living labour begins the reproduction process, hence also a growth in the value of the total product, although the price and value of the individual commodity falls, all this does not hinder the possibility of employing more *objectified labour*, hence not only use value but also exchange value, in a particular sphere to produce the same product. In all these spheres the reproduction of the same exchange value costs less, because the same quantity of living labour preserves more objectified labour. More objectified labour can therefore enter into this one sphere in order to replace the declining natural productivity of the land; and the product can therefore become dearer because, although it contains less living labour, it contains more objectified labour than that decline in living labour amounts to, hence it contains more labour altogether, without the nation's actually having worked more on that account in order to reproduce the same product. The product of agriculture may therefore become dearer, although it in fact costs less labour than in places where it is cheaper, for the greater quantity of objectified labour which enters into it costs the nation in fact nothing, because it is on the one hand reproduced by the same quantity of *living* labour, and on the other hand the amount of use values is so much increased that a greater part of them can replace this constant capital.//

//That a richer nation can expend more for a particular product, without becoming impoverished, than a poorer nation, is shown among other things by the increasing price of unproductive labour, such as singing, ballet-dancing, etc.¹¹⁰//

[XXII-1367] //I shall take up the development again later, but here I want to insert an earlier presentation of the subject, the appropriate passages of which can be retained.¹¹¹

The surplus value is itself posited once more as capital, as objectified labour entering into the process of exchange with living labour and therefore dividing itself into a *constant* part—the objective conditions of labour, material and instrument—and the subjective conditions for the existence of labour—for the existence of living labour capacity, the worker's means of subsistence, the *variable* part of capital.

In the first appearance of capital, these *presuppositions* themselves appeared outwardly to emerge from *circulation*, to be given in it; as external presuppositions of the origin of capital, of the conversion of money into capital. These *external presuppositions* now appear as moments of the movement of capital itself, as results of its own production process, so that it itself presupposes them as its own moments and conditions.

Objectified surplus labour in its totality, hence the surplus product in its totality, now appears as surplus capital—surplus capital, as compared with the original capital, before it has realised itself as capital; i.e. as exchange value become independent, and confronting living labour capacity as its specific use value. All the moments which confronted living labour capacity as alien, external [powers], consuming and using it under certain conditions independent of it, are now posited as its own product and result.

Firstly: Surplus value or surplus product is nothing but a certain sum of unpaid labour—the sum of surplus labour. This new value, which confronts living labour as value independent of it, is the product of labour, which the capitalist has appropriated for himself without giving an equivalent. It is nothing but the objectified surplus quantity of labour over the quantity of necessary labour.

Secondly: The particular forms which this value must adopt to be valorised anew, i.e. to be posited as capital-on the one hand as raw material and instrument, on the other hand as means of subsistence for the workers-are exactly for this reason merely particular forms of surplus labour itself. //(This should actually be considered when dealing with the reproduction process. What the individual capital has produced is a *particular commodity*, one part of the value of which is now admittedly employed for the purchase of new raw material, another part for the material of labour, etc., but in natura this particular capital does not produce its own conditions of reproduction but only their value. If we consider the whole of the surplus produce of the total capital, this consists of the material of labour, the means of labour, and the means of subsistence. Hence not only is surplus value reproduced, but also the material forms in which this surplus value can function anew as capital. Here, where the simple form of accumulation is being considered (where in fact it is still being considered formally, for it can only be considered concretely together with the process of circulation and reproduction), what has to be stressed first of all is that in the surplus value the capitalist has the part of the value with which he can buy new material and instrument. Originally the matter appears like this: The capitalist buys instrument and material and labour with his money. In this act of purchase he does nothing but what is done by every purchaser when he converts his money into commodities; the difference lies only in the fact that he buys commodities which are consumed productively, instead of buying commodities for his own individual consumption. This is

itself a great gain, for which he is duly grateful. But now the situation changes. He in fact makes his purchases with the worker's *money*, since this money represents nothing but *unpaid* alien labour, appropriated without an equivalent. If the worker himself could appropriate his own surplus labour, he would himself be able to sell his surplus PRODUCE, and convert a part of it into means of labour and material of labour. Then these would not confront him as *capital*. They would present themselves as a greater wealth of his own [XXII-1368] conditions of labour, instead of as the *surplus capital* of the capitalist.)//

Originally it appeared alien to the worker himself, accomplished without his participation, rather as an act of capital, or a circumstance dependent on the accidental size of the capitalist's wealth, that instrument or means of labour were available to an extent which made it possible for living labour to realise itself not only as *necessary labour* but as *surplus labour* as well. But now the *means of surplus production*, which allow the absorption of surplus labour, are themselves merely the *converted form* of surplus LABOUR or SURPLUS VALUE.

Thirdly: The independent being-for-itself of value in the form of money (as value) or materially in the form of productive capital, means of production, which also includes means of subsistencehence its being as capital-the separateness of the conditions of labour vis-à-vis living labour capacity, which goes so far that these conditions confront the person of the worker in the person of the capitalist-as a personification with its own will and interest-this absolute divorce, separation of property, i.e. of objective wealth, from living labour capacity—that they confront it as alien property, as the reality of another juridical person, as the absolute realm of his will; and that on the other hand, therefore, labour appears as alien labour vis-à-vis the value personified in the capitalist, or vis-à-vis the conditions of labour-this absolute separation between property and labour, between value and value-creating activity-hence also the fact that the content of labour is alien to the worker himself-this separation now appears as the product of labour itself, as the objectification of its own moments. For through, or in, the act of production itself-which only confirms the exchange between capital and living labour that preceded it—the total result of labour (of both necessary and surplus labour) is posited as capital. Labour capacity has appropriated only the means of subsistence necessary for its reproduction, i.e. for its reproduction as mere labour capacity separated from the conditions of its realisation, and it has posited these conditions themselves as objects,

values, which confront it in an alien, commanding personification. It emerges from the process not only no richer but actually poorer than it entered into it. For not only has it created the conditions of living labour as *capital*; but the valorisation inherent in it as a *potentiality*, the value-creating potentiality, now also exists as *surplus value*, *surplus product, surplus capital*; as value endowed with its own power and will confronting it in its abstract, objectless, purely subjective poverty. Not only has it produced alien wealth and its own poverty, but also the relationship of this wealth as self-sufficient wealth to itself as poverty, which this wealth consumes to draw new life and spirit to itself and to valorise itself anew.

All this arose from the exchange in which the worker exchanged his living labour capacity for an amount of *objectified* labour, except that now this objectification—these conditions for his being which exist outside him—appear as *his own product*, as posited by him himself, both as his own objectification and as the objectification of himself as a power independent of himself, indeed dominating him, dominating him through his own actions.

All the moments of surplus capital are the product of alien labour-alien surplus labour converted into capital. It no longer seems here, as it still did when we first considered the production process, as if capital, for its part, brought with it some sort of value from circulation. The objective conditions of labour now appear rather as labour's product-both in so far as they are value in general, and as use values for production. But if capital thus appears as the product of labour, the product of labour for its part appears as *capital*—objectified labour as dominion, command, over living labour. Labour thus appears to be active in the production process in such a way that it simultaneously rejects its realisation in objective conditions as an alien reality, and therefore posits itself as an insubstantial, merely necessitous labour capacity in face of this reality alienated from it, a reality not belonging to it but to others; that it posits its own reality not as a being-for-itself but as a mere being for something else, and hence also as a mere other-being or as the being of something else confronting it.

[XXII-1369] This process of the realisation of labour is at the same time the process of its de-realisation. It posits itself objectively, but it posits its objectivity as its own non-being, or as the being of its non-being—the being of capital. It returns back into itself as the mere potentiality of positing value or of valorisation, because the totality of real wealth, the world of real values, and equally the real conditions for its own realisation, are posited as independent existences facing it. It is the potentialities resting in living labour's own womb which come to exist as realities outside it as a result of the production process—but as realities *alien* to it, which constitute wealth in opposition to it.// //(The continuation of this extract follows immediately below.^a)//

The whole of the surplus capital=the part of the surplus value which has been reconverted into capital, but it is not entirely exchanged for living labour; what is exchanged is rather only the part which is converted into variable capital. The other part is exchanged for *objectified* labour in forms of the latter which enter into constant capital as its elements. The details of how this happens are only to be considered later in connection with the circulation process.^b Just as money was converted into capital by being exchanged for productive labour, the same thing takes place with the surplus capital, which is absolutely nothing but money or commodities converted into capital. But just as, in the case of the original conversion, the money, in order to be exchanged for productive labour, had at the same time to be exchanged for that labour's objective conditions of production, the same is true of the surplus capital. The statement that the conversion of surplus value into capital=the exchange of surplus value for productive labour misleads (even the most notable political economists) to the incorrect notion that this surplus capital is only exchanged for living labour or is only converted into variable capital. The reverse is the case. As this capital formation progresses, an ever greater part of the surplus capital is exchanged for additional past labour, the conditions of labour, and an ever smaller part is exchanged for living labour. Or an ever smaller part, relatively speaking, of the surplus product is reproduced in means of subsistence for the workers, and an ever larger part in means of labour and material of labour. The variable capital is so to speak converted into the worker's flesh and blood, into the living material of labour, the constant capital into the objective conditions of that labour. As capital formation progresses, the ratio between constant and variable capital changes. For the capitalist mode of production extends in part to cover new branches of labour not as yet subjected to it (therefore changing the above ratio in those branches); it creates new branches of labour, which are exploited from the outset in

^a See this volume, pp. 243-47.--Ed.

^b See K. Marx, *Capital*, Vol. II, Part III, Ch. XXI, Sect. III (present edition, Vol. 36).— Ed.

the capitalist manner; finally, it develops and extends previous modes of production by extending the *capital outlay*, the *scale* of production in them. In all these cases there is a *change* in the ratio between variable and constant capital, the ratio between the two components through which capital dirempts and reproduces itself. Capital of the same magnitude—in so far as its magnitude reaches the minimum required for the capitalist mode of production, for industrial operation—can be divided into an absolutely larger constant part and an absolutely smaller variable part. If the magnitude of the total capital varies with the *capital formation* which grows out of the formation of surplus capital, if it increases, there is under all circumstances a *relative* fall in the variable part of the capital, even though it has increased *absolutely*. More labour is set in motion by the increased capital, but *less* labour as compared with the magnitude of the capital.

The magnitude of the variable capital can only increase pari passu^a with the magnitude of the total capital in so far as the mode of production remains unchanged, in so far as no CHANGE takes place in the development of the productive forces. If, e.g., the surplus capital is large enough to set up a second factory alongside the first one, and productivity remains the same, the capital which is now twice as large will employ twice as much labour as did previously the capital which was half as large. A greater part of the surplus capital can only be converted into variable capital, i.e. more labour can be employed in proportion to the capital laid out, if it is invested in branches of production which require [XXII-1370] more living labour in proportion to objectified labour. This may be the case in a particular sphere. The one compared with the other.

But for the development of capitalist production, which is bound up with the increasing extent of the amount of capital as its material basis, there are changes in the mode of production, in the productivity of labour, and therefore in the technological proportion in which particular amounts of the objective means of labour require a particular quantity of living labour in order to set them in motion. We saw this when considering the capitalist mode of production.^b The extension of the scale [of production] permits the extension of cooperation, the division of labour, machinery, and other material means of aiding production, and with this a rising productivity of labour is posited. The same labour treats a greater amount of raw material, sets in motion a greater amount of the

^a In step.—Ed.

^b See present edition, Vol. 33, pp. 285-88, 305, 310.- Ed.

means of labour, reproduces a greater amount of constant capital in the product, and utilises a greater part of the means of labour not entering into the valorisation process.

The growing productivity of labour, which is developed with the growing extent of capital, hence with the reconversion of surplus value into capital, with the formation of surplus capital, is expressed precisely in, or is identical with, a change in the ratio between constant and variable capital, and the same amount of labour sets in motion more constant capital, or even a smaller amount of labour sets in motion the same or more constant capital; [the growing productivity of labour] is therefore expressed in the fact that the part of the total capital which is converted into variable capital constantly declines in proportion to the part which is converted into constant capital. The quantity of labour employed grows with the growth of the total capital, but in an ever-declining proportion to the growth of the total capital. The variable part of the surplus capital could continuously absorb the whole surplus population, and yet the relative magnitude of the additional variable capital might still fall constantly, in relation to the total capital. And in the same proportion as capital grows, through the growth of surplus capital and the addition of surplus capital to surplus a capital, there develops, excluding short intervals of extension [of production] while the productivity of labour remains the same, with the advance in the productivity of labour which accompanies that growth, a relative and absolute increase in constant capital as compared with variable. In the course of development, therefore, and as a result of accumulation, an ever smaller proportion of the surplus capital is converted into variable capital, or into means of subsistence which are exchanged with living labour. This development is merely identical with the fact that the rise in the scale of production results in a decline in the relative amount of living labour needed to convert a growing quantity of the means of production into the product. If, e.g., the ratio of constant capital [to variable] is as 3:1, $\frac{1}{3}$ of the surplus capital will be converted into variable capital, while if $it=5:1, \frac{1}{5}$ will be converted, and if it is as $10:1, \frac{1}{10}$ will be converted^b and this ratio changes with accumulation from 3:1, 4:1 into 5:1, 10:1, etc.

^{*} Should apparently be: "total". - Ed.
b This passage should read: "...1/4 of the surplus capital will be converted into variable capital, while if it=5:1, $\frac{1}{6}$ will be converted, and if it is as 10:1, $\frac{1}{11}$ will be converted".-- Ed.

The surplus capital changes the ratio for the total capital; it not only changes it for itself, but also for the original capital of which it is the offshoot. For it is precisely through the addition of the surplus capital to the original capital that the objective conditions of the labour process make it possible to raise the productivity of labour, and therefore to reduce the ratio of variable to constant capital. The greater the wealth of the conditions with which the work is being done, the greater the proportion between the part of the total product which is reproduced as constant capital, and the part which is reproduced as variable capital. The same division takes place in surplus capital where production remains the same: a still greater predominance of constant over variable capital. [XXII-1371] Thus the variable capital, i.e. the part of the capital laid out in wages, increases with the accumulation of capital, for this is the sole means of producing absolute surplus value, but it declines relatively, or it increases in a constantly falling ratio as compared with the growth of the total capital and indeed the increasing conversion of unpaid labour into capital, i.e. accumulation of means and necessary producers, is [the cause] of this declining ratio, which not only shows itself in the *division* of the surplus capital, but reacts back upon the total capital.

All accumulation is the means of greater accumulation, hence the means for the exploitation of more *living labour*, but at the same time it is the means of employing less *living* labour in proportion to the total capital.

Hence if a surplus POPULATION is employed and absorbed by the *surplus capital*, this process of the assimilation or absorption of living labour by objectified labour is, as we saw in considering capitalist production,^a created and accompanied—with improvements in machinery, etc., and the application of the capitalist mode of production where it did not previously exist—by a continuous expulsion of workers, a releasing of workers, a rendering of them available, with the result that the increasing number of workers attracted by capital is created by an increasing mass of expelled, released workers; a circumstance through which accumulation itself holds in reserve and continuously produces an available surplus POPULATION—living material for a still greater accumulation of capital—over and above the natural increase of the population.

It certainly must not be imagined that the amount of variable capital is identical with the increasing amount of the means of

^a See this volume, pp. 26-30.- Ed.

Reconversion of Surplus Value into Capital

subsistence which, with the development of the amount of capital and the productivity of labour, can be converted into variable capital, i.e. can be exchanged for living labour; nor should one adopt the fantastic notion that a certain part of the product must be converted into variable capital owing to the nature of its use value, or that variable capital has any kind of necessary relation to the amount of the means of subsistence (or the materials for the means of subsistence) which can enter as means of consumption into the reproduction of labour capacity.

Reproduction.

Reproduction in its narrower sense will be developed in the next section.¹⁰⁴ For the present, only the following point needs to be made: Production, considered as a continuously self-renewing act, or considered in the context of its constant renewal, is reproduction. The production process as a whole is always a reproduction process (in so far as new branches of labour are not being set up, and where it cannot be said at the STARTING point of these that the same product is being reproduced). In the total product there is *reproduced* 1) the constant capital, 2) the variable capital, and finally, 3) it contains a new component—the surplus PRODUCE, which represents the surplus value. The part of the constant capital that does not enter into the valorisation process can be left out of account here. The closer examination of this belongs to the following section. All 3 of these constituents contained in the product exist in the same material shape. It is the same mass of products, the same commodity, each part of which corresponds to the three parts described above. The original value is what is reproduced first, and the surplus value is newly produced. The part that represents surplus value may enter into consumption (although not completely, as will be seen later). To begin with, let us consider the first two [XXII-1372] parts. If production is to be begun again on the same scale, the parts of the product which represent variable capital and constant capital must be reconverted into the use value form they possessed originally. (All this would be better placed in the next section.) In reproduction the starting point is the product; in the simple production process the particular product must first come into existence, or what is reproduced obtains in the product a form it previously did not possess, whereas in reproduction the form is constantly repeated. In reproduction the presuppositions of production themselves appear as its past results and the result of production appears as its presupposition. Every presupposition appears in every reproduction as a result (a positing) and every result appears as a presupposition; the product both as condition and as result of the production process. Seen as a whole, the production process is a constant reproduction process, although, within every particular sphere of production, and for a single capital, 1) its presuppositions may appear as *initial* conditions, which are the starting point, as with the opening of any new business; and 2) the product may be converted into money without involving any renewal of the production process. Production, conceived in its flux—its truth—always appears as reproduction. *Accumulation* is nothing but reproduction on an extended scale. If the surplus value were entirely consumed, the scale would remain the same.

The following points are linked with this:

1) Surplus capital is nothing but SURPLUS LABOUR; 2) from the point of view of its value, every original capital, whether accumulated or not, appears after a certain period of time as having arisen from surplus value-hence it disappears as original capital, as independent wealth not derived from the exploitation of alien labour but rather presupposed to it. (Suppose the capital is 100, the surplus value=20. There may or may not be accumulation. If there is not, and the production process is always repeated on the same scale // reproduction 1) implies the constant repetition of the same production process, in so far as its product or the use value that results from it comes into consideration; 2) but it is not derived from the constant repetition of this process, the result of which is the commodity, or which is extinguished as a single process in the product, but rather from the fact that at the same time a part of the value of the product entered as a presupposition into production and emerges from it again as a result, and that the material form which this part of the value possessed in the labour process is restored again through the conversion of the product in that process//, hence the surplus value is consumed, the latter can always [be] expressed in a definite ratio with the capital, just as occurs in the case of profit. E.g. 20:100=1:5. So if this process is repeated 5 times, the surplus value consumed will=the original capital, and, where value is being considered, the situation is not changed at all, whether it is imagined that the surplus value is consumed and the capital preserved, or the value of the capital is consumed and the surplus value accumulated. After 5 years, the value of the capital in the given case=the value of the surplus value grabbed during the 5 years, or, in the value of the capital, the worker is confronted, from the point of view of the value, with no more than the total amount of the surplus value appropriated by the

capitalist without equivalent. If the worker had kept his own surplus value for himself and the capitalist had consumed as before an amount equal to that surplus value, the value of the original capital at the end of the 5 years would have been=0, while the worker would have possessed a value=the original capital. If, however, surplus value is reconverted into capital, let us say in the above case 10%, nothing changes in the calculation except this: the surplus value consumed is now 1/10 of the original capital, instead of being $\frac{1}{5}$ as it was previously. The value of the original capital is now consumed in 2×5 years, in 10 years, instead of in 5 years. But it has been replaced at the same time by a value of 20×10 , i.e. twice the original capital, because the total amount of surplus value capitalised in the 10 years=twice the [XXII-1373] value of the original capital. But the value of the original capital has disappeared, just as happened before, and the value of the whole of the capital is now only equal to the total amount of surplus value accumulated. (If the capital = C, the annual surplus value = y, and if $y = \frac{C}{C}$ (or xy = C, x:C = 1:y) then xy = C. Or if the surplus value = $\frac{C}{x}$. $C = \frac{xC}{x} = x\left(\frac{C}{x}\right) = C$. Thus if $\frac{C}{x}$ is the surplus value of one year, the original capital must be replaced by surplus value in x years.) Once more, this fact is not altered in any way whether it

x years.) Once more, this fact is not altered in any way whether it is conceived that the value of the original capital has been preserved and half the surplus value has been consumed (over the 10 years), while the other half, which=the original capital, has been accumulated, or that the value of the whole of the capital has been consumed, and on the other hand the whole of the surplus value,=twice the value of the original capital, has been accumulated over the 10 years.) But leaving aside these 2 points, leaving aside accumulation and leaving aside the nature of surplus capital and the ratio between the value of the original capital and the total amount of value of the surplus value that has been consumed, another point, 3), enters the picture:

If we consider the *simple reproduction process*, the simple repetition of the exchange between the same capital and the same labour capacity, the situation presents itself differently in considering the continuous process, its flux, its constant repetition, in short considering the same process as a reproduction process, from when this process appears as a simple and isolated, a solitary production process. //What converts the production process into a reproduction process—and for this reason the true conception of the production process is to conceive it as a *reproduction*
process—this belongs to the next section—is that the product is reconverted into the elements of its production. I.e. constant capital is again produced in its natural form through the conversion of the product, while another part of the capital, variable capital, is again exchanged for labour capacity. This reconversion of the part of the product which represents capital into the elements of its production is mediated by exchange, and in some branches of industry, e.g. agriculture, it proceeds in a natural form. A part of the product, as seed, manure, cattle, etc., re-enters the same production process as an element.

Within a particular sphere of production—i.e. a sphere which produces a particular commodity, a commodity with a particular use value—reconversion into elements of production of the same material character takes place. The product, in contrast, can be converted from its shape as money into any other elements of production, it can be transferred from one sphere to the other. Then the capital is not reproduced in the same natural form. But this too is reproduction, in so far as the value—which is indeed a product as well—is being considered. Then the form of reproduction changes.// //Rate of profit (average).¹¹² I showed earlier^a that if the rate of surplus value=e.g. 50, and we have the following compositions in various spheres of production: C50, V50+S25 (S=surplus value), hence a rate of profit of 25; C90, V10, S5, hence a rate of profit of 5; C80, V20, S10, hence a rate of profit of 10; C20, V80, S40, hence a rate of profit of 40%, the average

profit is = $\frac{25+5+10+40}{4} = \frac{80}{4} = 20\%$. According to this the average

rate of profit would be 20%. For a more precise determination it needs to be added that the *amount* of capital invested in each of the particular spheres also comes into consideration. E.g. if in the above case 2 capitals were invested at 25, 2 at 5, 2 at 10, and 2 at 40%, we would have 8 capitals. Hence $\frac{2 \times 80}{2 \times 4}$. The rate of profit would be the same, because the ratio of the total capital to the profit would have remained *the same*. If the doubling, or indeed any increase at all, of the capital had occurred *evenly* over every case, the amount of surplus value would have increased in the same proportion; the proportion between the two would therefore have remained *the same*. However, it is different if we have e.g. 20 capitals of 100 at 5%, 20 at 10, 10 at 25, and 5 at 40. In this case we would have:

^a See present edition, Vol. 31, pp. 301-02.- Ed.

Reconversion of Surplus Value into Capital

	Capital	Surplus Value	Rate of Profit
20×100 20×100 10×100 5×100	=2,000	100	
	=2,000	200	
	=1,000	250	
	= 500	200	
Hence: Capital	5,500	750	$13^{14}/_{22}\%$

[XXII-1374] Thus we see that the average profit is determined 1) by the average of the unequal profit rates of the different spheres of production; and 2) by the proportional division of the total capital among the different spheres of production. Here "different spheres of production" is to be understood to mean the spheres of production as they diverge according to their differing ORGANIC COMPOSITION OF CAPITAL.//

The relation we are referring to is this:

If we consider the simple reproduction process of capitalwhether it is reproduced in the same sphere of production or a different one is irrelevant-in the course of the constant repetition of the conversion of variable capital into labour the worker constantly reproduces 1) the variable capital, and 2) the surplus value. What confronts him as variable capital is just as much his own product as the surplus value is. He has reproduced the variable capital and it serves to buy his labour anew. He reproduces it again, and again it buys his labour. It is his labour of yesterday, or of the last six months, which buys and pays for his labour of today or of the next six months. His present labour is bought with his past labour. And if we examine the result, in the product he has reproduced firstly his own future wage, perhaps his present wage (if e.g. the wage is paid weekly and the commodity is sold during the week, the worker thus in fact being paid out of his product converted into money; this does occur, just as much as it occurs that other commodities are only converted into money after a year, hence are only then expressed in a form in which they can function as wages; but the relation is not changed at all by this), and then, equally, the surplus value.

The notion which is very widespread among some political economists (e.g. Ricardo^a) that the worker and the capitalist share the value of the product—share the product if we take the *total product* of the *total capital*, share the *value* of the product if we

^a See present edition, Vol. 32, pp. 52-59.- Ed.

take the individual capital-says nothing further. This notion is not an arbitrary one. If we consider the continuous production process, which constantly renews itself, hence if we do not fix on one single production process, the value the worker adds to the means of production forms the fund from which 1) variable capital is renewed, hence wages are paid; 2) surplus value flows, in whatever way it is divided and converted into a consumption fund for the capitalist and an accumulation fund. If the worker is to be continuously employed, this should only be possible in so far as he continuously reproduces the part of the value of the product which serves to pay him, i.e. in so far as he IN FACT constantly reproduces the means of paying for his own labour. And although the relation originally presented itself as the exchange of objectified for living labour, the value of the product not only contains objectified labour but also objectifies living labour. His objectified labour is therefore the fund from which his living labour is paid.

Let us imagine that the worker works with his own means of production, or, and this is the same thing, that he only works with alien means of production as long as is necessary to reproduce his wages (in the latter case the property of the capitalist in the means of production would only be *nominal*; they would not produce any surplus value for him, and would only serve to reproduce the [worker's] wages). In that case the fund from which he is paid or which he requires for the reproduction of his labour capacity, the fund of means of subsistence which is the natural condition for the renewal of his labour, would not confront him as *capital*. This fund would not employ him, he would rather apply the fund, constantly reproducing it, in order to maintain his life as a worker. Therefore the fact that this labour fund confronts him as variable capital-as a component of capital at all-is merely a specific social form of this fund, a form which has nothing to do with its nature as a labour fund, or with the service it performs for the reproduction of the worker and, therefore, of his product as such. In *capitalist production*, this labour fund is constantly reproduced as a mass of commodities belonging to the capitalist, which the worker must constantly buy back, and in doing so he gives more labour than is contained in it. But he must constantly buy it back because he constantly reproduces it as *capital*. If he constantly reproduced it as his own labour fund, it would not confront him as capital. This is therefore only a particular historical form of appearance of his product (or rather of part of his product), which is admittedly very important for the shape of the production process or rather

the reproduction process, [XXII-1375] but changes nothing, either in this labour fund, in so far as it is considered as use value, or in its character as the worker's own product, as the objectification of his own labour.

It is possible for this labour fund not to assume the form of capital, and despite this for the worker constantly to be obliged to provide surplus labour and to hand over a part of the value of his product without equivalent. This applies e.g. to the situation of the peasants on corvée in the Danubian Principalities, which we examined earlier.^a They do not just reproduce the labour fund itself-this is something all workers do under all forms of society. The labour fund rather assumes the form of capital vis-à-vis them. It appears as not only their product but a product which belongs to them, as the fund for their means of subsistence, which they constantly renew by their labour, but renew for themselves, in order to consume it as their labour fund. The corvée labour they perform for the boyars therefore appears as unpaid labour, while the labour of the wage labourer appears as *paid*, but it only appears as paid because 1) the labour fund reproduced by the wage labourer constantly passes into the ownership of the capitalist, thus constantly confronts him as variable capital, as alien property, which he must constantly buy back as means of payment from the hands of a third party; 2) the value of his necessary labour, of the part of the labour he does for himself, confronts of him the *price* for the whole the working as dav. necessary+surplus labour, and therefore the whole of the working day appears as paid; 3) his surplus labour therefore does not appear as separated from his necessary labour (separated spatially and temporally). If the worker works 6 hours a day for himself, 6 hours for his capitalist, this is, over 6 days of the week, the same as if he worked 3 days for himself (and during these 3 days used the means of production for himself as his own property) and 3 days for the capitalist, hence worked 3 days for nothing. But since this division does not take place outwardly, he appears to be paid for 6 working days. The corvée worker in Moldavia, on the other hand, works 3 days for himself on his own field, and no one pays him for this; he pays himself; the product of these 3 days of his week's work is not converted into capital, i.e. it never confronts him as a condition of production in the hands of a third party. He works the other 3 days on the boyar's estate for nothing. This surplus labour of his *appears* as what all surplus labour is - unpaid

^a See present edition, Vol. 30, pp. 212-17.- Ed.

compulsory labour, provided without an equivalent-but it only appears this way because the product of his necessary labour does not pass into the hands of the boyar, is therefore not given back by the boyar to the corvée peasant in exchange for 6 days [of labour]. If this were the case the whole of his labour would appear as paid, and thus the LABOUR fund he himself produced would confront him as capital. If the boyar were to appropriate the whole of the product of the peasant's labour, and pay back to him what he needed for his existence, so that he could again 1) buy back, i.e. reproduce, this part, which costs 3 days of labour a week or 6 hours a day, but in addition, 2), work 3 days [a week] or 6 hours a day for nothing, the corvée would have been converted into wage labour, and the labour fund into the specific form of variable capital. On the other hand, in India for example (pre-English India) the RYOT provided a certain part of his product or his surplus labour in the form of rent in natura. But he never alienated his LABOUR fund: it was not for a moment converted into capital: he himself constantly reproduced it for himself. Since capital, if it is to reproduce itself as capital, as self-valorising value, must constantly yield up to labour capacity part of the value of the product=the means of subsistence necessary for labour capacity's reproduction, and since it must equally constantly appropriate the surplus labour for nothing, just as the boyar or the Mogul does, it is evident that this formal quality of the LABOUR fund of appearing as capital, and in particular as variable capital, is only a particular historical form of appearance of the labour fund, and in and for itself-important as it is for the whole production process and the relation between the worker and the appropriator of surplus labour-it changes nothing in the circumstance that the LABOUR fund [XXII-1376] is nothing but the part of the value of the product or of the product of the worker which he constantly reproduces in order constantly to consume it. All that is different is the way in which he gets into a position to consume it. In the one case it confronts him directly as a product in his possession, and forms a consumption fund which stands directly at his disposal; in the other case this part of the product is first *alienated*, appears as alien property, as the product of the worker's labour which has become independent vis-à-vis him, the personification of his past labour, which he can appropriate again and again by buying it back again with more living labour than is contained in it. In the other forms, too, he must constantly buy back this part of the product by renewing his labour, but he does not have to buy it back as a *commodity* from a third party. If a part of the labour,

surplus labour, appears as corvée labour, as unpaid compulsory labour to the corvée worker, or the objectification of surplus labour, the surplus product, appears to the RYOT as a part of his total product which he must hand over without an equivalent, this is so only because in both cases the necessary labour and the product of that necessary labour appear as labour belonging to, and product belonging to, the corvée peasant and the RYOT themselves, and never as labour and product belonging to a third party. With the wage labourer in contrast the whole of his labour appears as paid labour, because no part of his labour appears as belonging to him, and the whole of the product of his labour, even the part that merely forms his own consumption fund, renews his own means of subsistence, constantly presents itself at each moment as a product belonging to the capitalist, as capital. It is only because his necessary labour itself appears as labour *alien* to him that his total labour appears as paid labour; it is only because the product even of his necessary labour appears as a product which does not belong to him that it can appear as the means of payment for his labour. In order to present itself as means of payment it must pass beforehand into the hands of a third party, and then pass in turn, through purchase and sale, out of his hands and into the hands of the worker. It therefore only appears as means of payment, or the LABOUR fund only appears as capital, because it is directly appropriated, not by the worker, but by the capitalist, because it is first taken, so that it can be given back. This constant divestiture is the condition for its appearance as a fund of means of payment of labour, as capital, instead of as a direct consumption fund.

We have seen, therefore, that:

1) Surplus capital—or capital as surplus capital—consists in all its elements of surplus labour appropriated by the capitalist without an equivalent, and it is the means for the repetition of this appropriation of alien surplus labour;

2) The value of all capital, even where it differs originally from surplus capital, disappears in production as a whole, and is converted simply into capitalised surplus value;

3) Apart from surplus value, variable capital occurs in the production process as a whole as merely a particular historical form of appearance of the LABOUR fund constantly renewed and reproduced by the worker himself for his reproduction.

The political economists express this when they:

1) characterise accumulation as the conversion of income (profit) into capital (this also includes constant capital);

2) characterise the total value of the product //apart from the

constant capital// or the product of the worker as the fund from which wages and surplus value are paid, or in which the capitalist and the worker each have a share;

3) conceive variable capital as merely a particular historical form of appearance of the LABOUR fund, as Richard Jones did, who demonstrated how this fund assumes different forms in different epochs.^a

[XXII-1377] //One of the chief merits of the Physiocrats was their insight into the reproduction process. Thus it is very finely brought out (see Baudeau^b) that what appear in production as avances^c appear in reproduction as reprises.^d Reprises appear in contrast to avances as a direct or mediated (through the circulation process) reconversion of the components of the product from their natural form into elements of production, components of constant capital; the reconversion of the part of the product which=constant capital into raw material, accessory materials and means of labour. As avances on the other hand these presuppositions of the product appear independent of the latter, they appear as derived from circulation. The difference is constantly evident. If a capital is invested in a particular sphere of production, its avances appear as constantly reproduced, as reconverted forms of components of the product. If new capital is productively invested, money is converted into constant and variable capital. For the individual capitalist these are not reprises, but mere although because this new capital is avances. surplus capital-they are just as much reprises, considered from the point of view of reproduction as a whole.// 113

//Both the old capital and the surplus capital can be reproduced in an altered natural form. This is possible in a double form. Firstly: The capital (old or surplus capital, original or additional capital) is not reproduced in the shape of the same product as the one of which it originally formed a component, but in the shape of another product, which had already been produced earlier. This is the emigration of capital (ITS TRANSFER) from one sphere of production to another, whether it happens that the distribution merely of the old capital between the different spheres of production is altered, or

^a See R. Jones, An Introductory Lecture on Political Economy..., London, 1833, pp. 14-50. Cf. present edition, Vol. 33, pp. 335-45, 352-53.— Ed.

^b N. Baudeau, Explication du Tableau Économique.... In: Physiocrates. Quesnay ... par M. Eugène Daire, Part II, Paris, 1846. See present edition, Vol. 31, pp. 230-32.— Ed.

^c Advances.— Ed.

d Returns.— Ed.

that the additional capital, the surplus capital, is invested in another sphere of production, already existing previously, instead of the one from which it originates. This is also a metamorphosis of capital, and indeed a very important one, since it underlies the competition between capitals in different spheres of production, hence the formation of the general rate of profit. The most variable part of capital, which can take on the most diverse forms, is variable capital itself, which is exchanged for living labour. For the natural form of this part of capital to alter, nothing else is necessary than that labour capacity should be employed in one manner rather than another. This rests on the CHANGEABILITY of human labour capacity. The simpler the labour-and in all large branches of production the labour is simple—the less specific training is necessary, the easier is this conversion of the form of concrete labour. Furthermore, as far as circulating capital is concerned, its convertibility into any desired form of existing commodity is naturally absolute; this is the character of money. But this convertibility is purely illusory. For money is only a transitory form of circulating capital //taken here in so far as it does not consist of means of subsistence for the worker; hence as the part of the constant capital which does not consist of fixed capital, implements of labour, etc.// and its amount stands in no relation at all to the amount of *circulating capital*. If e.g. more rye is to be produced rather than more wheat, more money must be converted into rye seed. If the previous rye harvest was precisely sufficient for previous consumption, and no foreign rye was available for purchase, the investment of more capital in rye could only take place if the consumption of rye were reduced by raising the price of rye, thereby setting free part of the rye as seed. As far as the other conditions are concerned, labour would remain the same, so too fixed capital, and there would merely be a different division of the same labour and the same implements between wheat cultivation and rye cultivation. On the other hand, e.g., to change the numbers of twist which are to be spun, etc., would require only a slight modification of the fixed capital. The kind of labour and the material would remain the same. This is in general the case when the dimensions [XXII-1378] of the same branch of production necessitate a change in the total amount of capital employed in it. Hence where the raw material remains the same. It is on the other hand possible for the raw material to change and the fixed capital and the kind of labour to remain the same, or for the latter to change only a little. E.g. when more of one kind of tree or another is felled, when more of one kind of fish or another is

caught, when more of one metal or another is extracted from the earth. But where the *branch of production* is essentially different, a given part of the fixed capital cannot be converted from one form into the other. The *buildings* may remain the same, but the machinery, etc., is very different, and the same is true of the installations erected on the land. When a CHANGE like this takes place, therefore, the *fixed capital* may become devalued and worthless. But if it is merely the *surplus CAPITAL* which changes its employment, the change always amounts to a treatment of *the same raw material* by different machines, etc. The *variability* of HUMAN LABOUR always forms the basis of this kind of *metamorphosis* of capital, whether because a part of the old labour capacities alter their work, or because new labour capacities are predominantly employed, not in the old sphere of production, but in another one.

This metamorphosis of capital concerns merely the real metamorphosis, which takes place in the labour process, the changed form of the raw material, machinery, labour, into which the capital has been reconverted. It has nothing to do with the formal metamorphosis, which consists exclusively in the conversion of commodity capital into money capital, and of money capital into productive capital, in fact in the reconversion of commodity capital, as the commodities which form the elements of the labour process. This second metamorphosis is related purely to the changed natural form (the form of the use values) into which the money is reconverted in the course of its reconversion into capital.

Secondly. Old or additional capital is invested in new branches of production. Either new raw material is needed for this, or the newly discovered use value of an old raw material. E.g. railways. No new material in addition to coal, iron, wood, etc., is required for this purpose. Rubber is a contrasting case. Even with the telegraph, there is merely the employment in a new way of old raw materials. The main variation in the latter case lies only in the method of working.

The more productive the labour, the more possible it is to increase the number of *branches of labour*; to utilise in a new manner labour which has become *superfluous* in the old production for its reproduction on the same or an extended scale, whether through a new way of using old raw materials, or through the discovery of, or the extension of trade in, new raw materials. The *variety* of branches of production grows with the *accumulation* of capital—hence the *differentiation of labour.*//

//The use of the excrements of production and consumption extends

along with the capitalist branches of production. By excrements of production we mean its waste products, whether those of industry or of agriculture (such as manure, etc.). By *excrements* of consumption we mean in part the excrements proceeding from the natural reproduction process (faeces, urine, etc., of human beings), in part the form in which the articles of consumption remain behind after they have been consumed (such as rags, etc.). In a chemical factory, for example, the subsidiary products which are lost in the case of small-scale production again form in the case of mass production the raw material for other branches of chemical production; in large-scale engineering iron filings are again converted into iron; in the manufacture of wood on a mass scale the sawdust again yields a return as fertiliser; thus the excrements either re-enter the same sphere of production as means of production, or other spheres of production. The manure of animals, the urine and faeces of human beings, re-enter cultivation, tanneries, etc. Iron waste re-enters the same branch of production as a means of production; rags go into the paper factory; COTTON waste goes into fertiliser; an example should be looked up for chemicals. This is connected partly with the natural interchange of matter, partly with the industrial interchange of form.// 96

[XXII-1379] Surplus value is always expressed in surplus produce; i.e. in a part of the *product* which is at the disposal of the capitalist, and forms a surplus over and above the parts of the product which replace the capital originally laid out. One should not imagine for that reason that surplus produce arises merely because in reproduction the amount of products increases as compared with the original amount. All surplus value is expressed in surplus PRODUCE, and it is only this that we call the surplus product. (The surplus of use value in which the surplus value is expressed.) On the other hand, not all of the surplus product represents surplus value; this is a confusion found in Torrens^a and others. Assume, for example, that the year's harvest is twice as large this year as the previous year, although the same amount of objectified and living labour was employed to produce it. The value of the harvest (disregarding here all deviations of price from value brought about by supply and demand) is the same. If the same ACRE produces 8 qrs of wheat instead of 4 grs, 1 gr of wheat will now have half as much value as before, and the 8 qrs will have no more value than the 4 had. In order to exclude all outside influences, assume that

^a See present edition, Vol. 32, pp. 267-74.- Ed.

the seed was cultivated on specific fields, which yielded the same product as the previous year. Thus a qr of seed would have to be paid for with 2 qrs of wheat, and all the elements of capital as also surplus value would remain the same (similarly the ratio of the surplus value to the total capital). If the situation is different in this example, this is only because a part of the constant capital is replaced *in natura* from the product; hence a smaller part of the product is needed to replace the seed; hence a part of the constant capital is set free and *appears* as SURPLUS PRODUCE.

This belongs to reproduction.¹⁰⁴

The surplus value is expressed as SURPLUS PRODUCE, and the shape of the surplus PRODUCE is the same as that of the total product, i.e. the particular use value capital produces in this particular branch. If the product consists of wheat, boards, machines, twist, locks, violins, etc., the surplus PRODUCE will also be expressed as wheat, boards, machines, twist, locks, violins, etc.

The following process can now take place with the *surplus produce*¹¹⁴:

Firstly, in so far as it is not converted into surplus capital, but consumed: 1) Either the capitalist can consume it in its natural form, entirely or partially. If only partially, it falls under the CASE to be examined in 2). For him to consume it in its natural form, it must exist in a form in which it is able to enter into individual consumption. To this there also belong the instruments, containers, etc., which enter into the consumption process as *implements*, such as needles, scissors, bottles, etc. Or e.g. semi-manufactures, such as sewing materials, which are worked up in the sphere of consumption itself. 2) He consumes it in the form of other use values; he sells it and buys with the money the various objects which form part of the consumption fund. If his product is the kind that cannot enter into individual consumption, its buyer must buy it for productive consumption, i.e. it must enter for him into his capital as a replacement element, or into his surplus capital as an element of new constant capital. Hence the fact that every part of the value of the surplus **PRODUCE** which is not converted by its owner into surplus capital is consumed by him does not imply that this surplus produce itself enters in natura into individual consumption. It may enter into capital. It can in fact be consumed as capital by the buyer of this surplus PRODUCE. And again, two things are possible here: Either it replaces original capital or surplus capital, or it represents for the buyer the conversion of a part of his surplus produce into surplus capital. If a greater part of the surplus **PRODUCE** were produced in a natural form in which it can only serve

as constant capital, the part of the SURPLUS PRODUCE which enters into individual consumption (whether in order to be converted into variable capital, or in order to enter into the consumption fund of the capitalist) being correspondingly [small], there would take place an overproduction of constant capital. If on the other hand too large a part of the SURPLUS PRODUCE were reproduced in a form in which it cannot be constant capital, but is destined for individual consumption, whether that of the worker as variable capital, or that of the non-worker, there would have taken place an overproduction of the part of the circulating capital which does not enter into constant capital. These relations could be determined precisely in an enclosed and isolated country. But foreign trade allows a part of the SURPLUS PRODUCE which exists in one country in the form of raw materials, semi-manufactures, accessory materials and machinery, to be converted into the form of the surplus PRODUCE [XXII-1380] of another country, in which it exists in the form of consumable objects. Foreign trade thus breaks through this barrier. It is therefore necessary for capitalist production, which works according to the *measure* of its means of production without regard to the satisfaction of a definite given need. The domination of production by exchange value appears for the individual in such a way that his production 1) is not directed towards his own needs, 2) does not directly satisfy his needs; in a word, he produces commodities, which can only be converted into use values for him after their conversion into money. But now this appears in such a way that the production of a whole country is not measured by its direct needs, or by such a distribution of the different parts of production as would be required for the valorisation of that production. With this, the reproduction process is dependent not on the production of mutually complementary equivalents in the same country, but on the production of these equivalents on foreign markets, on the power of absorption and the degree of extension of the world market. This provides an increased possibility of non-correspondence, HENCE a possibility of crises.

If a country were isolated, its surplus PRODUCE could only be consumed in the given natural form of that surplus PRODUCE. The sphere within which the surplus PRODUCE could be exchanged would be limited by the multiplicity of different branches of production in the same country. Foreign trade tears down this barrier. A surplus PRODUCE of twist can be represented in wine, raisins, silk, etc. Thus foreign trade multiplies the forms into which the surplus PRODUCE of a country can be converted and in which it can be consumed. But in spite of assuming this *foreign* form, the surplus **PRODUCE** continues to represent nothing but the surplus value, the surplus labour, of the indigenous workers.

The larger the scale on which the necessary means of subsistence are produced, and therefore the more productive the labour is (with the correspondingly increased accumulation of capital), the greater the part of the labour that can be employed in the production of a multiplicity of forms in which the surplus **PRODUCE** can be consumed.

The objects which enter into the consumption fund may be consumed more slowly or more quickly. The richer the production, the more does a wealth of more or less durable use values enter into this consumption fund, so that the consumption fund increases in size and multiplicity. Part of the *consumption fund* might in emergency be converted into capital.

However, if we are speaking of surplus PRODUCE in so far as it is not converted into surplus capital, but consumed by those who possess it, we can disregard any mediation through either internal or foreign trade. Only the part of the product which is expressed in a form appropriate for individual consumption can enter into the consumption fund. The capitalist does not need to consume everything himself: his cats, dogs, horses, birds, servants, mistresses, etc., eat as well. Or a part can also be consumed by unproductive workers whose services are bought in this way.

II) In so far as the surplus PRODUCE is converted into surplus capital.

The conversion may be into variable capital and constant capital. Variable capital can be increased or reduced (the variable capital in the proportion necessary for the extension of production; this proportion is not however determined by the proportion by which production is extended) without any increase or reduction in the surplus **PRODUCE** or indeed any change in that part of it alone which exists in the form of necessary means of subsistence entering into the worker's consumption. More of this part may be consumed by horses, dogs, mistresses, etc., or more or less may be exchanged for the services of unproductive labour. The part of the surplus PRODUCE which is convertible into variable capital may be increased or reduced according to the restriction or the extension of this unproductive consumption. This part of the surplus PRODUCE may be reduced e.g. for the following year (at least it may be reduced in relation to the number of productive workers newly set in motion during that year) if a large part of the surplus PRODUCE is fixed in the kind of constant capital (fixed capital) which rather than entering directly into the reproduction process forms merely a basis for extended reproduction, and is neither by nature exportable nor able to be turned into the components of variable capital on foreign markets. [XXII-1381] Thus e.g. with the conversion of surplus PRODUCE into railways, canals, buildings, bridges, the draining of marshes, docks, and the fixed parts of a factory, forges, coal mines, etc. None of these things can be transported; nor do they directly increase reproduction, although they are all means for extending reproduction. If they are constructed *disproportionately*, this may result in a deficit of next year's surplus PRODUCE; in particular a lessening of the part of the surplus PRODUCE which can be expressed as *variable capital* and as *circulating* capital in general. Again there is a *potentiality for crises* arising from the *overproduction* of *fixed capital*.

We demonstrated earlier^a:

If the scale of production remains the same—if reproduction is repeated to the same extent—the product of the producers who produce constant capital, in so far as this product consists of variable capital (wages) and surplus *produce*—hence represents in general the *income* of this class—must be exactly=to the *constant capital* needed annually by the class which produces the *means of consumption*. If it were larger, it would have no equivalent—no counter-value corresponding to it—and would be depreciated *pro tanto.*^b As remarked above, *foreign trade* breaks through this barrier. The producers can convert a part of their product into variable capital and objects of consumption of income on the foreign markets.

But let us disregard foreign trade. With reproduction remaining the same, therefore, the variable capital and the surplus PRODUCE of class I (which produces constant capital), in particular the surplus PRODUCE, cannot be considered as income. It is income for the capitalists involved in this class I alone, not for capital as a whole. For it is a part of the constant capital of class II. Thus one can look at the matter in this way, that the whole of the product of class II ¹¹⁵ only replaces the constant capital of the society, and the whole of the product of class I forms the income of the society, hence represents, after deduction of the variable capital, of the part that is consumed as wages, the surplus PRODUCE which is consumed annually in various forms; a consumption which is mediated through exchange, purchase and sale, in such a way that the

^a See present edition, Vol. 30, pp. 429-41, Vol. 31, pp. 134-45 and Vol. 32, pp. 102-08, 380-85.— Ed.

^b Correspondingly.--- Ed.

surplus **PRODUCE** is divided among its various owners according to need.

But it is different once the surplus **PRODUCE** is converted into surplus capital.

//This matter must be presented first without regard to money, and then with regard to money.

Without money: For a part of the surplus produce to be able to be converted into surplus capital, a part of it must d'abord^a be reproduced in a form in which it can serve as additional variable capital. This is true particularly of those items of the variable capital in which the product of one year must serve for the consumption of the following year, as with corn, etc., and all raw materials from the vegetable kingdom, such as cotton, flax, wool too, etc., where the same thing takes place. The sheep may be shorn at different times of year, but the wool harvest depends on the number of sheep available during the year, etc. It is untrue, in contrast, of those means of subsistence the production of which can itself be increased during the year, parallel with their production, if the conditions of this increased production are available, whether machinery and labour, or machinery, labour and raw material. Coal, iron, metals in general, wood, etc., require more labour, more coal, more machinery, and more implements of labour for increased production, if the number of workers in employment is increased. If, on the other hand, just the working day is increased, nothing more is necessary than in one case more raw material, in the other case more accessory materials and a more rapid production subsequently of the machinery or implements which have been worn out. The surplus capital does not need to be invested simultaneously or evenly in all branches. If e.g. new COTTON FACTORIES are built and filled with machinery (and this is not merely a new distribution of the old capital), the SURPLUS PRODUCE does not need to exist simultaneously in the form of cotton, but only once the new factory SHALL BE PUT TO WORK, perhaps in a year. Then, however, the additional cotton must be procured. What was necessary until then was only the additional conversion of surplus produce partly into wages (variable capital) and partly into more iron, wood, stones, belts and the additional quantity of accessory materials, machinery [XXII-1382] and implements required for an increased production of those items.

A part of the surplus PRODUCE can be converted in natura directly into constant capital, may enter directly, as such, into its own

^a First.— Ed.

reproduction. E.g. wheat may enter as seed, coal as an accessory in coal production, machines in machine-building, etc. Or the producers of the constant capital may exchange it among themselves, in which case it serves each of them, once it has changed hands, as constant capital; but this whole part of the surplus PRODUCE, considered as a whole, has been converted directly into constant capital, new, additional constant capital has been created.

Similarly, a part of the *surplus produce* is directly convertible into variable capital, and often all that is needed for this is a different distribution of the necessary means of subsistence, their exchange with productive instead of with unproductive workers.

A part of the surplus produce may be converted for one capitalist into variable, for another into constant, capital. E.g. the FARMER buys new machines, implements, etc. The machine manufacturer employs new workers with the means of subsistence received from the FARMER in exchange for the machines.

Since the constant capital employed by class I (the class that produces the means of subsistence) increases, this makes it possible to increase the part of the product produced by class II which can be resolved into variable capital and surplus PRODUCE. But the constant capital [of class II] can be increased directly, partly *in natura*, partly through a division of the surplus PRODUCE mediated through exchange, without any exchange with class I, and thus without meeting any direct barrier in the production of class I. Similarly, the exchange of constant capital takes place here directly with the surplus PRODUCE of class I (not with its constant capital). It is converted for class II into additional variable capital, and for class I into additional constant capital. Yet the necessary proportions are abolished thereby, made more accidental, hence new potentialities for *crisis*.

The difference for class I, however, is this, that if a greater part of its product is consumed as variable capital by class II, a smaller amount of product is consumed in the form of surplus PRODUCE by the non-productive workers and the capitalists themselves; *demand* thereby falls for the producers of class I who produce the surplus PRODUCE in the form of means of consumption for the non-workers. They are thereby restricted in their reproduction, and a devaluation of part of the capital invested in this class takes place. In reality, the part of the surplus PRODUCE which is consumed in the form of luxury products or for the payment of unproductive workers is relatively small at the beginning of the *carrière*^a of a

^a Career.— Ed.

nation producing in the capitalist fashion. The surplus PRODUCE increases in quantity and value with the accumulation of capital; it is therefore possible for an ever greater part to be reproduced in the form of luxury products, or exchanged for the services of unproductive workers, and accordingly a constantly growing part can be converted into surplus capital. Still greater, with this progress in accumulation, is the part of the capital which is converted into constant capital, while the part converted into variable capital constantly declines relatively, hence in the formation of surplus capital the part of the means of subsistence which is converted into variable capital or withdrawn from unproductive consumption constantly declines, so that there is a constant increase in the amount of products at the disposal of unproductive consumption, despite the growth of capital. The amount of surplus PRODUCE converted in the production of constant capital increases, but while the part of the surplus PRODUCE which exists in the form of means of subsistence grows to the same degree, there is a decline in the share of the working class-in the part of the surplus which is to be converted into additional variable capital.

Since the *definite proportion* in which the total capital is divided between the 2 classes [of producers], or in which the various components of the product enter into the reproduction process at particular points, is dissolved, partly by foreign trade, partly by the changing conversion of SURPLUS PRODUCE into SURPLUS CAPITAL, there is here a new potentiality of INADEQUACY and therefore of CRISES. These disproportions may occur not only between fixed and circulating capital (in their reproduction), between variable and constant capital, and between the different components of constant capital, but also between capital and income.

The case of money is to be examined later.//

[XXII-1383] For our present purpose, the conversion of surplus PRODUCE into surplus capital can be conceived most simply as follows: The surplus PRODUCE is expressed in products of varying use value. Part of it takes the form of means of consumption which do not enter into the consumption of the working classes. (Foreign trade would make it possible to express this part too in any form of use value, but here we want entirely to make abstraction from foreign trade.) This part enters entirely into the consumption of the possessor of the surplus PRODUCE. This is the first deduction to be made. A second part consists of means of consumption which enter into general consumption. A greater or lesser part of this is directly consumed by the possessors of the surplus PRODUCE, or indirectly consumed by their dogs, horses, servants or by the

unproductive workers whose services are given to the possessors of the SURPLUS PRODUCE in exchange. This second part of the surplus PRODUCE is thus equally to be deducted. Another part of these means of consumption serves to buy labour. It is converted into variable capital. Finally, part of it consists of seed, raw materials, accessory materials, semi-manufactures, cattle, machinery and tools. This part is converted into constant capital. The sum total of the parts of the surplus **PRODUCE** which are thus converted into variable and constant capital forms the surplus capital, into which a part of the surplus produce or surplus value has been converted. If, e.g., the surplus produce thus converted into capital = 500 thalers, of which 400 consist of constant and 100 of variable capital; if the day's work of 100 workers can be bought with the 100 thalers, and the working day of 100 workers is realised in 200 thalers, the 100 thalers would be the means of buying twice as much labour as is contained in them, and thereby of converting the 500 thalers into 600, into capital. The part of the surplus CAPITAL which is converted into variable capital is exchanged for more labour, or is a means of appropriating a part of new additional labour for nothing. But these 100 thalers are themselves alien labour appropriated for nothing, just as are the 400 thalers of additional constant capital, so that the whole of this surplus labour of the worker is, in the hands of the capitalist, a means of appropriating new surplus labour and effecting the reproduction for nothing of the labour already appropriated.

The circumstance that the productivity of labour, and at the same time the value of the product reproduced by it, depends on the wealth of the objective conditions, on the amount of past labour which enters into the production process-hence depends on the accumulation of capital-appears, like all the productive power of labour, as a productive power of capital, independent of labour and confronting it. This stage-by-stage extension of past labour, which is set in motion by living labour in the reproduction process-and which conditions the growing productivity of living labour-is presented as a service performed by this past labour, or it is conceived in such a way that the alienation of this past labour as capital makes it into this essential moment of production; because in fact in capitalist production this past labour constantly confronts living labour as capital, this confrontation, this estranged, socially converted form of labour is regarded as the secret process by which capital makes labour more productive, although naturally this past labour of the worker performed exactly the same service when it functioned as the worker's property. This view is necessary:

1) because only in capitalist production, as opposed to previous modes of production, does *past* labour enter into reproduction to this increasing extent; it therefore appears as *its* mark of distinction from previous modes of production; 2) because the *antagonistic* form in which objectified labour here appears towards living labour is considered as its *immanent* character, and as inseparable from the function it fulfils in the reproduction process.

Apart from the accumulation of objectified labour, as it appears in the conversion of surplus PRODUCE into surplus capital, a constant accumulation of the worker's personal skill takes place, through practice, and through the TRANSFER of acquiréd skill to the new generation of workers which is growing up. This accumulation costs capital nothing [XXII-1384] although it plays a role of decisive importance in the reproduction process. The accumulation of scientific knowledge should also be added here, in so far as it is applied to the material production process. This accumulation is continuous reproduction on a continuously expanding scale. The results of knowledge achieved are taught and reproduced as the elements of knowledge. Here the cost of reproduction never stands in proportion to the original cost of production.

A warning should be issued here against two notions:

1) confusing saving with accumulation,

2) confusing the accumulation process of capital with accumulation such as occurs in the simple formation of hoards.

Ad 1), saving. The actually disposable part of the product-the surplus **PRODUCE**—could be consumed by the capitalist *individually*. Hence by converting a part of it into capital he renounces its enjoyment and saves. The notion that the whole of the SURPLUS produce can be consumed is d'abord in and for itself incorrect, because the product passes through all kinds of dangers in the production process proper, as also in the circulation process, and a reserve fund is therefore necessary, not only for ordinary depreciation, but for extraordinary accidents. This reserve fund can only be formed from the surplus PRODUCE. Moreover, the capitalist mode of production would be impossible without a constant extension of the division of labour, improved and additional machinery, etc., which likewise requires a part of the SURPLUS PRODUCE. Capitalist production is altogether a production directed towards the increase of exchange value, especially surplus value, and this continuous increase can only be attained by the constant conversion of surplus **PRODUCE** into capital. The capitalist

mode of production is of course only possible with its conditions, and these are very different from those of a mode of production directed towards immediate subsistence. Thus much initially on the illusion that the whole of surplus **PRODUCE** can be consumed.

But we have here the even more extraordinary notion that the capitalist can consume the whole of his capital, instead of valorising it as capital! First of all, the major part of this capital exists in a non-consumable form, as means of production; it exists in a shape in which it can only be consumed productively. The whole notion rests on the idea of the *individual money owner*. Instead of converting £1,000 into capital, he can consume it. (He can of course only put it out at interest if he does not consume his £1,000, leaving it instead for others to employ as capital.) But if the total reproduction process were to be interrupted even for only 14 days, that would be the end of the "consumables".

But the capitalist has one merit in comparison with others. It has nothing to do with labour. What the capitalist saves is the product of unpaid labour, hence a product appropriated from the worker without equivalent. The savings of the rich are made at the expense of the poor (Say).^a It is accumulated labour, but not his accumulated labour.

2) Accumulation process. The difference between this and HOARD-ING has already been noted previously.^b

In so far as accumulation is understood to mean the building up of supplies, or the existence of commodities in the zone intermediate between production and consumption, this belongs to the circulation process.^c

The phrase that no one is more involved in the accumulation process of capital than the worker himself means in the opinion of the vulgarisers that the worker must be happy if he is paid as low a wage as possible (the *rate of surplus value*, further the rate of profit, as high as *possible*), because along with the amount of *surplus* value or *surplus produce* (profits, developed further) the part which is converted into *surplus capital* grows, and therefore there is a growth in the amount of **additional variable capital* or that part of capital which is converted into wages of productive labour or which is exchanged against labour.* If this part grows more

^a J. B. Say, Traité d'économie politique..., 5th ed., Vol. I, Paris, 1826, pp. 130-31. Marx quotes in French.— Ed.

^b See present edition, Vol. 29, pp. 359-70.- Ed.

^c See K. Marx, Capital, Vol. II, Part I, Ch. VI, Sect. I (present edition, Vol. 36).— Ed.

rapidly than the LABOURING POPULATION (and the ADDITIONAL DEMAND FOR LABOUR is determined by it), the *price of labour* will increase above its *VALUE*, or the *AVERAGE*. First a *lessening of the wage* (or at least a relatively low wage) is asserted to be something good; in other words, the worker exchanges as *large a part as possible* of his time with the capitalist for nothing, and therefore obtains as *little* of the product of his own labour as *possible*, and this is supposed to be good because the amount of capital employed is thereby increased. Then an increase in the size of this capital is regarded as something good because *SURPLUS LABOUR* is thereby reduced, or the wage increases. For a greater part of his free labour to flow back to him as wages under particular circumstances he is expected provisionally to appropriate a smaller part of his labour as wages. What [XXII-1385] pretty, and particularly for the worker what stupid, circular arguments!

Accumulation brings a *relative* reduction in the part of the capital that is converted into variable capital. This is No. 5.

Secondly, the mass of the *POPULATION made REDUNDANT* or the *surplus POPULATION* constantly created by the capitalist mode of production itself increases with the development of the productive forces associated with accumulation.

But leaving this aside, and these are circumstances of decisive importance, accumulation is in the worker's interest, however much it must bring him ever repeated misfortune,

1) in so far as *surplus capital* is increased through the fact that a smaller part of the surplus produce is consumed by the capitalist and a larger part converted into surplus capital; hence in so far as the growth of surplus capital does not result from an increase in surplus LABOUR (and therefore in surplus produce), but from the conversion of a larger part into capital when this surplus produce is divided into income and capital;

2) but since this depends on the *productivity of labour*, assuming the magnitude of the *surplus produce* remains the same, and the productivity of labour in turn depends on the *development of the capitalist mode of production*, it is in the worker's interest (once wage labour exists) for capitals to be employed in large, concentrated quantities, instead of being scattered among many capitalists and employed in an unproductive manner.

In so far as the accumulation process is identical with the concentration process, the inner progress of capitalist production consists in an ever increasing supersession of private production, of the kind of production for which the property of the genuinely isolated producer in his conditions of labour appears as a condition

of production itself. The worker's relation to the conditions of production develops into a relation to common, social magnitudes.

 $^{\prime}$ //Conclusion of the quotation from an earlier presentation of the subject ¹¹⁶:

In so far as the surplus product is valorised anew as surplus capital, enters anew the labour process and the process of self-valorisation, it divides itself into:

1) means of subsistence to be exchanged for labour capacity. This part of the capital can be defined as the *wages fund*. It serves for the progressive maintenance of labour capacity, since this part of the surplus capital grows continuously, even though by no means in the proportion to which the surplus capital itself grows. This *wages fund* now appears as *alienated* labour, converted into *capital*, just as much as do

2) the objective components, the objective conditions for the employment of additional labour. Both components of capital are now posited by labour, and posited as its presuppositions. What originally appeared as a division of capital within itself now appears in such a way that labour's own product—objectified surplus labour—is divided into those two components which, considered materially, are the objective conditions of the labour process, and the objective conditions for the *maintenance* and *reproduction* of labour capacity: but from the point of view of their form these conditions of the realisation of labour confront it as an alien, independent power, as *capital.* Labour has itself created a new fund for the employment of new labour, but at the same time it has created the condition that this fund can be appropriated only if new surplus labour is employed on the extra part of surplus capital. Hence, by producing surplus capital, surplus value, labour has simultaneously created the real necessity (and possibility) for new surplus labour, surplus capital thus itself being the real possibility of both new surplus labour and new surplus capital. It becomes evident here how progressively the objective world of wealth is enlarged through labour even as an alien power confronting it, and how it gains an ever wider and fuller existence, so that relatively, in relation to the values created or to the extent of the real conditions for the creation of value, the necessitous subjectivity of living labour capacity stands out in ever more glaring contrast. The more labour objectifies itself, the greater becomes the objective world of values which confronts it as alien-as alien property. By creating surplus capital, labour imposes on itself [XXII-1386] the compulsion to create yet further surplus capital, etc., etc.

With regard to the original, not-surplus, capital the relation has changed for labour in so far as 1) the part exchanged for necessary labour is reproduced by this labour itself, i.e. it no longer comes to labour out of circulation but is its own product, and 2) the part of value which represents the real conditions for the utilisation of living labour, in the form of raw material and instrument, has been maintained by living labour itself in the production process. And since every use value by its nature consists of transitory material, and exchange value exists only within use value, this maintenance=protection from destruction, or the negation of the transitory nature of the values owned by the capitalists. In this way, these values are posited as values-forthemselves; as *imperishable wealth*. Hence only in the production process has living labour posited this original sum of values as *capital*.

In so far as surplus capital is considered, the capitalist represents value-for-itself obtained by the appropriation of alien labour. For each moment of surplus capital (material, instrument, means of subsistence) resolves into alien labour, which the capitalist has not appropriated by means of exchange for already existing values but which he has appropriated without exchange. True, the exchange of a part of the values belonging to him, or of objectified labour possessed by him, for labour capacity, appears as the original condition for this surplus capital. The possession of values by the capitalist, part of which he formally exchanges for living labour capacity, appears to be the condition for the formation of surplus capital I, if that is what we call the surplus capital arising from the original production process, i.e. the condition for the appropriation of alien labour, of objectified alien labour. In any case, it appears as a condition for the formation of surplus capital I that there be an exchange of values belonging to the capitalist, thrown into circulation by him, and supplied to the workers by him-of values which do not derive from his exchange with living labour, or from his relation as *capital* to *labour*, but rather from a prior, so-called original accumulation. As e.g. this is always the case for every individual who steps into the marketplace as a new capitalist.

But now let us think of surplus capital I being thrown again into the production process, realising its surplus value in exchange once more, and appearing once more as new surplus capital II at the beginning of a third production process. This surplus capital II has different presuppositions from those of surplus capital I. The presupposition of surplus capital I was the existence of values belonging to the capitalist and thrown by him into circulation. The

presupposition of surplus capital II is nothing but the existence of surplus capital I; in other words the presupposition that the capital has already appropriated alien labour without exchange. This enables him to begin the process again and again, and on an ever-increasing scale. True, in order to create surplus capital II, he had to exchange a part of surplus capital I in the form of means of subsistence for living labour. But what he thus exchanged were values which he did not originally put into circulation from his own funds, but alien objectified labour which he appropriated without giving any equivalent for it, and which he now exchanges again for alien living labour, just as the means of labour in which this new labour is realised and with which it creates new surplus value have come into his possession without exchange, by means of simple appropriation. Past appropriation of alien labour now appears as the simple condition for new appropriation of alien labour. In other words, his possession of alien labour in objective, physical form, in the form of values already in existence, appears to be the condition for his ability to appropriate alien living labour capacity anew, without giving any equivalent for it. That he should already be confronting living labour as capital appears to be [XXII-1387] the sole condition not only for him maintaining himself as capital, but for him as growing capital appropriating alien labour without equivalent on an increasing scale. Property in past or objectified alien labour appcars as the sole condition for further appropriation of present or living labour.

In so far as a surplus capital I was created by means of simple exchange between objectified labour (the original capital) and living labour capacity-[a transaction] based on the law of the exchange of commodities as equivalents estimated by the comparative quantity of labour or labour time contained in them-and in so far as this exchange, speaking juridically, presupposed nothing but the right of property of each person in his own products and his right to dispose of them freely (on the side of the worker-the freedom to dispose of his own personal capacities), and in so far as surplus capital II is merely the result of surplus capital I, hence a consequence of that first relationship [that between labour and capital]—the right of property on the side of capital is *dialectically* transformed into the right to alien products or into the right of property in alien labour, the right to appropriate alien labour without equivalent; and on the side of the worker it is transformed into the duty to relate himself towards his own labour and its product as alien property. But the exchange of equivalents which appeared as the initial operation has been reversed in such a way that on the one side only an apparent exchange takes place, in that the part of capital exchanged for labour capacity is, in the first place, itself alien labour appropriated without equivalent, and in that, secondly, it must be replaced by labour capacity with a surplus, hence it is not IN FACT given away but only transformed from one form into another. The relationship of exchange is therefore a mere semblance, which belongs to the circulation process. Furthermore, the right to property originally appeared to be based on one's own labour. Now property appears as the right to alien labour and as the impossibility for labour to appropriate its own product. The separation of property, or wealth, and labour now appears as a consequence of the law which arose from their identity.

Finally, the result of the process of production and valorisation now appears to be above all the *reproduction* on an ever-increasing scale of the very relationship of capital and labour, of capitalist and worker. The number of necessitous labour capacities, lacking substance, of "the LABOURING POOR", thus increases along with the amount of capital, and inversely. This antagonistic relation is expressed by Eden, Chalmers,ª etc. IN FACT, this relationship of production (a relationship of social intercourse, into which the subjects enter as agents of production) appears to be an even more important result of the process than its material results. Each side reproduces itself by reproducing its other, its negation. The capitalist produces labour as alien; labour produces the product as alien. The capitalist produces the worker, and the worker the capitalist. As soon as the mode of production based on capital is presupposed //actually money has been transformed into capital only at the end of the first production process, which resulted in its reproduction (1) and in the new production of surplus capital I (2); but surplus capital I is itself only realised as surplus capital once it has reproduced itself (3) and posited surplus capital II (4), i.e. once the presuppositions of money in the process of becoming capital which still lie outside the movement of real capital have disappeared, and capital therefore has IN FACT itself and in accordance with its immanent essence created the very conditions from which it sets out in reproduction// the condition that the capitalist must bring into circulation values created by his own labour or in some other way-excepting only values created by already existing, past wage labour-belongs to the antediluvian conditions of capital; to its *historical* presuppositions, which,

^a See present edition, Vol. 28, pp. 520-21 and Vol. 29, pp. 120-22.-- Ed.

precisely as such historical presuppositions, have vanished and therefore belong to the history of its formation but by no means to its contemporary history, i.e. do not belong to the real system of the mode of production dominated by it. [XXII-1388] If e.g. the flight of serfs into the cities was one of the historical conditions and presuppositions for the development of the medieval city, it is not a condition, a moment, of the reality of fully developed city life, but belongs to its past presuppositions, to the presuppositions of its becoming, which are superseded in its being. But the conditions of the becoming, the emergence, of capital imply that it is not yet in being but is only becoming. Hence they disappear with the development of real capital, the capital which, setting out from its own reality, itself posits the conditions for its realisation. This occurs, e.g., when the process in which money or value-for-itself originally becomes capital presupposes a primitive accumulation by the owner of money or commodities, which he has achieved as a non-capitalist, whether by saving, or by his own labour, etc. Therefore, while the presuppositions for the transformation of money into capital appear as given, external presuppositions for the emergence of capital, as soon as capital has become capital, it creates its own presuppositions, namely the possession of the real conditions for the creation of new values without exchange-by means of its own production process. These presuppositions, which originally appeared as prerequisites of its becoming, and therefore could not arise from its action as capital, now appear as results of its own realisation, reality, as brought into being by it, not as conditions of its emergence, but as results of its being. It no longer sets out from its presuppositions, but is itself presupposed, and, setting out from itself, it itself creates the presuppositions for its maintenance and growth. The conditions, therefore, which preceded the creation of surplus capital I, and which express the becoming of capital, do not fall within the sphere of the mode of production for which capital serves as the presupposition. They lie behind it as preliminary historical stages of its becoming, just as the processes through which the Earth was transformed from a fluid sea of vapour into its present form, lie beyond its life as finished Earth. Note the views of the bourgeois political economists, who consider capital to be an eternal and natural form of production, but still try to justify it by declaring the conditions of its becoming (the imaginary conditions, moreover) to be the conditions of its present realisation, i.e. they present the moments in which the capitalist appropriates as a non-capitalist-because he is only in the process of becoming—as the VERY CONDITIONS in which he appropriates as a fully-fledged capitalist. //Natural laws of production! Here, it is true, it is a matter of the natural laws of bourgeois production, hence of the laws within which production occurs at a particular historical stage and under particular historical conditions of production. If there were no such laws, the system of bourgeois production would be altogether incomprehensible. What is involved here, therefore, is the presentation of the nature of this particular mode of production, hence its natural laws. But just as it is itself historical, so are its nature and the laws of that nature. The natural laws of the Asiatic, the ancient, or the feudal mode of production were essentially different. On the other hand, it is entirely certain that human production possesses definite laws or relations which remain the same in all forms of production. These identical characteristics are quite simple and can be summarised in a very small number of commonplace phrases.// These attempts at apologetics demonstrate a bad conscience and the inability to bring the specific mode of appropriation of capital into harmony with the general laws of property proclaimed by capitalist society itself. On the other hand—and this is much more important—our method indicates the points at which historical analysis must be introduced, or at which the bourgeois economy as a mere historical form of the production process points beyond itself towards earlier historical modes of production. To present the laws of the bourgeois economy, it is not necessary therefore to write the real history [XXII-1389] of the production relations. But the correct analysis and deduction of these relations always leads to primary equations, which point to a past lying behind this system. If, on the one hand, the pre-bourgeois phases appear as merely historical, i.e. as presuppositions which have been superseded, the present conditions of production [on the other hand] appear as superseding themselves and therefore as positing themselves as historical presuppositions for a future society.//

The above already belongs in part to the examination of the so-called *primitive accumulation.*^a

But the following should be added here:

The conversion of money into capital and therefore the formation of surplus capital I have two conditions;

Firstly: The money must be able to be exchanged freely for labour; the historical conditions which have to be fulfilled for this to happen will be considered later. The money owner, who now enters the marketplace, comes upon these conditions as the ruling

^a See this volume, pp. 243-56.- Ed.

conditions of the mode of production. The money (and what it represents) already *in itself* confronts labour as *capital*, and now has only to *perform its function* as such.

Secondly: If an individual wants to become a capitalist today, [he] must have money. If he is to be a newly formed capitalist, who has neither inherited money (is already in possession of money made in a capitalist way), nor been loaned money //for the identity of the person who confronts the worker with money in his pocket is a matter of complete indifference//, nor stolen it, nor acquired it in another sphere of capital (outside the actual sphere of production) as merchant, financier, speculator, etc., and the relation of these secondary functions of capital to productive capital will emerge later (we are not concerned at all here with the division of the available capitals, with their transfer from one hand to another), he must have earned it or worked for it and saved it. (What he gains by putting his savings out to interest, etc., must be deducted from this, for this is already capitalist valorisation.) He first converts his money into capital from the moment when he exploits workers himself. If he was a productive worker himself, the pécule^a cannot be great. But e.g. doctors, writers, lawyers, etc., who have acquired "capital", have only acquired it because the capitalist mode of production is dominant. The payment of these unproductive labours depends precisely on the wealth of the real agents of production, and the real use value of the service they render is therefore still entirely independent of its price. Milton DID THE Paradise Lost FOR £5.

Hoard formation proper does not occur. The hoarder is always a usurer at the same time.

The capitalist mode of production constantly reproduces the conditions, in that:

1) in the simple production process it reproduces the relation of the conditions of labour as capital and that of the worker as wage labour.

2) The continuous conversion of surplus value into capital (accumulation) creates the range of these conditions which exist as capital through the increase of the labour capacities available as wage labourers.

3) The extension of the capitalist mode of production to ever new spheres abolishes the unity which still sometimes existed there between the direct producer and his conditions of production;

^a Savings.— Ed.

turns the producer into a wage labourer and his means of labour into capital which confronts him as a wage labourer.

4) The concentration (and competition) of capital eliminates small capitals and fuses them together into large ones, although a process of repulsion in newly formed EMPLOYMENTS, etc., runs parallel to this process of attraction in the developed spheres. If this were not the case, bourgeois production would be very simple, and would soon arrive at its catastrophe.

> [XXII-1390] // Table of the Reproduction Process (presented without circulation of money and at a constant scale of reproduction)¹¹⁷

> > [First Draft]

Ι

Production of Means of Subsistence



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[Second Draft]



[XXII-1391] The part of the constant capital (hence here the fixed capital) which does not enter into the product, i.e. does not enter into the valorisation process, is discarded in all cases.

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1) Means of Subsistence

Under I) we see the constant capital of 400, which re-occurs in the product in its entirety. The whole of this product consists of means of subsistence, which enter into the consumption fund; although they enter only partially into the consumption fund of class I. The variable capital,=100, posits a surplus value of 200, in addition to its own reproduction in the product. The 100 of variable capital are paid out in money, in wages; these wages draw out of the total product of 700 products to the value of 100. In this way, the money flows back into the hands of the capitalist of class I. The surplus value appears entirely as profit, but is split into industrial profit, interest, and rent, of which at least the last two are entirely paid in money; the total amount of products is drawn on to the extent of 200 by the owners of this income. Class I has therefore consumed 300 of its own product; at the same time, money has flowed back to the capitalists, with the result that they can pay wages, interest and rent anew in money. There remains an unconsumed and disposable remainder of 400 from the total product, which is the part of the value of the [XXII-1392] product needed to replace the constant capital of 400.

Under II), the whole of the product consists of raw materials and machines.

The variable capital of $133^{1}/_{3}$ is paid out in wages (money), and $133^{1}/_{3}$ is drawn with this money from the total product of class I. Thus 133¹/₃ of the money of class II flows to class I, and products to the same value flow from class I to class II. The surplus value of $266^2/_3$ is paid in money as interest and rent, and a quantity of the products of class I is bought with this money. This sum of money together with the money that has flowed back from the wages, interest and rent of class I and the wages of class II is more than sufficient to provide class I with the 400 in money needed to replace class I's constant capital of 400 and to allow class II to draw means of subsistence from the total product of class I for its industrial profit. The result is that the whole of the product [of class] I has passed into the consumption fund, and 400 of the total product of class II has passed into class I in replacement of its constant capital, but class II, on the other hand, needs $533^{1}/_{3}$ for the replacement of its own constant capital.

The situation is actually as follows.

Class I. 100 are paid in money as wages. For this 100 the workers draw 100 out of the total product of I; with this, 100 flows back to the capitalists of I in money, with which they can buy labour anew. They have already paid a certain part of the 200 of

surplus value the year before in interest and rent; with this money interest and rent buy their corresponding parts of the total product of I. The money thus flows back to the capitalists of I, and with this money they pay interest and rent anew or give interest and rent new drafts on the product of the next year. As far as industrial profit is concerned, they partly consume it *in natura*, and partly exchange [it] among themselves through the mediation of money payments.

Class II has paid $133^{1}/_{3}$ (in money) as wages. For this money, the working class of II buys products from I. These 133¹/₃ thus flow back into the hands of class I in money, and class I uses this to buy products of this amount from class II. At the same time. the interest and rent money flows to class I from class II, and the latter similarly draws its share in return for this from the total product of I. With this money, class I buys products from class II, to which the money has thus flowed back again, allowing it to pay wages again, as well as interest and rent. It gives out one part of this money—a part which=its industrial profit—in order to buy products from I. With this money, class I buys the remainder of the products it requires from II. It has now bought for 400,=its constant capital, from class II, and replaced its constant capital. The whole of the product of class I has passed into the consumption fund. On the other hand, all the money class II needs for the payment of wages, interest, rent and the monetary transactions of the capitalists within this class has returned to it.

Under III), the total product of class II appears as the constant capital of the society, and the total product of class I represents in part the total amount of variable capital of I and II, in part the total amount of income enjoyed by both classes under various categories.//

[XXII-1393] The following should be noted in connection with the foregoing economic tables:

1) The constant CAPITAL consists of fixed and circulating capital. The part of the fixed capital which does not enter into the valorisation process is left out of account. Or, and this is the same thing, that part alone of the fixed capital which enters into annual reproduction, hence into the year's total product, is here included under the heading of constant capital.

Furthermore, part of the capital consists of *money*. Here only the variable capital is presented as *money capital*. Interest and rent, on the other hand, [are presented] as sums of money existing in the hands of their owners. The amount of money to be found in

circulation is IN FACT much less than appears here, partly as the monetary expression of variable capital, partly as the monetary expression of interest and rent.

2) Commercial capital and money-dealing capital are not displayed separately, as this would make the table too complicated.

3) For the same reason, *reproduction* is conceived as remaining constant, since the presentation of the accumulation process would equally tend to confuse the simple conception of the main movement.

4) Tables I and II show how the total product of II appears as the constant capital of the society, whereas the total product of I is realised in the variable capital and the surplus value of both classes. This process is presupposed in Table III, therefore here the product of II appears directly as constant capital, while the product of I appears as the total amount of variable capital and surplus value.

5) The dotted lines always show the ORIGIN of expenditures, the starting point of circulation, where they ascend. The unbroken lines show the ORIGIN of expenditures, where they descend.

The complete table follows on the next page [see p. 244]:

[XXII-1395] B) SO-CALLED PRIMITIVE ACCUMULATION

//From an earlier presentation of the subject.¹¹⁸

If we consider first of all the relationship as it has become, value which has become capital (and surplus value which has become surplus capital), and living labour as mere use value confronting it, so that living labour appears as mere means for the valorisation of objectified, dead labour, for its permeation with a life-giving soul while losing its own soul to it-and having produced as a result alien wealth on the one hand, but on the other, as its own property, only the necessitousness of living labour capacity-then we can see clearly that the physical conditions of real labour (the material in which it is valorised, the instrument by means of which it is valorised, and the means of subsistence which kindle the flame of living labour capacity into activity and prevent its being extinguished, and supply the necessary matter for its life process) are posited in and through the process itself as alien, independent existences: in other words as the mode of existence of an alien person, as self-sufficient values-for-themselves, and thus as values which form wealth alien to the living labour capacity which confronts them in subjective isolation, the wealth of the capitalist. The

[XXII-1394] Tableau économique of the Reproduction Process as a Whole



1) Means of Subsistence

objective conditions of living labour appear as separate values, become independent as against living labour capacity as subjective being, which therefore appears, as against them, only as value of another kind (distinct from them not as value, but as use value). Once this separation is presupposed, the production process can only produce it anew, reproduce it, and that on a larger scale. How it does this, we have already seen. The objective conditions of living labour capacity are presupposed as independent existences confronting it, as the objectivity of a subject distinct from living labour capacity and independently confronting it. The reproduction and valorisation, i.e. the expansion, of these objective conditions is therefore simultaneously their reproduction and their new production as the wealth of an alien subject, indifferent to and independently confronting labour capacity. What is reproduced and newly produced is not only the being of these objective conditions of living labour but their being as alien to the worker, as independent values, i.e. values belonging to an alien subject, confronting this living labour capacity. The *objective* conditions of labour gain a subjective existence as against living labour capacitycapital gives rise to the capitalist. On the other hand, the purely subjective being of labour capacity vis-à-vis its own conditions gives it a merely indifferent objective form as against these conditionsit is only a value of a particular use value—a commodity—alongside its own conditions as values of a different use value-other commodities. [XXII-1396] Instead of being reproduced in the production process as conditions for its realisation, they on the contrary emerge from it as conditions for their own valorisation and preservation as values-for-themselves over against it. The material on which it works is *alien* material; just as the instrument is an *alien* instrument; its labour appears as a mere accessory to them as substance and therefore objectifies itself in things not belonging to it. Indeed, living labour itself appears as alien vis-à-vis the living labour capacity whose labour it is, whose life it expresses, for it is surrendered to capital in return for objectified labour, for the product of labour itself. Labour capacity relates to it as to something alien, as compulsory labour. Its own labour is alien to it—and, as we see in capitalist production, it really is alien, as regards its content, its direction, and its social form-just as much as material and instrument are. Therefore the product too appears to it as a combination of alien material, alien instrument and alien labour—as alien property, and after production it has become poorer by the life force expended, and it begins the DRUDGERY anew as labour capacity EMPLOYED by the conditions of labour.
The recognition of the product as its own, and its awareness that its separation from the conditions of its realisation is an injustice—*a* relationship imposed by force—is an enormous consciousness, itself the product of the capitalist mode of production and just as much the KNELL TO ITS DOOM as the consciousness of the slave that he could not be the property of another reduced slavery to an artificial, lingering existence, and made it impossible for it to continue to provide the basis of production.

However, if we consider the original relation, before money entered into the process of self-valorisation, we come up against various conditions which must have arisen, or been given, historically, for money to become capital and for labour to become wage labour. The essential conditions are posited in the relationship itself as it originally appeared: 1) On the one side, the existence of living labour capacity as a purely subjective existence, separated from the moments of its objective reality; therefore separated just as much from the conditions of living labour as from the means of existence, the means of subsistence, the means of self-maintenance of living labour capacity; the living possibility of labour on one side in this complete abstraction. 2) On the other side, the value or objectified labour must be an accumulation of use values, sufficiently large to provide the objective conditions not merely for the production of the commodities necessary to maintain or to reproduce living labour capacity, but also to produce surplus labour, to supply the objective material for it. 3) A system of free exchange-money circulation-between the two sides; a relationship between the two extremes which is based upon exchange values, not on the lord-subject relationship, i.e. production which does not directly supply the means of subsistence to the producer but is mediated by exchange; and therefore also does not have direct disposition over alien labour, but must buy it from the vehicle of this labour himself. Finally 4) the side which represents the objective conditions of labour in the form in which they have become independent must present itself as value, and the ultimate aim must be the positing of value, the self-valorisation of value, the creation of money-not immediate enjoyment or the creation of use values.

[XXII-1397] So long as both sides exchange their labour with one another in the form of objectified labour—as products, which are commodities—the relation is impossible. It is equally impossible if the worker himself appears as the property of the other side, himself belongs among the objective conditions of labour, and not as a person engaged in exchange. (That slavery can exist at individual points within the bourgeois system of production, does not contradict this. But slavery is then possible only because it does not exist at other points, and represents an anomaly in relation to the bourgeois system itself.)

The conditions under which the relationship originally appears, or which appear as historical presuppositions for its becoming, exhibit at first glance a dual character—on the one side dissolution of lower forms of living labour, on the other side dissolution of relations more fortunate for the immediate producer. On the one hand, dissolution of slavery and serfdom. On the other, dissolution of the form under which the means of production are immediately available as the property of the immediate producer, whether his work is *predominantly* directed at use value (agriculture) or exchange value (urban work). Finally, the dissolution of the form of *community* in which the worker, as organ of this naturally evolved community, is at the same time posited as owner or possessor of his means of production.//

[ADDENDA]

//Petty, Sir Dudley North, Locke. By comparing North's and Locke's writings with Petty's Quantulumcunque (1682) and A Treatise of Taxes, and Contributions (1667), their indebtedness to Petty can be seen. Thus in the matter of 1) the LOWERING of INTEREST;
2) the RAISING AND ABASING OF MONEY;
3) North's CALLING INTEREST THE RENT OF MONEY, etc. [W. Petty, The Political] Anatomy of Ireland (1672).

North and Locke wrote their works^a at the same time and on the same occasion: LOWERING OF INTEREST and RAISING OF MONEY. But [they have] opposite views. With Locke it is the want of money that is responsible for the high rate of interest and in general for the fact THAT THINGS DO NOT FETCH THEIR REAL PRICES and THE REVENUES TO BE PAID OUT OF THEM. North shows the opposite, that it is not want of MONEY but of CAPITAL OR REVENUE. We find in his works the first definite concept of *stock* or *CAPITAL*, or RATHER OF *money* as a mere *form of capital*, in so far as it is not means of circulation. In *Sir Dudley North*'s writings we find the first correct conception of interest as opposed to Locke's idea.

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^a [D. North,] Discourses upon Trade; Principally Directed to the Cases of the Interest, Coynage, Clipping, Increase of Money, London, 1691, and J. Locke, Some Considerations of the Consequences of the Lowering of Interest, and Raising the Value of Money (1691), in: The Works, 7th ed., Vol. II, London, 1768.— Ed.

Petty, A Treatise of Taxes, and Contributions, London, 1667. Supplementary points.^a

1) On the quantity of circulating money which a nation needs, §§ 14, 15 [p. 16].

His view of total production is shown in the following passage:

"If there be 1,000 men in a territory, and if 100 of these can raise the necessary food and raiment for the whole 1,000, if 200 more make as much commodities, as other nations will give either their commodities or money for, and if 400 more be employed in the ornaments, pleasure and magnificence of the whole; if there be 200 governors, divines, lawyers, physicians, merchants and retailers, making in all 900, the question is, etc.,¹¹⁹ concerning the *paupers ('supernumeraries')"* (p. 12).

In his analysis of rent and of its valuation in money, where he takes *EQUAL LABOUR* (QUANTITIES), Petty remarks:

* "This, I say to be the *foundation* of *equalising and balancing of values*; yet in the superstructures and practices thereupon, I confess there is much variety and intricacy"* ([p.] 25).

[XXII-1398] 2) What he was much preoccupied with is [the "natural par] BETWEEN LAND AND LABOUR" ([p.] 25).

* "Our silver and gold we *call* [by several names, as in England by] pounds, shillings, and pence, all which may be called and understood by either of the [three. But that which I] would say upon this matter is, that all things ought to be *valued by two natural denominations, which is land and labour*: that is, all ought to say, a ship or garment is worth such a measure of land, with such another measure of labour; forasmuch as both ships and garments were the *creatures of lands* and *men's labours thereupon*; this being true, we should be glad to cut a *natural par between land and labour*, so as we might express the value by either of them alone as well or better than by both, and reduce one into the other as easily and certainly as we reduce pence into pounds." *

For this reason Petty seeks the "*NATURAL VALUES* of the *FEE SIMPLE* OF LAND", after he has found the monetary expression of rent ([p.] 25).

His definition contains three overlapping elements:

a) The magnitude of value, determined by equal labour time, with labour figuring as the source of value.

b) Value as the form of social labour. Hence money is treated as the true form of value, although in other passages he overturns all the illusions of the Monetary System. With him, therefore, the definition of the concept.

c) Labour as the source of exchange value is confused with labour as the source of use value; and labour is seen as presupposing natural material (LAND). In fact, HE "CUTS" the "PAR"

^a See this volume, pp. 170-75.- Ed.

between LABOUR and LAND by presenting the *FEE SIMPLE* of the latter as capitalised rent-therefore not treating land as the natural material of real labour.

3) With reference to the rate of interest he says:

* "Of the vanity and fruitlessness of making civil positive laws against the laws of nature"* (i.e. the laws arising from the nature of bourgeois production) *"I have spoken elsewhere" * (l.c., [p.] 29).

4) In regard to rent: surplus value consequent on the greater productivity of labour:

* "If the said shires by greater labour than now is used (as by digging instead of ploughing, setting instead of sowing, picking of choice seed instead of taking it promiscuously, steeping [it] instead of using it wholly unprepared, and manuring the ground with salt instead of rotten straw, etc.), could be fertilised, then will the rent be as much more advanced, as the excess of increase exceeds that of the labour"* ([p.] 32).

(He means here the price or wages of LABOUR.)

5) RAISING [the value] OF MONEY (§§ 18-19).^a

6) The passage quoted earlier^b "if you allow double, then he works BUT HALF SO MUCH, etc." must be taken to mean: If the worker received for 6 hours the value of 6 hours, then he would receive DOUBLE what he now receives, and he receives the value of 6 for 12. He would then work only 6, "which is a loss to the public, etc."

Petty, An Essay Concerning the Multiplication of Mankind (1682). Division of labour (pp. 28-29).¹²⁰

Political Anatomy of Ireland (and Sapienti Sat.), 1672 (London edition, 1691).

1) * "This brings us to the most important consideration in political oeconomies, viz. how to make a par and equation between land and labour, so as to express the value of any thing by either alone"* ([p.] 63).

In fact, the task in this connection is only to resolve the value of land itself into labour.

[XXII-1399] 2) This work was written later than the one examined earlier.^c

* "The day's food of an adult man, at a medium, and not the [day's labour, is the common measu] re of value, and seems to be as regular and constant as the value of fine silver... Wherefore I valued an Irish [cabin at the] number of day's food, which the maker spent in building of it" * ([p.] 65).

This latter statement is quite Physiocratic.

^a [W. Petty,] A Treatise of Taxes, and Contributions, London, 1679, Ch. XIV, p. 64.— Ed.

^b See this volume, p. 172.—*Ed.* ^c This refers to *A Treatise of Taxes, and Contributions,* the first edition of which appeared in 1662.-Ed.

* "That some men will eat more than others is not material, since by a day's food we understand 1/100 part [of what 100] of all sorts and sizes will eat, so as [to] live, labour, and generate" * ([p.] 64).

But what Petty is searching for here in the *statistics* of Ireland is not the *common* measure of values, but the measure of *values* in the sense that *money* is the measure of values.

3) Quantity of money and wealth of the nation (Verbum Sapienti, 1672, [p.] 13).

4) Capital.

"What we call the wealth, stock, or provision of the nation, being the effect of the former or past labour, should not be conceived to differ from efficiencies in being" ([p.] 9).

5) Productive power of labour.

* "We said, that half the people, by a very gentle labour, might much enrich the kingdom ... upon what shall they employ themselves? To which I answer in general, upon producing food and necessaries for the whole people of the land, by few hands; whether by labouring harder, or by introducing the compendium, and facilitations of art, which is equivalent to what men vainly hoped from polygamy. For as much as he, that can do the work of five men by one, effects the same as the begetting four adult workmen" ([p.] 22). "Cheapest food ... will be when food also is raised by fewer hands than elsewhere" * ([p.] 23).

6) Purpose of men and goal ([p.] 24).

7) On money, see also the Quantulumcunque (1682).//

//Buat (comte du), Éléments de la politique, ou Recherche des vrais principes de l'économie sociale (6 volumes), London, 1773.

This feeble and diffuse writer, who takes the outward form of Physiocracy for its essence and glorifies the landed aristocracy and in fact accepts Physiocracy only in so far as it serves this purpose—would not have to be mentioned at all but for the fact that the brutal characteristics of the bourgeois emerge so sharply in his work; quite as sharply as, e.g., in Ricardo's writings later. His error in restricting the net product to rent makes no difference to this.

What Buat says is repeated by Ricardo in relation to the net product in general.^a The workers belong to the *faux frais*^b and exist only in order that the owners of the net product may "form society". (See the relevant passages.¹²¹) The free worker's lot is conceived as only a changed form of slavery; but this is necessary so that the higher strata may form "society". // Arthur Young too

^a See D. Ricardo, Des principes de l'économie politique et de l'impôt, Paris, 1819, Ch. XXVI, and present edition, Vol. 31, pp. 116-19, 126-29.-- Ed.

^b Incidental expenses.— Ed.

sees the net product, surplus value, as the purpose of production.^{a 122}//

[XXII-1400] In this connection we may recall the passage in Ricardo, directed against Adam Smith, for whom that capital is the most productive which employs the greatest number of workers.^b On this, compare *Buat*, pp. 30-31; also on the labouring class and slavery ([pp.] 28-29); on the necessity for these labourers to work surplus time, and on the meaning of the *strict nécessaire*^c ([p.] 30). The one passage to be quoted here—because it deals well with the prattle about the *risk* that the capitalist always runs:

"They" (the merchants) "have risked much to gain much? But they have risked men, and goods or money. As for the men, if they have exposed them to manifest peril for the sake of gain, they have done a very wicked act. As for the goods, if there is any merit in producing them, there should be no merit in risking them for the profit of one individual, etc." (Vol. II, [p.] 297).^d//

//Capitalist cultivation of the land:

"As the LAND is PUT IN BETTER ORDER, AN ACRE TAKES LESS CORN TO SOW IT, AND LESS STRENGTH" (HORSES, etc.) "TO MANAGE IT" (An Essay on the Causes of the Present High Price of Provisions, as connected with Luxury, Currency, Taxes, and National Debt, London, 1773, p. 13) (author: Dickson, AUTHOR of The Husbandry of the Ancients).

Rent. The pamphlet cited quotes An Inquiry into the Late Mercantile Distress, in Scotland and England etc., London, 1772, and in the latter work, which apart from this calls for an increase in the CURRENCY, against which the Essay protests (see p. 245 of the Thick Notebook 123), complaint is made about the great increase in rents. The author says that the view of the LANDLORD is

* "that to advance the rents was the first step to improvements in agriculture" (An Inquiry etc., p. 36). "The rents have been greatly advanced in general all over the country" (Scotland), "and in some parts of it, to a degree that hardly admitted of the tenants' absolute wants being supplied" * ([p.] 38). Many TENANTS had therefore emigrated to America ([pp.] 51[-52]).

In the Essay now (1773) the rise in the price of corn in England is in part explained by the fact that the demand for BUTCHERS MEAT has led to the conversion of the larger part of the land to pasture, and that in England

*"the arable lands are kept in constant tillage; and the grasslands, whether meadows or upland pastures, are kept perpetually in grass" * ([p.] 15).

^a See A. Young, Political Arithmetic. Containing Observations on the Present State of Great Britain..., London, 1774.— Ed.

^b See D. Ricardo, Des principes de l'économie politique et de l'impôt, Ch. XXVI, and present edition, Vol. 31, pp. 116-19, 126-29.— Ed.

^c Absolute necessities.— Ed.

^d Marx quotes in French.--- Ed.

On the Scottish method, by which lands cultivated in GRASS and CORN are constantly rotated between the two, there is higher production of both corn and meat. On the English method, there is *less corn*, and not much more BUTCHERS' MEAT, but it is HIGH-FED. According to Dickson, therefore, the irrational system of cultivation in England is the cause of the RISE in the PRICE OF CORN, etc. (disregarding the bad SEASONS).

* "It is a certain truth, that a great quantity of our best lands, formerly in tillage, is now lying in grass" ([p.] 9). "Provisions in general are reduced in their quantity, and therefore must be raised in their price"* ([p.] 17). The "FREE IMPORTATION" OF CORN is proposed as one means of LOWERING the PRICES OF PROVISIONS (pp. 73 sqq.).

But there is no way of helping the depressed state of manufactures except:

* "by reducing the price of materials and labour: and this can only be done by reducing the *price of provisions.* The *landholder* is in a different situation from the manufacturer: For as in all farms lately taken in lease, the *rent* is adapted to the present *high price* of their productions; if this price is reduced, the *tenants* of these farms must undoubtedly fail" ([p.] 81). "What is to be done for the support of the farmer? Is he to be left to the mercy of his landlord?" ([p.] 82). "There are some" (landlords) "who have no more compassion for their tenants than for the Moors of Bengal, or the Caribs of St. Vincents. Immersed in dissipation, or possessed by avarice, they assign the management of their country affairs to persons whose whole merit consists in being expert in bargain-making, and who are the more highly valued, the more they are habituated to the low arts of trick and cunning"* ([p.] 83).

If prices are reduced through "FREE IMPORTATION" or "regulation of the CURRENCY" ([pp.] 84 sqq.) it will therefore not be necessary

* "that a breach be made in their leases... Should rents be reduced in proportion to the price of commodities, they" * (the * landlords) "will still be able to live as well as at present" * ([p.] 84) (namely on account of the reduced prices of the COMMODITIES).

[XXII-1401] With him the excessive issue of paper is also a reason. He is a CURRENCY PRINCIPLE MAN.³²⁴

He indicates TAXES as a further cause of the rise in the prices of PROVISIONS.

*"Taxes raise the price of all commodities" * ([p.] 89).

Hence, on pp. 87 sqq., a rise in the PRICE of PROVISIONS with the rise in the PUBLIC DEBT. Only one TAX without

* "such [a] bad consequence - a tax on stockholders" * ([p.] 89).

Apart from the TAXES there is

* "the money spent by the taxgatherers" * ([p.] 92).

He proposes

* "the saving of 1 or 2 millions annually on the article of posts and pensions" * ([p.] 93).

Tithes to be assessed in money, as has long been the case in Scotland ([p.] 104). The division of commonties (l.c.).

* "Making roads in the country at the public expense" * ([p.] 105).

Not only do roads open markets to the farmer, he

"gains * access to foreign manure for improving his lands ... the advantages of one place are communicated to all*" ([p.] 106).

What is the cause of the rise in rents? Not bad seasons. For

"if the *price of provisions is raised * by *bad crops, land continues of the same value, and the farmer cannot afford a higher rent... In proportion to this" (advancement of price) "the quantity which he sends to market is lessened *" ([p.] 6).

Nor can improvements be the cause.

Not only "have rents risen nearly in the PROPORTION mentioned IN PLACES where no IMPROVEMENTS have been made", but also * "it is even probable that they" (the improvements) "have prevented the price of provisions from rising so high as otherwise it would have done" ([p.] 7).

"When the price is raised by other causes" * (than * bad seasons), "the produce of the land becomes more valuable, and, in proportion to this, the farmer can afford an advancement of rent. When therefore the rise of rents keeps pace with the price of provisions, it is a certain evidence that in the opinion of the farmers the advancement of the price is not owing to bad crops"* ([p.] 6).

But now rents have risen, particularly in Southern Scotland,

* "nearly in the same proportion as the price of grain and cattle" * ([pp. 6-]7).//

//Charles Smith, A Short Essay on the Corn Trade, and the Corn Laws etc., London, 1758. (The CORN TRACTS to be cited later.) The tendency of this pamphlet can be seen from the following:

* "Although it be the general opinion that the present dearness of corn arises principally from the avarice of the farmers and [the] iniquity of the factors, merchants, millers, bakers and dealers in corn; yet there is cause to believe that it arises chiefly, if not wholly, from a real scarcity, occasioned by the shortness of crops * in the last 4 to 5 years, 1756 in the whole * kingdom, 1752-55 in * its * West and Northwest parts" * ([Ch. Smith, Three Tracts on the Corn-Trade and Corn-Laws, London, 1766, p.] 5).^a

He develops the laws of supply and demand against POPULAR PREJUDICES.// (This is the first of the Three Tracts on the Corn-Trade and Corn-Laws published together in 1766.)

//Edmund Burke (THE LATE), Thoughts and Details on Scarcity, originally presented to the Right Hon. William Pitt, in the month of November, 1795, London, 1800.

^a Marx quotes with some alterations.- Ed.

* "The labouring people are only poor because they are numerous. Numbers, in their nature, imply poverty" * ([p.] 2).

This "deep" thinker considers that if x is divided into 100 each of the 100 receives more than if x is divided into 1,000. What depth of insight, which contrasts particularly finely with the following statements:

Surplus value. Constant and variable capital.

*"Those who labour ... in reality feed both the pensioners called the rich and themselves" ([pp. 2,] 3).

"Of all the instruments of his" (the farmer's) "trade, the labour of man (what the ancient writers have called the instrumentum vocale) is that on which he is most to rely for the re-payment of his capital. The other two, the semi-vocale in the ancient classification, that is, the working stock of the cattle, and the instrumentum mutum [XXII-1402] such as carts, ploughs, spades, and so forth ... without a given portion of the first, are nothing at all" * ([p.] 10).

(Amusing doggerel poem by Spence: E. Burke's Address to the Swinish Multitude, 1795.)¹²⁵

Value of labour. Employment of many workers.

* "Unquestionably, there is a good deal of difference between the value of one man's labour and that of another, from strength, dexterity, and honest application. But I am quite sure, from my best observation, *that any given five men* will, in *their total*, afford a proportion of labour equal to any other five within the periods of life I have stated; that is, that among such 5 men there will be one possessing all the qualifications of a good workman, one bad, and the other three middling, and approximating to the first and the last. So that in so small a platoon as that of even five, you will find the full complement of all that 5 men *can* earn"* ([pp. 15-]16).

Concentration of capital.

*"The monopoly of authority is, in every instance and in every degree, an evil; but the monopoly of capital is the contrary" * ([p.] 25).

(As if the "MONOPOLY OF CAPITAL" did not give a "MONOPOLY OF AUTHORITY"!)//

Primitive accumulation. Let us take Price's pamphlet and the reply to it.^a

Dr. Richard Price, Observations on Reversionary Payments (the 3RD ED., to which the reply makes reference, is that of 1773), 6th ED., 2 VOLS (EDITED BY William Morgan, London, 1803).

Price, l.c., Vol. II:

*"If land gets into the hands of a few great farmers ... the little farmers" * (described earlier as *"a multitude of little proprietors and tenants, who maintain themselves and families by the produce of the ground they occupy, by sheep kept on a common, by poultry, hogs, etc., and who, therefore, have little occasion to

^a This refers to [J. Arbuthnot,] An Inquiry into the Connection between the Present Price of Provisions, and the Size of Farms.., London, 1773.— Ed.

purchase any of the means of subsistence")^a "will be converted into a body of men who earn their subsistence by working for others, and who will be under a necessity of going to market for all they want" ([p.] 147). "There will, perhaps, be more labour, because there will be more compulsion to it" ([p.] 147). "More bread will be consumed, and, therefore, more corn grown: because there will be less ability of going to the price of other food" ([pp.] 147-48). "Towns and manufactures will increase, because more will be driven to them in quest of places and employments. This is the way in which the engrossing of farms naturally operates: And this is the way in which, for many years, it has been actually operating in this kingdom" ([p.] 148). "The very causes which produce depopulation among us, may, for some time, promote tillage"* ([p.] 148).

Shows further on pp. 149-52 (p. 32 of the notebook 126), that the LABOURING CLASSES consumed disproportionately *more meat*, and that therefore the *price of corn*, especially wheat, is of less concern to them.

Cites Rev. MR. Addington's Enquiry into the Reasons for and against Inclosing Open-Fields, London, 1772, pp. 43 and 37:

"In Northamptonshire and Leicestershire, *inclosing ¹²⁷ has greatly prevailed, and most of the new enclosed landskips are turned into pasturage; in consequence of which, many landskips have not now 500 acres ploughed yearly, in which 1,500, or at least 1,000 were ploughed formerly; and scarce an ear of corn is now to be seen in some that bore hundreds of quarters. And so severely are the effects of this felt, that worse wheat has been lately sold in those counties at an average of 7s. and 7s. 6d. the Winchester bushel, for many months together than used to be sold at 3s. 6d. and 4s., etc." * ([p.] 43).

Addington also says:

*"In the counties of Northampton and Leicester the decrease of the inhabitants in almost all the inclosed villages in which [XXII-1403] they have no considerable manufacture, is obvious to be remarked by every one who knew their state 20 or 30 years ago, and sees them now... The ruin of former dwelling houses, barns, stables, etc., shew every one who pass through them that they were once better inhabited. A hundred houses and families have in some places dwindled into 8 or 10 [pp. 43, 44]. The *landholders*, in most parishes that have been inclosed only 15 or 20 years, are very few in comparison of the numbers who occupied them in their open field state. It is no uncommon thing to see 4 or 5 wealthy graziers *engrossing* a large inclosed lordship, which was before in the hands of 20 or 30 farmers, and as many smaller tenants or proprietors. All these *are thrown out of their livings with their families*, and many other families which were employed and supported by them''* (Addington, [pp.] 37[-38]).

Price comments on these quotations from Addington:

*"I have here in view inclosures of open fields and lands already improved. It is acknowledged by even the writers in defence of inclosures, that these diminish tillage, increase the monopolies of farms, raise the prices of provisions, and produce depopulation. Such inclosures, therefore, however gainful they may be at present

^a In the original the words given by Marx in brackets immediately precede the passage in which he includes them here.—Ed.

to a few individuals, are undoubtedly pernicious. On the contrary. Inclosures of waste lands and commons would be useful, if divided into small allotments, and given up to be occupied at moderate rents by the poor. But if, besides lessening the produce of fine wool, they bear hard on the poor by depriving them of a part of their subsistence, and only go towards increasing farms already too large, the advantages attending them may not much exceed the disadvantages" * ([pp.] 155-56, note).

(One can see from these quotations how shallowly and optimistically the matter is conceived by that compiler and arch-plagiarist MacCulloch in his *Literature of Political Economy*, London, 1845 (p. 194):

* "To whatever other causes the increase of prices might have been ascribed, one could hardly have imagined that the extension of enclosures would have been of the number. Indeed, if there be any thing that contributed more than another to the vast increase that has taken place in the produce of England since the middle of the last century, it has been the enclosure of wastes, etc." *)

One can see how with contemporaries of the process, which forms a major moment in the primitive accumulation of capital namely (quote Steuart^a later) the separation of the earth from its INDUSTRIOUS CHILDREN—the formation of big FARMS is the characteristic FEATURE, as "INGROSSING" (this is only another word for the concentration of many small FARMS in a single hand). Just as Mirabeau describes large-scale manufactories as "fabriques réunies",^b small MANUFACTURING CONCERNS concentrated in one hand.

This *primitive accumulation*, which looks so idyllic in the hands of the liberal cretins, is a most melancholy and tragic story.

Concentration of the available conditions of production in a few hands, and their separation from the hands of the direct producers, as whose property or possessions they originally appear, is the decisive factor. On the theft of the possessions of the church by the nobility and the bourgeoisie, see Cobbett's HISTORY of the Reformation.^c The beginning of the liberal regime sees the *FRAUDULENT* appropriation of the ESTATES of the CROWN (see F. Newman^d). The *FRAUDULENT* ENCLOSURES of the COMMONS. (The passages cited, and others.) In this connection the destruction of the *YEOMANRY*,⁷⁸ the SELF-CULTIVATING PROPRIETORS //as also the COTTIERS⁴³//, who had in their hands perhaps $^{7}/_{10}$ of the land after 1689, and were in fact the owners of property.

^a J. Steuart, An Inquiry into the Principles of Political Oeconomy..., Vol. I, London, 1767, p. 50.- Ed.

^b Associated factories. See [H. G. V. R.] Mirabeau, De la monarchie prussienne, sous Frédéric le Grand..., Vol. 3, London, 1788, p. 20.- Ed.

^c W. Cobbett, A History of the Protestant "Reformation", in England and Ireland..., London, 1824.— Ed.

^d F. W. Newman, Lectures on Political Economy, London, 1851, pp. 129-30.- Ed.

[XXII-1404] (See Macaulay^a and passages to be cited later.) They were defeated by the improvements in agriculture, by competition from the large-scale FARMERS (since from 1700 to ABOUT 1750 there was an almost continuous fall in the price of grain^b), by the increasing burden of the taxes (national debt, etc., standing army, etc.) and by the collapse of the rural side-industries, which were unable to compete with the factories. For the way in which the LABOURERS themselves were starved out by the taxes on the means of subsistence (CUSTOMS AND EXCISE), see later quotation.^c (The whole system of the protection of agricultural and MANUFACTURED PRODUCE, together with the development of foreign trade, of the colonial system and the credit system, played a part in promoting the acceleration of accumulation, the accumulation of capital at the expense of the working class and the old GENTRY, and the transformation of the independent producers into simple wage labourers. The sudden creation of large *fortunes* through state debts (=stock-exchange swindles), as well as through the newly arisen intermediary agents, FACTORS, BROKERS, etc., accelerated the concentration of money in a few hands. This money subsequently functioned as capital in part in agriculture and manufacture, or also, through the purchase of land, promoted the new system of FARMING, as conducted by LANDLORDS aiming purely at MONETARY REVENUE.)

Systematically conducted by the CLEARING OF ESTATES^d (the conversion of clan-based or feudal landed property into modern landed property, the forcible separation of the old TENANTS from their conditions of production, involving murder and manslaughter, and military operations, their forcible CONVERSION INTO BEGGARS, the burning down of COTTAGES. Since the middle of the 18th century in the Scottish Highlands. Repeated in the 19th. In part still continuing. First conversion into sheep pastures, later on (now) even into artificial forests for hunting grounds; the inhabitants were legally prohibited from *emigrating* in the 18th century, so as to drive them into the factories. Some became fishermen, fled to the coast. Again driven from there, once the LANDLORDS found it advantageous to make contracts with the big London fishmongers, who conduct the business on a large scale). (In England the conversion of arable land into pasture since the decade prior to the middle of the 18th century through ENCLOSURES OF COMMONS, the

^a Th. B. Macaulay, The History of England from the Accession of James the Second, 10th ed., Vol. I, London, 1854, pp. 333-34.— Ed.

^b See also present edition, Vol. 31, pp. 363-64, 370-71.- Ed.

^c No such quotation occurs further in the text.- Ed.

^d See present edition, Vol. 31, pp. 458-59.- Ed.

throwing together of small farms. This is still proceeding now. The CLEARING OF ESTATES has taken place again in Ireland on a very large scale since 1846. The death by hunger of 1 million Irish and the driving of another million overseas—this was a CLEARING OF THE ESTATE OF IRE AND. Still continuing. (Cite details on this.) The CLEARING OF ESTATES only shows, as a systematic process applied to whole counties, what occurred everywhere in detail in that primitive accumulation, as a result of the changed relations of production.)

Now against Price, Addington, etc.:

An Inquiry into the Connection between the Present Price of Provisions, and the Size of Farms etc. By a Farmer, London, 1773.^a This fellow shrugs his shoulders over those whose philosophy "DOES NOT SEE BEYOND THE BELLIES OF THE POOR". Modern political economy can certainly not be reproached with this.

*"The culture of the earth cannot be overdone" * ([p.] 62).

The fellow is a FREETRADER:

REPEAL of the CORN LAWS; * "make the trade free and open for export or import at all times and on all occasions, without the least restraint ... let corn flow like water, and it will find its level" * ([p.] 88).

//FREE TRADE, leaving aside the abolition of restrictions on international trade, means nothing but the *free, unrestricted development* of capitalist production and its laws, without any regard for the agents of production, without any regard for any [XXII-1405] considerations which fall outside the laws and conditions of the *development of capital*, whether those considerations are national, humanitarian or whatever. The previous restrictions, in so far as they proceed from the MANUFACTURERS, LANDOWNERS, etc., themselves have the purpose of first creating the conditions in which *capital* can proceed from itself as its own presupposition. It is only at a *certain point* in its development that it ceases to need any EXTRANEOUS help.//

* "Absolute necessity of a perfect freedom in trade in general, but most especially in that of corn" * ([p.] 135).

Against Price:

* "Nor is it a consequence that there must be depopulation, because men are not seen wasting their labour in the open field" ([p.] 124).

"If by converting the little farmers into a body of men who must work for others more labour is produced, it is an advantage which the nation should wish for" ([p.] 128). "The produce being greater when their joint labours are employed on one farm, there will be a surplus for manufacturers, and by these means manufactures, one of

^a This work, published anonymously, was written by John Arbuthnot.- Ed.

the mines of this nation, will increase, in proportion to the quantity of corn produced" * ([p.] 129).

//It is not just the surplus which is created by the increased productivity of capitalist production. If, for example, only 3 people are now necessary in place of 4 previously employed on the land, and at the same time the variable capital is replaced by constant capital and the 3 are thrown into manufacture, part of the FARMER's constant capital is exchanged for the variable capital of the MANUFACTURER. The 3 now receive the quantity of corn they consumed previously as peasants on the land in the form of a wage from the MANUFACTURER. Thus, more grain is thrown onto the market, not because a surplus has been produced, but because the part of the product which was previously consumed directly by the 3 as peasants is now purchased by the same 3 people as workers in MANUFACTURE. More has been thrown onto the market because more consumers have been taken from agriculture and thrown into manufacture. What is gained by this is not a SURPLUS OF CORN PRODUCE, but more MANUFACTURING PRODUCE.

He admits that meat continued as late as 1697 to be the chief element in the diet of the workers ([p.] 130).

Incidentally, he has the right idea (hence *before* Adam Smith) about changes in the relative prices of meat and corn and the way they balance out:

* "The value of the one must fall, or that of the other rise, till they come on a par... The only method of ascertaining what should be the price of the one for it to be in proportion to that of the other, is to allot a certain sum of money to the raising of corn, and an equal sum to the rearing and fattening of cattle; an equal profit will determine the real value of each"* ([pp. 132-]33).

(In this passage rent is not included among the costs of production.) This passage is important for prices of production.¹²⁸

*" If no labour was wanted, there could be no price" * ([p.] 138).

This man concedes to Dr. Price that wages have not risen in proportion to the PRICE OF PROVISIONS, and adds in congratulation:

*"In the circumstance of the price of labour's not being increased in the proportion of the price of provisions, the Doctor's" (Price's) "assertion corroborates what is said in the valuable works of Mr. Arthur Young, and will, I hope, pacify the minds of those who imagine that the dearness of provisions must ruin our manufactures" * ([p.] 138).

(This latter point was the general view at that time.)

[XXII-1406] * "I most truly lament the loss of our yeomanry, that set of men who really kept up the independence of this nation; and sorry I am to see their lands now in the hands of monopolising lords, tenanted out to small farmers, who hold their leases on such conditions as to be little better than vassals ready to attend a summons on every mischievous occasion. With regard to the class called hirelings, I believe they are mostly in the same state as they were, with the benefit of work at present, instead of being prowling about commons and wastes"* ([p.] 139).

The following passages for *Smith's* opinion, that corn creates its own consumers and always has value:

* "The culture of the earth cannot be overdone" ([p.] 62).

"Corn is scarce or not scarce in proportion to the consumption of it. If there are more mouths, there will be more corn, because there will be more hands to till the earth; and if there is more corn, there will be more mouths, because plenty will bring people" ([p.] 125).

"Profuse plenty in manufacturing towns does not produce more labour, but the contrary. It is a fact well known to those who are conversant in that matter, that scarcity, to a certain degree, promotes industry, and that the manufacturer who can subsist on three days' work, will be idle and drunken the remainder of the week"* ([p.] 93).

This fellow, who gives very precise calculations of the income and expenditure of the FARMERS (pp. 146, 103-07), says:

* "By the foregoing estimate it appears that the farmer may, by great care and with good luck, obtain about 25 p.c. per annum, but to do this he must sell his wheat [at] 46s. 8d., etc. It is not every soil that will admit of a course attended with so much profit" * (l.c. [p. 107]).

It will be seen how the big FARMERS enriched themselves at that time—how they accumulated capital—through the impoverishment of the LABOURERS and EXPROPRIATION of the SMALL TENANTS. From the end of the 14th or the beginning of the 15th through the 16th century we have the conversion of arable land into sheep pastures. The English laws against this. In the 17th century under Elizabeth, and similarly from the time of the Revolution¹²⁹ until 1697, the small TENANTS and OCCUPIERS again increase, in part through the extension of corn cultivation, in part because manufacture [ha]s¹³⁰ to perform part of its preparatory work (e.g. spinning) on the land.

[The fact that] this "accumulation of capital" went hand in hand with the impoverishment of the workers can also be seen from Price.

[Pric]e says¹³¹:

[...] Bacon, Essays, Civil and Moral, Sect. 20, says:

"The device of King Henry VII was profound and admirable, [in mak]ing farms and houses of husbandry of a standard; that is, maintained with such a proportion of land to [them, as may breed a su]bject in convenient plenty and no servile condition, and to keep the plough in the [hands of the owners and] not hirelings." "Inclosures," says Bacon in his history of the REIGN of Henry VII, [*"began at that] time (1489) to be more frequent, whereby arable land was turned into pasture, which was [easily manag]ed by a few herdsmen. This bred a decay of people... They" (King and parliament) "took a [course to take] a way depopulating inclosures and depopulating pasturage by consequence. The ordinance was, [that all houses of hus]bandry with 20 acres of ground to them, should be kept up for ever, together [with a ... pr]oportion of land to be occupied with them, and in no wise to be severed from them. [By these means, the houses bein]g kept up, did of necessity, enforce that dweller not to be a beggar."*

This statute [was renewed under Henry VIII. Every person who] converted [tillage into] PASTURE [was subjected to a] FORFEITURE [of] HALF THE LAND ([Price, op. cit., Vol. II, pp.] 156, 157).

[XXIII-1407]¹³² In a LAW passed in the 25th year of the reign of *Henry VIII* IT IS SET FORTH

* "that many farms, and great plenty of cattle, particularly sheep, had been gathered into few hands, whereby the rents of land had been increased, and tillage very much decayed; churches and towns pulled down; the price of provisions excessively enhanced and marvellous number of people rendered incapable of maintaining themselves and families; and, therefore, it was enacted, that no person should keep above 2,000 sheep nor hold more than two farms."

"In 3 Edward VI a bill was brought in for the benefit of the poor, for rebuilding decayed farm houses, and maintaining tillage against too much inclosing. [In] 1638, there was a special commission from Charles I, for enforcing the statute of 30 Elizabeth, by which no cottage was allowed in any country place, without at least 4 acres [of] land to it, to prevent the increase of the poor, by securing to them a maintenance, nor were any inmates allowed in a cottage, to secure the full cultivation of the land, by diffusing the people more over it" ([Price, op. cit., pp.] 157, 158). "By an act in Cromwell's time, no new house was to be built within 10 miles of London, unless there were 4 acres of land occupied by the tenant" (l.c.).

"Such",* says Dr. Price, * "was the policy of former times. Modern policy is, indeed, more favourable to the higher classes of people; and the consequence of it may in time prove, that the whole kingdom will consist of only gentry and beggars, or of grandees and slaves" ([p.] 158).

"As in former times the number of occupiers of land was greater, and all had more opportunities of working for themselves, it is reasonable to conclude, that the number of people willing to work for others, must have been smaller, and the price of day labour higher. This is now the case in our American colonies, and this likewise, upon inquiry, I find to have been the case in this country formerly" ([pp.] 158, 159). "The nominal price of day-labour is at present no more than about 4 times, or at most 5 times higher. So far, therefore, has the price of labour been from advancing in proportion to the increase in the expenses of living, that it does not appear that it bears now half the proportion to those expenses that it did bear formerly" * ([p.] 159).

Price quotes:

//MR. Kent, Hints to Gentlemen of Landed Property etc., London, 1776 (2nd ed., 1793), p. 273:

* "The balance at present is considerably against the labourer... The great increase in the poor rates may be accounted for in a few words. The rise upon land and its produce, is at least 60 p.c., the rise upon labour not above 20 p.c. The difference is of course against the working hands; and when their earnings are insufficient for the absolute necessaries of life, they must inevitably fall upon the parish." *//

Further, Price himself says:

* "Upon the whole. The circumstances of the lower ranks of men are altered in almost every respect for the worse. From *little occupiers of land*, they are *reduced* to the

state of *day-labourers* and *hirelings*; and at the same time their subsistence in that state is become more difficult"* ([pp.] 159 sqq.).

[XXIII-1408] // Value and PRICE. Let us suppose that the quantity of labour SPENT UPON AN ACRE OF LAND (IN WHEAT) is represented by a quantity of money, $= \pounds 7$.

*"His" * (the * farmer's) "expenses will always be nearly the same, but his crop may vary, therefore his wheat should sell in proportion to his crop" * ([J. Arbuthnot,] An Inquiry into the Connection etc. By a Farmer, London, 1773, [p.] 107).

The example is a good one, because it is presupposed with some likelihood that *labour* remains exactly the same.

Then:

* "When	he h	as 5 qrs	he can	sell at	28s.—£7
		$4^{1/2}$		about	31s.—ditto*
		4			35s.
		31/2			40s.
		3 -			46s. 8d.
		$2^{1}/_{2}$			56s.
		2 -			70s." (l.c., [p.] 108).//133

This FARMER, in An Inquiry into the Connection etc., presents the FREE TRADE doctrine in its double aspect. On the one hand FREE IMPORT and EXPORT. On the other hand

* "perfect freedom in markets¹³⁴: every restraint on the sale of a commodity, is a check on the trade, and must necessarily enhance the price of the commodity" * (l.c., [p.] 110).

This absolute free movement of capital, according to its own immanent laws, expresses itself at the same time as utter ruthlessness towards the LABOURING POPULATION, who only figure among the "faux frais"^a of capital. As long as capitalist production has not yet produced for itself all the conditions of its free development—and the most essential one is the formation of a class of wAGE LABOURERS absolutely dependent on capital—capital regulates and intervenes, until it has made the conditions adequate to its needs. The measures by which it protects itself against foreign competition are presented as MEANS FOR SECURING THE LABOURING PEOPLE THEIR EMPLOYMENT. The application of forcible methods at home is in part presented as [a means for achieving] the national goal of PRODUCING "THE GREATEST QUANTITY" POSSIBLE (l.c., [p.] 3), and in part [as a way of ensuring] that labour does not go to waste and that we SHALL NOT BE UNDERSOLD BY FOREIGNERS.

This FARMER (just cited) shows the development of productive power resulting from the capitalist farming of the land. And on the

^a "Incidental expenses".- Ed.

other hand, economy in the use of constant capital. The small FARMER does not have at his disposal the appropriate number of horses; he needs apart from this relatively more ready money and more workers ([pp.] 5, 6 sqq.).

* "There are operations on ... almost every kind of soil, which, at different times, require different strength of horses: f.i. sometimes 6 horses will be required in 1 plough, to break up a piece of ground for fallow; thus, in this instance, the farmer of 300 acres will have 2 ploughs at work, when the little farmer cannot have one, but must wait till it is [XXIII-1409] perhaps too late to recover his season; or at least he will have lost all the benefit of the roasting weather, which is to make his fallow. On the other hand, there are many operations in fallowing, and in seed time, when three-horse ploughs are sufficient; in which case the farm of 300 acres will have 4 three-horse ploughs at work when the other can have but one" * [p. 6]. "...Hence the *farmer of 300 acres, with a proportionate capital and number of horses, is able to do more than his proportion of work in the same time; and the doing of it at the critical juncture" * //see Liebig on this as well 135// * "is of so much the greater consequence; thus his ground is naturally in better tilth, his fallows, seed-time, dung-cart, in short, every operation performed better, because they can be dispatched; and his ground being in better order, it will not be denied but that his produce must be greater" ([p.] 7).

"The great farmer will also have a considerable advantage in respect to his carts and waggons... The same will hold good with regard to harrows, rollers, and many other implements" * ([pp.] 8-9). ¹³⁶

Further:

* "The keeping of livestock; oxen or sheep, or both... It may be asked ... whether an equal number of cattle may not be kept on the three small farms? The reasons why they cannot are many: The purchasing of stock and providing artificial food for them, not only requires capital, but the resolution of a man in an extensive business... This is one of the great advantages which attends the farmer who at the same time is [a] grazier ... he can, by the assistance of artificial pasture, bring cattle to market at a cheaper rate than when fed on old pastures and hay" * ([pp.] 9, 10).

The small FARMER needs relatively speaking as many workers as the big one, and even more. If they are his own children,

"they are not maintained for so little as hired servants ..."

If the FARMER works himself,

* "he is a loser by it. His employment should be, a general attention to the whole: his thresher must be watched ... his mowers, reapers, etc., must be looked after; he must constantly go round his fences; he must see there is no neglect; which would be the case if he was confined to any one spot..."*

As regards the FARMERS themselves

*"there are 3 men employed to look after 300 acres, which would be at least as well managed by one man on his horse" ([pp.] 11, 12).

"This calculation of the comparative advantage of labour on the great and small farms, only regards the common business of a farmer, without taking in the several great works of marling, land-draining, etc. ... which there is rarely, if ever, an instance of on small farms, for *want of a sufficient capital* for such an undertaking" * ([p.] 13).

RENT: Some people praise

* "the old method of calculating the profits of the farmer by the *three rents. In* the infancy of agriculture, it was a conscientious and equal partition of property; such as it is now practised in the less enlightened parts of the world; in most parts of France, Germany, and in some of our American colonies: the one finds land and capital, the other knowledge and labour: but on a well-cultivated and good soil, the rent is now the least object: it is the sum which a man can sink in stock, and in the annual expense of his labour, on which he is to reckon the interest of his money or income"* ([p.] 34).

[XXIII-1410] // Pauperism. An Inquiry into the Management of the Poor etc., London, 1767, p. 84:

* "The poor always have, and ever must at least keep pace with, if not out-run, the public provision made for their relief."*

Hence this PUBLIC PROVISION is the cause of pauperism. N'est-ce-pas?^a//

//An Enquiry into the Causes of the Present High Price of Provisions. In two parts (the author is Rev. Nathaniel Forster), London, 1767.

The causes of the rise in the price of provisions are

1) "THE WEALTH OF THE COUNTRY, OR THE GREAT QUANTITY OF MONEY ACCUMULATED IN IT, AND CIRCULATING THROUGH EVERY PART OF IT" ([p.] 1), 2) LUXURF and 3) TAXES.

Too great a natural fertility is unfavourable to the development of a country (l.c., Supplementary Notebook B, p. 8^{137}).

Defence of machinery (l.c., pp. 8 and 9).

Antagonism between classes.

*"The landed and trading interests are eternally jarring, and jealous of each other's advantage" * (l.c., [N. Forster, op. cit.,] p. 22, note).

* "From the fluctuating state of most manufactures and many trades, and the consequent fluctuation of wages, the masters and their workmen are unhappily in a perpetual war with each other" * ([p.] 61).

Laziness, LUXURY, VICES of the workers. [Forster] quotes:

"They want the unfortunate to be perfect" (Helvétius, De l'esprit, Vol. II, [Paris, 1758, p.] 38).^b

* "From whence do the poor generally learn those vices of idleness and luxury, which are ever unpardonable in them! From their betters altogether. Luxury was never yet found to ascend." * ([N. Forster, op. cit., pp.] 62-63).

Defence of corn profiteering, etc. (l.c. [Supplementary Notebook B], p. 9.¹³⁸)

* "The landed interest ... has certainly had no reason to complain of late. The value of lands and their produce has been raised to the present high pitch by our trades and manufactures solely. This is not only true in fact, but ... it could not be

a Is it not so? — Ed.

^b Marx quotes in French.-Ed.

otherwise. The produce of lands is of no value without a demand for it. And this demand can only arise from industry, in some other way; that is, from commerce and manufactures" * (l.c., [p.] 213).//

Disappearance of the YEOMANRY.⁷³

*"At that time" * (the time of the revolution of $1688 \, {}^{129}$) * "there existed a race of men in the country, besides the gentlemen and husbandmen, called *yeomanry*. Men who cultivated *their own property*, consisting chiefly of farms from 40 to fourscore pounds" (£80) "a year ... the men were hardy, brave, [XXIII-1411] and of good morals; by the *influx of riches* and a change of manners, they were nearly annihilated, in the year 1750, and are now but faintly remembered" * (A Letter to Sir T. C. Bunbury, Bart. etc. on the Poor Rates, and the High Price of Provisions etc. By a Suffolk Gentleman, Ipswich, 1795, [p.] 4).

//"Reasons for the * deficiency in the supply of bread-corn: First ... an increasing population... Another and principal cause ... that a greater proportion of the general produce is appropriated to the sustenance of horses and other flock, than formerly, in a degree to affect the bread-corn destined for the sustenance of man,*" etc. (GOVERNOR Pownall, Considerations on the Scarcity and High Prices of Bread-Corn and Bread etc., Cambridge, 1795, [p.] 8).

INGROSSING OF FARMS.

"In many PARISHES OF Hertfordshire" (which he lists) "INSTEAD OF 24 FARMS (of from 50 to 150 ACRES) THERE ARE NOW ONLY 3" (Thomas Wright (OF Mark-Lane), A Short Address to the Public on the Monopoly of Small Farms, [London, 1795,] pp. 2-3).^a

* "It is become a common practice with the landed gentlemen, in every part of the kingdom, to throw several estates together, to make capital farms; or for several landholders to let estates which lie near together, to one man; whereby the renters are so enriched, and their numbers so diminished,—that it is easy for them to form combinations"* (Two Letters on the Flour Trade, and the Dearness of Corn etc. By a Person in Business, London, 1767, [pp.] 19-20).//

Devaluation of labour through a FALL IN THE VALUE OF MONEY. (DEPRECIA-TION of money; the artificial RAISING of the VALUE OF MONEY has the same effect.)

* "Merchants and traders ... can always raise the prices of whatever they deal in, faster than the value of money decreases; but the labourer, having nothing to subsist on but his daily work, must ever be behindhand in advancing the price of his labour; because he is not able to wait till it acquires its due proportion of value, and therefore by it he must suffer extremely" * ([S.]enyns,] Thoughts on the Causes and Consequences of the Present High Price of Provisions, [London,] 1767, [p.] 18).

//As a reason for the rise in the price of corn: POPULATION.

*"During a part of the period from 1771 to 1789, trade, manufactures and population have increased very rapidly" * (*Considerations on the Corn Laws etc.*, By Edgar Corrie, MERCHANT in Liverpool, London, 1791, [p.] 33).//

[XXIII-1412] // RENT. The pamphlet that follows is important for the history of the theory of rent. Although Anderson discovered the theory of differential rent,¹³⁹ he was far from being able to

^a Marx quotes with some alterations.— Ed.

explain thereby the RISING PRICE OF CORN and PROVISIONS. This happens first here, in the following pamphlet, unlike all the previous literature. Admittedly the author otherwise assumes that *RENT* is an *ITEM* in the costs of production, and in particular explains the rise in the price of *BUTCHERS' MEAT* partly through the INCLOSURE OF COMMONS, whereby a large number of farmers were no longer able as before to *feed* their cattle without paying RENT for this. Directly introducing *rent* in this way as a *CAUSE* of the increase in the price of *cattle*, etc., rather than as an *EFFECT* corresponds not only to *Smith's* theory of rent but also to *Ricardo's*, etc., since Smith's theory //see Ramsay on this as well^a// with regard to the determination of other *agricultural prices* by the *price of corn* is not attacked at all, indeed not even investigated. The title of the pamphlet 'is:

A Political Enquiry into the Consequences of Enclosing Waste Lands etc., London, 1785.

*"It is not the *plenty* or *scarcity* which makes an article dear for any long continuance of time, because the *price depends on the necessary charges and expenses in the production of it*" ([p.] 65). "In fact it is not the *scarcity* that we have any reason to complain of, it is only the *dearness* or *high price*" ([p.] 71). "There is now a great *plenty* of *cattle* in this country ... and yet the *price* of butchers' meat is nearly twice as dear as it was 30 years ago; therefore it must be the *charge of production*, which stamps the price of these articles" ([p.] 72).

"Plenty or scarcity of the articles of subsistence do not ultimately govern the price of a commodity, though it may tend to create a temporary rise or fall to a certain degree. It is the charge of production, that stamps the permanent average price on all kinds of commodities whatever... F.i., no possible plenty of Dutch holland, or fine muslins of India, could ever cause those articles to alter for any length of time to an equal low price as the coarse dowlas-because the manufactory of those fine articles is so infinitely more expensive than the coarse" ([p.] 20). "Gold may be bought too dear, and so may corn, or grass, or any other of the useful productions of nature" (l.c.). "Admitting then that the charge of production stamps the permanent averaged price on all kinds of commodities, then I may fairly draw this conclusion: that though by a higher degree of cultivation of the lands in this country, we might be able to produce twice as much corn and grass as we produce at present; yet, if that corn and grass so produced should cost the nation, or the farmer who produced it, on account of the advanced rent of lands, and the exorbitant expenses in the cultivation, twice as much per load as the price of those articles are at present, neither the nation nor the farmer would mend their condition by this increased plenty; on the other hand the poor would suffer double the distress they now suffer unless their wages were doubled; and if their wages were doubled, this would effectually put a stop to all manufactures carried on at present to supply foreign markets" ([pp.] 20-21). "Although the superior skill and industry of the inhabitants of a country where the soil is naturally poor, may sometimes triumph over the inhabitants of another where the soil is naturally more fertile; does that prove that every poor or barren soil to be found in this or other countries, can be brought to yield equal compensation for labour,

^a G. Ramsay, An Essay on the Distribution of Wealth, Edinburgh, London, 1836, pp. 278-79. See also present edition, Vol. 33, p. 283.-Ed.

as those soils [XXIII-1413] which are naturally rich and fertile?... There are many degrees of fertility or barrenness" ([pp. 23-]24).

"I have been in countries where barely harrowing in the seed was the only cultivation required to produce the most immense crops; and as to manure, should any have been laid thereon, the corn would have been so rank as to have rotted before it was ripe. On the other hand, there are degrees of poverty; f.i. some soils naturally poor pay well for cultivation; there are others which after much labour yield a scanty crop, not equal in value to the expense of raising it; there is a sort of poor soil, of which there are millions of acres in this kingdom which would be much less beneficial to the nation, when cultivated by the best practical method that could be devised, than they are in their present uncultivated state"* ([p.] 24).

"One has to distinguish: 'MARSHY SOILS', which WANT DRAINING, like the Isle of Dogs, * and many other lands on the banks of large rivers every farmer knows to be, when properly drained, the most productive meadow ground in this kingdom" ([p.] 26). "The waste lands now in England ... chiefly consist of either stiff clays, with little or no staple of mould to produce a profitable vegetation; or of absolute sands, where no verdure but heath can grow; or of chalk soils, where there is only a thin carpet of turf to cover the barren rock" * ([p.] 27).

RENT as entering into the CHARGE OF PRODUCTION:

* "What is the cause of the present high price of butchers' meat? Why, the *dearness* of lean stock; and what is the cause of that dearness?" *— The difference between * the expense of rearing a beast on a common, and that of rearing one on ground for which rent is paid* ([p.]) 81).//

Expropriation of the COTTAGERS.⁴³ (The Political Enquiry etc. we have just cited.)

* "Farmers forbidding cottagers to keep any living creature besides themselves, under the pretence, that if they keep any beasts or poultry, they will steal from the farmers' barns for their support; they also say, keep the cottagers poor and you will keep them industrious. But the real fact is, [so] that the farmers may have the whole right of commons to themselves" ([p.] 75). "Though the farmers, their wives and daughters have, in a great measure, forsaken the ancient system of industry"* //eggs, poultry, the making of butter and milk//, *"yet I do not find that the cottager or his wife ... are in general deficient therein; but the enclosing of commons added to the tyrannical behaviour of farmers, has in many places deprived them of means of exerting their natural industrious disposition"* (1.c., [p.] 76).

//On the wheat consumption of the English people (1759) as well as the consumption of BARLEY, RYE, OATS (1759) see Supplementary Notebook B, p. 16:

"From the year 1752 to 1765, THE ANNUAL CONSUMPTION OF OATS for horses is INCREASED, in London only, above 52,000 qrs" (Corn Tracts,^a by Charles Smith, 2ND ED., 1766, p. 140).//

 $||B_{READ} consumption of the individual labourer. 1 qr per year, i.e. 1 qr of MEAL=512 1bs=1 qr 1 bushel of corn seems to be the$

^a Three Tracts on the Corn-Trade and Corn-Laws...-Ed.

average consumption of Healthy LABOURING PEOPLE. This makes 1 lb. 6 oz. of FLOUR per day (Corn Tracts, [p.] 187).//

[XXIII-1414] // Change in England from a corn exporting to a corn importing country. The Committee of Council (1790) imputes this change to an increased population, an increased opulence, and consequently an increased demand. This is how the change is presented:

* "This kingdom, which in former times used to produce more corn than was necessary for the consumption of its inhabitants, has of late years been under the necessity of depending on the produce of foreign countries for a part of its supply" ([p.] 8). //Representation of the Lords of the Committee of Council, appointed for the consideration of all matters relating to trade and foreign plantations, upon the present state of the laws for regulating the exportation and importation of corn etc. A new edition, 1800 (made to the King* on the 8th of March 1790).//

Export until 1765, IMPORT after 1771.//

// TASK work. (FREE AND SLAVE LABOUR.) Where

* "the whole labour was to be performed by slaves, the resource of task-work was unknown, and the farmer or owner of the estate must ... maintain the year round as many slaves as he would want in harvest" * (William Mitford, Considerations on the Opinion Stated by the Lords of the Committee of Council etc., London, 1791, [p.] 59).¹⁴⁰//

//Laws on settlement:

* "Among the hindrances to agriculture may well be reckoned the present law of settlements; which forbids the migration of industry to the parts where it is wanted, and compels the maintenance of involuntary sloth *... It is a matter of *emancipating the poor from their present attachment to the glebe" * (W. Mitford, l.c., [p.] 53).//

//Differences in fertility.

The Question of Scarcity Plainly Stated etc. By Arthur Young, London, 1800. (Young was the Secretary to the Board of Agriculture.)

According to his own calculations, and those of the BOARD OF AGRICULTURE, etc., the AVERAGE PRODUCT OF an ACRE=23 BUSHELS, about 3 quarters, in England (p. 9). 40 counties in England. The worst county AVERAGE PER ACRE is 15 BUSHELS (Huntingdonshire) and the best is 28 (Lincoln and Rutland).

It emerges from these figures that 8 counties have very low *AVERAGES* (15, 18 and 20 BUSHELS); as against this 21 COUNTIES produce from the AVERAGE (23 BUSHELS) up to the maximum (28).//

// Capital's stay in the sphere of production.

"A field now-[in] 1814--sown with, and growing a crop of oats or beans, will next year (1815) be fallowed, and ploughed, and harrowed at least 5 or 6 times, to pulverise and to prepare it to receive the seed wheat in September or October 1815; it will then be sown with wheat, which will be reaped in September 1816; consequently the crop is chargeable [XXIII-1415] with 2 years' rent, and taxes and cesses of every description" ([Th. Simpson,] A Defence of the Land-owners and Farmers of Great

Britain etc., London, 1814, [pp.] 4-5). *"The lowest rent of land [is] from 30s. to 40s. per acre" * (l.c., [p.] 4).//¹⁴¹

// TASK WORK, etc. It says in the same pamphlet^a:

* "The far greater part of the operations of husbandry are performed by men employed by the day, or by the piece. The wages or earnings of these have been taken only at 12s. per week; and though at piece-work a man may properly be supposed, under the increased stimulus to industry, to obtain 1s. or perhaps 2s. a week more than he would earn by weekly wages, yet in estimating his general earnings, the loss of time in the course of the year, from bad weather or sickness, may be held equivalent to this addition. The wages of these men will also generally be found to bear—some reference to the necessary charges of subsistence; so as that a man with two children... may be able to maintain his family without parochial relief" (1.c., [p.] 34). "A reduction in the price of labour can with more propriety be applied to yearly servants ... their necessities being commonly limited to themselves" * ([p.] 35).//

//RENTS AND FALLOWS:

*"If, until the prevalence of the late high prices, *arable* land in general bore but little rent, chiefly by reason of the acknowledged necessity of frequent fallows; the rents must again be reduced, to admit of a return to the same system"* (J. D. Hume (OF THE CUSTOM HOUSE), *Thoughts on the Corn-Laws etc.*, London, 1815, [p.] 72).//

//Constant and variable capital. Calculation of income and expenditure for 100 ACRES of LAND. (Supplementary Notebook B, [pp.] 21-22.)¹⁴²//

Burke, in the pamphlet quoted earlier,^b describes the expression "LABOURING POOR" as DETESTABLE POLITICAL CANT; Burke, that great CANT-MONGER with his EXECRABLE CANT about LANDLORDS, etc. The expression "LABOURING POOR" is found in the Statutes, and furthermore in almost all the writers of the 17th and 18th centuries. (Adam Smith too. See e.g. the passage on the consequences of the division of labour.^c) Eden, etc. The contrast is made in part with the IDLE POOR (PAUPERS), in part with the SELF-SUSTAINING PEASANT OR HANDICRAFTSMAN.

// Rent.

The period from 1740 to 1750 was THE CHEAPEST PERIOD IN OUR ANNALS; it was also the period of the greatest EXPORTS (Remarks on the Commercial Policy of Great Britain, Principally as It Relates to the Corn Trade, London, 1815, [p.] 33). One may see from p. 143 of the Lords' Report^d that the *expense of cultivating 100 acres in $1790=\pounds411$ 15s. [11]³/₄d.; in 1813 [it was] $\pounds771$ 16s. $4^{1/2}$ d.; but the former sum bears almost precisely the same proportion to the latter as 6s., the price of wheat in the first year, does to 11s. in the second //per bushel//* (l.c., [p.] 42).

^a This refers to Address to the Two Houses of Parliament on the Importance of the Corn Laws to the National Revenue, London, 1815.— Ed.

^b E. Burke, *Thoughts and Details on Scarcity...* (see this volume, pp. 253-54).—.*Ed.* ^c See present edition, Vol. 30, p. 306.—*Ed.*

^d Presumably Reports Respecting Grain, and the Corn Laws..., London, 1814.- Ed.

[XXIII-1416] INCREASE OF RENT. On most ESTATES from 2 to 5, on many of them more (l.c., [p.] 43).

Increase of rent combined with decline in the rate of rent. The ADDITIONAL CAPITAL produces dearer (l.c., [pp.] 44-45). (Supplementary Notebook B, p. 30).

Value of labour and price of the means of subsistence.

* "It has been endeavoured to be proved that labour is not influenced by the price of subsistence, but that, on the contrary, it is always cheapest when grain is dearest. In support of this brilliant discovery, which would undoubtedly have entitled the author to a chair in the university of Laputa,⁹⁹ no example could be adduced but from the cotton manufactory, in the infancy of which wages were far beyond the rate of common labour; and where from this cause and other improvements in machinery they have always had a tendency to diminish. The real earnings of the cotton weaver are now far less than they were; his superiority over the common labourer, which at first was very great, has now almost entirely ceased. Indeed, whether from the increase in the price of ordinary labour, or from the freer circulation which has been produced by the alteration in the laws of settlement and apprenticeship, the difference in the wages of skilful and common labour is far less now than at any former period" * (l.c., [p.] 48).^a

The IMPORTATION of the PRECIOUS METALS into Europe has DOUBLED since 1770. SHORTLY AFTER THIS THE GREAT RISE IN CORN BEGAN ([p.] 76). "From 1700 to 1770 THE IMPORTATION OF SILVER REMAINED NEARLY STATIONARY. At that time (according to Humboldt) importation into Europe amounted to 6 million *livres* (4 for Europe, 2 TRANSMITTED to ASIA). Since that time there have been INCREASES" (l.c., [pp.] 76-77).

Size of circulation.

* "The manufacturer, who has 500 workmen to pay on the Saturday night, cannot do it with the same notes when their wages amount to £500, as he did when they were only £300. The circulation of the country is always regulated by the value of the goods to be exchanged. It is not the greater quantity of shipping which trade between Newcastle and London that has caused the increase in the trade between those two ports. It is the greater quantity of goods which has caused the employment of a greater amount of shipping" * (l.c., [p.] 86).

Cause of the high price of corn.

* "Thus it has been shown that the high price of corn has arisen partly from a *depreciation* in the *value of silver*, partly from an *alteration in the value of the currency*, and partly *from speculation*" (l.c., [p.] 88).

Clearing of estates.

"In every country the state of manners will greatly depend on the nature of the equivalent given for the surplus produce of the soil. Where that equivalent consists of manufactures, wealth and industry will flourish; but when there are no manufactures to give to the landlord for his surplus produce, it will generally be consumed by idle retainers. Such ... was the state of manners under the feudal system; the landlord distributing the surplus produce [XXIII-1417] among a train of dependants, and receiving his equivalent in military service. The feudal system has

^a Cf. this volume, p. 162.- Ed.

declined throughout Europe with the progress of trade and manufactures. In the Highlands of Scotland this change is not yet fully accomplished, though the ancient state of property is daily subverted by the progress of modern manners. The landlord, without regard to the hereditary tenant, now offers his land to the highest bidder, who, if he is an improver, instantly adopts a new system of cultivation. The land, formerly overspread with small tenants or labourers, was peopled in proportion to its produce; but under this new system of improved cultivation and increased rents the largest possible produce is obtained at the least possible expense; and the useless hands being, with this view, removed, the population is reduced not to what the land will maintain, but to what it will employ. The disposses tenants" //"outcasts from home", a p. 145// "either seek a subsistence in the manufacturing towns, or, if they can afford the expense of the voyage, emigrate to America"* (David Buchanan, Observations etc., Edinburgh, 1814, [pp.] 143-44).

Personification of capital.

* "Stock cultivates land; stock employs labour" * (A. Smith, [An Inquiry into the Nature and Causes of the Wealth of Nations,] BOOK V, CH. II, Buchanan EDITION, [Vol.] III, [p.] 309).

//Shortening of labour by means of machinery. The workers' struggle against this. Beckmann, in Supplementary Notebook C, pp. 4[-5].¹⁴³ Ribbon mills. The gaining of extra wheat by better grinding (l.c., p. 5).

Struggle in England against the sawmills (ibid., p. 5). German inventions (ibid., p. 5).// //Against Malthus. See Ensor. Supplementary Notebook C, pp. 6-7. CLEARING OF ESTATES.

"They dispossessed families as they would grub up coppice-wood, and they treated villages and their people as Indians harassed with wild beasts do, in their vengeance, a jungle with tigers... Men shall be bartered for a fleece or a carcass of mutton, nay, held cheaper... The Moguls, when they had broken into the Northern provinces of China, proposed in council to exterminate the inhabitants, and convert the land into pasture. This proposal many Highland proprietors have effected in their own country against their own countrymen" (George Ensor, *An Inquiry Concerning the Population of Nations etc.*, London, 1818, [pp.] 215-16).//

// Exchange of objectified for living labour.

"Just as everyone is forced to consume before he produces, the poor worker finds himself dependent upon the rich man, and can neither live nor work without obtaining from him existing produce and commodities, in exchange for those he promises to produce by his own labour" (Simonde (i.e. Sismondi), De la richesse commerciale etc., Geneva, 1803, Vol. I, [p.] 36). "To make him" (the rich man) "consent to this" (i.e. to this bargain), "it was necessary to agree that whenever labour already performed was exchanged for [XXIII-1418] labour yet to be done, the latter would have a higher value than the former" ([p.] 37).^b//

^a D. Buchanan has: "outcasts at home".- Ed.

^b Marx quotes in French.---Ed.

On differences in the RETURN from capital. Sismondi, l.c., [pp. 130-31, 228-29, 232] in Supplementary Notebook C, p. 8. The same writer on merchant capital, l.c.

//Sir Dudley North, Discourses upon Trade etc., London, 1691 (Supplementary Notebook C).¹⁴⁴

This work, like Locke's economic writings, is in direct connec-, tion with and directly based on Petty's works.

The work is mainly concerned with *commercial capital*, and so it is not relevant here: Masterly skill in the field with which it deals.

It is particularly remarkable that from the time of the Restoration of Charles II up to the middle of the 18th century there were continual complaints from the LANDLORDS about the fall in rents (just as the price of wheat continually declined especially from?¹⁴⁵ onwards). Although the industrial capitalist class played a considerable part in the compulsory reduction of the rate of interest (from the time of Culpeper and Sir Josiah Child),^a the real protagonist of this measure was the LANDED INTEREST. The "VALUE OF LAND" and the "RAISING of it" were proclaimed to be in the national interest. (Just as on the other hand from about 1760 the rise in rents, in the VALUE OF LAND and in the PRICE of CORN and PROVISIONS, and the complaints of the MANUFACTURERS on this score, form the basis of the economic investigations on this subject.)

With few exceptions it is the struggle between MONEYED INTEREST and LANDED INTEREST that fills the century from 1650 to 1750, as the nobility, who lived in the grand style, saw with disgust how the usurers had got their hands on them and, with the building up of the modern credit system and the national debt at the end of the 17th century, confronted them with overwhelming power in the sphere of legislation, etc.

Already Petty speaks of the LANDLORDS' complaints about the fall in rents and their opposition to the IMPROVEMENTS (look up the passage).^b He defends the usurer as against the LANDLORD and puts RENT OF MONEY and RENT OF LAND on the same footing.^c

Locke reduces both to exploitation of labour.^d He takes the same standpoint as Petty. Both oppose the compulsory regulation of interest. The LANDED INTEREST had noted that the VALUE OF LAND rose

^a See also present edition, Vol. 32, pp. 463, 540.- Ed.

^b See W. Petty, Political Arithmetick... In: Several Essays in Political Arithmetick..., London, 1699, p. 230, and also present edition, Vol. 31, p. 343.—Ed.

^c See W. Petty, A Treatise of Taxes, and Contributions..., London, 1667, Ch. 4, pp. 19-27, and Ch. 5, p. 28.— Ed.

^d See this volume, pp. 87-89.— Ed.

when interest fell. At a given level of rent, its *capitalised expression*, i.e. the VALUE OF LAND, falls or rises in inverse relation to the rate of interest.

The third writer to follow this LINE of Petty's is Sir Dudley North, in the work referred to above.

This is the first form in which *capital* starts its revolt against *landed property*, as in fact *USURY* was one of the principal means of the accumulation of capital—i.e. through its CO-PROPRIETORSHIP in the LANDLORD'S REVENUES. But industrial and commercial capital go more or less hand in hand with the LANDLORD'S against this outmoded form of capital.

* "As the landed man lets his land, so these (who have stock in trade, and either have not the skill, or care not for the touble of managing it in trade) let their stock; this latter is called *interest*, but is only *rent* for stock"*

(here, as also in Petty's writings, it can be seen how rent, to those just emerging from the Middle Ages, [XXIII-1419] appears as the primary form of surplus value)

*"as the other is for land. And in several languages, hiring of money, and lands, are terms of common use; and it is so also in some counties of England. Thus to be a *Landlord*, or a *Stocklord* is the same thing; the landlord has the advantage only in this: that his tenant cannot carry away the land, as the tenant of the other may the stock; and therefore land ought to yield *less profit* than stock, which is let out at a greater hazard" * ([p.] 4).

Interest. North seems to have been the first to have a correct conception of interest, for by *stock*, as will be seen from the passages next quoted, he means not only money, but capital (as indeed Petty, too, distinguishes between *stock* and money. Locke considered that interest was determined exclusively by the quantity of money; so did Petty. See the passages in Massie on this^a).

*"If there be more lenders than borrowers, interest will ... fall; ... it is not [low] interest [that] makes trade, but *trade increasing the stock of the nation* makes interest low" ([p.] 4).

"Gold and silver, and, out of them, money, are nothing but the weights and measures, by which traffick is more commonly^b carried on, than could be done without them: and also a proper fund for a *surplusage of stock to be deposited in*" * ([p.] 16).

Price and money. As the price is nothing but the EQUIVALENT of the commodity expressed in money, and, when we are dealing with a sale, the commodity realised in money—that is, it represents the

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^a See [J. Massie,] An Essay on the Governing Causes of the Natural Rate of Interest; Wherein the Sentiments of Sir William Petty and Mr. Locke, on That Head, Are Considered, London, 1750, pp. 11-19, and this volume, p. 91.—Ed.

^b North has "conveniently".-- Ed.

commodity as exchange value in order to convert it subsequently into a use value again—it is one of the earliest recognitions of the fact that here we are dealing with gold and silver only as a form of existence of the exchange value of commodities themselves, as a phase in their metamorphosis, not with gold and silver as such. North puts this very nicely for his time.

* "What do these people want, who cry out for money",* etc. (The whole passage. Supplementary Notebook C, [pp.] 12-13).¹⁴⁶

* "Money being ... the common measure of buying and selling, every body who has any thing to sell, and cannot procure chapmen for it, is presently apt to think, that *want of money* in *the Kingdom* ... is the cause why his goods do not go off; and so, want of money is the common cry, which is a great mistake"*([p.] 11).

Further: Capital is self-valorising value, whereas in hoarding the crystallised form of exchange value as such is the aim. One of the earliest discoveries of the classical economists is therefore the antithesis between hoarding and the valorisation of money, that is to say, the presentation of money as capital.

* "No man is richer for having his estate all in money, plate, etc., lying by him, but on the contrary, he is for that reason the poorer. That man is richest, whose estate is in a growing condition, either in land at farm, money at interest, or goods in trade" * ([p.] 11).

(Similarly, John Bellers, Essays about the Poor, Manufactures, Trade, Plantations, and Immorality etc., London, 1699, says:

* "Money neither *increaseth*, nor is useful, but when it's parted with, and as money is unprofitable to a private person but as he disposeth of it, for something valuable, so what money is more than of absolute necessity for a Home Trade, is dead stock to a kingdom or nation, and brings no profit to that country it's kept in" ([p.] 13).)

"Altho' every one desires to have it" (money), "yet none, or very few care for keeping it, but they are forthwith contriving to dispose of it: knowing that from all the money that lies dead, no benefit is to be expected and it is a certain loss" * ([D. North, op. cit., p.] 21).

[XXIII-1420] Money as world money.

* "A nation, in the world, as to trade, is in all respects like a city in a kingdom, or a family in a city" ([p.] 14). "In this course of trade, gold and silver are in no sort different from other *commodities*, but are taken from them who have plenty, and carried to them who want or desire them".* etc. ([p.] 13).

The quantity of money that can circulate is determined by the exchange of commodities.

*"If never so much" (money) "be brought from abroad, or never so much coined at home, all that is more than what the commerce of the nation requires, is but bullion, and will be treated as such; and coined money, like wrought plate at second hand, shall sell but for the intrinsick" * ([pp.] 17-18). Conversion of MONEY into BULLION, and vice versa ([p.] 18) (Supplementary Notebook C, p. 13). Valuation and weighing of money. Oscillatory movement (l.c., p. 14).¹⁴⁷

Usury and LANDED INTEREST and TRADE:

* "The moneys employed at interest in this nation, are not near the tenth part, *disposed to trading people*, wherewith to manage their trade; but are for the most part lent for the supply of luxury, and to support the expense of persons, who though great owners of land yet spend faster than their lands bring in, and being loath to sell, choose rather to mortgage their estates" * ([North, op. cit., pp.] 6-7).

//A Discourse of the Necessity of Encouraging Mechanick Industry etc., London, 1689.¹⁴⁸

Child labour.

The late age at which the English employ *children* as compared with Germany [op. cit., p. 13]. (Supplementary Notebook C, p. 24. Cf. in contrast that falsifier of history Macaulay.^a)

Unproductive labour (that of the BRAIN alone). "A NECESSARY EVIL". Hamburg praised for treating it in this way (l.c. [p. 14]).//

//Gold and silver are commodities. This is a basic perception for money to be understood at all; for it is a commodity which develops into money in the process of commodity exchange; it receives the function of money, and the other commodities can only express their value in it in so far as they are exchanged for it as a commodity.

"Silver and gold themselves (which we may call by the general name of bullion) are to be considered but as a finer sort of commodities; and as such are capable of rising and falling in price, and may be said to be of more or less value in divers places, according to their plenty or scarcity. Bullion then may there be reckoned to be of higher value, where the smaller weight will purchase the greater quantity of the product or manufacture of the country" ([S. Clement,] A Discourse of the General Notions of Money, Trade, and Exchanges, as they stand in Relation Each to Other etc. By a Merchant, London, 1695, [p.] 7).

"Silver and gold, coined or uncoined, tho' they are used for a measure of all other things, are no less a *commodity* than wine, oil, tobacco, cloth or stuffs" ([J. Child,] A Discourse Concerning Trade, and That in Particular of the East-Indies etc., London, 1689, [p.] 2). "The stock and riches of the kingdom cannot properly be confined to money, nor ought gold and silver to be excluded from being [XXIII-1421]¹⁴⁹ merchandise" ([Th. Papillon.] The East-India-Trade a Most Profitable Trade etc., London, 1677, [p.] 4).//

"Weak minds may be alarmed at the exportation of specie ... but ... gold and silver is as much a commodity as corn, wine, and oil, and it must circulate like, and with, all other kinds of property; and will increase or decrease in proportion to the demand at market, like any other goods or merchandise; with this superior advantage attending it, viz. that it is utterly impossible we can ever be in want of

^a Th. B. Macaulay, The History of England from the Accession of James the Second, 10th ed., Vol. I, p. 417; see also present edition, Vol. 30, p. 222, and Vol. 33, p. 471.— Ed.

cash, so long as we have trade, goods and property to purchase it"* (An Essay upon Publick Credit, in a Letter to a Friend. Occasioned By the Fall of Stocks, London, 1748, [p.] 16).

[XXIII-1422] //A Discourse Shewing the Great Advantages That New Buildings, and the Enlarging of Towns and Cities Do Bring To a Nation, London, 1678.

Just as later on the rise in rents, etc., was ascribed to the most idiotic causes, so at that time the FALL IN THE VALUE OF LAND was treated in the same way. The blame was laid, among other things, upon the large number of new buildings in London at the time. The above work is directed against this argument. The author first of all gives the real causes, in which connection he also notes that the VALUE OF LAND and of rents depends upon the price of the products of agriculture.

* "By the plague, 200,000 people dying in one year, the fall of rents of the land was occasioned, corn, meat, and wool, that was wont to feed and clothe those 200,000 persons, now went wanting, occasioned the market to fall, and the price of land must follow the price of its commodities" * ([p.] 1).

The cause of the "FALL OF RENTS IN THE COUNTRY" is

* "that the product of the country is greater than the consumption, that is, that there is more corn, wool and other commodities of the country, than the people can dispose of: which makes plenty, and plenty makes things cheap; now the value of land must fall in proportion to the value of the goods that are produced from it; that which has occasioned it, is, that the *improvements* in the country are greater than the increase of people. The improvements of the country are many, as the draining of fens, the sowing of sanfoin and other seed, the disparking of parks, the inclosing of forests; ...now there is not an increase of people in proportion. First, because of the great plague...; and, secondly, the going away of the people to new plantations, and to improve Ireland"* ([p.] 14).

But secondly the man points to the differential rent on houses, and regards this increasing valorisation of houses as the production of wealth.

* "In all other employments of those hands ... as in making of stuff and cloth, and several other commodities; the market is sometimes overstocked; by which the prices of the goods do so much fall ... that there is greater loss to those goods that were made before, than what is gained by the imploying of the hands in making of new; so that then, the profit by the labour of the poor is lost, and it is much the same thing as if their food had been given them gratis. But this never happens in the building of new houses; for the building of new houses raises the rent of the old ones; and that this is true, appears because in the ends and outparts of all cities and towns, houses are of less value than they are in the middle" ([p.] 3). "Now when cities and towns so flourish, that they incourage builders, so that by the addition of new buildings those houses that were before the ends and outparts of the city, or town, stand nearer to the middle; then the rents of these houses rise in proportion as they become nearer to [XXIII-1423] the middle of the town"* ([pp. 3-]4). He then uses the example of London to demonstrate this. SITUATION is for houses what the growth of relative fertility is for the land. The peculiar nature of the creation of value which distinguishes differential rent is picked out here. It is, namely, that THE ADDITIONAL PRODUCTION *raises* the value of the older lands and their produce, instead of reducing it.//

// Writings of Josiah Tucker.

Good point against the mercantile balance of TRADE^a (Supplementary Notebook *C*, p. 27).

First of all against the possibility of a general overproduction (l.c.). Population is wealth. More people=more labour, and labour is the "RICHES OF A COUNTRY" (l.c.).

Against *Hume's theory* that the richer country must produce *dearer* on account of the INFLUX OF MONEY, etc.^b (l.c., p. 28).//

// VALUE OF LAND. The purpose of all TRADE is to increase it.

* "All trade, domestick or foreign, that does not in the result increase the value of land, ought to be totally rejected" * ([J. Child,] A Discourse Concerning Trade, and That in Particular of the East-Indies etc., London, 1689, [p.] 1).//

The Mercantile System's view of surplus value:

* "Trade confined amongst ourselves, procures little advantage to the kingdom; no more than the buying and selling of land, one hath more, and another hath less; the owners are changed, but the land is still the same. It is foreign trade that is the great interest and concern of the kingdom"* ([Th. Papillon,] The East-India-Trade a Most Profitable Trade to the Kingdom etc., London, 1677, [p.] 1).

In contrast to the Monetary System:

* "If gold and silver must be confined within our walls, i.e. the seas that environ us, it is rendered fruitless, and yields *no increase* to the kingdom's *capital*"*(l.c., [pp.] 4-5).

Money of account:

*"It is true, that usually the *measure* of *stock or riches* is accounted by money; but that is rather in *imagination* than *reality*. A man is said to be worth 10,000 pounds, when possibly he has not 100 pounds in ready money, but his estate, if he be a farmer, consists in land, corn, or cattle, and husbandry implements; if a merchant, in goods,"* etc. (l.c., p. 4).

Accelerated rapidity of the turnover of money at a time of QUICK TRADE.

* "It is a great mistake, though a common one, to think, that it is the *plenty* or *scarcity* of *money*, that is the cause of a good or bad trade: It is true, when the trade is quick and good, money is more seen, and *changeth hands ten times for what it does*,

^a J. Tucker, A Brief Essay on the Advantages and Disadvantages Which Respectively Attend France and Great Britain, with Regard to Trade, 3rd ed., London, 1753, Introduction, p. VI.— Ed.

^b See J. Tucker, Four Tracts, Together with Two Sermons, on Political and Commercial Subjects, 3rd ed., Gloucester, 1776, pp. 35-37.— Ed.

when the trade is dull and dead; so that one hundred pounds in a time of quick trading, makes as great an appearance as one thousand pounds in a time of dead trading. It is not so much the money that influenceth the trade, as it is the trade that discovers the money, which otherwise would lie hid" * (l.c., [p.] 5).

[XXIII-1424] //Reasons for a Limited Exportation of Wool, London, 1677.

On behalf of the LANDLORDS and TENANTS, who blame their misfortunes on the CHEAPNESS OF WOOL ([p.] 3), the export of which was prohibited in order to provide the manufacturers with cheap raw material. The whole pamphlet is directed against "THE BEATING DOWN [of] THE PRICE OF WOOL" ([p.] 16).

This is one of the first works to express the antagonism between the *LANDED INTEREST* and the *MANUFACTURING interest*. (Otherwise this period as a whole is characterised more by the antagonism between the *LANDED* and the *MONIED* INTEREST.)

The author says earlier that the export of wool was only ever suspended for temporary reasons.

In 1647 the EXPORT OF "WOOL" was prohibited

* "upon pretence that there was not wool enough to furnish our own necessities. Which (if true) might be because of the great destruction of sheep by the wars. Yet there seems to be another ground for that act. The government of that time having been assisted in the civil wars by great numbers of the wool workmen, (who liked much better to rob and plunder for half a crown a day, than toil at a melancholy work for 6d. a day) to encourage and reward them, I say, and to weaken the gentry, they made this prohibition" * ([p.] 8).

Great stocks of wool lay UPON the LAND; hence a fall in the price; and the ruin of the FARMERS and GRAZIERS, and of the LANDLORDS, who were compelled to take over the FARMS themselves...

"In fine the farm must be sold, since the wool has no price".

But the rent had fallen so low, the number of lands offered for sale was so great, that there were no buyers ([p.] 16). The "CHEAPNESS of the wool." is to blame for everything. On the other hand:

* "The low price of wool hath made so many apply to husbandry, that usually corn does hardly bear any price wherewith to pay his" (the farmer's) "rent"* (l.c., [p.] 18).

The scourge of pauperism is an effect of industry.

* "Where there is most manufacture there is either always or for the most part, more poor: the reasons are plain. It is true indeed that the first introducing a manufacture employs many poor, but they cease not to be so: and the continuance of it makes many" (l.c., [p.] 19). ("Their masters allow wages so mean, that they are only preserved from starving whilst they can work" ([p.] 4).)

"Now then suppose wool fall to 3d. per pound... The price of all land in England must likewise fall; there being not one acre which produceth not wool (plowed lands at least from harvest to seed-time, and longer when they lie fallow). Consequently the *taxes* (which now are *generally on land*, and ever *proportioned to rent*, the ancient manner of taxing by 10th and 15th being of late out of use) [are] much to the advantage of the usurer, but to the prejudice of the country gentleman"* ([p.] 5).

It can be seen from this that wool was then still the chief product of the country, and that taxes still laid a significant burden upon the LANDLORDS, who were later able to shift this burden from themselves by means of indirect taxation.

But now comes the most significant passage in this book: Because the SUPERFLUOUS WOOL is unsaleable

*"the one" ([the] farmer) "cannot pay his rent, nor the other" ([the] landlord) "sustain the taxes. And is not this the chiefest, if not the sole reason of sinking our rents, throwing up farms, and the misery of the whole country?... Now that it is the greatest concern and interest of the [XXIII-1425] nation, to preserve the nobility, gentry, and those to whom the land of the country belongs, at least much greater than a few artificers, imployed in working the superfluity of our wool, or the merchants who gain by the exportation of our manufacture, is manifest. 1) Because they" (the landholders) "are the masters and proprietors of the foundation of all the wealth in this nation, all profit arising out of the ground, which is theirs" * (Physiocrats). *"2) Because they bear all the taxes and publick burthens; which in truth are only born by those who buy and sell not; all sellers raising the price of their commodities, or abating of their goodness, according to their taxes"* [op. cit., pp. 4-5].

(Locke, Vanderlint, Physiocrats. Except that Locke immediately TURNS the point to his own convenience; because all TAXES ultimately fall on the landholders, they should also pay them *directly*, instead of indirectly. How a person comes to *buy* without *selling*, hence to possess *money*, the converted form of the commodity, without throwing any *commodities* onto the market, is naturally not explained here. Thus this theory was initially constructed by the LANDED INTEREST.)

*"3) Because they maintain great families, which conduce much to the *consumption* of our manufactures, many people relying upon them, and perhaps as many as upon cloth working" * [op. cit., p. 5].

(The necessity for these people, as "fruges consumere nati", a consumers, in order to provide an impulse to industry. Physiocrats. Later Malthus and his sort.^b)

"4) Because they must of necessity bear all magistracies and public imployments (how burthensome soever)" (ceases, therefore, with the coming of bureaucracy) *"and are the only hindrances of the confusion which would follow upon equality"* ([p.] 5).//

// Denunciation of wool staplers and FACTORIES AS A PUBLIC NUISANCE. On the history of the formation of the different forms of commercial

^a "Born to consume the fruits" (Horace, Epistolae, lib. I, ep. 2:27).- Ed.

^b Cf. present edition, Vol. 32, p. 217.- Ed.

capital. Supplementary Notebook E [pp. 153-54]. ([G. Clarke,] The Case of Our English Wool etc., 1685.) (In the same place, Reasons of the Decay of the Clothing-Trade, [London,] 1691 [pp. 154-56].)//

//Sir R. Temple, in An Essay upon Taxes etc., London, 1693, gives a compact presentation, on pp. 3-4, of the pre-capitalist tax system (of ITS PRINCIPLES). For the LANDLORDS and MEAN PEOPLE. Against USURERS, TRADERS and FREEHOLDERS [p. 5].

- "A GENERAL EXCISE UPON HOME COMMODITIES," he says, is IN TRUTH the same thing as "A LAND TAX.... SINCE BOTH ARE A DUTY UPON THE SAME COMMODITIES, WHICH ARE THE PRODUCT OF THE LAND" ([pp. 10-]11).

(The same idea as with Locke, the wool MAN, etc.^a) Says that the TAXES UPON COMMODITIES do not raise their *prices* for the consumers, but reduce them for the producers, if the "NECESSITY" of the "SELLERS" is GREATER than that of the "BUYERS", which is the case in England with HOME COMMODITIES. (The same point in *Quesnay*.^b) This is said to be the "PRINCIPAL CAUSE OF THE PRESENT FALL OF RENTS, AND THE PRICE OF COMMODITIES" ([p.] 12). (All this in Supplementary Notebook *E* [pp. 156-58].) (*Against an EXCISE*, [p.] 12.) The excise is attacked very well from the political point of view ([p.] 14).// (Exactly the same antagonism towards *Holland* as in Quesnay [pp. 16 ff.].)

//Struggle between the LANDLORDS and the MONEY LORDS. See the work Remarks on the Proceedings of the Commissioners etc. (by John Trenchard)¹⁵⁰ (anonymously), London, 1696. Supplementary Notebook E [pp. 158-60]. Land bank against BANK OF ENGLAND. Conflict: As interest falls (which the MONIED INTEREST does not want) the VALUE OF LAND rises. The MONIED MEN want the kind of interest, etc., that ENABLES them IN A FEW YEARS TO APPROPRIATE LAND—

*"so that at this rate in some few years, the traders will invade the antient gentry, and take away their *place and station*" * ([pp.] 3-4).//

//Cruelty of capital.

"Such a spirit of cruelty reigns here in England among the men of trade, that it is not to be met with in any other society of men, nor in any other country of the world" (An Essay on Credit and the Bankrupt Act etc., London, 1707, [p.] 2).

(This should be brought in when dealing with debtors and creditors. 151)//

[XXIII-1426] //Once the products are exchanged as commodities, they are per se^c money. This point should be made in connection with the transition to the metamorphosis of the commodity.¹⁵²

^{, &}lt;sup>a</sup> See J. Locke, Some Considerations of the Consequences of the Lowering of Interest, and Raising the Value of Money (1691). In: The Works, 8th ed., in 4 vols, Vol. II, London, 1777, pp. 20-21, 34-35, 39, 48.— Ed.

^b F. Quesnay, Dialogues sur le commerce et sur les travaux des artisans. In: Physiocrates ... par M. Eugène Daire, Part I, pp. 145-46, 163.—Ed.

^c Of themselves.— Ed.

* "The course of trade being thus turned, from exchanging of goods for goods, or *delivering* and *taking*, to *selling* and *paying*, all the bargains in the world are now stated upon the foot of *a price in money*; and tho' it be at any time an *exchange of goods for goods*, yet even those goods are on either side rated at a price in money"* ([p.] 8).^a//

//On the insignificance of politics, when exchange value is at stake. [D. Defoe,] An Essay on Loans etc., London, 1710.//

//Nicholas Barbon, A Discourse Concerning Coining the New Money Lighter. In Answer to Mr. Locke's Considerations etc., London, 1696.

It emerges both from Barbon's preface, and from *Decus et Tutamen etc.* (by a PARTISAN of Locke), that Dr. Barbon, banking entrepreneur, had a *private interest* in the "RAISING OF MONEY".¹⁵³

Use value is the basis of value.

*"The value of all things arise from their use ... things of no use are of no value" * ([p.] 2).

The USE may derive from physical needs, or mental needs, which means here "DESIRES"...

* "There are two general uses... They are either useful to supply the *wants of the body,* ... or the *wants of the mind* (such things that satisfy *desire..* Desire implies want; it is the *appetite of the mind,* and as natural as hunger to the body)" (l.c.). "The greatest number ... have their value from supplying the wants of the mind" ([p.] 3).

"Desire and wants increase with riches. And from thence it is, that the contented man is the only rich man, because he wants nothing" ([p.] 3). "If any things could have an *intrinsick* value *in themselves*, they would be cattle and corn"* ([p.] 3), namely * "things that supply the wants of the body, and support life" (l.c.). "Rarity and scarcity are the chief reasons for the value of those things that are used for ornament, and not for any excellent quality in themselves" ([p.] 5). "[Value] depends only on opinion"* ([p.] 4). (Storch.^b)

Use value and exchange value.

*"There is nothing that troubles this controversy more, than for want of distinguishing betwixt value and virtue. Value is only the price of things: that can never be certain... Nothing can have an intrinsick value. But things have an intrinsick virtue, which in all places have the same virtue; as the load stone to attract iron, etc. But these things, though they may have great virtues, may be of small or no value or price, according to the place where they are plenty or scarce" * ([p.] 6).

Exchange value is indifferent towards the use value of things.

*"There is no difference or distinction in things of equal value; that is, one commodity is as good as another that's of the same value. One hundred pounds worth of lead or iron, is of as great a value as one hundred pounds worth of silver and gold" ([p.] 7).

[XXIII-1427] "Gold and silver are commodities as well as lead or iron" ([p.] 7). "In trade and commerce there is no difference in commodities when their values are equal" ([p.] 11).

^a [D. Defoe,] An Essay upon Publick Credit..., London, 1710.- Ed.

^b See this volume, p. 303.— Ed.
"Nothing has a price or value in itself; the price or value of every thing arises from the occasion or use for it; the plenty and scarcity, in respect to their occasion, makes things of greater or less value" ([p.] 10).

"Now if the value of all things arise from their use; if plenty or scarcity makes things dear or cheap; if silver be a commodity for several uses, and more plentiful in some places than in others; then it must necessarily follow, that silver can have no certain or intrinsick value; and if silver be of an uncertain value, then it can never be the instrument of commerce and traffick: For, that which is uncertain in its own value, can never be a certain measure of another value"*([p.] 8).

Money of account (l.c., [pp.] 17, 18, 27). It is the denomination, etc. ([pp.] 30, 31).

Means of circulation.

* "It is the *currency* of the coin that all men regard more than the *quantity* of silver in it" ([p.] 29).

"Money does wear and grow lighter by often telling over"* ([p.] 29).

His polemic against the BALANCE OF TRADE ([pp.] 35-40, 42, 44-45, 51-52). (Supplementary Notebook E [pp. 183-87].)

// * "One sort of wares are as good as another, if the value be equal" * ([p.] 53).

Accounts. Holland ([pp.] 54-55).

World money, BULLION, commodity ([pp. 54-]55). The BALANCING OF ACCOMPT is not to blame for the sending out of money ([p.] 57). Spaniards ([p.] 57). The relative value of BULLION in different countries is to blame for its BEING SENT OUT ([pp.] 59-60).//

//Decus et Tutamen etc., London, 1696.

Subsidiary coinage. Copper coinage ([pp.] 6-7). Assumes, anyway, taking this from Barbon, that BULLION is sent abroad not for payments but as a means of purchase ([p.] 51).//

//* "It is evident that *enclosures* have been in a great measure the occasion of the increase of the poor in their neighbouring parishes" * (Some Thoughts Concerning the Maintenance of the Poor etc., London, 1700, [p.] 10).//

//Land as the basis of wealth.

"Land paid" (during the 11 years of war since 1689) *"10s. in the pound per annum, principal and interest, under which latter name (land) husbandry, manufacture and trade are comprehended, as having their existence from, and being no more than the product and improvement of land, which is the principal stock, and gives birth and maintenance to all of 'em"* ([p.] 2).

On the binding character of contracts extorted by NECESSITY.^a This also applies to the contract between capitalist and wage labourer ([p.] 16). (Both quotations come from: [J. Drake,] An Essay Concerning the Necessity of Equal Taxes etc., London, 1702. The

^a In the manuscript the English word is given in brackets after its German equivalent.— Ed.

second is on page 4, Supplementary Notebook F.) The interest of the year 1699 amounted to more than the whole change of the year 1688 ([p.] 9).//

//* "Stock jobbing a publick nuisance" * ([p.] 1).^a

(THE ANATOMY OF THE STOCK EXCHANGE... under George I.)

*Stockjobbers "original thieves and pick pockets" ([ibid., p.] 8). "A gang a rogues and cheats" ([p.] 6).

"That original of stock jobbing, Josiah Child" * ([p.] 13). See stock exchange manipulations ([pp.] 13-15).//

[XXIII-1428] // VALUE.

*"The value of a thing Is just as much as it will bring."*¹⁵⁴

Or as Nicholas Barbon quotes "THE OLD MAXIM" [Op. cit., p. 2]: "Valet quantum vendi potest." ^b//

//Sir Matthew Decker^c: ONE SINGLE TAX, namely UPON HOUSES according to the rents they pay. See the pamphlet in Supplementary Notebook F, p. 6. This pamphlet was already in its 5TH EDITION in 1774. He was a MEMBER OF PARLIAMENT. See also MR. Horsley, 1744.^d (Supplementary Notebook F, [p.] 6. In the same place [pp. 6-9] the pamphlet An Essay on the Inequality of Our Present Taxes, Particularly the Land-Tax etc., London, 1746.) In the last-mentioned work:

*"The latter tax" (excises) "has well nigh starved our poor" * ([p.] 25).

Denounces the way the EXCISE falls UPON THE POOR ([p.] 37).

* "The manufacturers who work for their daily bread, ... are the chief consumers of customed as well as excised goods"*([pp.] 37-38).

Says that out of all the English families 600,000 should pay nothing. The other 900,000 2s. IN THE POUND [of] ANNUAL INCOME (hence an *income tax*), modified according to the number of children and the income ([pp.] 38-39).//

//Some Thoughts on the Interest of Money in General, and Particularly in the Publick Funds etc., London, 1750. This is a very significant work.

Rent:

*"The rent of land, and the price of the things which that land produces, always do, and necessarily must, rise and fall together" * ([p.] 3).

^a [D. Defoe,] The Anatomy of Exchange Alley: or, a System of Stock Jobbing, London, 1719.— Ed.

^b "A thing costs as much as it can fetch".- Ed.

^c [M. Decker,] Serious Considerations on the Several High Duties Which the Nation in General (As Well As Its Trade in Particular) Labours Under..., London, 1743.— Ed.

^d [W.] Horsley, Serious Considerations on the High Duties Examin'd: Address'd to Sir Matthew Decker, London, 1744.— Ed.

//He thinks, quoting from *Locke*, that this is connected with the *CHEAPNESS OF MONEY* (in view of the *PLENTY OF SILVER*) and therefore the *DEARNESS OF PROVISIONS*, while the same cause which makes MONEY CHEAP (ITS PLENTY) also reduces the interest ([p.] 12).//

*"The decrease of the interest of money is one cause, or rather measure, of the increase in the price of the necessaries of life" * ([pp.] 6-7).

//Locke is his main authority.//

A fall in profit (interest) and a rise in rents are here for the first time presented as interconnected FACTS, even though the phenomenon is explained in a curious way according to Lockean principles. Take the following passage:

* "An increase of the rent, or annual value" * (of the land) * "...must proceed from a rise in the price of the produce of [the] land, and the common provisions of life; but I do not mean here that the fall of interest is the immediate cause of the increase of rents, or of the price of the necessaries of life, but that there is such a connection between them that they will accompany one another; so that the cause, whatever that be, which produces the one, will necessarily draw the other after it" * ([p.] 36).

Notes the FALL OF RENTS for some years; but this is not a general phenomenon, he says ([pp.] 57-58, [Supplementary Notebook F,] p. 16).

Value. This is the most complete discussion, since Petty and Franklin, of the correct theory of value (Supplementary Notebook F, [pp.] 12 sqq.). (P. 14, where he gets rid of the supply and DEMAND TALK in a few words.) (Similarly pp. 15, ++.) Whether gold or silver falls in price or the commodity (l.c., [p.] 15).¹⁵⁵

Fall in rents. (Inkling of differential rent.)

*"The fall in the rents of particular farms" * is partly due to the fact that *"many of them have been heretofore raised above a holding rent, and now are sunk down again; and others have consisted of rich and unimprovable lands, and whilst poor and barren lands, by manure and dressing, have been made to yield a greater produce, the richer lands have been at a stand; and such improvements of one must have depreciated the value and rent of the other; for the value, and price, of the lands and the provisions arising from them, all taken [XXIII-1429] together, will be no more than before, unless the mouths to consume them, or the money to buy them, have increased in proportion to the increase in the produce" ([pp.] 58-59). "The persons would indeed live better and more plentifully on such increased produce, but the value and price of the present greater produce would be no more than of the former less produce; and the rent ... put together would be no more" * ([pp.] 58-59).

Price of the necessary means of subsistence and price of labour.

* "Whether the charge to the poor would be heightened by an advance in the price of provisions, is a very great question" ([p.] 72). "As to labour, in husbandry or manufactures," it has been observed, that it is always dearest when provisions are cheapest, because people in low life, who work only for their daily bread, if they can get it by three days' work in a week, will many of them make holiday the other

three, or set their own price on their labour. If a greater price of provisions should oblige them to work one day in a week, or one hour in a day more, or rather play one day, or one hour less than they now do, which would not very much hurt them; the pay of that day or hour would more than make amends for the advance in the prices of such things as they commonly live on; and those who imploy them, might very well afford to set the industrious to work, and pay them better wages too, since their *profit* would be augmented in a *proportion much greater*"* ([p.] 73).

Investigation of the effect of dearness of labour in making commodity prices dearer.

"I know't is frequently a subject of complaint that labour is dear in England, and from thence that the goods of the growth or manufacture of this country, come dear to a foreign or domestic market; but I think that the dearness of them arises rather from the multiplicity of brokers, who intervene between the first producer and the last consumer, and the great profit which is made by those intermediate dealers. The very smallest of abatements made in the gains of the manufacturer, that is the employer, the factor, shopkeeper, or merchant, would make a vast advance in the wages of the labourer and first workman. I doubt therefore that the true reason why merchants of some foreign countries do undersell ours, is because our goods run too long a circuit before they come to the consumer, and the several agents through whose hands they go, eat up a great share of those gains which should belong to the first producer and manufacturer; and neither the factor nor dealer is content with so small a profit as in other countries; and not because the goods, when they come out of first hands, are dearer than in other places" ([pp.] 73-74).

All taxes must fall on the land. Quotes in this connection a CONTEMPORARY WRITER and Locke (Supplementary Notebook F, p. 18). An EXCISE increases prices, etc., for the CONSUMER, but often thereby lowers them for the PRODUCER (l.c., p. $19 \times$).//

*"Labour is distant wealth" * ([Ch. Townshend,] National Thoughts, Also with an Appendix Showing the Damages Arising from a Bounty of Corn. By a Land-Owner, London, 1752 or 1753, [p.] 26).

Bounties on exportation of corn, etc., and against import duty (the above-mentioned National Thoughts, Supplementary Notebook F, p. 19).¹⁵⁶

[XXIII-1430] // Reasons for the Late Increase of the Poor-Rates: or, A Comparative View of the Price of Labour and Provisions etc., London, 1777.

1) CHANGE IN THE RELATIVE SITUATION of the classes.

* "Labourer depressed almost to the earth" * [p.5] (Supplementary Notebook F, p.21).

The LANDOWNER receives a double gain from the rising price of PROVISIONS the amount of rent has risen, "ADVANCED RENT" [op. cit., p. 8] and therefore the VALUE OF LAND has risen, and secondly [he gains] from the fall in interest (l.c.).¹⁵⁷

Factors which help the FARMER to raise the price of PROVISIONS:(l.c.).

*"The landlord and tenant ... have both gone hand in hand in keeping the labourer down; from a mistaken notion that they could not raise his wages, but at the expense of their respective emoluments" * (*Reasons etc.*, [p.] 11).

Calculation of the means of subsistence now and 40 years ago ([Supplementary] Notebook F, p. 22) shows further how for a long time wages did not rise in the same proportion as 3) the price of the means of subsistence.

"The disadvantage which the labourer sustains, is slipt into the profits which the landholder has acquired" (Reasons etc., [p.] 19) (similarly p. 23 [of Supplementary Notebook F], pp. 20-22 in the pamphlet).

On the rubbish talked about the LUXURES of the POOR (Supplementary Notebook F, p. 23). (Wheaten bread, tea.)

Views of property owners and capitalists.

*"There is a capital error, in the very idea that men of fortune often entertain of the poor. They are apt to consider them as a tax, and a burden upon their property, when, in fact, their property is of no value without them" * ([p.] 23).

Laws regulating wages. Elizabeth. James I.

PAUPERISM, FARMERS, MANUFACTURERS. Very significant passage (l.c. [Supplementary Notebook F], pp. 23-24 [pp. 26-28 in the pamphlet]).

Value of land.

"Land itself ... must be considered of no value ([without] the labourer); and that value which it acquires by his means, must be allowed to rise, and fall, in proportion to his strength and industry" (Reasons etc., [p.] 29).

How the POOR LABOURER was treated before and now (l.c. [Supplementary Notebook F], pp. 24-25 [pp. 30-35 in the pamphlet]). (ENPROPRIATED BY FARMER and LANDLORD.)

Capitalist and worker.

*"The farmer now absurdly asserts, that he keeps the poor. They are indeed kept in misery" * ([op. cit., p.] 31).

On the nonsensical explanations of MISERY and the moral means to remedy it ([Supplementary Notebook F,] p. 25).

Previous and present wages ([Supplementary Notebook F,] pp. 25-26 [pp. 36-42 in the pamphlet]). An extremely admirable work!//

//Storch, Cours d'économie politique, Vol. I [St. Petersburg, 1815].^a The earth is a machine (Vol. I, [p.] 168). (Machinery of DIFFERENT POWERS.)

"The fertility of the soil is manifested sometimes by the abundance of its products, and sometimes by their variety" ([p.] 169).

Disadvantages of the division of labour. With division of labour the worker is merely an accessory (p. 204).

Separation of workers in agriculture ([p.] 209).

^a Here and below Marx quotes from and comments on Storch partly in French.— Ed.

Transport. Travel by sledge in Russia ([pp. 226-]227). [XXIII-1431] Entrepreneurs and workers.

"In small enterprises ... the entrepreneur is often his own worker" ([p.] 242).

Sources of income are at the same time causes of production ([p.] 259) (Supplementary Notebook G, p. 8).

Rent as general expression for surplus value ("income independent of labour") ([p.] 260).

"Durable wealth in the consumption fund may serve as capital" ([p.] 273).

Fixed capital remains in the hands "of the industrial worker" and does not "change its form at all", whereas circulating capital "is most often converted into new products" ([p.] 295).

With the fisherman circulating capital is NOTHING, fixed capital is fairly considerable ([p.] 296).

Income ([p.] 331).

PROFITS OF STOCK in Smith. He CONFOUNDS the rent of capital with the profit of the entrepreneur ([p.] 334, note).

"Smith—confounds the profit of the entrepreneur and the rent of capital into a single income which he calls the PROFITS OF STOCK" ([p.] 334, note).

Vol. II: WAGES OF SUPERINTENDENCE.

"When it is a matter of separating it" (the wage of the entrepreneur) "from this profit, it is impossible to estimate its value except by virtue of the wage the entrepreneur would have had to pay to a worker if he had hired one to perform this task" ([p.] 1).

Fixed capital and circulating capital (Supplementary Notebook G, pp. 55-56 [Storch, Cours..., Vol. II, pp. 36-37]). Difference in circulation time (l.c. [Supplementary Notebook G], pp. 56-57).

"The worker ... lends his industry" ([p.] 36).

But, adds the cunning Storch, he "risks" nothing except

"the loss ... of his wages... The worker does not hand over anything of a material nature" ([pp. 36-]37).

With Storch a double confusion is apparent: 1) when the *necessary price* is resolved into mere "incomes", instead of into constant capital+income; 2) when the *necessary price* of the commodities is determined by the price of wages, etc., and the latter is for its part in turn determined by the prices of the commodities. With regard to the first point:

1) "The circulating capital" // why not the fixed capital as well? // "employed in materials, raw materials and labour already performed, is itself composed of commodities, the necessary price of which is formed of the same elements; with the result that in considering the whole of the commodities in a country, it would be counting twice to place this portion of the circulating capital among the elements of the necessary price" ([p.] 140).

2) "It is true that the worker's wage, just like the part of the profit of the entrepreneur that consists of wages, if one considers them as a portion of means of subsistence, is also composed of commodities bought at current prices, which themselves consist of wages, the rent of capital, the rent of land, and the profits of entrepreneurs... This observation only serves to prove that it is impossible to resolve the necessary price into its simplest elements" ([pp.] 140[-141], note).

Young—evaluation of the gross product per acre ([Supplementary] Notebook G, p. 59). Rent (AVERAGE) the same (p. 60 [Storch, Cours..., Vol. II, p. 223]).

Money (as means of credit and payment):

"If these same pieces of money can thus serve as the instrument of different loans for three times ... [or] thirty times ... their value, they can equally serve just as many times successively as an instrument of repayment" ([ibid.,] Vol. III, [p.] 161).

Under Adam Smith the division of labour ([Storch, Cours...,] Vol. VI, Note II) (Supplementary Notebook G, p. 114).

[XXIII-1433]¹⁵⁸ Exchange of commodities and division of labour within society.

"For exchanges to take place, it is not sufficient for there to exist exchangeable things; there also has to be ... a variety of things" (Storch, Vol. I, [p.] 75). "The division of labour ... is rather the cause than the effect of exchanges, at least at the beginning" (l.c., [p.] 82, note).

Price of commodities. Price is first of all the monetary expression of value. The fact that the exchange value of one commodity is expressed in the use value of another does not make the latter into the *price* of the former. Here the category taken from the circulation of money has been smuggled into the simple bartering of commodities. Thus e.g. *Storch* says:

If e.g. 4 lbs of tea are exchanged for 1 arshin of cloth, "it is clear that the quantity of cloth forms the *price* of the tea, just as the quantity of tea forms the *price* of the cloth" ([Vol.] 1, [p.] 87). "It is *correlative quantities* which constitute the *price* of commodities" (1.c.).//



^a Marx gives the *Tableau* in French; further, in his comments on it, he uses some French words and expressions.— *Ed.*

This is the simplest form of the Tableau économique.¹⁵⁹

1) Money circulation (assuming payment is made only annually). The money circulation starts out from the SPENDING CLASS, the landlords, who have no commodities to sell, who buy without selling.

They buy to the amount of 1 milliard from the productive class, who send back the milliard in money in payment of rent to them. (This disposes of 1/5 of the AGRICULTURAL PRODUCE.) They buy to the amount of 1 milliard from the sterile class, who in this way get 1 milliard in money. (This disposes of 1/2 of the product of manufacture.) With the 1 milliard, the sterile class buy means of subsistence from the productive class; so that 1 milliard in money thus flows back to the latter. (This disposes of a second 1/5 of the AGRICULTURAL PRODUCE.) With the same milliard in money the productive class buy 1 milliard in manufactured products; this replaces for them one half of their advances. (This disposes of the second 1/2 of the PRODUCE of MANUFACTURE.) The sterile class buy [XXIII-1434] raw materials with the same milliard in money. (This disposes of another 1/5 of the agricultural produce.) In this way the [2] milliards in money have flowed back to the productive class.

So what remains is $\frac{2}{5}$ of the AGRICULTURAL PRODUCE. $\frac{1}{5}$ is consumed *in natura*, but in what form is the second $\frac{1}{5}$ accumulated? That is to be shown later.¹⁶⁰

2) Even from *Quesnay's* point of view, according to which the whole sterile class in fact consist only of wage labourers, the falsity of the assumptions made is evident from the *Tableau* itself.

The original advances (fixed capital) made by the productive class are assumed to be 5 times the size of the annual advances. In the case of the sterile class this ITEM is not mentioned at all—which naturally does not prevent it from existing.

Moreover, it is wrong to say that the reproduction=5 milliards; the Tableau itself shows it to be 7 milliards; 5 in the case of the productive class and 2 in the case of the sterile class.

The product of the sterile class=2 milliards. This product consists of 1 milliard in raw materials (which therefore partly enter into the product, and partly replace the wear and tear of the machinery which has entered into the value of the product) and 1 milliard in means of subsistence, which have been consumed in working them up.

They sell this entire product to the landlords and the productive class,^a in order *firstly* to replace the advance (in raw materials),

[&]quot; Marx has "stériles" ("sterile class"), probably a slip of the pen.- Ed.

secondly to obtain agricultural means of subsistence. Therefore not a farthing's worth of the manufactured products is left for their own consumption, still less for interest or profit. This in fact was noticed by Baudeau (or [Le] Trosne); he explains it by the sterile class selling their product above its value, so that what they sell for 2 milliards=2 milliards-x. The profit, and even what they consume in manufactured goods as necessary means of subsistence, is therefore explained only by the raising of the price of the commodities above their value.^a And here the Physiocrats necessarily fall back on the Mercantile System's PROFIT UPON ALIENATION.¹⁶¹ This is why free competition between the MANUFACTURERS is so very essential, so that they do not take too great advantage of the productives and AGRICULTURISTS. On the other hand this free competition is necessary in order that AGRICULTURAL PRODUCE may be sold at a "good price", that is, that it may rise above its NATIVE PRICE by sale abroad—the assumption being a country which exports wheat, etc.

"Every purchase is a sale, and every sale a purchase" (Quesnay, Dialogues sur le commerce et sur les travaux des artisans etc., ed. Daire! 162 ([p.] 170).^b "To buy is to sell, and to sell is to buy" (Quesnay in Dupont de Nemours, Origine etc., [p.] 392).¹⁶³

"Price always precedes purchases and sales. If the competition of sellers and buyers brings about no change in it, it exists as it is through other causes independent of trade" ([p.] 148).^c

"It is always to be presumed that it" (exchange) "is profitable to both" (contracting parties), "since they mutually procure for themselves the enjoyment of wealth which they could only obtain through exchange. But always there is only exchange of wealth of a certain value for other wealth of equal value, and consequently no real increase of wealth" (this should be: no real increase of value) (l.c., [p.] 197).^d

Advances and capital are explicitly stated to be identical.

"The increase of capitals is then the principal means of augmenting labour, and is of the greatest benefit to society", etc. (Quesnay in Dupont de Nemours, l.c., [p.] 391).¹⁶³//

[XXIII-1435] //[J. Cunningham,] An Essay on Trade and Commerce: Containing Observations on Taxes, as they are supposed to affect the price of labour in our manufactories etc., London, 1770. (The same author had already published the essence of this work in Considerations on Taxes etc., London, 1765.)

This fellow vents his spleen against the workers in manufacturing, who should be restored, he says, to the same "HAPPY STATE" as

^a See N. Baudeau. Explication du Tableau economique... In: Physiocrates ... par M. Eugène Daire, Part II, pp. 852-54.--Ed.

^b Here and below Marx quotes Quesnay in French.-Ed.

 $^{^{\}rm c}$ F. Quesnay, *Dialogues...*: "Du commerce. Premier dialogue entre M.H. et M.N.".—*Ed.*

^d F. Quesnay, *Dialogues...:* "Sur les travaux des artisans. Second dialogue".-- Ed.

that enjoyed already by then by the ACRICULTURAL LABOURERS. His work is very important. One sees in part from it that there was still a lack of discipline in manufacture shortly before the introduction of large-scale industry; that the supply of hands still by no means met the demand; that the worker was still far from regarding the whole of his time as belonging to capital. (Naturally at that time there was still much brutality among the workers; but no more than there was among THEIR NATURAL SUPERIORS.) In order to remedy these defects, the author recommends high taxes on the NECESSARIES of LIFE, which will compel the workers to work, in the same way as bad harvests do; GENERAL NATURALISATION, in order to increase competition among them; also debasement of the currency (RAISING OF MONEY), etc. Apart from machinery, everything that this fine man demanded came about shortly afterwards: HIGH PRICE OF PROVISIONS, IMMENSE TAXATION, DEPRECIATION OF CURRENCY, all circumstances which contributed towards reducing the level of wages, and in the year 1815 happily placed the ragged factory worker alongside the "PAUPER" who represented the "BOLD PEASANTRY OF ENGLAND". Above all, the following passages are important, partly as showing the labour time really worked by manufacturing workers in those days, partly as showing the efforts of capital to force them to work TO THE FULL EXTENT OF THEIR POWERS (as well as to inculcate in them industrious HABITS, CONSTANCY OF LABOUR):

First of all, the whole of the worker's labour time belongs to the "COMMERCIAL STATE", meaning here the COMMON INTEREST OF INDUSTRIAL CAPITAL:

*"An hour's labour lost in a day is a prodigious injury to a commercial state" * ([p.] 47).

Compulsion to labour:

* "Any method ... that will enforce labour and industry, will have the same effect as increasing the number of hands, and will convert what would otherwise be a burthen, into the riches and strength of the state" * ([p.] 18).

(One of these METHODS is the HIGH PRICE OF PROVISIONS, to which taxes on the means of subsistence, etc., contribute.)

*"Taxes tend to lower the price of labour" * ([p.] 14).

Price of labour and quantity of labour. (Length of the working day.)

* "To labour less and not cheaper has been the consequence of a low price of provisions" ([p.] 14).

"Men will not labour, while they have the means of idleness in their power; but, as soon as these means are exhausted, *necessity* again rouses them to their work; and *from this cause*, no state has ever yet made any considerable figure in commerce, where the necessaries of life could be obtained by little labour"* ([p.] 26).

Some kind of "METHOD" must therefore

* "be found out, to create a general industry; that the moderate labour of 6 days in the week may be so enforced as, in time, to grow habitual, as in the case with the Dutch; for this would be equal to an increase of manufacturing people, near one third, and produce many millions, per annum, more in commodities... Of such vast consequence is sobriety, industry, and constant labour, to a commercial state" ([pp. 28-]29). "When, from a high price of necessaries, persons are obliged to labour 6 days in the week, they keep themselves sober, and the work of such men is always best performed, etc." ([p.] 30). "Sir William Temple observes, that 'of such force is the prevalency of habit, that the change from constant labour to constant ease, is as difficult and disagreeable, as from constant ease to constant labour." ((pp.] 30[-31]).

[XXIII-1436] "If the making every seventh day an holiday is supposed to be a divine institution, as it implies the appropriating the other six days to labour, surely it will not be thought cruel to enforce it" ([p.] 41).

"If our poor will ... live *luxuriously*, and *work only four days in a week*, their labour must of course be dear" ([pp.] 44, etc.).

"I hope I have said enough to make it appear that the moderate labour of 6 days in a week is no slavery" * [p. 55].

Against Postlethwayt (the author of The Universal Dictionary of Trade and Commerce). Postlethwayt had said, in a work entitled Great-Britain's Commercial Interest Explained and Improved, 2ND EDITION, London, 1759:

* "High taxes must raise the price of necessaries, an high price of necessaries must raise the price of labour, and an high price of labour must enhance the value of commodities: so that the state, in which labour is cheapest, will always be able to undersell other states, and gain their trade"* [pp. 12-13].

The scoundrel we are presently dealing with states the contrary, in his first work, the title of which indicates the whole of its contents: Considerations on Taxes, as they are supposed to affect the price of labour in our manufacturies: also some reflections on the general behaviour and disposition of the manufacturing populace of this kingdom; shewing, by arguments drawn from experience, that nothing but necessity will enforce labour;// hence wages are always to be kept at such a level that NECESSITY is there every single day, today as well as yesterday, that it drives the worker on, and that he is never able to emerge from this "NECESSITY"// and that no State ever did, or ever can, make any considerable figure in trade, where the necessaries of life are at a low price, London, 1765. Postlethwayt answered the fellow in a later edition of his Universal Dictionary.¹⁶⁴ (We shall quote the passage later; he INVEIGHS AGAINST HIM IN THIS BOOK.)

* "Our labouring people who are employed in husbandry do this" [work six days in a week] "and, to all appearance, they are the happiest of all our labouring poor:"*

(This blighter himself admits later on in the work that these "HAPPY" FELLOWS have already sunk to the physical minimum, and that at least they would be unable to bear any further increase of the taxes on NECESSARIES without an increase in wages.)

* "but the Dutch do this in manufactories, and appear to be a very happy people. The French do so, when holidays do not intervene" * ([J. Cunningham, An Essay..., p.] 55).

The working class must have the feeling of dependency upon THEIR SUPERIORS:

*"But, our manufacturing people have adopted a notion, that as Englishmen they enjoy a birthright privilege of being more free and independent than in any country in Europe. Now, this idea, as far as it may affect the bravery of our troops, may be of some use; but the less the manufacturing poor have of it, certainly the better for themselves and the state. The labouring people should never think themselves independent of their superiors" ([p.] 56). "It is extremely dangerous to encourage mobs in a commercial state like ours, where perhaps seven parts out of eight of the whole are people with little or no property" ([p.] 57).

"It is the quantity of labour, and not the price of it,¹⁶⁵ that is determined by the price of provisions and other necessaries: reduce the price of necessaries very low, and of course you reduce the quantity of labour in proportion" ([p.] 48). "That mankind, in general, are naturally inclined to ease and indolence, [XXIII-1437] we fatally experience to be true, from the conduct of our manufacturing populace"* (rabble), * "who do not labour, upon an average, above 4 days in a week, unless provisions happen to be very dear" ([p.] 15).

"Master-manufacturers know, that there are various ways of rising and falling the price of labour, besides that of altering its nominal value" ([p.] 61).

"The cure will not be perfect, till our manufacturing poor are contented to labour 6 days for the same sum which they now earn in four days" ([p.] 69). "This is necessary to bring us upon a par with France" ([pp. 69-]70).

"A day's labour is vague; it may be long or short" ([p.] 73).

"In this kingdom ... the manufacturer, who labours 4 days, has a surplus of money to live idle with the rest of the week. Now, say wheat should rise to 7s. a bushel"* (from 5), * "the only evil the manufacturer has to complain of, is, that he is obliged to work a day and a half, or two days, more in a week, and be frugal and sober, like the Dutch manufacturer, or the English husbandman"* (l.c., [p.] 97).

If workhouses are to be effective, they must become houses of *terror*:

*"If a workhouse scheme is to answer any good purpose, in regard ... to extirpating idleness, debauchery and excess, promoting a spirit of industry, lowering the price of labour in our manufacturies ... such house must be made an house of terror, and not an asylum for the poor" * ([pp.] 242[-43]).

He calls a "workhouse" of this kind an "*ideal workhouse*", proposing that within it

"he" (the poor [man]) "shall labour 14 hours in a day, allowing proper time for his meals, in such manner that there shall remain 12 hours of neat labour" ([p.] 260).

If one sees on the one hand that he demonstrates that 6 days of work in the week are not "*slavery*" for MANUFACTURING WORKINGMEN (see Postlethwayt¹⁶⁴ straight away) and that he indicates as an extraordinary fact that in Holland the poor work 6 days in the MANUFACTORIES; if on the other hand he proposes a working day of 12 hours in his "HOUSE OF HORROR", his "IDEAL WORKHOUSE", and one compares this with the situation (in 1833?) when a restriction to 12 hours of labour in factories for children, women and young persons was opposed as a terrible outrage by Ure and his patrons,^a while the French workers regard the reduction of the working day to 12 hours as the sole achievement of the February Revolution [of 1848] (see the Report of the Inspectors of Factories^b), the prolongation of labour time (of the working day) enforced by the capitalist mode of production becomes evident.

"There is a very great consumption of luxuries among the labouring poor of this kingdom; particularly among the manufacturing populace, by which they also consume their time, the most fatal of all their consumptions" ([J. Cunningham, An Essay..., p.] 153).

If the workers work more, they should not therefore earn more, for NECESSITY must always remain the stimulus for their labour; they must remain *poor*, but create the *WEALTH* of the "COMMERCIAL STATE", i.e., if we paraphrase this, of their bourgeoisie.

* "Temperate living and constant employment is the direct road, for the poor, to [XXIII-1438] rational happiness; and to riches and strength for the state" * ([p.] 54).

What he understands by "RATIONAL HAPPINESS" of the POOR can be seen from his depiction of the AGRICULTURAL "LABOURERS" as the "HAPPIEST".⁶ He himself says in another passage of this work:

* "Husbandmen ... but just live decent when provisions are at the cheapest rates... Their powers are always upon the stretch, they cannot live cheaper than they do, nor work harder... But this is far from being the case with the manufacturer" * ([p.] 96).

This, then, is the "RATIONAL HAPPINESS" of the POOR.

Against this there is a passage from Postlethwayt¹⁶⁴ ((to be quoted in connection with the normal working day) see Supplementary Notebook G, pp. 50-52).

Primitive accumulation.

The fellow^d may be quoted to great effect in connection with the *ENFORCING OF LABOUR*, and the *bringing about with the help of the power of the state, etc.*, of such circumstances as further the accumulation of capital, and convert the working class into a mere

^a See this volume, p. 42.-- Ed.

^b Reports of the Inspectors of Factories ... for the Half Year Ending 31st October 1855, London, 1856, p. 80. See present edition, Vol. 30, p. 221.—Ed.

^c Cf. this volume, p. 292.— Ed.

^d []. Cunningham.] An Essay on Trade and Commerce..., London, 1770.-Ed.

instrument for the valorisation and the quickest and most massive possible increase of capital.

It was first of all the forcible legislation passed since the Statute of Edward III^a which established the working day (seeking at the same time to hold down wages), but in precisely the opposite way to the FACTORY ACTS of NOWADAYS. The earlier legislation corresponds to the period of the formation of capitalist production, the conditions of which only ripened gradually; the later legislation corresponds to the domination of the capitalist mode of production, which removed all the obstacles standing in its way, and created the circumstances under which the "NATURAL LAWS" could function freely. The earlier legislation was a way of determining the working day in order to force the workers to perform every day a certain quantity of labour, through a form of compulsion which lay outside the compulsion of the laws of economics; these are the laws against the alleged "indolence and ease" of the working classes. The later legislation, in contrast, consists of laws against overwork, interventions into the "natural functioning" of the laws of economics. The contrast between these two types of law shows the manner in which capitalist production enforces labour-the former laws compel the workers to labour, the latter enforce the limits of the working day.

The fellow starts off like this:

*"In the reign of *Edward VI* indeed the English seem to have set, in good earnest, about *encouraging* manufactures and *employing the poor*. This we learn from a remarkable statute which runs thus:

"'That all vagrants shall be *branded*, and be the *slaves* of those who apprehend them, for two years; to be fed with bread and water'"*

//later to be the staple diet of the AGRICULTURAL LABOURERS//,

* "with an iron collar or ring fastened on their necks, arms, or legs; and upon running away, to be farther branded, and be condemned to slavery for life; and upon running away again, to be hanged' (*Statute I Edward VI c. 3*)" * [pp. 5-6].

An increase in the price of PROVISIONS is a circumstance which brings the LABOURING POOR (without coercive laws) to such a condition "THAT THEY CANNOT LIVE CHEAPER ... NOR WORK HARDER". They thereby attain to the "RATIONAL HAPPINESS" of the PROUD PEASANTRY OF ENGLAND [pp. 14-15].

In cases where the price of **PROVISIONS** is high:

*"A general industry is immediately created; workmen crowd about the houses of master-manufacturers, *begging* for work, *almost at any rate*; and they work 5 or 6 days in the week instead [of] 3 or 4. Labour being a kind of commodity, the quantity then offered tends to the lowering its price"* ([pp. 15-]16).

^a See also present edition, Vol. 30, p. 226.- Ed.

(This QUANTITY OFFERED by no means depends merely on the number of workers; it depends rather on the *amount of labour* which is offered, and this amount is determined, [XXIII-1438a] if the number is given, by the length of the working day, and if the length of the working day is given, it is determined by the number of workers.)

Our friend remarks quite correctly on this point:

*"Any method that will enforce labour and industry, will have the same effect as increasing the number of hands" * ([p.] 18).

An increase in the price of PROVISIONS can naturally first of all result from an increase in POPULATION relative TO THE TERRITORY.

* "A multitude of people being drawn together in a small territory will raise the price of provisions; but, at the same time, if the police be good, it must keep down the price of labour, make men industrious, and incline them to exert their best abilities in the improvement of manufactures" * ([p.] 19).

Increase of population through enlistment of foreign workers, thus increasing competition among the workers:

*"But the most expeditious way of increasing the number of people, keeping down the price of labour, enforcing industry, and improving our manufactures, is a general naturalisation" * ([p.] 20).

(The flow of Irish people into the industrial districts, etc., since the machine age has fulfilled all this scoundrel's expectations about "A GENERAL NATURALISATION". It is in fact remarkable how all the pious wishes this obsequious sycophant of the industrial and commercial bourgeoisie mechanically reels off—increase in the prices of agricultural products, growth in the national debt, introduction of taxes on NECESSARIES, enlistment of foreign workers, depreciation of money, workhouses as houses of terror, artificial production of a constant "REDUNDANCY OF LABOUR"—how all this has become a reality since the arrival of the epoch of large-scale industry in England.)

It is in the highest degree characteristic that among all these means "TO ENFORCE LABOUR AND INDUSTRY" the fellow never thinks of better PAY, or raising wages. The reverse in fact. One may see from his pamphlet that precisely on the eve of the introduction of machine industry the DEMAND FOR LABOUR grew more rapidly in England than the SUPPLY, and that the manufacturing bourgeois, jealous and envious of the "RATIONAL HAPPINESS" the AGRICULTURAL LABOURERS had already been reduced to, struggled with all their might against the rising rate of wages. The *introduction of machinery* coincides precisely with the epoch when the spokesmen of the bourgeoisie were racking their brains as to how to increase the supply of labour without raising wages, in view of the preponderance of the demand for labour over its supply. *Machinery* really did enter the picture at a moment when they were considering ways of lowering *wages*.

The FACT that at that time the demand for labour rose more rapidly than the supply of labour can be seen from the following passages (already Vanderlint, and later Forster,^a etc., point out that the bourgeois refuse to provide for themselves a larger amount of labour by paying higher wages):

* "Another cause of idleness, in this kingdom, is the want of a sufficient number of labouring hands" ([p.] 27).

"Whenever, from an extraordinary demand for manufactures, labour grows scarce, the labourers feel their own consequence" * (which should not happen) * "and will make their masters feel it likewise: it is amazing; but so depraved are the dispositions of these people, that, in such cases, a set of workmen have combined to distress their employer, by idling a whole day together" * ([pp.] 27-28).

(Compare Vanderlint and Forster on this "AMAZING" [XXIII-1438b] fact and this unheard-of "DEPRAVATION".)¹⁶⁶

*"These things never happen when wheat and other necessaries are dear; labour is then so *plentiful*, and becomes too necessary to admit of *such unnatural combinations*" * ([p.] 28).

Some "METHOD" or other must therefore "BE FOUND TO CREATE A GENERAL INDUSTRY" ([pp. 28-]29).

Apart from the *natural* rise in the price of Necessaries and A General NATURALISATION, the method is *TAXES UPON NECESSARIES*.

* "Indolence and ease are luxuries of the poor, which should not often be indulged, lest they grow into habit; for then they become fatal. Now *all the taxes on the necessaries* of the poor appear to be the more useful, as they operate to prevent this fatal indulgence, and therefore should be the last taxes to be abolished" ([p.] 45).

"Half the taxes which the lower sort of people in England pay, are for superfluities, or the means of a low debauch, and not for the necessaries. When it is considered what luxuries the manufacturing populace consume, such as brandy, gin, tea, sugar, foreign fruit, strong beer, printed linens, snuff, tobacco, etc., it is *amazing* any one should be so weak as to conceive that *taxes raise the price of labour*; or that it should be necessary to raise the price of labour because of our taxes, in order to enable the poor to live comfortably, knowing they consume *such heaps* of superfluities" ([p.] 46).

"Taxes are so far from injuring our foreign trade, by rendering our manufactures dear in foreign markets, ... that I am persuaded we should have no manufactures to export, if all taxes were entirely abolished; and if from other concurrent causes, our manufacturing poor could live at half the expense they have done for 20 years past" ([p.] 47).

^a See J. Vanderlint, Money Answers All Things..., London, 1734, and [N. Forster,] An Enquiry into the Causes of the Present High Price of Provisions, London, 1767.— Ed.

"In the great city of Amsterdam, not above 4 malefactors are capitally convicted in a year, and a beggar is hardly to be seen in the streets; happy consequences these of high taxes, dearness of provisions, and a good police... The great De Witt, in his maxims of Holland,¹⁶⁷ says that 'high taxes promote invention, industry and frugality'" * ([p.] 49).

The main reason why England is "UNDERSOLD" by the French in a number of countries is "the high price of LABOUR" ([p.] 67).

The condition of "RATIONAL HAPPINESS" to which he wants to bring the working Englishmen is described in what follows. He only commits one more *falsification* here, in that the French workers of whom he speaks were *AGRICULTURAL LABOURERS*, who in England at that time, on his own admission, were already in the same condition of "RATIONAL HAPPINESS". (The disproportion between the wages of MANUFACTURING AND AGRICULTURAL LABOURERS WAS ENFORCED then by the LAWS OF SETTLEMENT.¹⁶⁸)

* "This [is] necessary to bring us upon a par with France. An author, who stiles himself a Northampton manufacturer, says that 'labour is 1/3 cheaper in France than in England; for their poor work hard, and fare hard, as to their food and clothing: their chief diet is bread, fruit, herbs, roots, [XXIII-1439] and dried fish; for they very seldom eat flesh; and when wheat is dear, they eat very little bread'. To which may be added, that their drink is either water or other small liquors, so that they spend very little money, etc." ([pp. 69-]70). "These things are very difficult to be brought about; but they are not impracticable, since they have been effected both in France and Holland" * ([pp.] 70[-71]).

Quotes authorities for the view that a high price of provisions is necessary "to *ENFORCE* GENERAL INDUSTRY":

"Sir William Temple, in his discourse to the Lord Lieutenant of Ireland, says, "provisions must be rendered so dear, as to enforce general industry". Sir W. Petty, Sir Josiah Child" (the mid-17th century ancestor of the STOCKJOBBERS), ""Mr. Polixfen, Mr. Gee"* (chief Mercantilist), ""etc., have all concurred in the same observation; viz. that trade can never be greatly extended, where the necessaries of life are very cheap"* ([p.] 83).

He further quotes the wretched Arthur Young, TAX-MONGERER and sycophant to the English landed aristocracy, whose merits as an agronomist have been greatly exaggerated, and whose economic views are beneath criticism. The fellow was always an enthusiastic supporter of high prices of PROVISIONS, partly because, as he explicitly says, they "compensate" the GENTRY for the TAXES and secure for them the necessary freedom from taxation, partly because they on the one hand force down the level of wages, and on the other hand compel the workers to work more for lower wages. In order to make the "high price of corn" acceptable to the MANUFACTURERS, the chief opponents of such a system, (and also to make the BOUNTY ON THE EXPORT OF CORN palatable to them) he demonstrated statistically (l.c., p. 18) in A Six Weeks' Tour into Wales, London, 1769,¹⁶⁹ that * "there was not any proportion between the rates of labour and those of provisions" * [See J. Cunningham, An Essay..., p. 290].

They were related instead inversely:

* "so very far is the rate of the one from the rule of the other, that they are mostly in opposition" * [ibid., p. 291].

His work The Expediency of Allowing the Free Exportation of Corn, 1770, is directed exclusively at proving this point.

*"But, in the name of common-sense where are the facts, and what are the reasonings, that prove a high rate of provisions an enemy to manufactures? Living must be rendered dear before that general industry, which can alone support a manufacturing people, will be rooted amongst them" [p. 293]. "The labouring poor work no more days in a week than are sufficient to maintain themselves; the remainder is spent in idleness" * [p. 294] (Young, l.c., [pp.] 28 sqq.).

Thus far the authorities.

The national debt is therefore a good thing, because it effects the increase of taxes, and an INCREASE "OF RICHES" fortunately leads to an increase in the national debt.

*"An increase of riches had a tendency to increase the national debt ... by making it extremely easy for the government, on any emergency, to borrow money at a low rate of interest" * ([J. Cunningham, An Essay..., pp.] 164-65).

Cites the Dutch national debt and Dutch taxes:

*"And yet, after all, labour is cheaper there than in England" * ([p.] 170).

[XXIII-1440] DEPRECIATION OF MONEY is also a good method.

"Since the year 1613, the French have, by frequent enhancements of their money, varied the relation between silver and commodities; that is, they have altered the measure of value; by which means they do not give half so much silver for a day's labour as they did 150 years ago" ([p.] 211). "France purchases an equal quantity of labour with less silver than we do; consequently labour is cheaper in France than in England" ([p.] 213).

He therefore wishes

*"some alteration" in "the value of money" ([p.] 213).

"Labour continues the same in England when wheat is at 10s. a bushel, as it does when it is at 2s. 6d.; and I believe, in other countries, the price of wheat as little governs the price of labour" ([p.] 160).

But assume

* "that an increase of our taxes should raise the price of necessaries 2d. a day to the poor manufacturer; the utmost evil that could arise from thence, supposing there was sufficient employment, would be, that he must work 1 or 2 hours a day^a in a week more, etc.; by working this hour or 2 extraordinary, he would be capable of purchasing as many necessaries and superfluities as he could do before this increase of taxes" ([p.] 161).

^a Cunningham has: "a day, or one day".- Ed.

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"We find that the manufacturing people readily submit to the necessity of labouring more for a maintenance, when, from a *bad harvest*, wheat is very dear... *Taxes on the necessaries of the poor*, operate something in this way, and are great incitements to labour and industry ... the *price of labour* is no way affected by it, but the quantity only" * ([p.] 94).

The workers would submit to this operation by the method of TAXES, without noticing it, if only such blighters as *Postlethwayt* and his gang "were shlent" ([p.] 95).

State measures, coercive laws for enforcing the creation of a labour force. First the above-mentioned law of Edward VI.^a Then various laws of Elizabeth (Supplementary Notebook G, pp. 32, 40¹⁷⁰). STATUTE I. Anne (l.c., [p.] 40). Dutch Statute of Charles V, October 7, 1531 (l.c., [p.] 45) (against begging). First Edict of the states and cities of Holland, 19th of March 1614 (l.c., [pp.] 45, 46) (WHIPPING, BANISHMENT, BURNING OF BEGGARS). Similarly PLACARD OF THE UNITED PROVINCES, JUNE 25, 1649 (l.c., p. 46).

But he thinks that these frankly coercive laws would not work in England. The same effect must be achieved in a more inconspicuous manner:

*"The lower sort of people in England, from a romantic notion of liberty, generally reject and oppose everything that is forced upon them: and though, from a fear of punishment, you may oblige persons to work certain hours for certain wages, you cannot oblige them to do their work properly" ([p.] 92). "Although necessity must be the basis of any scheme to enforce general industry, yet, it appears from the notions and dispositions of the British populace, that it should not come so fully and directly to the point, as it does in such acts of parliament; for the execution of such laws has almost always produced illegal combinations, riot, and confusion. If possible, the effects of such laws should be produced, almost insensibly, and without the appearance of force" * ([p.] 93).

[XXIII-1441] Piecework. Cantillon, Essai sur la nature du commerce en général (the Amsterdam edition, 1756, forms Vol. III of the Discours politiques, Amsterdam, 1754-1757).^b

"These master craftsmen know approximately how much work a journeyman can do per day in each trade, and they often pay in proportion to the work that they do; thus these journeymen work as much as they can, in their own interests, without any other supervision" (l.c., [p.] 185).

"The work of the journeymen is regulated by the day or by the piece" (Cantillon, l.c., p. 202).

Protestantism was also a means for increasing surplus labour.

"Those states which have embraced Protestantism ... enjoy the advantage of having abolished a large number of the holidays which are days of idleness in the

^a See this volume, p. 295.— Ed.

^b Here and below Marx quotes from the French writers in French; some of his comments are also in French.— Ed.

Roman Catholic countries, and lessen the labour of the inhabitants by nearly the eighth part of the year" (Cantillon, l.c., [p.] 231).

//Ch. Ganilh, [La] Théorie de l'économie politique etc., Paris, 1815, 2 vols.

Productive labour.

"This market value, the distinctive characteristic" (!) "of productive labour" (Vol. I, [p.] 266).

Progress of industry and number of workers employed.

"The progress of industry, far from necessitating a larger number of hands, reduces the number" (Vol. I, [p.] 308). "It is not even easy to say when the increase of the products of industry requires the increase of the manufacturing population" ([Vol.] I, [p.] 307).

Rent.

"The rent of land, like every other *product*" (!) "... is entirely due to the employment of capital" ([Vol.] II, [p.] 77).

"The fact that the capital which produced it belongs to the landowner or the farmer is of little importance" ([Vol.] II, [p.] 80). "The market price of cultivated land" //and what about uncultivated land?//

"The market price of cultivated land" //and what about uncultivated land?// "can neither be smaller nor greater than the capital which has brought it under cultivation" ([Vol.] I, [p.] 54).

Value. There are no *intrinsic values*. It depends on the need for the products.

"Whether they have cost much or little is therefore a matter of indifference" ([Vol.] II, [pp.] 335 and 334-37) (p. 126 of Supplementary Notebook G).//

//Forbonnais, Principes économiques (edit. Daire and Molinari, in: Mélanges d'économie politique, [Vol. I,] Paris, 1847).

Income.

"Income is the fruit of a property made capable of *annually* bringing new values into trade or circulation" ([p.] 174).

Fixed capital.

"The work of draining and clearing the land requires an amount of labour the land can only pay for over several years" ([p.] 179).

"The level of profit ... is the sine qua non factor" ([p.] 185).

(What Forbonnais says on high and low prices is good, ibid., [pp.] 184-85.)

[XXIII-1442] Conversion of land into fishponds.

"At one time the fashion for fish was a sort of madness, ruining the people as well as the nobility. A large amount of land was converted into ponds. Now the change of taste has converted them into grazing land and pastures" (l.c., [p.] 187, Note 2 by Forbonnais).

Low price (against the Economists¹⁷¹) (Supplementary Notebook G, [p,] 129 [op. cit., p. 187]). The same on the reduction in men

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involved in agriculture and the *emigration* of these "superfluous men" into other trades (pp. 130-31 [op. cit., pp. 187-88]).

Forbonnais argues well in the following passage against the wretched Ganilh and his associates, who make market price the distinguishing characteristic of productive labour, and [advocate] heavy luxury consumption, etc.:

An increase in the price of relatively useless things is bad,

"when the considerable surplus of some citizens is acquired by cutting down the surplus of the rest of the citizens; for then there is a forcible transfer of property, which constitutes harmful luxury" ([p.] 187). "The more taxes there are, the more luxury there appears to be, because there will be a greater number of men provided with a big surplus through a forcible transfer of other people's property" ([p.] 206).//

//Abrégé élémentaire des principes de l'économie politique, Paris, 1796 (Germain Garnier).

This fellow, Smith's translator, a Physiocrat who has gone through him, is above all a plagiarist of Cantillon. Let one phrase suffice:

"Any commodity men have the power to multiply ... has as its average and ordinary value the total amount of land and labour employed to produce it and to put it on sale" ([pp.] 61-62).

The rent of LANDLORDS, in contrast to wages and profit,

"is received by the proprietor free of charge and solely in virtue of a legal fiction which recognises and maintains the right of property in certain individuals" ([p.] 28).

Adam Smith.

"He set himself," says Garnier, "to derive the growth of the wealth of nations from two causes alone, these being 1) the perfecting of the faculties of labour; and 2) the accumulation of capital" ([p.] VI, Preface).

Capital=advances.

"It is rare for the consumer to employ the worker directly. It is equally rare for the latter to have in his possession the wherewithal to feed himself while he is working, or to furnish himself with materials and instruments. Moreover, this advance, whoever makes it, is a service distinct from labour, and requires a specific compensation" ([p.] 34).

Hence because the conditions of labour are separated from labour in capitalist production, it is a service to overcome this separation, and the service must receive special payment—from the workers. (Garnier admits that profits are made on this, p. 35.) The possibility of this service therefore only arises from the reality of the separation. According to Mr. Garnier, if all sellers or buyers of commodities only sold [or bought] their own products, they would have to pay each other reciprocally, by an addition to their prices, "compensation" for the fact that they had advanced to themselves, during their work, the *means of subsistence* needed for working.

[XXIII-1443] The fellow's consumption theory, and his polemic against Smith's distinction between productive and unproductive labour^a (Supplementary Notebook G, [pp.] 134, 136, 138, 139). For the rest, there are some sensible statements here and there but he applies them incorrectly, for example the following two:

"A nation necessarily lives from day to day" ([p.] 193). "It cannot become richer except by *simultaneously* increasing the volume of its consumption and that of its production" ([p.] 194).

Commodities = wealth in the circuit of circulation.

"Wealth, considered in the circuit it has to pass through before arriving in the hands of the consumer, is normally described by the expression commodities" ([pp.] 54-55).

The Physiocratic theory (Supplementary Notebook G, p. 135): subsistence (corn, etc.) gives labour value, labour does not give subsistence value.//

//Condillac, Le commerce et le gouvernement, 1776. [In:] Mélanges etc., edit. Daire and Molinari, [Volume I,] Paris, 1847.

Value depends on the "utility" of "things", i.e. on our "need" for them, i.e. on our "opinion" of their utility, etc., i.e. on our "judgment" of their useful qualities ([pp.] 251, 252). This "opinion" is further related to the "opinion" we have of their scarcity or abundance, more or less, and therefore of the degree of their value ([pp.] 253, etc.).

"Their value lies ... principally in the *judgment* we form of their utility, etc." ([p.] 255).

("This philosophy" is the source of Mr. Storch's wisdom on the nature of value.) $_{2}$

Value is not absolute or inherent (cf. Barbon^b).

"One is inclined to regard value as an absolute quality, which is inherent in things independently of the judgments we form, and this confused notion is a source of faulty reasoning... Things have more or less" (value) "solely according to whether we judge them to be more or less useful, or, if they have the same utility, we judge them to be scarcer or more abundant" ([p.] 255).

Surplus value. Exchange of equal values.

"If ... one always exchanges one product of an equal value for another product of equal value, one will multiply the number of exchanges in vain; it is clear that afterwards, just as before, *the amount of value* or wealth will always be *the same*" ([pp.] 266-67).

^a See present edition, Vol. 31, p. 167.-Ed.

^b See this volume, pp. 280-82.-Ed.

"But it is not true that in an exchange [of commodities] we give equal value for equal value. On the contrary, each of the contracting parties in every case gives a less for a greater value" ([p.] 267). "In fact, if we always exchanged equal values, neither of the contracting parties would have anything to gain. And yet they both do gain something, or they ought to. Why? Because the value of a thing consists solely in its relation to our needs. What is more to the one is less to the other, and vice versa" ([p.] 267). "It is not to be assumed that we offer for sale articles essential for our own consumption: we offer what is superfluous... We wish to part with a thing that is useless to us, in order to obtain one that we need: we want to give less for more" ([p.] 267).

The "ideas on the value of things" then become completely confused by the introduction of the precious metals as units of money:

"When it began to be believed that the price of things was to be seen in a measure which always remained the same, such as an ounce of gold or silver, no one doubted any more that they had an absolute value, and from that time there were nothing but confused ideas on the subject" ([p.] 288).

"It was ... natural to think that, in an exchange, equal value was given for equal value whenever each of the articles exchanged was estimated as being of equal value with the same quantity of money... But there is another point to be considered in the calculation. The question is, whether we both exchange something superfluous [XXIII-1444] for something necessary" ([p.] 291).

Movement of money in capitalist production.

"When it" (money) "moves without giving rise to an exchange, no circulation takes place. For example, the money which comes from taxation has passed through many hands before arriving in the sovereign's treasury. But this is not circulation; it is only transport.. What is needed for circulation is that money should be converted in some sense into all the things which are appropriate to the maintenance of life, etc." (Condillac, [p.] 295).//

//Considerations Concerning Taking Off the Bounty on Corn Exported.¹⁷² In some letters to a friend. To which is added, a Postscript, shewing that the price of corn is no rule to judge of the value of land; which will be increased in proportion to the cheapness of its several products, London, 1753. These letters originally appeared in The Evening Post.

This man is an *absolute FREE TRADER*. He even calls for the abolition of the Act of Navigation,¹⁷³ which Sir M. Decker does not do^a... But he also wants all the barriers to capitalist production within the country to be pulled down.

* "To raise the price of corn at home, in whatever manner it is done, is the same thing as to lay a tax on the consumption of it; and to do this in such a manner as lessens the price of it abroad, is to apply this tax for the benefit of foreigners" ([p.] 4).

^a See [M. Decker,] Serious Considerations on the Several High Duties..., pp. 21-22.- Ed.

"The interest of trade requires, that corn and all other provisions should be as cheap as possible; for whatever makes them dear, must make *labour dear also*, and must lessen the sale of our manufactures" * ([p.] 3).

Reduction of wages. Amount of labour time in the first half of the 18th century in England. Removal of RESTRAINTS, guild laws, APPRENTICESHIP, monopolies, etc. Free movement of capital a means of reducing wages in relation to the price of PROVISIONS.

But the *"trader"* himself *"objects, that taking away the bounty, and consequently making corn cheap, the industry of the common people will be lessened ... that the traders in our manufactures^a find the greatest difficulty in carrying on their business upon every extraordinary call from abroad for our manufactures: That the workmen proportion the value of their labour to the demand for the manufactures"* [ibid.];

(There was the rub. Population declined in the first decades of the 18th century, rose only slightly until ABOUT 1760; nevertheless it was already superabundant on the land, but owing to LAWS OF SETTLEMENT,¹⁶⁸ guild laws (APPRENTICESHIP, etc.) the ranks of the urban workers in the towns were not filled up to the same degree: fall of the price of corn from 1700 up to ABOUT 1760. And the bourgeois did not want the workers to "PROPORTION THE VALUE OF THEIR LABOUR TO THE DEMAND FOR THE MANUFACTURES"; he did not want the law of supply and demand to operate in so far as it worked against himself. Instead, the worker was supposed to restrict the VALUE OF HIS LABOUR as value of labour capacity to a definite amount of the means of subsistence. Nevertheless, even today almost every attempt of this kind calls forth a *STRIKE* on the part of the workers, and it only succeeds under the most extraordinary circumstances.)

* "and, when the price of 3 days' labour will maintain their families [for] a week, will not work six" * [ibid.];

(they WILL rather ONLY WORK SIX FOR PROGRESSIVE WAGES. It took [XXIII-1445] time before *capital* was able to gain *de facto* the title to all the worker's available time);

* "and, if the necessaries of life were to be had at a cheaper rate, the case would be still worse... This is true with regard to all labour in *England*, where a *monopoly* is given to almost every kind of manufacture, and the *traders are not* allowed to employ such hands as they think are fit and able to work for them, but are confined to such only as the law has qualified... In all countries, where industry is not restrained, the price of provisions must affect the price of labour. This will always be diminished when the necessaries of life grow cheaper" * ([p.] 3).

He enumerates among the "difficulties" and "discouragements" PUT UPON INDUSTRY:

the * Apprenticeship Act "(many trades a man may not lawfully exercise who has not served an apprenticeship), others he may not join together: at others he may

^a In the source: "manufacture towns".- Ed.

not work within the limit of a corporation... Every man, if not restrained by law, would pass from one employment to another, as the various turns in trade should require... Our present restraints often put it in the power of workmen to demand higher wages than their works deserve, and thus prevent the sales of our manufactures" * ([p.] 4).

The chief law of capitalist production as opposed to guild industry is the FREE TRANSFER OF LABOUR AND CAPITAL FROM ONE FIELD OF EMPLOYMENT TO ANOTHER. Labour confronts capital as labour in general, the particular content of which is as accidental and external for capital as the particular use value of the commodity it produces. For what is important for capital is the production of surplus value, the appropriation of alien surplus labour IN WHATEVER SHAPE—THE SHAPE BEING OF COURSE DETERMINED BY THE WANTS OF THE MARKET. On the other hand, in capital labour comes face to face with value as such, objectified labour as such, money in the independent form, the relation of which to living labour is its quality of being capital, a capital which does not increase because of its use value or the particular skill of the capitalists. (This belongs to CHAPTER IV.^a)

All this out of the *first* letter. In *Letter* II a representative of the *LANDED INTEREST* replies, and this man frankly expresses what is at stake for the *LANDED INTEREST* in this question (something only a few did in 1814-15).

Rent and price OF PROVISIONS (see Supplementary Notebook H, pp. 2-3 [op. cit., pp. 5-6]).

In the THIRD LETTER OUR MAN REPLIES

Fall in the value of labour * "In whatever proportion the expenses of a labourer" * //or capacity: as he puts it elsewhere, * "the price of provisions" ([op. cit.,] p. 3)// "are diminished, in the same proportion will his wages be diminished, if the restraints upon industry are at the same time taken off" * (p. 7).

In what follows he endeavours to prove, and this is interesting, that *rent* does not depend on the level of the *price of corn* (Supplementary Notebook H, pp. 3-4 [op. cit., pp. 8-9]).//¹⁷⁴

//1765 RIOTS in London, 1765 and 1766 in the countryside, as a consequence of the PRICE of PROVISIONS (see the TAXES ESSAY MAN,^b his Preface, and Three Letters etc.,^c Supplementary Notebook H, p. 4).

Letters to Men of Reason, and the Friends of the Poor, on the Hardships of the Excise Laws relating to Malt and Beer etc., London, 1774. This is the most furious pamphlet against the LANDED INTEREST.

^a See this volume, p. 178.-- Ed.

^b This refers to J. Cunningham, author of An Essay on Trade and Commerce... See also this volume, pp. 290-94, 315.—Ed.

^c Three Letters to a Member of the Honourable House of Commons, from a Country Farmer, Concerning the Prices of Provisions..., London, 1766, pp. 3, 31.— Ed.

It is therefore very important. (Supplementary Notebook H, pp. 5-9.)//

[XXIII-1446] //Considerations on the Present State of the Poor, London, 1775 (1st edition 1773).

In 1680 the poor RATE ¹⁷⁵ in England was £665,392; in 1773 IT WAS INCREASED between 4 and 5 times, BEING 3 MILLIONS (PREFACE, [p.] V).

Against the FARMING OUT OF THE POOR (Supplementary Notebook H, p. 10 [op. cit., p. 9]).//

//Béardé de l'Abbaye, etc. [Recherches sur les moyens de supprimer les impôts...,] Amsterdam, 1770. Against the Physiocrats (Supplementary Notebook H, [pp.] 10-11 [op. cit., pp. 40-43]).//

//Against the laws of rent and POPULATION. M. Fletcher, [Reflexions on the Causes Which Influence the Price of Corn, London,] 1827 (Supplementary Notebook H, p. 12 [op. cit., pp. 9-10, 18]).//

//[M. Fletcher,] An Essay on Political Economy, [London,] 1828. Trickery with the LAND TAX SINCE GEORGE II (Supplementary Notebook H, [pp.] 12-13 [op. cit., p. 25]).//

//RENT. [J. F. M. Redesdale,] Observations etc., [London,] 1828 [p. 84]. SITUATION more important than NATURAL FERTILITY.//

//[G. Robertson,] Essays on Political Economy etc., London, 1830 (Supplementary Notebook H, [pp.] 13[-14]).

How capital and rent grew during the ANTI-JACOBIN WAR,¹⁷⁶ but the main reason was the *PRIVATIONS* of the working class and the greater labour time, in part of women and children, in part of the other workers. These passages are *important*. To be included in the CHAPTER on so-called primitive accumulation.¹⁷⁷ (Supplementary Notebook H, p. 14 [op. cit., pp. 247-48]).//

England and America etc., 2 volumes, London, 1833 (Wakefield).

COMBINATION OF LABOUR (Vol. I, p. 16) (Supplementary Notebook H, p. 15). In a PIN FABRIC

*"each pin is the produce of many persons' united labour" * [p.] 19).

The first [combination] is therefore "COMBINATION IN POWER" ([p.] 20).

Division of agriculture into numerous mutually independent branches ([p.] 27) (Supplementary Notebook H, p. 16).

The concentration of capital (or of great masses of capital) IN a FEW HANDS is the condition for capitalist production. Where capital is evenly distributed among the producers it does not function as capital; this prevents "THE EXISTENCE OF A CLASS OF LABOURERS FOR HIRE" and labour on a large scale, etc. How then is the scattered capital combined? For this is the presupposition of capitalist production. Wakefield calls this concentration //which in fact coincides with primitive accumulation//

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* a "contrivance for the accumulation of capital, and the use of capital ... in large masses and a fixed shape".*

How have men done this?

* "They have divided themselves into owners of capital and owners of labour",

and, horribile dictu,^a

*"this division was ... the result of concert or combination" * (pp. 17-18) ([Supplementary Notebook H,] pp. 15-16).

Wakefield makes this distinction between England and America: In the UNITED STATES less than 1/10 of the PEOPLE are HIRED LABOURERS, [whereas] in England THE BULK OF THE PEOPLE consists of this class "whose ONLY PROPERTY IS LABOUR" [pp.] 42-44) ([Supplementary Notebook H,] p. 16).

Will some idiot now say that this is the case because THE BULK OF THE ENGLISH PEOPLE are idlers, and only the few capitalists work, or that this contrast arises out of the difference in energy and thrift between AMERICAN and ENGLISH PRODUCERS?

Increase in capitalists with the accumulation of capital, but not in the same proportion.

* "The number of master-manufacturers ... has increased, though in a less proportion than manufacturing capital" * ([p.] 87).

[XXIII-1447] In America there is a rapid alternation between being a capitalist and being a worker (now this has already changed) ([pp.] 130-31) ([Supplementary Notebook H,] p. 18, below).

Division between worker and capitalist: PROPORTIONATE WAGES. Wakefield says:

* "The mere division of produce between capitalists and labourers is a matter of very small moment, indeed, when compared with the amount of produce to be divided... The grand question is, how much do the two parties divide between them?" * (Vol. I, [p.] 123).

1) We see here, firstly, that wages and profit are viewed as parts of the product. This contradicts the relation of wage labour; but in reality the product of the worker is nonetheless always the fund from which he is paid. The money he receives this week is a part of the realised value of the commodity he produced the day before yesterday, or a week ago, or a month ago, etc.

2) The money that is paid out in wages, or variable capital, consists in substance, from the point of view of its use value, of means of consumption (mainly; the worker may, and must, expend a part of it on so-called unproductive labour), of objectified

^a It is dreadful to relate.-Ed.

labour, which always appears towards living labour as past labour. But for that reason this past labour may be CONTEMPORANEOUS OF a thing of the future. For example, the worker receives his weekly wage on Saturday; the bread, milk, meat, vegetables, etc., in which it is expended are first produced in the course of the following week, in this final form, the form in which these articles enter into individual consumption. To that extent, his wage is nothing but a draft on the products of simultaneous and even future labour; a draft which the workers receive on their reciprocal products, simultaneous and future. To that extent it would be absurd to maintain that the capitalist accumulates this and holds it in reserve for the workers. But the exclusive possession of the products in which past labour has been objectified, whether as means of labour or as means of subsistence, enables the capitalist to exchange his money for living labour, and, secondly, in so far as he pays it out in wages, to make it into drafts on the products of CONTEMPORANEOUS and future labour. But the conceptual point one must keep hold of here is that the capitalist exchanges money, hence the independent expression of past labour, value, for living labour. How the wage is subsequently realised is another matter. This should be brought forward during the investigation of normal stocks and circulating capital.

3) What Mr. Wakefield overlooks is *that the amount of produce to be divided* has something to do with the manner in which this amount is produced and that the division of the product has something to do with the method of division. This ought to have been very clear to Mr. Wakefield, because his main point is that capital, wage labour, capitalist production, and the amount of produce dependent on that, only arise with a certain method of division of the produce.

Process of accumulation.

* "Labour creates capital, before capital employs labour" * (Vol. II, [p.] 110).

The accumulation of capital is not identical with the growth of variable capital¹⁷⁸:

[XXIII-1448] * "It does not follow that, because labour is employed by capital, capital always finds a field in which to employ labour" ([Vol.] II, [p.] 103, note). "Capital frequently increases without providing any more employment for labour" ([Vol.] II, [p.] 99). "It is not true that all capital employs labour" (l.c., [p.] 99). "Though no labour be employed save by capital, still millions upon millions of capital are accumulated, not to employ domestic labour, but, for want of employment for capital, either to lie idle, or to be wasted in distant and ruinous speculations" * ([Vol.] II, [p.] 97). [XXIII-1448]

[XXIII-1448] Rapid succession of generations of workers.

*The overworked children in the factories "die off with strange rapidity; but the places of those who perish are instantly filled, and a *frequent change of persons* makes no alteration in the scene"* ([Vol. I, p.] 55).

FARMING OUT OF THE POOR (see above, p. 1446,^a Considerations etc. ([Supplementary] Notebook [H], p. 10). Cf. Robert Blakey (1602^b), The History of Political Literature, [London,] 1855, and here [in] Wakefield [on] MRS. Hibner,¹⁷⁹ etc. (Supplementary Notebook H, [p.] 17).

Large profits during the Anti-Jacobin War.¹⁷⁶

* "The rate of interest is a pretty sure criterion of the rate of profit. During the last war the rate of interest was very high" * ([E. G. Wakefield, op. cit., Vol. I, p.] 91).

And what was the CONCOMITANT CIRCUMSTANCE of this accumulation of CAPITAL? Exactly what was "rediscovered" in 1830:

* "The peasant of the South of England ... is not a freeman, nor is he a slave; he is a *pauper*" * (Wakefield, l.c., [Vol.] I, [p.] 47).

On the bad remuneration of the workers who trade in KNOWLEDGE ([Supplementary Notebook H,] p. 17 [op. cit., Vol. I, p. 96]).

Universal, SUFFRAGE and the WORKING CLASSES and the Reform Bill of 1830 (Supplementary Notebook H, p. 19 [op. cit., Vol. I, pp. 184-85]).

(Wages. James Mill (quoted by Wakefield). Article on EDUCATION in Supplement to the Encyclopaedia Britannica, 1832):

*"A good diet is a necessary part of a good education... In the great body of the people, all education is impotent without it" * [op. cit., Vol. I, p. 206] (against $Rumford^{c}$).

RENT. SITUATION is almost the only decisive factor in the Colonies ([ibid., pp.] 217-18) ([Supplementary Notebook H,] p. 20).

*"Rent ... arises from competition for the use of land" * ([p.] 218).

How IMPROVEMENTS which lessen the COST OF PRODUCTION benefit the LANDLORD (l.c., [p.] 224, [Supplementary Notebook H,] p. 20). Circumstances which determine competition for the USE OF LAND in England ([ibid., pp. 227-28] Supplementary Notebook H, pp. 20-21). Minimum of wages.

*"In what country, except North America and some new colonies, do the wages of free labour employed in agriculture, much exceed a bare subsistence for the labourer?" ([p.] 246). "Undoubtedly farmhorses in England, being a valuable property, are better fed than English peasants" * ([p.] 246).

^a See this volume, p. 307.-Ed.

^b This presumably refers to the Act for the Relief of the Poor, 1601. Blakey attributes it to the year 1602.-Ed.

^c B. [Thompson,] Count of Rumford, Essays, Political, Economical, and Philosophical, Vol. I. London, 1796. See also present edition, Vol. 30, p. 46.-Ed.

Simple labour (quoted by Wakefield^a).

* "The great class, who have nothing to give for food but ordinary labour, are the great body of the people" * (James Mill, Article on *Colony* in *Supplement to the Encyclopaedia Britannica*, 1832).

Connection of agriculture with domestic industry, etc., in the UNITED STATES (Supplementary Notebook F, pp. 21-22, 25).//

[XXIII-1449] [J. Gray,] The Essential Principles of the Wealth of Nations, Illustrated, in Opposition to Some False Doctrines of Dr. Adam Smith, and Others, London, 1797.

This man knew of Anderson, for in his appendix he quotes from Anderson's Agricultural Report for the County of Aberdeen.

This is the only important English work directly linked with the Physiocratic teaching. William Spence's Britain Independent of Commerce, 1807, is a mere caricature. This same fellow in 1814-15 was one of the most fanatic defenders of the LANDED INTEREST on the basis of Physiocracy—which teaches FREE TRADE. The fellow is not to be confused with Thomas Spence, the deadly enemy of PRIVATE PROPERTY IN LAND.

The work contains firstly an excellent and compressed résumé of the Physiocratic doctrine.

He is right in tracing the origin of this view to Locke and Vanderlint, and he describes the Physiocrats as men who

*"very systematically, though not correctly, illustrated" * the doctrine (p. 4). (See also on this [p.] 6; [Supplementary] Notebook H, pp. 32-33.¹⁸⁰)

The summary given there brings out very nicely that the *PRIVATION theory*—which the later apologists, and *PARTLY* even Smith, made the basis for the formation of capital—arose precisely from the Physiocratic view that *NO SURPLUS VALUE* IS CREATED in industry, etc.:

"The expense laid out in employing and maintaining them" [handicraftsmen, manufacturers¹⁸¹ and merchants] *"does no more than continue the existence of its own value, and is therefore unproductive" //because * unproductive of surplus value//. "The wealth of society can never in the smallest degree be augmented by artificers, manufacturers, or merchants otherwise than by their saving and accumulating part of what is intended for their daily subsistence; consequently it is by privation or parsimony alone that they can add any thing to the general stock"* (Senior's theory of abstinence, Adam Smith's theory of saving). * "Cultivators, on the contrary, may live up to the whole of their income, and yet at the same time enrich the State; for their industry affords a surplus produce called rent" ([p.] 6).

"A class of men whose labour (though it produces something) produces no more than what was bestowed, in order to effect that labour, may with the greatest propriety be called *an unproductive class*" * ([p.] 10).

^a [E. G. Wakefield,] op. cit., Vol. II, p. 77.- Ed.

Production of surplus value to be clearly distinguished from its TRANSFER.

*"The augmentation of revenue" * //this is accumulation// *"is not, but indirectly, the object of the Economists...¹⁷¹ Their object is the production and reproduction of revenue" * ([p.] 18).

And this is the great merit of Physiocracy. It asks itself: how is *surplus value* (for him it=REVENUE) produced and reproduced? The question of how it is *reproduced* on a *larger scale*, that is, increased, comes up only in the second place. Its *category*, the secret of its production, [XXIII-1450] must first be revealed.

Surplus value and COMMERCIAL CAPITAL.

* "When the question is about the production of revenue, it is altogether illogical to substitute for that the transfer of revenue, which all commercial dealings are resolvable into" ([p.] 22). "What does the word commerce imply but commutatio mercium^a... sometimes more beneficial to the one than the other; but still what the one gains the other loses, and their traffic really produces no increase" ([p.] 23). "Should a Jew sell a crown piece for 10s., or a Queen Anne's farthing for a guinea, he would augment his own income, no doubt, but he would not thereby augment the quantity of the precious metals; and the nature of the traffic would be the same, whether his virtuoso customer resided in the same street with himself, or in France, or in China"* ([p.] 23).

The Physiocrats explain the profit of industry as profit UPON ALIENATION¹⁶¹ (that is, in the Mercantilist way). This Englishman therefore draws the right conclusion that this profit is only a gain when industrial commodities are sold abroad. From the Mercantilist premiss he draws the right Mercantilist conclusion.

* "No man, as a manufacturer, however he may gain himself, adds anything to the national revenue, if his commodity is sold and consumed at home; for *the buyer precisely loses* ... what the manufacturer gains... There is an *interchange* between the seller and the buyer, but no increase" ([p.] 26).

"To supply the want of a surplus ... the master employer takes a profit of 50 p.c. upon what he expends in wages, or 6d. in the shilling on each manufacturer's pay... And if the manufacture is sold abroad"* ... this * "would be the national profit"* of so and so many * "artificers" * ([p.] 27).

Very good presentation of the reasons for Holland's wealth. Fisheries. (He should also have mentioned stock raising.) MONOPOLY OF THE SPICES OF THE EAST. CARRYING TRADE. Lending money abroad. (Supplementary Notebook H, pp. 36-37).¹⁸²

*Manufacturers "are a necessary class" * but not a * "productive class" * ([op. cit., p.] 35). They * "occasion a commutation or transfer of the revenue previously provided by the cultivator, by giving a permanency to that revenue under a new form" * ([p.] 38).

^a Commodity exchange.- Ed.

There are only 4 essential classes. Productive class or cultivators. Manufacturers. Defenders. The class of instructors (into which he includes the Physiocratic décimateurs^a or priests),

"for every civil society must be fed, clothed, defended and instructed" ([pp.] 50-51).

The mistake of the Economists¹⁷¹ is that they * "deemed receivers of land rents, as mere receivers of rent, a productive class in society... They have in some degree compensated for their error by intimating that the Church and King are to be served out of those rents. Dr. Smith ... suffering it"* (this *error* of the *Economists) "to pervade the whole of this enquiry,"* (this is correct) * "directs his refutation to the sound part of the Economical system"* ([p.] 8).

[XXIII-1451] The LANDLORDS as such are not only not *productive*, but not even *an essential class of society*.

* "The proprietors of land as mere receivers of land rents are not an essential class of society... By separating the rents of lands from the constitutional purpose of the defence of the State, the receivers of those rents instead of being an essential class, render themselves one of the most unessential and burthensome classes in society" * ([p.] 51).

See his further treatment of this, which is very good (Supplementary Notebook H, pp. $38-39^{183}$)—and this polemic against the receivers of land rent from the standpoint of the Physiocrats, as the final conclusion from their doctrine, is very important.

[The author] also shows that the real tax on land is Turkish ([Supplementary Notebook H, p.] 40 [op. cit., p. 59]).

The LANDLORD taxes not only IMPROVEMENTS OF LAND, but often the PRESUMPTION OF FUTURE IMPROVEMENT ([Supplementary Notebook H,] p. 40 [op. cit., pp. 63-64]). Tax on rents ([Supplementary] Notebook [H], p. 40; l.c. [p. 65]).

The Physiocratic doctrine ANCIENTLY ESTABLISHED in England, Ireland, feudal Europe, EMPIRE OF THE MOGUL¹⁸⁴ ([Supplementary Notebook H,] p. 42; l.c. [pp. 93-94]).

The LANDLORD as TAX-IMPOSER ([Supplementary Notebook H,] p. 43; l.c. [p. 118]).

The limitations of Physiocracy break through in the following (lack of understanding of the division of labour):

Let us assume that a clockmaker or CALICO manufacturer cannot sell his clock or CALICO.

//But let us assume instead that a producer of coal, iron, flax, indigo, etc., cannot sell these products, or even that a producer of corn cannot sell his corn. *Béardé de l'Abbaye*, cited above, is very good on this.^b He [the anonymous author] has to stress production

^a Tithe recipients — Ed.

^b Béardé de l'Abbaye, Recherches sur les moyens de supprimer les impôts..., p. 43. See also this volume, p. 307.—Ed.

for immediate consumption as against the production of commodities very much in contradiction with the Physiocratic view that valeur vénale^a is the principal thing. But that runs right through the work of this fellow. It is the bourgeois view within the pre-bourgeois way of looking at things.//

We will see then * "that a manufacturer only enriches himself by being a seller" *

(we will only see that he produces his product as a commodity)

* "and that when he ceases to be a seller, his profits" *

//and what of the profits of the farmer who is not a seller ?//

* "are immediately at a stand, because they are not natural profits, but artificial. The cultivator ... may exist, and thrive, and multiply, without selling any thing" * ([pp. 38-]39).

(But then he must also be a MANUFACTURER.)

Against Arthur Young's high price as being important for the PROSPERITY OF AGRICULTURE"; but this is at the same time polemics against the Physiocrats (Supplementary Notebook H, pp. 41, 42 and 43 [op. cit., pp. 65-78 and 118]).

Surplus value cannot be derived from the nominal raising of the price on the part of the seller.

* "Sellers" * are * "not enriched" * through the * "augmentation of the nominal value of the produce ... since what they gain as sellers, they precisely expend in the quality of buyers" * ([p.] 66).

Vanderlint-like:

* "While a field admitting cultivation can be found for every idler, let no idler be without a field. Houses of industry are good things; but fields of industry are much better" * ([p.] 47).

Against the FARM SYSTEM, and for LONG LEASES, because landownership will otherwise only hinder production and IMPROVEMENTS ([Supplementary Notebook H,] p. 43 [op. cit., pp. 118-23]). (Irish right of tenantry.^c)

[XXIII-1452] Quotes the following Mercantilist opinion expressed by Mun or Lee:

* "Great Britain could no more expect to get rich, without the balance of trade in her favour, than a family could get rich, the master of which had no other occupation than winning the money of his wife and children at play" * [p.] 114).

^a Market value.— Ed.

^b See this volume, pp. 298-99.— Ed.

^c See K. Marx, "The Indian Question.—Irish Tenant Right" (present edition, Vol. 12, pp. 157-62).—Ed.

Quotes in an appendix [p. 7] the above-mentioned arguments by Anderson^a FOR LONG LEASES, etc. On the YEOMANRY.⁷³

//[G. Whatley,] Principles of Trade etc., [London,] 1774.

How the phrase that wages are not determined by the price of provisions is used here by the defender of the landed interest, i.e. the BOUNTY on the EXPORTATION OF CORN (Supplementary Notebook H, pp. 44-45 [op. cit., pp. 18, 39]).//

OVERWORKING and dying off of YOUNG WOMEN (The Times, JULY 2, 1863. Supplementary Notebook H, p. 168¹⁸⁵).

//R. Torrens, An Essay on the External Corn Trade etc., London, 1815.

Against Malthus (Supplementary Notebook G, p. 9). Extension of the fields devoted to corn production^b:

* "Other things remaining the same, in proportion as the territory, which supplies subsistence, is extended, the inequality in the productiveness of the seasons will be diminished" * ([p.] 2), or its * "irregularity" * (p. 24).

Value of labour capacity. Well worked out (Supplementary Notebook G, p. 10 [op. cit., pp. 62-65]). At that time //also in part in the 18th century// this "law of nature" was exploited by the FREE TRADERS in favour of the MANUFACTURING INTEREST and against the LANDED INTEREST and taxes imposed by the state (CORN LAWS). On the other hand, the defenders of the LANDED INTEREST, TAX MONGERS, etc., hold onto the phenomenon of CURRENT PRICES, which is independent of the price of the means of subsistence, and onto the surplus labour and fall in the level of wages (hence direct subjection of the working class to the capitalists) which is brought about by the increasing dearness of the means of subsistence. This doctrine had lost much of its sense, once the whole of the available labour time of the working class was subordinated to capital. In the 18th century it was advocated by the following fellows, apart from Sinclair and other TAX GATHERERS and representatives of the national debt: the TAX ESSAY MAN^c (completely systematically) (1765 and 1770), Sir Temple (apes the Dutch) //the Physiocrats too, half W. unconsciously//, Principles of Trade (1774)^d (in favour of a BOUNTY ON CORN), Arthur Young, A Six Weeks' Tour into Wales etc., 1769, The Expediency of Allowing the Free Exportation of Corn (1770) (he, like the TAX Essays MAN, is a Pindar of the high price of NECESSARIES), and all the rest of his writings, such as Political Arithmetic [1774], the

^a See this volume, p. 311.-Ed.

^b In the manuscript, Marx wrote "(PROVISION)" above "corn production".— Ed. ^c This refers to J. Cunningham, author of *Considerations on Taxes...* and An

Essay on Trade and Commerce... See also this volume, pp. 290-94, 306 .-- Ed.

^d By G. Whatley.— Ed.

Inquiry [into the Connection between the Present Price of Provisions, and the] Size of Farms [London,] $(1773)^{a}$ (that it was a faith in practice can be seen from Vanderlint's polemic of 1737 or thereabouts^b) and others.

In opposition: Vanderlint. Against the BOUNTY pamphlet (Evening Post LETTERS) (1753),^c Letters to Men of Reason (1774),^d Essential Principles (1797),^e etc. Postlethwayt.

In the 19th century advocated by Malthus, Spence (W.), Lauderdale, Parnell, in short the whole CORN LAW gang; opponents included Buchanan, West, Ricardo, Commercial Policy, Torrens, I. D. Hume and many others, some of whom need to be mentioned again in connection with the squabble over the CORN Laws. (It is to be noted that the same FREE TRADERS have told the workers since 1830 that this law of nature does not apply to them; they have in part made the same assertions vis-à-vis the workers as the LANDED interest made towards the FREE TRADERS. During the first three-quarters of the 18th century, when the price of corn was constantly falling, the issue was in practice a matter of indifference for the bourgeois, whereas they did not succeed until the introduction of large-scale industry in squeezing out of the urban workers the full labour for a price corresponding to the value of labour. They only turned against the LANDED interest in periods when corn became dearer.)

[XXIII-1453] Mr. Torrens admits, incidentally, that this was tolerable in the period of the Anti-Jacobin War,¹⁷⁶ when 1) England had a monopoly of machinery, 2) she had the monopoly of the world market, and 3) the workers were further protected by the depreciation of the currency. But once this came to an end, *competition on the world market* became harmful to the cause; apart from this, *wages* had in part already been driven down to the very LIMIT OF THEIR NATURAL PRICE, driven down so far that any further pressure on wages was *dangerous*; in addition, the struggle and the revolt of the workers *against the extension of the working day* had already started at that time. (It should be added that in so far as RAW PRODUCE enters into constant capital, the *rate of profit* is reduced

^a By J. Arbuthnot.--- Ed.

^b This presumably refers to J. Vanderlint's work *Money Answers All Things...*, London, 1734.—*Ed.*

^c See this volume, pp. 304-06.- Ed.

^d Ibid., p. 306.— Ed.

^c By J. Gray. See this volume, pp. 311-15. - Ed.

^f This presumably refers to Remarks on the Commercial Policy of Great Britain, Principally As It Relates to the Corn Trade, London, 1815.—Ed.

by an increase in the price of RAW PRODUCE, independently of wages, and with competition on the world market and the cessation of the monopoly the NOMINAL RISE IN THE VALUE OF LABOUR MUST SERIOUSLY ATTACK THE RATE OF PROFIT.)

Where FOOD RISES WITHOUT A CORRESPONDING RISE IN WAGES, etc., DISEASE and death of the workers, until [the wage of] labour rises "UP TO THE LEVEL OF THE MONEY PRICE OF CORN" ([Torrens, op. cit., pp.] 78-79; Supplementary Notebook G, pp. 12-13).

Exceptions to the principle: 1) when "CORN SO VERY GRADUALLY RISES" as to LEAD to "SUBSTITUTION OF POTATOES FOR BREAD", "LOWERING THE STANDARD OF SUBSISTENCE" (i.e. LOWERING the VALUE OF LABOUR) ([Supplementary] Notebook G, p. 14 [Op. cit., p. 90]); 2) TEMPORARY exceptions with SUDDEN RISES OF CORN, as in Thuringia (l.c. [Supplementary Notebook G,] pp. 14-15 [Op. cit., pp. 90-91]; 3) If the RISE OF CORN is compensated for by a cheapening of manufactured commodities or a FALL in other NECESSARIES owing to a reduction in TAXES ([Supplementary Notebook G,] p. 15 [Op. cit., pp. 91-92]).

*"Contrary to all sound theory, and in direct opposition to experience, those who would make provisions dear contend that the price of corn has no influence on wages; and cannot, therefore, increase the price of wrought goods, or give the foreigner any advantage over the home manufacturer" * ([op. cit., p.] 227).

Torrens believes—as was the prevailing view before and after Adam Smith, until Ricardo—that raising wages raises the prices of commodities. This point of view was predominant in the 18th century in the polemic against HIGH PRICES OF PROVISIONS and therefore HIGH NOMINAL PRICES OF WAGES. But it does not alter the situation in any way. With West, Ricardo, etc., on account of the (direct) reduction in the rate of profit, with Torrens and his predecessors on account of the rise in the amount of commodities, BEING UNDERSOLD ON THE MARKET OF THE WORLD, hence, by a detour, a fall in profit.

Torrens quotes the EVIDENCE^{*} of Lauderdale given before the House of Lords. (This should all be quoted in connection with the PRICE OF LABOUR.)

The situation amounts to this: In years of dearth they work EXTRA HOURS; the quantity of labour added is thereby increased; hence if the DEMAND remains the same, the price of labour falls, while labour time is prolonged. An important point here, once again, is that the SUPPLY OF LABOUR can rise without any increase in the number of workers. ([To be cited] in connection with the PRICE OF LABOUR.) ([Supplementary] Notebook G, pp. 33-34 [op. cit., pp. 227-30].)

Torrens in contrast says this:

^a Marx gives this English word in brackets after its German equivalent.-- Ed.
* "With respect to labour, as well as with respect to everything else, market will occasionally vary from natural price" * ([op. cit., p.] 229).

Lauderdale further says:

* "In 1790, when wheat $= \pounds 2$ 16s. per qr., it cost 15d. to *weave* an ell of muslin; and in 1812, when wheat was at $\pounds 6$, the same work was done for 6d. ... Dear provisions and low wages of 1812"* (Torrens, [p.] 230).

The author of [Remarks on the] Commercial Policy [London, 1815] comments on this, as quoted above,^a that it is admittedly the case for the kind of manufacturing labour that stood far above the COMMON LABOUR PRICE. It was levelled down to the latter. But the EVIDENCE given [by Lauderdale] before LORDS and COMMONS (not to mention the POOR LAW SYSTEM, whereby in England part of the WAGES is paid as alms) proves the contrary, that the nominal price of labour increased considerably on an average, even if not in the same proportion as the price of PROVISIONS, except in a very few cases. See the arguments of Torrens ([Supplementary] Notebook G, pp. 34-36 [Op. cit., pp. 229-36]). (On the whole, AGRICULTURAL WAGES doubled, while the price of the means of subsistence tripled) (between 1790 and 1813) (i.e. the price of corn; meat even more).

[XXIII-1454] Quotes Sir Henry Parnell, pamphlet on the CORN TRADE, 1815^b—this fellow was CHAIRMAN of the COMMONS' COMMITTEE on the CORN LAWS, directed against the MANUFACTURERS—as saying that the increased prices will raise CORN WAGES and thereby the PRICES OF MANUFACTURES ([Supplementary] Notebook G, p. 37 [op. cit., p. 238]). He, says Torrens,

* "confines his consideration to the market rate of wages" * ([op. cit., p.] 239).

Quantity of imported corn ([Supplementary] Notebook G, p. 39 [op. cit., pp. 290-91]).

* "...when it requires a greater quantity of labour, to procure subsistence, a greater quantity of labour, or of its produce, must remain with the labourer as his wages. But, as a greater quantity of his labour, or (what is the same thing) of the produce of his labour, becomes necessary to the subsistence of the labouring manufacturer, and is consumed by him while at work, a smaller quantity of the productions of labour will remain with the employer; and any given quantity of manufacturing capital will bring to market" * //as if the commodities destined for the workers did not also come onto the market// * "a less supply of wrought goods than before" ([op. cit.,] 235-36).¹⁸⁶

"Every reduction in the money price of corn, reduces the money price of labour" ([op. cit., p.] 76). "An increase in the money price of corn, increases wages" * (l.c.).

^a See this volume, pp. 162 and 269.- Ed.

^b Presumably The Substance of the Speeches of Sir H. Parnell, Bart. in the House of Commons, with Additional Observations, on the Corn Laws, 2nd ed., London, 1814.— Ed.

If the CORN DUTY were suddenly removed:

* "The agricultural labourers, too, who had been employed upon the land thus thrown out of tillage, would lose all the benefit of the skill and dexterity they might have acquired in their accustomed calling; and, deprived of their moral capital, would be driven to seek employments in which their productive powers must be lowered" * ([op. cit., pp.] 179-80).¹⁸⁷

But this applies to all workers who are thrown out of their ACCUSTOMED CALLINGS by IMPROVEMENT.

Artificial increase of rent through artificial increase of the price of provisions. Threatened with the revenge of the people ([Supplementary Notebook] G, [pp.] 18-19 [op. cit., p. 199]).

Session 1813-14. Report and Evidence from the Select Committee (of the House of Commons) on Petitions Respecting the Corn Laws and Reports from the Lords' Committee on the State of the Growth, Commerce, and Consumption of Grain, and All Laws Relating Thereto. Session 1814-15.¹⁸⁸//

//G. Newnham (BARRISTER AT LAW).^a

The price below which [the import of] corn was prohibited was fixed at 63s. in the law of 1804, but at 80s. in the law of 1815. Above that price it can be imported on payment of a DUTY of 2s. 6d. ([Supplementary Notebook] E, [p.] 118 [op. cit., p. 2]).

An increase in the price of corn *increases wages*, where they are limited to *MERE NECESSARIES*¹⁸⁹; but it deprives the workers of the LITTLE SUPERFLUITIES, compels them

*"to descend from [their] accustomed place in the general scale" * ([Sup-plementary Notebook] E, [p.] 118 [op. cit., pp. 5-6]).

The wretched Malthus had plagiarised Anderson with regard to the superFLUITIES which went to make up wages apart from corn. In fact a few more superFLUITIES of this kind are indicated by Eden for 1795 and later. These had completely disappeared among the AGRICULTURAL LABOURERS by 1815. They were in fact reduced to the earlier English prison diet of bread and water ([Supplementary Notebook] E, p. 118, below, [p.] 119, at the beginning, l.c. [p. 6]).

See on the *rate* at which *corn*, etc., and *wages* rose from 1773 to 1812 ([Supplementary Notebook] E, p. 119 [op. cit., p. 7]).

[XXIII-1455] How the wage of AGRICULTURAL LABOURERS was directly measured by reference to the price of PROVISIONS by MAGISTRATES, POOR HOUSE overseers, etc. 1 GALLON LOAF per week (8 LB. 11 oz.) and 3d. for clothing per week per family of father, mother and 3 children.

^a G. L. Newnham, A Review of the Evidence before the Committees of the Two Houses of Parliament, on the Corn Laws, London, 1815.— Ed.

EVIDENCE OF MR. BENNETT (Lords' Report,^a p. 97; [Supplementary Notebook] E, pp. 119-20; l.c. [p. 20]).

Those swine! Sir F. Eden, Vol. I, p. 577, relates that the squires of Berkshire (in their capacity as MAGISTRATES these fellows determined the wages of the AGRICULTURAL LABOURERS—this in relation to earlier laws, see above on the "poor" (the second book)^b)

"fixed the rate of wages at Speenhamland, 1795" as follows: *"income should be 3s. for a man, when the gallon or *half peck* loaf of 8 lb. 11 oz. is at 1s., and increase regularly till bread is 1s. 5d.; when it is *above that sum*, decrease regularly till it be at 2s.; and then his food should be 1/5th less"* ([G. L. Newnham,] l.c., [p.] 20, note).

Bad land which was cultivated then. RENT ([Supplementary Notebook] E, [pp.] 120-21 [op. cit., pp. 51, 17]). See on this what a MEMBER IN THE HOUSE OF COMMONS openly says,

*"that this is a measure mainly intended to raise rents" * ([Supplementary Notebook] E, p. 121 [op. cit., p. 17]).

On the proportion of bad land, it emerges from the EVIDENCE that it was not very high ([Supplementary Notebook] E, [pp.] 121-23 [op. cit., pp. 52-53]).

See the table on corn imports ([Supplementary Notebook E,] pp. 123-24 [op. cit., pp. 58-59]). (On this evidence it is incomprehensible how Adam Smith could drivel on about the disinterestedness of the LANDLORDS.^C)

Owing to the RISE of RENTS the LANDLORDS did not pay a FARTHING for the ANTI-JACOBIN WAR ¹⁷⁶; indeed, they gained ([Supplementary Notebook] E, [p.] 23).^d//

//Charles H. Parry, M. D., The Question of the Necessity of the Existing Corn Laws, Considered etc., London, 1816. Against the Ricardian and Malthusian conception of differential rent ([Supplementary Notebook] E, p. 17). In practice rents often do not fall when THE PRICE OF PRODUCE FALLS (Parry, [p.] 11).

The cases where RENT "IMPEDES" CULTIVATION ([Supplementary Notebook] E, p. 18 [op. cit., pp. 13-14]).

The EVIDENCE before the HOUSES OF COMMONS and LORDS ([Supplementary Notebook] E, p. 19 [op. cit., p. 40]).

According to Arthur Young himself in his evidence, the poorer FARMERS (INSUFFICIENT CULTIVATORS owing to shortage of capital)

^a Presumably Reports Respecting Grain, and the Corn Laws...-Ed.

^b F. M. Eden, The State of the Poor: or, an History of the Labouring Classes in England..., Vol. I. See also present edition, Vol. 30, p. 46.— Ed.

^c See present edition, Vol. 31, p. 578.-Ed.

^d See Ch. H. Parry, The Question of the Necessity of the Existing Corn Laws..., pp. 100-01.— Ed.

*"heep up the price of corn only for the benefit of the greater capitalists, their rivals" * ([Ch. H. Parry, op. cit.,] p. 51).

Parry, a pure FREETRADE BOURGEOIS, points out that some of the FARMERS compensated themselves entirely at the expense of the workers, and by THROWING THEM ON THE PARISH obstructed

* "the usual connection between wages and provisions" * ([op. cit., pp.] 69-70).

STANDARD OF LIFE. Parry bemoans the fact that the English "LABOURERS" do not want to eat any inferior "MIXTURES OF FLOUR", and says:

*"In Scotland, where education is better, this prejudice is ... unknown" * ([op. cit., p.] 69).

Wages. For Eden, the years 1792-96 correspond closely to THE DEARNESS OF 1812 and the following years. But the LABOURERS suffer still worse ([Supplementary Notebook] E, pp. 20-21 [op. cit., pp. 73-78]). Here bread accounts for approximately half, in Eden not quite half. On an average over $^{2}/_{5}$. But with families with more children, it accounts for much more. In 1795 and 1796 there still figure articles [of consumption] which have disappeared by 1815. BESTIALITY of the FARMERS ([Supplementary Notebook E,] pp. 21 and 22 [op. cit., pp. 77 and 80-81]). Also on p. 22 [of Supplementary Notebook] E [op. cit., pp. 78-81] there is the demonstration that despite the considerable rise in NOMINAL WAGES the REAL WAGES of the LABOURER have suffered an immense decline. Cf. Eden [Supplementary Notebook] E, p. 26 [op. cit., p. 213].

Those dirty dogs of LANDLORDS are freed by their RENTS from all TAXES. Moreover, gain. On this, and the different varieties of these fellows, see [Supplementary Notebook] E, [pp.] 23-24 [op. cit., pp. 100-04].

[XXIII-1456] RENT and FARMERS' PROFIT.

* "If ... it be determined that a farmer must necessarily make a profit because he engages to pay a rent, nothing can be more oppressive",* etc. ([op. cit., p.] 158).

Horses in Great Britain and Ireland: 1,800,000. They cost $\pounds 16,200,000$. They eat the food needed by human beings ([op. cit., p.] 176; [Supplementary Notebook] E, p. 25).//

//John Locke, Some Considerations on the Consequences of the Lowering of Interest etc. (1691). [In:] Works, Vol. II, London, 1777.

* "There being a want of day labourers" //agricultural// "in the country, they must be humoured, or else they will not work for you", etc. ([p.] 17). "If the labourer hath less wages, he must also pay less for corn, butter, cheese, flesh" ([p.] 48).

"The natural worth"* (use value) *"of any thing, consists in its fitness to supply the necessities, or serve the conveniencies of human life"* ([p.] 28).

In distinction from this, "MARKETABLE VALUE".

* "The marketable value of any assigned quantities of two or more commodities are ... equal, when they will exchange one for another" (l.c.). "The value or price of all commodities, of which money passing in trade is truly one, consisting in proportion, you alter this, as you do all other proportions, whether you increase one, or lessen the other" * (l.c., [p.] 30).//

//Pietro Verri, Meditazioni sulla economia politica etc. (first published in 1771), Custodi [his edition Scrittori classici italiani di economia politica], Parte moderna, Vol. XV [Milan, 1804].^a

"Money is the universal commodity" ([p.] 16).

(Against the Physiocrats.) (Thick Notebook,¹²³ p. 95, below [op. cit., pp. 20, 22].)

Monetary and Mercantilist.

"These are the pivots around which all the measures of political economy turn: the maximum possible increase in the number of sellers of each commodity, and the maximum possible decrease in the number of buyers" ([op. cit., pp.] 52-53).

See how he extricates himself from that, combining it in his manner with the increase of annual reproduction (Thick Notebook, p. 96, below [op. cit., pp. 53-56]).

"The problem of political economy is to increase annual reproduction to the utmost" (he means by that the net product, surplus value) "with the least possible labour, or given the quantity of reproduction to obtain it with the least possible labour; given the quantity of labour to obtain the maximum reproduction; to increase labour as far as possible and to extract from it the maximum reproductive effect" ([op. cit., p.] 190).

Ferdinando Paoletti.^b For the Physiocrats (Thick Notebook, p. 98).

Antonio Genovesi, Lezioni di economia civile (1765), [In: Scrittori classici italiani di economia politica. Parte moderna,] Vol. VIII [Milan, 1803].

"It seems that these human forces have much elasticity; because, just like elastic bodies, they never achieve a full development without a great degree of compression and provocation" ([pp.] 10-11).

"The merchant counts the money he has made as almost nothing; he always looks to the future" ([p.] 139).//

[XXIII-1457] //Nicolas Baudeau, Première introduction à la philosophie économique etc. (1771). [In:] Physiocrates, ed. Daire [Paris, 1846].^c

"The title of wealth [richesse] therefore presupposes two things: firstly the usual qualities, which make objects suitable for our useful or pleasant enjoyment, and

^a Marx quotes the Italian authors in Italian.-- Ed.

^b F. Paoletti, I veri mezzi di render felici le societá. In: Scrittori classici italiani di economia politica. Parte moderna, Vol. XX, Milan, 1804. See present edition, Vol. 30, p. 368.— Ed.

^c Marx quotes Baudeau in French.-Ed.

make them goods [biens]; secondly the possibility of exchanging them, which makes it possible for these goods to obtain other goods for you, and which makes them wealth" ([p.] 661).

"By the continuity, the generality, and the perfection of the art of instruction, men appropriate in good time the results of the reflections, the experiences, and the successes of many generations and many centuries; and it is this appropriation which develops the faculties", etc. ([p.] 665).//

Process of accumulation.

* "Simple labour is produced by the mere multiplication of human beings" * (Francis Wayland, The Elements of Political Economy, Boston, 1843, p. 298).

The natural growth of population is one of the results of reproduction; it is firstly itself accumulation (of human beings) and secondly the prerequisite of the process of accumulation (wITHIN CERTAIN LIMITS). It costs the capitalist nothing, no more than does the skill accumulated (piled up) by the working class through practice alone and TRANSMITTED as a result (advantages of labour) to its remplaçants.^a (See Hodgskin.^b) Finally there is the accumulation and reproduction of scientific knowledge, which determines the material process of production more or less directly. Scientific knowledge is the branch of objectified labour in which reproduction—the labour time necessary to "appropriate" it—stands in the lowest ratio to the labour time required originally in production. Process of accumulation and demand for labour.

A part of the total surplus **PRODUCE** is converted back into capital or a part of this part is converted into variable capital, i.e. laid out in wages. With this premiss, the following needs to be remarked about the preposterous economic doctrine of the physical dependence of wages on the magnitude of the capital available (this is also to disregard foreign trade and the investment of capital abroad at interest):

1) If one says that the amount of labour employed depends on the amount of capital available, this is correct in so far as—expressed in absolute terms—it is an absolute tautology, which only appears not to be a tautology because the moments of labour appear in the capitalist mode of production and therefore also in capitalist ideology as autonomous and alien and independent of each other. It means nothing more than this, that the increase in the number of working human beings depends on (or at least finds its limit in) the degree of productivity of their labour, a degree of productivity which is on the one hand expressed in the development of their own productive capacities and the degree of energy,

^a Replacements.--- Ed.

^b See present edition, Vol. 32, pp. 411, 427-28.- Ed.

knowledge and appropriateness to the purpose with which these capacities are exerted and *have been exerted*. But, secondly, it is expressed in the broader or narrower basis of *produced productive forces* on which it works and in the *extent of annual reproduction*, which must as raw material maintain in existence the means of subsistence and production itself for the following year. Son. EARTH.

[XXIII-1458] 2) The whole of the surplus PRODUCE consists of newly added labour (considered from the point of view of its value). Hence also that part of it which is converted into surplus capital or forms the source of accumulation. But although the whole of that surplus capital is derived from surplus LABOUR, nothing could be further from the truth than the notion that it is entirely exchanged for additional new labour, in the real conversion of the surplus PRODUCE into capital. It exists from the outset in forms in which it constitutes elements of constant capital, and only a part of it, relatively speaking a much more insignificant part, is converted into variable capital.

3) The more developed capitalist production is, the smaller is the part of the surplus PRODUCE which is reconverted into variable capital, and the greater is the part of the population which is constantly made REDUNDANT by the production process. The greater too is the quantity of labour which is consumed without increasing the number of workers. The supply of LABOUR, be it noted, depends (see the passage from Lauderdale^a) not only on the number of workers but on the length of the working day. It should also be added that large-scale industry, while on the one hand it constantly creates AN ARTIFICIAL REDUNDANCY OF POPULATION, on the other hand creates a situation of the working class in which it reproduces itself on a mass scale as a tas de misérables.^b

4) Then there is also the part which enters into the consumption of the UPPER CLASSES directly (or after being modified by foreign trade).

The rising demand for labour, adopted by Adam Smith as a dogma, (and, since he lets wages rise here as well, the accelerated growth of demand for labour) in proportion to the accumulation of productive capital, is a chimera which was, to be sure, correct for the system of Manufacture, on which his views were based. There is the same peculiar contradiction in Wakefield. In the UNITED STATES, and NEW COLONIES SETTLED by OLD BOURGEOIS COUNTRIES, an accelerated growth of wages (demand for labour) takes place up to a certain period, along with the growth of wealth, because here $\frac{99}{100}$ of the

^a See this volume, pp. 317-18.- Ed.

^b Gang of wretches.-Ed.

agriculturalists, who in turn contribute perhaps $\frac{4}{5}$ of the whole of production, are PEASANTS working for themselves, hence not producing *in a capitalist fashion*, while in the towns there is capitalist production, and the whole colony exploits the capitalist mode of production of the OLD COUNTRIES without sharing its birthpangs. He himself admits this. On the other hand he wishes forcibly to introduce the *capitalist mode of production* into the colonies in their turn, and to abolish the free [exploitation of the] fertility of the soil—which is the essence of the colonies.^a

//Le Trosne, De l'intérêt social etc. [In:] Physiocrates, edit. Daire, [Part II,] Paris, 1846.^b

"It" (money) "has no other motion than that imparted to it by the products" ([p.] 885).

"Value consists in the exchange relation between one thing and another, between a given amount of one product and a given amount of another" ([p.] 889).

"Properly speaking, all products of the same kind form a single mass, and their price is determined in general and without regard to particular circumstances" ([p.] 893).

(Say, [Traité d'économie politique,] 3rd ed., Vol. II, Paris, 1817, p. 438.)

"Products can only be paid for with products" ([Le Trosne, op. cit., p.] 899). ("Products can only be bought with products" [Say, op. cit., p. 441].) "Exchange is by its nature a contract which rests on equality, i.e. it takes place between two equal values. It is therefore not a means of self-enrichment, since as much is given as is received" ([Le Trosne, op. cit., pp.] 903[-904].)

[XXII1-1459] "Sale can be reduced ... to exchange... It takes place in the same way, between two equal values, and it is not a means of self-enrichment" ([ibid., p.] 909).

"It is ... not the parties to a contract who decide on the value; that has been decided before the contract" ([p.] 906). "A commercial transaction in which money is involved is not completed ... by the sale... [At that point] only the buyer has achieved his aim... For the seller, however, all has not yet finished: the money he has received is not yet a good suitable for his enjoyment; in order to make use of it, then, he must in turn become a buyer" ([p.] 908). "It follows from this that every purchase on the part of someone buying at that moment presupposes a prior sale, and every sale presupposes a purchase to follow... It follows also that everyone daily returns the money he has received, and puts it into circulation; and that each halt money makes indicates the fulfilment of a need by the giver, or the discharge of an obligation, and the subsequent intention to discharge an obligation or fulfil a need on the part of him who receives the money" ([pp.] 908-09).

"Exchange arrives directly at the goal, which is consumption; it has only two terms, and concludes with a single contract. But a contract in which money is involved has not been completed, since the seller must become a buyer, either in person or through the mediation of the person to whom he transfers his money. In order to arrive at consumption, which is the ultimate aim, at least four terms and three contracting parties are therefore needed, and one of the contracting parties intervenes twice" ([p.] 909).

^a See [E. G. Wakefield,] England and America, Vol. I, London, 1833, and E. G. Wakefield, A View of the Art of Colonization, with Present Reference to the British Empire..., London, 1849. See also this volume, pp. 307-11.—Ed.

^b Here and below Marx quotes the French authors in French.-Ed.

"It" (money) "is not a mere token, for it is itself wealth; it does not represent the values, it is their equivalent" ([p.] 910). "In the hands of the seller who has received it, the money is a pledge or draft, which he will call on when he wishes, and in the manner in which he wishes" ([p.] 910).

Accumulation over and above annual reproduction. //But the whole of the fixed capital which has not been consumed is also a result of reproduction, without which it would be devalued and lose its use value.//

"Thanks to the more or less long duration of the products of manufacture, a nation possesses a considerable fund of wealth, *independent* of its annual reproduction, which forms a long-term *accumulation of capital*. This was originally paid for with products, and is continually *maintained* and *augmented*" ([pp.] 928-29).//

//Mercier de la Rivière, L'ordre naturel et essentiel des sociétés politiques (1767). [In:] Physiocrates, edit. Daire [Part II, Paris, 1846].

"One does not exchange money for money" ([p.] 486).

"At bottom, a value in money is nothing but a value in the form of product, which has merely changed its form" ([p.] 486).

"It is absolutely necessary that sellers and buyers should alternately yield up to each other by their purchases the money they have received through their sales" ([p.] 540). "Each seller, by the purchases he makes in his turn, must provide the money to enable the others to buy the commodities he wants to sell them" ([p.] 541).

[XXIII-1460] "With money one buys commodities, and with commodities one buys money; thus to sell or to buy is always ... to exchange one value, whatever it may be, for another value. Whether one of these two values is money, or they are both ordinary commodities, is in itself a matter of complete indifference", etc. ([p.] 543).

"A seller can normally only succeed in raising the prices of his commodities if he agrees to pay, by and large, more for the commodities of the other sellers; and for the same reason a consumer can normally only pay less for his purchases if he submits to a similar reduction in the prices of the things he sells" ([p.] 555).

"Is not each consumer alternately a buyer and a seller for equal amounts of money?" ([p.] 559).

"If money represents, in our hands, the things we can wish to buy, it also represents the things we have sold to obtain that money" ([p.] 586).

Valorisation process.

"This method of adding to one particular object the value of a number of others" //e.g. adding the living costs of the *tisserand*,^a etc.//, "of as it were *heaping up* various values in *layers* on top of one single value, has the result that this value grows to the same extent" ([p.] 599). "The expression addition gives a very clear picture of the way in which the *price of a manufactured product* is formed: this price is only the sum of a number of values which have been consumed, and it is arrived at by adding them together; however, addition is not the same as *multiplication*" ([p.] 599).

^a Weaver.— Ed.

(In fact addition does=multiplication. 2+2=4. $2\times2=4$.) //[H. Martyn,] The Advantages of the East-India Trade to England, Considered, London, 1720.¹⁹⁰//

[XXIII-1461] Now we return to:

2) So-called Primitive Accumulation.^a

a) If we presuppose the *capitalist mode of production* as historically given, the conditions are thus given in which the means of production are constantly reproduced as capital and labour as wage labour by the production process itself, for the latter is not only a process of the production of use values^b and commodities but a process of production and reproduction of social relations, of the relations of production within which use values^b and commodities are reproduced. And indeed, reproduction takes place in such a way that on the one hand the relations of capitalist production are reproduced on a larger scale, and on the other hand their differentia specifica, their inner tendency is giving reality a form ever more adequate to the principle. Once the capitalist mode of production is itself presupposed as given, its analysis remains important even for the present theme, because the manner in which the capitalist mode of production expands (takes possession of a greater segment of the social area) and subjects to itself spheres of production as yet not subject to it, while on the other hand it proceeds from the merely *formal* subsumption of labour under it to labour's real subsumption, entirely reproduces the manner in which it arises altogether. For this reason, we shall be able in this section to have constant consideration for these changes, which proceed on the basis of the capitalist mode of production itself.

This is number I.

The second is as follows:

The development of capital does not begin with the creation of the world, it does not begin $ab \ ovo$. Only in the 16th and 17th centuries does it in fact begin to be something which dominates the world and seizes hold of the whole economic formation of society. This is its infancy. Therefore, we only need to go back to conditions in the very recent past. The capitalist mode of production in fact only attains a full development with *large-scale industry*, and therefore dates in its totality from the last third of the 18th century (even if it was still only sporadically developed). Even the merely *formal subsumption* of labour under capital—on

^a See this volume, pp. 243-47.- Ed.

^b In the manuscript Marx wrote "things" above "use values".--Ed.

which the prolongation of the working day depends, as well as the confiscation of the whole of the disposable time of the working class as belonging to capital—only develops once the capitalist mode of production has really developed. Previously this was seen at most in the system of slavery (founded on modern colonies or among ancient trading peoples or in classical antiquity, e.g. among the Romans) once production on a mass scale, hence production for sale, production of commodities, had taken control of agriculture through the concentration of landed property.

Where we find manufacture before the 16th and 17th centuries, as in Italy, Spain, Constantinople, Flanders, etc., it 1) has a partially handicraft character (except perhaps in mining and metalworking), and 2) always rests on trade, on the monopoly of the CARRYING TRADE, which piles up money capital, mercantile capital, in the hands of these monopolists of the [XXIII-1462] world market of that time.

Nevertheless, it is necessary to go back to earlier conditions in order to refute current notions about the so-called primitive accumulation of capital.

3) Capitalist production presupposes that a man must sell his *labour* because he is not in a position to *sell commodities*, hence is not in a position to *produce* commodities, hence the means of production of commodities—the objective conditions of labour—confront him as *alien* property.

Where private property exists in one form or another, as well as the exchange of commodities, the exchange of the products of this private property, one condition of capitalist production-namely the individual who has been stripped of the means of production, of the conditions of labour-can be created for all the reasons for which the individual is deprived of, loses that private property and therefore those means of production. And these conditions are from the point of view of the isolated individuals purely accidental, they have nothing to do with the general deprivation, loss of these conditions by the mass of the people, hence with their general conversion into wage labourers. The isolated individual can be pauperised under all possible forms of private property; hence under all possible modifications of the social mode of production which presupposes private property. And yet Rome, Athens, etc., show us (even in Thebes, the ancient republic, free wage labourers arose in this manner) that the capitalist mode of production by no means originates through this pauperisation of the individual, and even of the mass of plebeians, etc. But without slavery it would have had to come into existence.

If it emerges here that even the loss of the means of production by the mass of (free) people does not create the capitalist mode of production (although conditions in Athens, Sicily, etc., came close to it), this is even less the case for the circumstances and accidents by which individuals lose their means of production, and may sporadically become free wage labourers in so far as they do not live as paupers of the state (panes et circenses^a). In this investigation we are not interested in the fact that free wage labourers may sporadically be present, without affecting the society's whole mode of production and therefore the social relations of production.

4) ¹⁹¹ Proudhon speaks in his Philosophie de la misère of an extra-economic origin of property, by which he means landed property.^b This mystery amounts to the pre-bourgeois ([pre-]capitalist) relation [of the individual] to the conditions of his labour, initially to the natural conditions, then to the soil. He might just as well accuse capital and wage labour, as forms of property, of having an extra-economic origin. For the worker's encounter with the objective conditions of labour as *capital*, and the capitalist's encounter with the worker as a propertyless, abstract worker, presuppose an historical process, however much this relation is reproduced on this basis, once it has been given, however much it is elaborated in scope and depth. And this historical process is the history of the emergence of both capital and wage labour. In other words, the extra-economic origin of property means nothing but the historical origin of the bourgeois forms of production, forms to which the categories of political economy give theoretical or conceptual expression. The statement that pre-bourgeois history, and each phase of it, has its own economy and an economic basis of its movement, is in fact merely the tautology that human life [XXIII-1463] has from the beginning rested on production, and-once humanity emerged from the merely animal condition - d'une manière ou d'une autre, c on social production, whose relations are precisely what we call economic relations.¹⁹²

[XXIII-1464] Interest calculation.

Simple interest. 100:5=860:43 (the interest). As hundred (100) is to i (interest, f.1.5%), so principal to interest, i = interest of 100. p = principal.

As 100: i = p:x, and $x = \frac{ip}{100}$.

^a Bread and circuses.— Ed.

^b See K. Marx, The Poverty of Philosophy (present edition, Vol. 6, p. 197).- Ed.

[•] In one way or another - Ed.

COMPOUND INTEREST: for the sake of simplification the rate of interest is assumed to be=5%, $^{105}/_{100}$ or $^{21}/_{20}$. Number of years=n. PRINCIPAL=a, sum=S. Thus the formula is as follows:

 $S = a \left(\frac{21}{20}\right)^n$. And solved logarithmically this gives: log. $S = \log_2 a$ + log. $({}^{21}/{}_{20})'' = \log a + n \cdot \log ({}^{21}/{}_{20}) = \log a + n \cdot (\log 21 - \log 20).$ Let a = 1,000, n = 100 years, interest = 5%, S = x? $S = 1,000 (^{21}/_{20})^{100}$. log. $S = \log 1,000 + 100$ (log. 21-log. 20). log. 21=1.3222193 20 = 1.3010300SUBTRACTING log. $\log \frac{21}{20} = 0.0211893$ MULTIPLYING BY 100 $\log \frac{21}{20} = 2.1189300$ 100 $\log 1,000 = 3.0000000$ ADD 5.1189300 Hence log. S =5.1189300, TO WHICH CORRESPONDS

THE NATURAL NUMBER $f_{131,501}$.

According to Leonhard Euler's calculation (done however to 15 decimal places instead of 7, as in the above example, owing to the length of the series of years) a principal of $\pounds 1$, being placed at 5% compound interest for 500 years, = $\pounds 39,323,200,000$. And this makes $\pounds 78,646,400$ (on an average) for each year of the 500.

[XXIII-1465] If not only interest is ADDED every year to the PRINCIPAL, but A NEW SUM b is always added as well, *the original principal,=a, would increase each year in the following manner:

after [the] 1st year: ${}^{21}/_{20} a + b$; after 2 years: $({}^{21}/_{20})^2 a + ({}^{21}/_{20})b + b$; after 3 years: $({}^{21}/_{20})^3 a + ({}^{21}/_{20})^2 b + ({}^{21}/_{20})b + b$; after 4 years: $({}^{21}/_{20})^4 a + ({}^{21}/_{20})^3 b + ({}^{21}/_{20})^2 b + ({}^{21}/_{20})b + b$; after n years: $({}^{21}/_{20})^n a + ({}^{21}/_{20})^{n-1} b + ({}^{21}/_{20})^{n-2} b \dots + ({}^{21}/_{20})b + b$.

Now if we take that part of this formula, in which b appears, inversely, it forms an ascending geometrical proportion, viz:

$$b + {\binom{21}{20}} b + {\binom{21}{20}}^2 b + {\binom{21}{20}}^3 b \dots + {\binom{21}{20}}^{n-1} b$$

The exponent of this series is $\binom{21}{20}$. Now the formula for a geometrical progression is=

$$\frac{a(\text{the first term}) \cdot (b^n - 1)}{b - 1}$$

supposing a the first term, b^{n-1} the last term, so that* $b^n = b^{n-1} \times b$, and b * the ratio. Hence in our case

 $b = \text{first term}, \frac{21}{20} = \text{ratio.}$ Consequently the sum of the above geometrical progression=

$$b \cdot \frac{\binom{21}{20}^{n}-1}{\binom{21}{20}-1} = \frac{b\binom{21}{20}^{n}-1}{\binom{1}{20}} = 20\binom{21}{20}^{n}b - 20b.$$

The whole expression will therefore be:

$$\binom{2^{1}}{20}^{n}a + 20\binom{2^{1}}{20}^{n}b = 20b + \binom{2^{1}}{20}^{n}(a + 20b) - 20b.$$

To calculate the latter expression by logarithm, we treat its first part— $\binom{2^{1}}{20}$ ⁿ(a+20b) separately, and afterwards subtract 20b. Suppose $a=\pounds1,000, 5\%$ compound [XXIII-1466] interest, b (the sum annually added) *=100, n (the *number of years)=25.

In this case the formula $\binom{21}{20}^n \times (a+20b) - 20b$ resolves itself into $\binom{21}{20}^{25} \times (1,000+2,000) - 2,000$.

log. ${}^{21}/_{20}=0.021189299$ 25×log. ${}^{21}/_{20}=0.5297324750$ log. (1,000+2,000)=3.4771213135

Sum =4.0068537885, which is the logarithm of 10,159.2

Subtracting 20b = 2,000 - 2,000

 $\pounds 8,159$ 2s. = $\pounds 8,159$ 2s.

Since this principal of £1,000 is always increasing, and after 25 years amounts to $\pounds 8,159^{1}/_{10}$, it may be asked, in how many years it will amount to £1,000,000.

We have then the equation * $\binom{2^{2}/_{20}}{(a+20b)-20b}=1,000,000$ or $(3,000) \binom{2^{2}/_{20}}{n} - 2,000 = 1,000,000.$ $\binom{2^{2}/_{20}}{n} = \frac{1,002,000}{3,000} = 334.$ $n \log. \binom{2^{1}/_{20}}{20} = \log. 334.$ $\log. 334 = 2.5237465$ and $\log. \binom{2^{1}}{20} = 0.0211893.$ $n = \frac{25237465}{00211893} = \frac{25237465}{211893} = 119$ years, 1 month, 7 days. [XXIII-1467] The formula developed above, $\binom{2^{2}/_{20}}{n} (a+20b) - 20b$, or $\binom{2^{1}/_{20}}{n} a + 20\binom{2^{1}}{20} b - 20b$ 331

is changed into $\binom{21}{20}{}^{n}a-20\binom{21}{20}{}^{n}b+20b$; or into $\binom{21}{20}{}^{n}(a-20b)+20b$ if the annual total, *b*, is subtracted from the principal, instead of being added to it.

If n expresses in YEARS LESS than a YEAR instead of a * whole year, it becomes a fraction, but the calculation is performed by logarithms as before.

If the amount, f.i., of the principal at the end of 1 day was required, $n = \frac{1}{365}$, if after 2 days, $n = \frac{2}{365}$, etc.

Suppose $a = \pounds 100,000$, interest *=5%. The principal is to be calculated for 8 days * (compound interest).

Then $S = a \cdot {\binom{21}{20}}^{\frac{8}{5}}_{565} = 100,000 {\binom{21}{20}}^{\frac{8}{5}}_{565}$ log $S = \log 100,000 + {\binom{8}{365}}$ log. ${\binom{21}{20}}$, but log. ${\binom{21}{20}} = 0.0211893$ $\times {\binom{8}{365}} = 0.0004644$, to which [should be added] log. 100,000 = 5.0000000

5.0004644, which corresponds to the natural number 100,107. If we subtract from this number 100,107 the original principal of 100,000, we find the interest for 8 days= ± 107 .

The theory of the calculation of interest owes its first improvements to the great Leibnitz, who published the principal elements of it in the Leipsic Acta Eruditorum for 1683.**

If a is the first TERM, b the exponent of the progression, and n-1 the exponent of the final term,

the sum of the progression $= \frac{a \cdot (b^n - 1)}{b - 1}$. If $b = \frac{b}{c}$, so that $\frac{b}{c} < 1$, hence c > b, the sum, or

$$S_{r} = \frac{a}{1-b/c} \quad \text{or} = \frac{ac}{c-b}.$$

^a This refers to Leibnitz's article "Meditatio juridico-mathematica de interusurio simplice".— Ed.

[XXIII-1468] * To this subject belongs also the calculation of the present value of a sum of money, which is payable only after a term of years.

For as £20, in ready money, amounts to £21 in a year; so (reciprocally) a sum of £21, which cannot be received till the end of one year, is really worth only £20. If, therefore, we express, by a, a sum whose payment is due at the end of a year, the present value of this sum is ${}^{20}/{}_{21}a$; and, therefore, to find the present worth of a principal a, payable a year hence, we must multiply it by ${}^{20}/{}_{21}$; to find its value two years before the time of payment, we multiply it by $({}^{20}/{}_{21})^2$; and, in general, its value, n years before the time of payment, will be expressed by $({}^{20}/{}_{21})^n a$.

Suppose a man has to receive for 5 successive years an annual rent of $\pounds 100$, and that he wishes to give it up for ready money, the interest being at 5%; it is required to find how much he is to receive.

For	£100	due	after	1	year,	he	receives	95.239
			after	2	years			90.704
			after	3	years			86.385
			after	4	years			82.272
			after	5	- years			78.355

Sum of the 5 terms = 432.955,

which he receives in ready money for the $\pounds 500$.

If the annual rent=a, which commencing at present, and lasting n years, will be actually worth

 $a + \binom{20}{21}a + \binom{20}{21}^2a + \binom{20}{21}^3a + \binom{20}{21}^4a \dots \binom{20}{21}^n a.$ Exponent = $\binom{20}{21}$.

This is a geometrical progression. The whole is reduced to finding its sum.

$$\frac{\binom{20}{21}^{n+1}a-a}{\binom{20}{21}-1} = \frac{\binom{20}{21}^{n+1}a-a}{-\frac{1}{21}} = -21 \cdot \binom{20}{21}^{n+1}a + 21a = 21a - 21\binom{20}{21}^{n+1}a.$$

The latter part to be calculated by logarithms, and then to be subtracted from 21a.

[XXIII-1469] When the principal alone produces interest, it is called simple interest.

When the interest, as soon as it becomes due, is added to the principal, and the whole then produces interest, it is termed compound interest.

Simple interest. p= principal lent, r the interest of $\pounds 1$ for 1 year, n = number of years, i= the interest of the sum lent * //hence r = *rate

of interest//, $m \approx$ the *amount* (the sum of the principal and its interest for any time, taken together).

rp = the interest of $\pounds p$ for one year.

nrp = the interest of f p for n years.

 $i = n \cdot r \cdot p; \quad m = p + nrp = p(1 + nr).$

These 2 equations: * 1) i = nrp, and 2) m = p(1 + nr) are sufficient * to solve any question connected with simple interest.

If q the rate per cent, then, since r the rate of interest for £1,

$$q=100r$$
, or $r=\frac{q}{100}$. then * 1) $i=n\cdot\left(\frac{q}{100}\right)p$ and 2) $m=p\left(1+\frac{nq}{100}\right)=\left(\frac{100+nq}{100}\right)p$.

*Required the simple interest, and amount of $\pounds 125$ 6s. 8d. in 4 years, at 5 p.c.

 $p = 125^{1}/_{3}; r = 5/_{100} = 1/_{20} = 0.05; n = 4.$ $i = 4 \cdot (1/_{20}) \cdot 125^{1}/_{3} = 1/_{5} \cdot 125^{1}/_{3} = 25^{1}/_{15} = \pounds 25$ ls. 4d. $m = \pounds 150$ 8s.

Discount at simple interest. p = present worth and discount of a given sum m, due n years hence, at the rate r. In n years at r p[will] = m.

 $m = (1 + nr)p. \quad p = \frac{m}{1 + nr}.$ This is the present worth of p. Discount $d = m - \frac{m}{1 + nr}$, for the discount=the amount of money to be received after n years-the present worth of p; since* p + d or $d + \frac{m}{1 + nr} = m$, [XXIII-1470] $d = m - \frac{m}{1 + nr} = \frac{m + mnr - m}{1 + nr} = \frac{nrm}{1 + nr}$.

*If q the rate p.c.,

$$p = \frac{m}{1+nr} = \frac{m}{1+\frac{nq}{100}} = \frac{100m}{100+nq}.$$

$$d = \frac{nrm}{1+nr} = \frac{n \cdot \binom{q_{100}}{1+nq_{100}}}{1+\frac{nq_{100}}{1+nq_{100}}} = \frac{nqm}{100+nq_{100}} = \frac{nqm}{100+nq}$$

Since * *i* (interest) * of *m* in the time *n* at the rate * r = nrmor $n\left(\frac{q}{100}\right)m$ and $d = \frac{nqm}{100 + nq}$ * it is evident that interest is always greater

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than discount under the same circumstances.

Compound interest. * $\mathbf{M} = (1 + r)^n P$. If I = interest; $\mathbf{I} = \mathbf{M} + \mathbf{P} = (1 + r)^n P - P((1 + r)^n - 1).$

* If R = 1 + r, or one pound, together with its interest for a year,*

$$M = P \cdot R^{n} \text{ and since } I = M - P = P \cdot R^{n} - P,$$

$$I = (R^{n} - 1)P.$$

$$P = \frac{M}{R^{n}} \cdot n = \frac{\log M - \log P}{\log R}$$

*When compound interest is allowed, the present worth will be obtained from *

 $P = \frac{M}{R^n}$, and * the discount from $D = M - P = M - \frac{M}{R^n} = \frac{M(R^n - 1)}{R^n}$.

[XXIII-1471] If P the present value of an annuity [A], to be paid in n years, at compound interest $(R=1+r, \pounds 1+its \text{ interest for one year})$

the amount of P in n years will be * PR^n (which we expressed earlier as $a({}^{21}/{}_{20})^n$).

$$PR^{n} \text{ or } M = \frac{A \cdot (R^{n} - 1)}{R - 1} \text{ and } P = \frac{A \cdot (R^{n} - 1)}{R^{n} (R - 1)}$$
$$* \text{ If } P = \frac{A \cdot (R^{n} - 1)}{R^{n} (R - 1)} = A \cdot \frac{\frac{R^{n} - 1}{R^{n}}}{R - 1} = A \cdot \frac{1 - \frac{1}{R^{n}}}{R - 1},$$

we suppose n to be indefinitely great= ∞ , so

$$\frac{1}{R^n} = \frac{1}{\infty} = 0$$
, and hence
 $P = A \cdot \frac{1 - \frac{1}{R^n}}{R - 1} = \frac{1 - 0}{R - 1} A = \frac{A}{R - 1}$.

Hence: $P = \frac{A}{R-1}$; that is to say the annuity divided by * 1 and

its interest for one year minus 1 is the present value or worth of the annuity A to continue payable for ever. Suppose $R = {}^{21}/{}_{20}$, which is $ = 1 + {}^{1}/{}_{20}$ or = 5%, *then the value of the perpetual annuity would be, if the annuity was £800,

$$P = \frac{800}{\frac{21}{20} - 1} = \frac{800}{\frac{1}{20}} = 20 \times 800 = \pounds 16,000. \text{ If the rate of interest} = 3\%$$

[XXIII-1472]
$$P = \frac{800}{103/100} = \frac{800}{3/100} = \frac{80,000}{3} = 26,666^2/_{3}.$$

If the rate of interest was $*=2^{1}/_{2}\%$, so that $\frac{102^{1}/_{2}}{100}=R$. *we should have, $2^{1}/_{2}=5/_{2}$, $P=\frac{800}{4^{1}/_{40}-1}=\frac{800}{1/_{40}}=32,000$, which corresponds to

the value of P of 16,000 at 5%.

This is the formula by which the sales or purchases of Freehold Estates are regulated: and it is evident that the sum of money paid, must be greater or less according as the rate of interest of money is lower or higher. (Cf. Hind's Algebra, pp. 264-65).*¹⁹³ [XXIII-1472]¹⁹⁴

[CAPITAL] BOOK I THE PROCESS OF PRODUCTION OF CAPITAL ¹⁹⁵