

Das Kapital.

Kritik der politischen Oekonomie.

Von

KARL MARX.

Erster Band

Buch I: Der Produktionsprozess des Kapitals.

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CAPITAL

A Critique of Political Economy

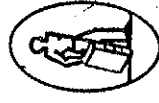
by **KARL MARX**

VOLUME I

THE PROCESS OF
CAPITALIST PRODUCTION

TRANSLATED FROM THE THIRD GERMAN EDITION
BY SAMUEL MOORE AND EDWARD AVELING

EDITED BY
FREDERICK ENGELS



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PUBLISHERS NOTE

The present edition of Volume I of *Capital* is published on the occasion of the 100th Anniversary of the first German edition. Reproduced here is the text of the English edition of 1887, edited by Frederick Engels (published by Swan Sonnenschein, Lowry & Co., London), and as corrected by Progress Publishers, Moscow, in their edition of 1965.

The changes made by Engels in the fourth (1890) German edition have been incorporated into the 1887 English text. These changes are indicated wherever they occur. The editors have also rechecked original sources and have made the necessary corrections in the author's footnotes.

Following Engels' preface to the first English edition, the editors have added all the Prefaces and Afterwords by Marx and Engels to the German and French editions. The Index of Authorities has been rechecked and a Name Index is supplied.

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Dedicated

To My Unforgettable Friend

WILHELM WOLFF

Intrepid, Faithful, Noble Protagonist of the Proletariat

Born in Tarnau on June 21, 1809

Died in Exile in Manchester on May 9, 1864

6.90

M.P.W.

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SECTION 4.—SURPLUS-PRODUCE

The portion of the product that represents the surplus-value, (one-tenth of the 20 lbs., or 2 lbs. of yarn, in the example given in Sec. 2) we call "surplus-produce." Just as the rate of surplus-value is determined by its relation, not to the sum total of the capital, but to its variable part; in like manner, the relative quantity of surplus-produce is determined by the ratio that this produce bears, not to the remaining part of the total product, but to that part of it in which is incorporated the necessary labour. Since the production of surplus-value is the chief end and aim of capitalist production, it is clear, that the greatness of a man's or a nation's wealth should be measured, not by the absolute quantity produced, but by the relative magnitude of the surplus-produce.¹

The sum of the necessary labour and the surplus-labour, *i.e.*, of the periods of time during which the workman replaces the value of his labour-power, and produces the surplus-value, this sum constitutes the actual time during which he works, *i.e.*, the working-day.

profit is derived from the labour of the capitalist, and interest from his asceticism, in other words, from his "abstinence." The dodge was an old one, but the word "abstinence" was new. Herr Roscher translates it rightly by "Enthaltung." Some of his countrymen, the Browns, Jones, and Robinsons, of Germany, not so well versed in Latin as he, have, monk-like, rendered it by "Entsagung" (renunciation).

¹ "To an individual with a capital of £20,000, whose profits were £2,000 per annum, it would be a matter quite indifferent whether his capital would employ a 100 or 1,000 men, whether the commodity produced sold for £10,000 or £20,000, provided, in all cases, his profit were not diminished below £2,000. Is not the real interest of the nation similar? 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 of inhabitants." (Ric. l. c., p. 416.) Long before Ricardo, Arthur Young, a fanatical upholder of surplus-produce, for the rest, a rambling, uncritical writer, whose reputation is in the inverse ratio of his merit, says, "Of what use, in a modern kingdom, would be a whole province thus divided [in the old Roman manner, by small independent peasants], however well cultivated, except for the mere purpose of breeding men, which taken singly is a most useless purpose?" (Arthur Young: "Political Arithmetic, &c." London, 1774, p. 47.)

Very curious is "the strong inclination ... to represent net wealth as beneficial to the labouring class ... though it is evidently not on account of being net." (Th. Hopkins, "On Rent of Land, &c." London, 1828, p. 126.)

CHAPTER X
THE WORKING-DAY

SECTION 1.—THE LIMITS OF THE WORKING-DAY

We started with the supposition that labour-power is bought and sold at its value. Its value, like that of all other commodities, is determined by the working-time necessary to its production. If the production of the average daily means of subsistence of the labourer takes up 6 hours, he must work, on the average, 6 hours every day, to produce his daily labour-power, or to reproduce the value received as the result of its sale. The necessary part of his working-day amounts to 6 hours, and is, therefore, *cæteris paribus*, a given quantity. But with this, the extent of the working-day itself is not yet given.

Let us assume that the line A B represents the length of the necessary working-time, say 6 hours. If the labour be prolonged 1, 3, or 6 hours beyond A B, we have 3 other lines:

Working-day I. Working-day II. Working-day III.
A — B — C. A — B — C. A — B — C.

representing 3 different working-days of 7, 9, and 12 hours. The extension B C of the line A B represents the length of the surplus-labour. As the working-day is A B + B C or A C, it varies with the variable quantity B C. Since A B is constant, the ratio of B C to A B can always be calculated. In working-day I, it is $\frac{1}{6}$, in working-day II, $\frac{3}{6}$, in working-day III, $\frac{6}{6}$ of A B. Since, further, the ratio $\frac{\text{surplus working-time}}{\text{necessary working-time}}$, determines the rate of the surplus-value, the latter is given by the ratio of B C to A B. It amounts in the 3 different working-days respectively to $16\frac{2}{3}$, 50 and 100 per

cent. On the other hand, the rate of surplus-value alone would not give us the extent of the working-day. If this rate, e.g., were 100 per cent., the working-day might be of 8, 10, 12, or more hours. It would indicate that the 2 constituent parts of the working-day, necessary-labour and surplus-labour time, were equal in extent, but not how long each of these two constituent parts was.

The working-day is thus not a constant, but a variable quantity. One of its parts, certainly, is determined by the working-time required for the reproduction of the labour-power of the labourer himself. But its total amount varies with the duration of the surplus-labour. The working-day is, therefore, determinable, but is, *per se*, indeterminate.¹

Although the working-day is not a fixed, but a fluent quantity, it can, on the other hand, only vary within certain limits. The minimum limit is, however, not determinable; of course, if we make the extension line B C or the surplus-labour = 0, we have a minimum limit, *i.e.*, the part of the day which the labourer must necessarily work for his own maintenance. On the basis of capitalist production, however, this necessary labour can form a part only of the working-day; the working-day itself can never be reduced to this minimum. On the other hand, the working-day has a maximum limit. It cannot be prolonged beyond a certain point. This maximum limit is conditioned by two things. First, by the physical bounds of labour-power. Within the 24 hours of the natural day a man can expend only a definite quantity of his vital force. A horse, in like manner, can only work from day to day, 8 hours. During part of the day this force must rest, sleep, during another part the man has to satisfy other physical needs, to feed, wash, and clothe himself. Besides these purely physical limitations, the extension of the working-day encounters moral ones. The labourer needs time for satisfying his intellectual and social wants, the extent and number of which are conditioned by the general state of social advancement. The variation of the working-day fluctuates, therefore, within physical and social bounds. But both these limiting conditions are of a very elastic nature, and allow the greatest latitude. So we find working-days of 8, 10, 12, 14, 16, 18 hours, *i.e.*, of the most different lengths.

The capitalist has bought the labour-power at its day-rate. To him its use-value belongs during one working-day. He has

¹ "A day's labour is vague, it may be long or short." ("An Essay on Trade and Commerce, Containing Observations on Taxes, &c." London, 1770, p. 73.)

thus acquired the right to make the labourer work for him during one day. But, what is a working-day?¹

At all events, less than a natural day. By how much? The capitalist has his own views of this *ultima Thule*, the necessary limit of the working-day. As capitalist, he is only capital personified. His soul is the soul of capital. But capital has one single life impulse, the tendency to create value and, surplus-value, to make its constant factor, the means of production, absorb the greatest possible amount of surplus-labour.²

Capital is dead labour, that, vampire-like, only lives by sucking living labour, and lives the more, the more labour it sucks. The time during which the labourer works, is the time during which the capitalist consumes the labour-power he has purchased of him.³

If the labourer consumes his disposable time for himself, he robs the capitalist.⁴

The capitalist then takes his stand on the law of the exchange of commodities. He, like all other buyers, seeks to get the greatest possible benefit out of the use-value of his commodity. Suddenly the voice of the labourer, which had been stifled in the storm and stress of the process of production, rises:

The commodity that I have sold to you differs from the crowd of other commodities, in that its use creates value, and a value greater than its own. That is why you bought it. That which on your side appears a spontaneous expansion of capital, is on mine extra expenditure of labour-power. You and I know the market only one law, that of the exchange of commodities. And the consumption of the commodity belongs not to the seller who parts with it, but to the buyer, who

¹ This question is far more important than the celebrated question of Sir Robert Peel to the Birmingham Chamber of Commerce: What is a pound? A question that could only have been proposed, because Peel was as much in the dark as to the nature of money as the "little shilling men" of Birmingham.

² "It is the aim of the capitalist to obtain with his expended capital the greatest possible quantity of labour (d'obtenir du capital dépensé la plus forte somme de travail possible)." J. G. Courcelle-Seneuil. "Traité théorique et pratique des entreprises industrielles." 2nd ed. Paris, 1857, p. 63.

³ "An hour's labour lost in a day is a prodigious injury to a commercial State.... 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 consumptions." "An Essay on Trade and Commerce, &c.," p. 47, and 153.

⁴ "Si le manouvrier libre prend un instant de repos, l'économie sordide qui le suit des yeux avec inquiétude, prétend qu'il la vole." N. Linguet, "Théorie des Lois Civiles, &c." London, 1767, t. II., p. 466.

acquires it. To you, therefore, belongs the use of my daily labour-power. But by means of the price that you pay for it each day, I must be able to reproduce it daily, and to sell it again. Apart from natural exhaustion through age, &c., I must be able on the morrow to work with the same normal amount of force, health and freshness as to-day. You preach to me constantly the gospel of "saving" and "abstinence." Good! I will, like a sensible saving owner, husband my sole wealth, labour-power, and abstain from all foolish waste of it. I will each day spend, set in motion, put into action only as much of it as is compatible with its normal duration, and healthy development. By an unlimited extension of the working-day, you may in one day use up a quantity of labour-power greater than I can restore in three. What you gain in labour I lose in substance. The use of my labour-power and the spoliation of it are quite different things. If the average time that (doing a reasonable amount of work) an average labourer can live, is 30 years, the value of my labour-power, which you pay me from day to day is $\frac{1}{30} \times 30$ or $\frac{1}{10950}$ of its total value. But if you consume it in 10 years, you pay me daily $\frac{1}{10950}$ instead of $\frac{1}{3650}$ of its total value, i.e., only $\frac{1}{3}$ of its daily value, and you rob me, therefore, every day of $\frac{2}{3}$ of the value of my commodity. You pay me for one day's labour-power, whilst you use that of 3 days. That is against our contract and the law of exchanges. I demand, therefore, a working-day of normal length, and I demand it without any appeal to your heart, for in money matters sentiment is out of place. You may be a model citizen, perhaps a member of the Society for the Prevention of Cruelty to Animals, and in the odour of sanctity to boot; but the thing that you represent face to face with me has no heart in its breast. That which seems to throb there is my own heart-beating. I demand the normal working-day because I, like every other seller, demand the value of my commodity.¹

We see then, that, apart from extremely elastic bounds, the nature of the exchange of commodities itself imposes no limit to the working-day, no limit to surplus-labour. The capitalist main-

¹ During the great strike of the London builders, 1860-61, for the reduction of the working-day to 9 hours, their Committee published a manifesto that contained, to some extent, the plea of our worker. The manifesto alludes, not without irony, to the fact, that the greatest profit-monger amongst the building masters, a certain Sir M. Peto, was in the odour of sanctity (This same Peto, after 1867, came to an end à la Stroussberg.)

tains his rights as a purchaser when he tries to make the working-day as long as possible, and to make, whenever possible, two working-days out of one. On the other hand, the peculiar nature of the commodity sold implies a limit to its consumption by the purchaser, and the labourer maintains his right as seller when he wishes to reduce the working-day to one of definite normal duration. There is here, therefore, an antinomy, right against right, both equally bearing the seal of the law of exchanges. Between equal rights force decides. Hence is it that in the history of capitalist production, the determination of what is a working-day, presents itself as the result of a struggle, a struggle between collective capital, i.e., the class of capitalists, and collective labour, i.e., the working-class.

SECTION 2.—THE GREED FOR SURPLUS-LABOUR. MANUFACTURER AND BOYARD

Capital has not invented surplus-labour. Wherever a part of society possesses the monopoly of the means of production, the labourer, free or not free, must add to the working-time necessary for his own maintenance an extra working-time in order to produce the means of subsistence for the owners of the means of production,¹ whether this proprietor be the Athenian *καλὸς κἀγαθός*, Etruscan theocrat, civis Romanus, Norman baron, American slave-owner, Wallachian Boyard, modern landlord or capitalist.² It is, however, clear that in any given economic formation of society, where not the exchange-value but the use-value of the product predominates, surplus-labour will be limited by a given set of wants which may be greater or less, and that here no boundless thirst for surplus-labour arises from the nature of the production itself. Hence in antiquity over-work becomes horrible only when the object is to obtain exchange-value in its specific independent money-form; in the production of gold and silver. Compulsory working to death is here the recognised form of over-work. Only read Diodorus Siculus.³ Still these are exceptions in antiquity.

¹ "Those who labour ... in reality feed both the pensioners ... [called the rich] and themselves." (Edmund Burke, l. c., p. 2.)

² Niebuhr in his "Roman History" says very naively: "It is evident that works like the Etruscan, which in their ruins astound us, pre-suppose in little (!) states lords and vassals." Sismondi says far more to the purpose that "Brussels lace" pre-supposes wage-lords and wage-slaves.

³ "One cannot see these unfortunates (in the gold mines between Egypt, Ethiopia, and Arabia) who cannot even have their bodies clean, or their nakedness clothed, without pitying their miserable lot. There is no indulgence, no forbearance for the sick, the feeble, the aged, for woman's weak-

But as soon as people, whose production still moves within the lower forms of slave-labour, *corvée*-labour, &c., are drawn into the whirlpool of an international market dominated by the capitalist mode of production, the sale of their products for export becoming their principal interest, the civilised horrors of over-work are grafted on the barbaric horrors of slavery, serfdom, &c. Hence the negro labour in the Southern States of the American Union preserved something of a patriarchal character, so long as production was chiefly directed to immediate local consumption. But in proportion, as the export of cotton became of vital interest to these states, the over-working of the negro and sometimes the using up of his life in 7 years of labour became a factor in a calculated and calculating system. It was no longer a question of obtaining from him a certain quantity of useful products. It was now a question of production of surplus-labour itself. So was it also with the *corvée*, e.g., in the Danubian Principalities (now Roumania).

The comparison of the greed for surplus-labour in the Danubian Principalities with the same greed in English factories has a special interest, because surplus-labour in the *corvée* has an independent and palpable form.

Suppose the working-day consists of 6 hours of necessary labour, and 6 hours of surplus-labour. Then the free labourer gives the capitalist every week 6×6 or 36 hours of surplus-labour. It is the same as if he worked 3 days in the week for himself, and 3 days in the week gratis for the capitalist. But this is not evident on the surface. Surplus-labour and necessary labour glide one into the other. I can, therefore, express the same relationship by saying, e.g., that the labourer in every minute works 30 seconds for himself, and 30 for the capitalist, etc. It is otherwise with the *corvée*. The necessary labour is distinctly marked off; the peasant does for his own maintenance is distinctly marked off from his surplus-labour on behalf of the Boyard. The one he does on his own field, the other on the seignorial estate. Both parts of the labour-time exist, therefore, independently, side by side one with the other. In the *corvée* the surplus-labour is accurately marked off from the necessary labour. This, however, can make no difference with regard to the quantitative relation of surplus-labour to necessary labour. Three days' surplus-labour in the week remains three days that yield no equivalent to the labourer himself, whether

ness. All must, forced by blows, work on until death puts an end to their sufferings and their distress." ("Diod. Sic. Bibl. Hist.," lib. 2, c. 13.)

er it be called *corvée* or wage-labour. But in the capitalist the greed for surplus-labour appears in the straining after an unlimited extension of the working-day, in the Boyard more simply in a direct hunting after days of *corvée*.¹

In the Danubian Principalities the *corvée* was mixed up with rents in kind and other appurtenances of bondage, but it formed the most important tribute paid to the ruling class. Where this was the case, the *corvée* rarely arose from serfdom; serfdom much more frequently on the other hand took origin from the *corvée*.² This is what took place in the Roumanian provinces. Their original mode of production was based on community of the soil, but not in the Slavonic or Indian form. Part of the land was cultivated in severalty as freehold by the members of the community, another part—*ager publicus*—was cultivated by them in common. The products of this common labour served partly as a reserve fund against bad harvests and other accidents, partly as a public store for providing the costs of war, religion, and other common expenses. In course of time military and clerical dignitaries usurped, along with the common land, the labour spent upon it. The labour of the free peasants on their common land was transformed into *corvée* for the thieves of the common land. This *corvée* soon developed into a servile relationship existing in point of fact, not in point of law, until Russia, the liberator of the world, made it legal under pretence of abolishing serfdom. The code of the *corvée*, which the Russian General Kisseleff proclaimed in 1831, was of course dictated by the Boyards themselves. Thus Russia conquered with one blow the magnates of the Danubian provinces, and the applause of liberal crétins throughout Europe.

According to the "Réglement organique," as this code of the *corvée* is called, every Wallachian peasant owes to the so-called

¹ That which follows refers to the situation in the Roumanian provinces before the change effected since the Crimean war.

² This holds likewise for Germany, and especially for Prussia east of the Elbe. In the 15th century the German peasant was nearly everywhere a man, who, whilst subject to certain rents paid in produce and labour was otherwise at least practically free. The German colonists in Brandenburg, Pomerania, Silesia, and Eastern Prussia, were even legally acknowledged as free men. The victory of the nobility in the peasants' war put an end to that. Not only were the conquerors South German peasants again enslaved. From the middle of the 16th century the peasants of Eastern Prussia, Brandenburg, Pomerania, and Silesia, and soon after the free peasants of Schleswig-Holstein were degraded to the condition of serfs. (Maurer, Fronhöfe iv. vol.,—Meitzen, "Der Boden des preussischen Staats."—Hanssen, "Leibeigenschaft in Schleswig-Holstein."—F. E.)

landlord, besides a mass of detailed payments in kind: (1), 12 days of general labour; (2), one day of field labour; (3), one day of wood carrying. In all, 14 days in the year. With deep insight into Political Economy, however, the working-day is not taken in its ordinary sense, but as the working-day necessary to the production of an average daily product; and that average daily product is determined in so crafty a way that no Cyclops would be done with it in 24 hours. In dry words, the Réglement itself declares with true Russian irony that by 12 working-days one must understand the product of the manual labour of 36 days, by 1 day of field labour 3 days, and by 1 day of wood carrying in like manner three times as much. In all, 42 corvée days. To this had to be added the so-called jobagie, service due to the lord for extraordinary occasions. In proportion to the size of its population, every village has to furnish annually a definite contingent to the jobagie. This additional corvée is estimated at 14 days for each Wallachian peasant. Thus the prescribed corvée amounts to 56 working-days yearly. But the agricultural year in Wallachia numbers in consequence of the severe climate only 210 days, of which 40 for Sundays and holidays, 30 on an average for bad weather, together 70 days, do not count. 140 working-days remain. The ratio of the corvée to the necessary labour $\frac{56}{84}$ or $66\frac{2}{3}\%$ gives a much smaller rate of surplus-value than that which regulates the labour of the English agricultural or factory labourer. This is, however, only the legally prescribed corvée. And in a spirit yet more "liberal" than the English Factory Acts, the "Réglement organique" has known how to facilitate its own evasion. After it has made 56 days out of 12, the nominal day's work of each of the 56 corvée days is again so arranged that a portion of it must fall on the ensuing day. In one day, e.g., must be weeded an extent of land, which, for this work, especially in maize plantations, needs twice as much time. The legal day's work for some kinds of agricultural labour is interpretable in such a way that the day begins in May and ends in October. In Moldavia conditions are still harder. "The 12 corvée days of the 'Réglement organique' cried a Boyard drunk with victory, amount to 365 days in the year."¹

If the Réglement organique of the Danubian provinces was a positive expression of the greed for surplus-labour which every paragraph legalised, the English Factory Acts are the negative

¹ Further details are to be found in E. Regnault's "Histoire politique et sociale des Principautés Danubiennes," Paris, 1855.

expression of the same greed. These acts curb the passion of capital for a limitless draining of labour-power, by forcibly limiting the working-day by state regulations, made by a state that is ruled by capitalist and landlord. Apart from the working-class movement that daily grew more threatening, the limiting of factory labour was dictated by the same necessity which spread guano over the English fields. The same blind eagerness for plunder that in the one case exhausted the soil, had, in the other, torn up by the roots the living force of the nation. Periodical epidemics speak on this point as clearly as the diminishing military standard in Germany and France.¹

The Factory Act of 1850 now in force (1867) allows for the average working-day 10 hours, *i.e.*, for the first 5 days 12 hours from 6 a. m. to 6 p. m., including $\frac{1}{2}$ an hour for breakfast, and an hour for dinner, and thus leaving $10\frac{1}{2}$ working-hours, and 8 hours for Saturday, from 6 a. m. to 2 p. m., of which $\frac{1}{2}$ an hour is subtracted for breakfast. 60 working-hours are left, $10\frac{1}{2}$ for each of the first 5 days, $7\frac{1}{2}$ for the last.² Certain guardians of these laws are appointed, Factory Inspectors, directly under the Home Secretary, whose reports are published half-yearly, by order of Parliament. They give regular and official statistics of the capitalistic greed for surplus-labour.

¹ "In general and within certain limits, exceeding the medium size of their kind, is evidence of the prosperity of organic beings. As to man, his bodily height lessens if his due growth is interfered with, either by physical or social conditions. In all European countries in which the physical holds, since its introduction, the medium height of adult men, and generally their fitness for military service, has diminished. Before the revolution (1789), the minimum for the infantry in France was 165 centimetres; in 1818 (law of March 10th), 157; by the law of March 24, 1832, 156 c. m.; on the average in France more than half are rejected on account of deficient height or bodily weakness. The military standard in Saxony was in 1780, 178 c. m. It is now 155. In Prussia it is 157. According to the statement of Dr. Meyer in the Bavarian Gazette, May 9th, 1862, the result of an average of 9 years is, that in Prussia out of 1,000 conscripts 716 were unfit for military service, 317 because of deficiency in height, and 399 because of bodily defects.... Berlin in 1858 could not provide its contingent of recruits; it was 456 men short." J. von Liebig: "Die Chemie in ihrer Anwendung auf Agrikultur und Physiologie, 1862," 7th Ed., vol. I., pp. 117, 118.

² The history of the Factory Act of 1850 will be found in the course of this chapter.

Let us listen, for a moment, to the Factory Inspectors.¹ "The fraudulent mill-owner begins work a quarter of an hour (sometimes more, sometimes less) before 6 a. m., and leaves off a quarter of an hour (sometimes more, sometimes less) after 6 p. m. He takes 5 minutes from the beginning and from the end of the half hour nominally allowed for breakfast, and 10 minutes at the beginning and end of the hour nominally allowed for dinner. He works for a quarter of an hour (sometimes more, sometimes less) after 2 p. m. on Saturday. Thus his gain is —

Before 6 a. m.,	15 minutes.
After 6 p. m.,	15 "
At breakfast time,	40 "
At dinner time,	20 "
Five days—300 minutes,	60 "
On Saturday before 6 a. m.,	15 minutes.
At breakfast time,	40 "
After 2 p. m.,	15 "
Total weekly,	40 minutes.
	340 minutes.

Or 5 hours and 40 minutes weekly, which multiplied by 50 working weeks in the year (allowing two for holidays and occasional stoppages) is equal to 27 working-days."²

¹ I only touch here and there on the period from the beginning of modern industry in England to 1845. For this period I refer the reader to "Die Lage der arbeitenden Klasse in England," von Friedrich Engels, Leipzig, 1845. How completely Engels understood the nature of the capitalist mode of production is shown by the Factory Reports, Reports on Mines, &c., that have appeared since 1845, and how wonderfully he painted the circumstances in detail is seen on the most superficial comparison of his work with the official reports of the Children's Employment Commission, published 18 to 20 years later (1863-1867). These deal especially with the branches of industry in which the Factory Acts had not, up to 1862, been introduced, in fact are not yet introduced. Here, then, little or no alteration had been enforced, by authority, in the conditions painted by Engels. I borrow my examples chiefly from the Free-trade period after 1848, that age of paradises, of which the commercial travellers for the great firm of Free-trade, blatant as ignorant, tell such fabulous tales. For the rest England figures here in the foreground because she is the classic representative of capitalist production, and she alone has a continuous set of official statistics of the things we are considering.

² "Suggestions, &c. by Mr. L. Horner, Inspector of Factories," in Factories Regulation Acts. Ordered by the House of Commons to be printed, 9th August, 1859, pp. 4, 5.

"Five minutes a day's increased work, multiplied by weeks, are equal to two and a half days of produce in the year."¹

"An additional hour a day gained by small instalments before 6 a. m., after 6 p. m., and at the beginning and end of the times nominally fixed for meals, is nearly equivalent to working 13 months in the year."²

Crises during which production is interrupted and the factories work "short time," *i.e.*, for only a part of the week, naturally do not affect the tendency to extend the working-day. The less business there is, the more profit has to be made on the business done. The less time spent in work, the more of that time has to be turned into surplus labour-time.

Thus the Factory Inspector's report on the period of the crisis from 1857 to 1858:

"It may seem inconsistent that there should be any over-working at a time when trade is so bad; but that very badness leads to the transgression by unscrupulous men, they get the extra profit of it. . . . In the last half year, says Leonard Horner, 122 mills in my district have been given up; 143 were found standing," yet, over-work is continued beyond the legal hours.³

"For a great part of the time," says Mr. Howell, "owing to the depression of trade, many factories were altogether closed, and a still greater number were working short time. I continue, however, to receive about the usual number of complaints that half, or three-quarters of an hour in the day, are snatched from the workers by encroaching upon the times professedly allowed for rest and refreshment."⁴ The same phenomenon was reproduced on a smaller scale during the frightful cotton-crisis from 1861 to 1865.⁵ "It is sometimes advanced by way of excuse, when persons are found at work in a factory, either at a meal hour, or at some illegal time, that they will not leave the mill at the appointed hour, and that compulsion is necessary to force them to cease work [cleaning their machinery, &c.], especially on Saturday afternoons. But, if the hands remain in a factory after the machinery has ceased to revolve . . . they would not

¹ Reports of the Inspector of Factories for the half year, October, 1856, p. 35.

² Reports, &c., 30th April, 1858, p. 9.

³ Reports, &c., l. c., p. 10.

⁴ Reports, &c., l. c., p. 25.

⁵ Reports, &c., for the half year ending 30th April, 1861. See Appendix No. 2; Reports, &c., 31st October, 1862, pp. 7, 52, 53. The violations of the Acts became more numerous during the last half year 1863. Cf. Reports, &c., ending 31st October, 1863, p. 7.

have been so employed if sufficient time had been set apart specially for cleaning, &c., either before 6 a. m. [sic] or before 2 p. m. on Saturday afternoons.¹

"The profit to be gained by it (over-working in violation of the Act) appears to be, to many, a greater temptation than they can resist; they calculate upon the chance of not being found out; and when they see the small amount of penalty and costs, which those who have been convicted have had to pay, they find that if they should be detected there will still be a considerable balance of gain. . . .² In cases where the additional time is gained by a multiplication of small thefts in the course of the day, there are insuperable difficulties to the inspectors making out a case."³

These "small thefts" of capital from the labourer's meal and recreation time, the factory inspectors also designate as "petty pilferings of minutes,"⁴ "snatching a few minutes,"⁵ or, as the labourers technically called them, "nibbling and cribbling at meal-times."⁶

¹ Reports, &c., October 31st, 1860, p. 23. With what fanaticism, according to the evidence of manufacturers given in courts of law, their hands set themselves against every interruption in factory labour, the following curious circumstance shows. In the beginning of June, 1836, information reached the magistrates of Dewsbury (Yorkshire) that the owners of 8 large mills in the neighbourhood of Batley had violated the Factory Acts. Some of these gentlemen were accused of having kept at work 5 boys between 12 and 15 years of age, from 6 a. m. on Friday to 4 p. m. on the following Saturday, not allowing them any respite except for meals and one hour for sleep at midnight. And these children had to do this ceaseless labour of 30 hours in the "shoddy hole," as the hole is called, in which the woollen rags are pulled in pieces, and where a dense atmosphere of dust, shreds, &c., forces even the adult workman to cover his mouth continually with handkerchiefs for the protection of his lungs! The accused gentlemen affirm in lieu of taking an oath—as quakers they were too scrupulously religious to take an oath—that they had, in their great compassion for the unhappy children, allowed them four hours for sleep, but the obstinate children absolutely would not go to bed. The quaker gentlemen were mulcted in £20. Dryden anticipated these gentry.

"Fox full fraught in seeming sanctity.

That feared an oath, but like the devil would lie,

That look'd like Lent, and had the holy leer.

And durst not sin! before he said his prayer!"

² Rep., 31st Oct., 1856, p. 34.

³ l. c., p. 35.

⁴ l. c., p. 48.

⁵ l. c., p. 48.

⁶ l. c., p. 48.

It is evident that in this atmosphere the formation of surplus-value by surplus-labour, is no secret. "If you allow me," said a highly respectable master to me, "to work only ten minutes in the day over-time, you put one thousand a year in my pocket."¹ Moments are the elements of profit."²

Nothing is from this point of view more characteristic than the designation of the workers who work full time as "full-timers," and the children under 13 who are only allowed to work 6 hours as "half-timers." The worker is here nothing more than personified labour-time. All individual distinctions are merged in those of "full-timers" and "half-timers."³

the inherent tendency of capitalist production. But as it is physically impossible to exploit the same individual labour-power constantly during the night as well as the day, to overcome this physical hindrance, an alternation becomes necessary between the workpeople whose powers are exhausted by day, and those who are used up by night. This alternation may be effected in various ways; e.g., it may be so arranged that part of the workers are one week employed on day-work, the next week on night-work. It is well known that this relay system, this alternation of two sets of workers, held full sway in the full-blooded youth-time of the English cotton manufacture, and that at the present time it still flourishes, among others, in the cotton spinning of the Moscow district. This 24 hours' process of production exists to-day as a system in many of the branches of industry of Great Britain that are still "free," in the blast-furnaces, forges, plate-rolling mills, and other metallurgical establishments in England, Wales, and Scotland. The working-time here includes, besides the 24 hours of the 6 working-days, a great part also of the 24 hours of Sunday. The workers consist of men and women, adults and children of both sexes. The ages of the children and young persons run through all intermediate grades, from 8 (in some cases from 6) to 18.¹

In some branches of industry, the girls and women work through the night together with the males.²

Placing on one side the generally injurious influence of night-labour,³ the duration of the process of production, unbroken

¹ Children's Employment Commission. Third Report. London, 1864, pp. iv., v., vi.

² "Both in Staffordshire and in South Wales young girls and women are employed on the pit banks and on the coke heaps, not only by day but also by night. This practice has been often noticed in Reports presented to Parliament, as being attended with great and notorious evils. These females employed with the men, hardly distinguished from them in their dress, and begrimed with dirt and smoke, are exposed to the deterioration of character, arising from the loss of self-respect, which can hardly fail to follow from their unfeminine occupation." (l. c., 194, p. xxvi. Cf. Fourth Report (1865), 61, p. xiii.) It is the same in glass-works.

³ A steel manufacturer who employs children in night-labour remarked: "It seems but natural that boys who work at night cannot sleep and get proper rest by day, but will be running about." (l. c., Fourth Report, 63, p. xiii.) On the importance of sunlight for the maintenance and growth of the body, a physician writes: "Light also acts upon the tissues of the body directly in hardening them and supporting their elasticity. The muscles of animals, when they are deprived of a proper amount of light, become soft and inelastic, the nervous power loses its tone from defective stimulation, and the elaboration of all growth seems to be perverted... In the case of

SECTION 4.—DAY AND NIGHT WORK. THE RELAY SYSTEM

Constant capital, the means of production, considered from the standpoint of the creation of surplus-value, only exist to absorb labour, and with every drop of labour a proportional quantity of surplus-labour. While they fail to do this, their mere existence causes a relative loss to the capitalist, for they represent during the time they lie fallow, a useless advance of capital. And this loss becomes positive and absolute as soon as the intermission of their employment necessitates additional outlay at the recommencement of work. The prolongation of the working-day beyond the limits of the natural day, into the night, only acts as a palliative. It quenches only in a slight degree the vampire-thirst for the living blood of labour. To appropriate labour during all the 24 hours of the day is, therefore,

of the North wants to break the head of the South with all his might, because the Peter of the North hires his labour by the day, and the Paul of the South hires his by the life. ("Macmillan's Magazine," *Ulla Americana* in nuce, August, 1863.) Thus, the bubble of Tory sympathy for the urban workers—by no means for the rural—has burst at last. The sum of all is—slavery!

¹ Dr. Richardson, l. c.

during the 24 hours, offers very welcome opportunities of exceeding the limits of the normal working-day, *e. g.*, in the branches of industry already mentioned, which are of an exceedingly fatiguing nature; the official working-day means for each worker usually 12 hours by night or day. But the over-work beyond this amount is in many cases, to use the words of the English official report, "truly fearful."¹

"It is impossible," the report continues, "for any mind to realise the amount of work described in the following passages as being performed by boys of from 9 to 12 years of age . . . without coming irresistibly to the conclusion that such abuses of the power of parents and of employers can no longer be allowed to exist."²

"The practice of boys working at all by day and night turns either in the usual course of things, or at pressing times, seems inevitably to open the door to their not unfrequently working unduly long hours. These hours are, indeed, in some cases, not only cruelly but even incredibly long for children. Amongst a number of boys it will, of course, not unfrequently happen that one or more are from some cause absent. When this happens, their place is made up by one or more boys, who work in the other turn. That this is a well understood system is plain . . . from the answer of the manager of some large rolling-mills, who, when I asked him how the place of the boys absent from their turn was made up, 'I daresay, sir, you know that as well as I do,' and admitted the fact."³

"At a rolling-mill where the proper hours were from 6 a. m. to 5¹/₂ p. m., a boy worked about four nights every week till

children, constant access to plenty of light during the day, and to the direct rays of the sun for a part of it, is most essential to health. Light assists in the elaboration of good plastic blood, and hardens the fibre after it has been laid down. It also acts as a stimulus upon the organs of sight, and by this means brings about more activity in the various cerebral functions." Dr. W. Strange, Senior Physician of the Worcester General Hospital, from whose work on "Health" (1864) this passage is taken, writes in a letter to Mr. White, one of the commissioners: "I have had opportunities formerly, when in Lancashire, of observing the effects of night-work upon children, and I have no hesitation in saying, contrary to what *some* employers were fond of asserting, those children who were subjected to it soon suffered in their health." (*l. c.*, 284., p. 55.) That such a question should furnish the material of serious controversy, shows plainly how capitalist production acts on the brain-functions of capitalists and their retainers.

¹ *l. c.*, 57, p. xii.

² *l. c.*, Fourth Report (1865), 58, p. xii.

³ *l. c.*

8¹/₂ p. m. at least . . . and this for six months. Another, at 9 years old, sometimes made three 12-hour shifts running, and, when 10, has made two days and two nights running." A third, "now 10 . . . worked from 6 a. m. till 12 p. m. three nights, and till 9 p. m. the other nights." "Another, now 13, . . . worked from 6 p. m. till 12 noon next day, for a week together, and sometimes for three shifts together, *e. g.*, from Monday morning till Tuesday night." "Another, now 12, has worked in an iron foundry at Stavely from 6 a. m. till 12 p. m. for a fortnight on end; could not do it any more." "George Allinsworth, age 9, came here as cellar-boy last Friday; next morning we had to begin at 3, so I stopped here all night. Live five miles off. Slept on the floor of the furnace, over head, with an apron under me, and a bit of a jacket over me. The two other days I have been here at 6 a. m. Aye! it is hot in here. Before I came here I was nearly a year at the same work at some works in the country. Began there, too, at 3 on Saturday morning—always did, but was very gain [near] home, and could sleep at home. Other days I began at 6 in the morning, and gi'en over at 6 or 7 in the evening," &c. :

¹ *l. c.*, p. xiii. The degree of culture of these "labour-powers" must naturally be such as appears in the following dialogues with one of the commissioners: Jeremiah Haynes, age 12—"Four times four is 8; 4 fours are 16. A king is him that has all the money and gold. We have a King (told it is a Queen), they call her the Princess Alexandra. Told that she married the Queen's son. The Queen's son is the Princess Alexandra. A Princess is a man." William Turner, age 12—"Don't live in England. Think it is a country, but didn't know before." John Morris, age 14—"Have heard say that God made the world, and that all the people was drowned but one; heard say that one was a little bird." William Smith, age 15—"God made man, man made woman." Edward Taylor, age 15—"Do not know of London." Henry Mathewman, age 17—"Had been to chapel, but missed a good many times lately. One name that they preached about was Jesus Christ, but I cannot say any others, and I cannot tell anything about him. He was not killed, but died like other people. He was not the same as other people in some ways, because he was religious in some ways, and others isn't." (*l. c.*, p. xv.) "The devil is a good person. I don't know where he lives." "Christ was a wicked man." "This girl spelt God as dog, and did not know the name of the queen." ("Ch. Employment Comm. V. Report, 1866," p. 55, n. 278.) The same system obtains in the paper factories, where the paper is made by machinery, night-work is the rule for all processes, except rag-sorting. In some cases night-work, by relays, is carried on incessantly through the whole week, usually from Sunday night until midnight of the following Saturday. Those who are on day-work work 5 days of 12, and 1 day of 18 hours; those on night-work 5 nights of 12, and 1 of 6 hours in each week. In other cases each set works 24 hours consecutively on alternate days, one set working 6 hours on Monday, and 18 on Saturday to make up the 24 hours. In other cases an intermediate system

Let us now hear how capital itself regards this 24 hours' system. The extreme forms of the system, its abuse in the "cruel and incredible" extension of the working-day are naturally passed over in silence. Capital only speaks of the system in its "normal" form.

Messrs. Naylor & Vickers, steel manufacturers, who employ between 600 and 700 persons, among whom only 10 per cent. are under 18, and of those, only 20 boys under 18 work in night sets, thus express themselves: "The boys do not suffer from the heat. The temperature is probably from 86° to 90° At the forges and in the rolling-mills the hands work night and day, in relays, but all the other parts of the work are day-work, i.e., from 6 a. m. to 6 p. m. In the forge the hours are from 12 to 12. Some of the hands always work in the night, without any alternation of day and night work. . . . We do not find any difference in the health of those who work regularly by night and those who work by day, and probably people can sleep better if they have the same period of rest than if it is changed. . . . About 20 of the boys under the age of 18 work in the night sets. . . . We could not well do without lads under 18 working by night. The objection would be the increase in the cost of production. . . . Skilled hands and the heads in every department are difficult to get, but of lads we could get any number. . . . But from the small proportion of boys that we employ, the subject (i.e., of restrictions on night-work) is of little importance or interest to us."¹

Mr. J. Ellis, one of the firm of Messrs. John Brown & Co., steel and iron works, employing about 3,000 men and boys, part

prevails, by which all employed on the paper-making machinery work 15 or 16 hours every day in the week. This system, says Commissioner Lord, "seems to combine all the evils of both the 12 hours' and the 24 hours' relays. Children under 13, young persons under 18, and women, work under this night system. Sometimes under the 12 hours' system they are obliged, on account of the non-appearance of those that ought to relieve them, to work a double turn of 24 hours. The evidence proves that boys and girls very often work over-time, which, not infrequently, extends to 24 or even 36 hours of uninterrupted toil. In the continuous and unvarying process of glazing are found girls of 12 who work the whole month 14 hours a day. "without any regular relief or cessation beyond 2 or, at most, 3 breaks of half an hour each for meals." In some mills, where regular night-work has been entirely given up, over-work goes on to a terrible extent, "and that often in the dirtiest, and in the hottest, and in the most monotonous of the various processes." ("Ch. Employment Comm. Report IV., 1865," p. xxxviii, and xxxix.)

¹ Fourth Report, &c., 1865, 79, p. xvi.

of whose operations, namely, iron and heavier steel work, goes on night and day by relays, states "that in the heavier steel work one or two boys are employed to a score or two men." Their concern employs upwards of 500 boys under 18, of whom about $\frac{1}{3}$ or 170 are under the age of 13. With reference to the proposed alteration of the law, Mr. Ellis says: "I do not think it would be very objectionable to require that no person under the age of 18 should work more than 12 hours in the 24. But we do not think that any line could be drawn over the age of 12, at which boys could be dispensed with for night-work. But we would sooner be prevented from employing boys under the age of 13, or even so high as 14, at all, than not be allowed to employ boys that we do have at night. Those boys who work in the day sets must take their turn in the night sets also, because the men could not work in the night sets only; it would ruin their health. . . . We think, however, that night-work in alternate weeks is no harm. (Messrs. Naylor & Vickers, on the other hand, in conformity with the interest of their business, considered that periodically changed night-labour might possibly do more harm than continual night-labour.) We find the men who do it, as well as the others who do other work only by day. . . . Our objections to not allowing boys under 18 to work at night, would be on account of the increase of expense, but this is the only reason. (What cynical naïveté!) We think that the increase would be more than the trade, with due regard to its being successfully carried out, could fairly bear. (What mealy-mouthed phraseology!) Labour is scarce here, and might fall short if there were such a regulation." (i.e., Ellis Brown & Co. might fall into the fatal perplexity of being obliged to pay labour-power its full value.)¹

The "Cyclops Steel and Iron Works," of Messrs. Cammell & Co., are conducted on the same large scale as those of the abovementioned John Brown & Co. The managing director had handed in his evidence to the Government Commissioner, Mr. White, in writing. Later he found it convenient to suppress the MS. when it had been returned to him for revision. Mr. White, however, has a good memory. He remembered quite clearly that for the Messrs. Cyclops the forbidding of the night-labour of children and young persons "would be impossible, it would be tantamount to stopping their works," and yet their

¹ l. c., 80, p. xvi.

business employs little more than 6% of boys under 18, and less than 1% under 13.¹

On the same subject Mr. E. F. Sanderson, of the firm of Sanderson, Bros., & Co., steel rolling-mills and forges, Attercliffe, says: "Great difficulty would be caused by preventing boys under 18 from working at night. The chief would be the increase of cost from employing men instead of boys. I cannot say what this would be, but probably it would not be enough to enable the manufacturers to raise the price of steel, and consequently it would fall on them, as of course the men (what queer-headed folk!) would refuse to pay it." Mr. Sanderson does not know how much he pays the children, but "perhaps the younger boys get from 4s. to 5s. a week. . . . The boys' work is of a kind for which the strength of the boys is generally 'generally,' of course not always) quite sufficient, and consequently there would be no gain in the greater strength of the men to counterbalance the loss, or it would be only in the few cases in which the metal is heavy. The men would not like so well not to have boys under them, as men would be less obedient. Besides, boys must begin young to learn the trade. Leaving day-work alone open to boys would not answer this purpose." And why not? Why could not boys learn their handicraft in the day-time? Your reason? "Owing to the men working days and nights in alternate weeks, the men would be separated half the time from their boys, and would lose half the profit which they make from them. The training which they give to an apprentice is considered as part of the return for the boys' labour, and thus enables the men to get it at a cheaper rate. Each man would want half of this profit." In other words, Messrs. Sanderson would have to pay part of the wages of the adult men out of their own pockets instead of by the night-work of the boys. Messrs. Sanderson's profit would thus fall to some extent, and this is the good Sandersonian reason why boys cannot learn their handicraft in the day.² In addition to this, it would throw night-labour on those who worked instead of the boys, which they would not be able to stand. The difficulties in fact would be so great that they would very likely lead to the giving up of night-work altogether, and "as far as the work itself is concerned," says E. F. Sanderson, "this would suit as

¹ l. c., 82, p. xvii.

² In our reflecting and reasoning age a man is not worth much who cannot give a good reason for everything, no matter how bad or how crazy. Everything in the world that has been done wrong has been done wrong for the very best of reasons. (Hegel, l. c., p. 249.)

well, but—" But Messrs. Sanderson have something else to make besides steel. Steel-making is simply a pretext for surplus-value making. The smelting furnaces, rolling-mills, &c., the buildings, machinery, iron, coal, &c., have something more to do than transform themselves into steel. They are there to absorb surplus-labour, and naturally absorb more in 24 hours than in 12. In fact they give, by grace of God and law, the Sandersons a cheque on the working-time of a certain number of hands for all the 24 hours of the day, and they lose their character as capital, are therefore a pure loss for the Sandersons, as soon as their function of absorbing labour is interrupted. "But then there would be the loss from so much expensive machinery, lying idle half the time, and to get through the amount of work which we are able to do on the present system, we should have to double our premises and plant, which would double the outlay." But why should these Sandersons pretend to a privilege not enjoyed by the other capitalists who only work during the day, and whose buildings, machinery, raw material, therefore lie "idle" during the night? E. F. Sanderson answers in the name of all the Sandersons: "It is true that there is this loss from machinery lying idle in those manufactories in which work only goes on by day. But the use of furnaces would involve a further loss in our case. If they were kept up there would be a waste of fuel (instead of, as now, a waste of the living substance of the workers), and if they were not, there would be loss of time in laying the fires and getting the heat up (whilst the loss of sleeping time, even to children of 8 is a gain of working-time for the Sanderson tribe), and the furnaces themselves would suffer from the changes of temperature." (Whilst those same furnaces suffer nothing from the day and night change of labour.)¹

¹ l. c., 85, p. xvii. To similar tender scruples of the glass manufacturers that regular meal-times for the children are impossible because as a consequence a certain quantity of heat, radiated by the furnaces, would be "a pure loss" or "wasted," Commissioner White makes answer. His answer is unlike that of Ure, Senior, &c., and their puny German plagiarists à la Roscher who are touched by the "abstinence," "self-denial," "saving," of the capitalists in the expenditure of their gold, and by their Timur-Tamerlanish prodigality of human life! "A certain amount of heat beyond what is usual at present might also be going to waste, if meal-times were secured in these cases, but it seems likely not equal in money-value to the waste of animal power now going on in glass-houses throughout the kingdom from growing boys not having enough quiet time to eat their meals at ease, with a little rest afterwards for digestion." (l. c., p. xlv.) And this in the year of progress 1865! Without considering the expenditure of strength in lifting and carrying, such a child, in the sheds where bottle and flint glass are made,

SECTION 6.—THE STRUGGLE FOR THE NORMAL WORKING-DAY. COMPULSORY LIMITATION BY LAW OF THE WORKING-TIME. THE ENGLISH FACTORY ACTS, 1833 TO 1864

After capital had taken centuries in extending the working-day to its normal maximum limit, and then beyond this to the limit of the natural day of 12 hours,¹ there followed on the birth of mechanism and modern industry in the last third of the 18th century, a violent encroachment like that of an avalanche in its intensity and extent. All bounds of morals and nature, age and sex, day and night, were broken down. Even the ideas of day and night, of rustic simplicity in the old statutes, became so confused that an English judge, as late as 1860, needed a quite Talmudic sagacity to explain "judicially" what was day and what was night.² Capital celebrated its orgies.

As soon as the working-class, stunned at first by the noise and turmoil of the new system of production, recovered, in some measure, its senses, its resistance began, and first in the native land of mechanism, in England. For 30 years, however, the concessions conquered by the workpeople were purely nominal. Parliament passed 5 Labour Laws between 1802 and 1833, but was shrewd enough not to vote a penny for their carrying out, for the requisite officials, &c.³

¹ "It is certainly much to be regretted that any class of persons should toil 12 hours a day, which, including the time for their meals and for going to and returning from their work, amounts, in fact, to 14 of the 24 hours... Without entering into the question of health, no one will hesitate, I think, to admit that, in a moral point of view, so entire an absorption of the time of the working-classes, without intermission, from the early age of 13, and in trades not subject to restriction, much younger, must be extremely prejudicial, and is an evil greatly to be deplored.... For the sake, therefore, of public morals, of bringing up an orderly population, and of giving the great body of the people a reasonable enjoyment of life, it is much to be desired that in all trades some portion of every working-day should be reserved for rest and leisure." (Leonard Horner in "Reports of Insp. of Fact. for 31st Dec., 1841.")

² See "Judgment of Mr. J. H. Otway, Belfast. Hilary Sessions, County Antrim, 1860."

³ It is very characteristic of the régime of Louis Philippe, the bourgeois king, that the one Factory Act passed during his reign, that of March 22nd, 1841, was never put in force. And this law only dealt with child-labour. It fixed 8 hours a day for children between 8 and 12, 12 hours for children between 12 and 16, &c., with many exceptions which allow night-work even for children 8 years old. The supervision and enforcement of this law are in a country where every mouse is under police administration, left to the good-will of the *amis du commerce*. Only since 1853, in one single department—

They remained a dead letter. "The fact is, that prior to the Act of 1833, young persons and children were worked all night, all day, or both *ad libitum*."¹

A normal working-day for modern industry only dates from the Factory Act of 1833, which included cotton, wool, flax, and silk factories. Nothing is more characteristic of the spirit of capital than the history of the English Factory Acts from 1833 to 1864.

The Act of 1833 declares the ordinary factory working-day to be from half-past five in the morning to half-past eight in the evening, and within these limits, a period of 15 hours, it is lawful to employ young persons (*i.e.*, persons between 13 and 18 years of age), at any time of the day, provided no one individual young person should work more than 12 hours in any one day, except in certain cases especially provided for. The 6th section of the Act provided: "That there shall be allowed in the course of every day not less than one and a half hours for meals to every such person restricted as hereinbefore provided." The employment of children under 9, with exceptions mentioned later, was forbidden; the work of children between 9 and 13 was limited to 8 hours a day, night-work, *i.e.*, according to this Act, work between 8.30 p. m. and 5.30 a. m., was forbidden to all persons between 9 and 18.

The law-makers were so far from wishing to trench on the freedom of capital to exploit adult labour-power, or, as they called it, "the freedom of labour," that they created a special system in order to prevent the Factory Acts from having a consequence so outrageous.

"The great evil of the factory system as at present conducted," says the first report of the Central Board of the Commission of June 28th, 1833, "has appeared to us to be that it entails the necessity of continuing the labour of children to the utmost length of that of the adults. The only remedy for this evil, short of the limitation of the labour of adults, which would, in our opinion, create an evil greater than that which is sought to be remedied, appears to be the plan of working double sets of children." . . . Under the name of System of Relays, this "plan" was therefore carried out, so that, *e.g.*,

the Département du Nord—has a paid government inspector been appointed. Not less characteristic of the development of French society, generally, is the fact, that Louis Philippe's law stood solitary among the all-embracing mass of French laws, till the Revolution of 1848.

¹ "Report of Insp. of Fact.," 30th April, 1860, p. 50.

from 5.30 a. m. until 1.30 in the afternoon, one set of children between 9 and 13, and from 1.30 p. m. to 8.30 in the evening another set were "put to," &c.

In order to reward the manufacturers for having, in the most barefaced way, ignored all the Acts as to children's labour passed during the last twenty-two years, the pill was yet further gilded for them. Parliament decreed that after March 1st, 1834, no child under 11, after March 1st, 1835, no child under 12, and after March 1st, 1836, no child under 13, was to work more than eight hours in a factory. This "liberalism," so full of consideration for "capital," was the more noteworthy as, Dr. Farre, Sir A. Carlisle, Sir B. Brodie, Sir C. Bell, Mr. Guthrie, &c., in a word, the most distinguished physicians and surgeons in London, had declared in their evidence before the House of Commons, that there was danger in delay. Dr. Farre expressed himself still more coarsely. "Legislation is necessary for the prevention of death, in any form in which it can be prematurely inflicted, and certainly this (*i.e.*, the factory method) must be viewed as a most cruel mode of inflicting it."

That same "reformed" Parliament, which in its delicate consideration for the manufacturers, condemned children under 13, for years to come, to 72 hours of work per week in the Factory Hell, on the other hand, in the Emancipation Act, which also administered freedom drop by drop, forbade the planters, from the outset, to work any negro slave more than 45 hours a week. But in no wise conciliated, capital now began a noisy agitation that went on for several years. It turned chiefly on the age of those who, under the name of children, were limited to 8 hours work, and were subject to a certain amount of compulsory education. According to capitalistic anthropology, the age of childhood ended at 10, or at the outside, at 11. The more nearly the time approached for the coming into full force of the Factory Act, the fatal year 1836, the more wildly raged the mob of manufacturers. They managed, in fact, to intimidate the government to such an extent that in 1835 it proposed to lower the limit of the age of childhood from 13 to 12. In the meantime the pressure from without grew more threatening. Courage failed the House of Commons. It refused to throw children of 13 under the Juggernaut Car of capital for more than 8 hours a day, and the Act of 1833 came into full operation. It remained unaltered until June, 1844.

In the ten years during which it regulated factory work

first in part, and then entirely, the official reports of the factory inspectors teem with complaints as to the impossibility of putting the Act into force. As the law of 1833 left it optional with the lords of capital during the 15 hours, from 5.30 a. m. to 8.30 p. m., to make every "young person," and "every child" begin, break off, resume, or end his 12 or 8 hours at any moment they liked, and also permitted them to assign to different persons, different times for meals, these gentlemen soon discovered a new "system of relays," by which the labour-horses were not changed at fixed stations, but were constantly re-harnessed at changing stations. We do not pause longer on the beauty of this system, as we shall have to return to it later. But this much is clear at the first glance: that this system annulled the whole Factory Act, not only in the spirit, but in the letter. How could factory inspectors, with this complex book-keeping in respect to each individual child or young person, enforce the legally determined work-time and the granting of the legal meal-times? In a great many of the factories, the old brutalities soon blossomed out again unpunished. In an interview with the Home Secretary (1844), the factory inspectors demonstrated the impossibility of any control under the newly invented relay system.¹ In the meantime, however, circumstances had greatly changed. The factory hands, especially since 1838, had made the Ten Hours' Bill their economic, as they had made the Charter their political, election-cry. Some of the manufacturers, even, who had managed their factories in conformity with the Act of 1833, overwhelmed Parliament with memorials on the immoral competition of their false brethren whom greater impudence, or more fortunate local circumstances, enabled to break the law. Moreover, however much the individual manufacturer might give the rein to his old lust for gain, the spokesmen and political leaders of the manufacturing class ordered a change of front and of speech towards the workpeople. They had entered upon the contest for the repeal of the Corn Laws, and needed the workers to help them to victory. They promised, therefore, not only a double-sized loaf of bread, but the enactment of the Ten Hours' Bill in the Free-trade millennium.² Thus they still less dared to oppose a measure intended only to make the law of 1833 a reality. Threatened in their holiest interest,

¹ "Rept. of Insp. of Fact.," 31st October, 1849, p. 6.
² "Rept. of Insp. of Fact.," 31st October, 1848, p. 98.

the rent of land, the Tories thundered with philanthropic indignation against the "nefarious practices"¹ of their foes.

This was the origin of the additional Factory Act of June 7th, 1844. It came into effect on September 10th, 1844. It places under protection a new category of workers, viz., the women under 18. They were placed in every respect on the same footing as the young persons, their work-time limited to twelve hours, their night-labour forbidden, &c. For the first time, legislation saw itself compelled to control directly and officially the labour of adults. In the Factory Report of 1844 1845, it is said with irony: "No instances have come to my knowledge of adult women having expressed any regret at their *rights* being thus far interfered with."² The working-time of children under 13 was reduced to $6\frac{1}{2}$, and in certain circumstances to 7 hours a-day.³

To get rid of the abuses of the "spurious relay system," the law established besides others the following important regulations:—"That the hours of work of children and young persons shall be reckoned from the time when any child or young person shall begin to work in the morning." So that if A, e.g., begins work at 8 in the morning, and B at 10, B's work-day must nevertheless end at the same hour as A's. "The time shall be regulated by a public clock," for example, the nearest railway clock, by which the factory clock is to be set. The occupier is to hang up a "legible" printed notice stating the hours for the beginning and ending of work and the times allowed for the several meals. Children beginning work before 12 noon may not be again employed after 1 p. m. The afternoon shift must therefore consist of other children than those employed in the morning. Of the hour and a half for meal-times, "one hour thereof at the least shall be given before three of the clock in the afternoon. . . . and at the same period of the day. No child or young person shall be employed more than five hours before 4 p. m. without an interval for meal-time of at least 30 minutes. No child or young person [or female] shall be employed or allowed to remain in any room in which any manufacturing process is then [*i.e.*, at meal-times] carried on," &c.

¹ Leonard Horner uses the expression "nefarious practices" in his official reports. ("Report of Insp. of Fact.," 31st October, 1839, p. 7.)

² "Rept.," &c., 30th Sept., 1844, p. 15.

³ The Act allows children to be employed for 10 hours if they do not work day after day, but only on alternate days. In the main, this clause remained inoperative.

It has been seen that these minutiae, which, with military uniformity, regulate by stroke of the clock the times, limits, pauses of the work, were not at all the products of Parliamentary fancy. They developed gradually out of circumstances as natural laws of the modern mode of production. Their formulation, official recognition, and proclamation by the State, were the result of a long struggle of classes. One of their first consequences was that in practice the working-day of the adult males in factories became subject to the same limitations, since in most processes of production the co-operation of the children, young persons, and women is indispensable. On the whole, therefore, during the period from 1844 to 1847, the 12 hours' working-day became general and uniform in all branches of industry under the Factory Act.

The manufacturers, however, did not allow this "progress" without a compensating "retrogression." At their instigation the House of Commons reduced the minimum age for employable children from 9 to 8, in order to assure that additional supply of factory children which is due to capitalists, according to divine and human law.¹

The years 1846-47 are epoch-making in the economic history of England. The Repeal of the Corn Laws, and of the duties on cotton and other raw material; Free-trade proclaimed as the guiding star of legislation; in a word, the arrival of the millennium. On the other hand, in the same years, the Chartist movement and the 10 hours' agitation reached their highest point. They found allies in the Tories panting for revenge. Despite the fanatical opposition of the army of perjured Free-traders, with Bright and Cobden at their head, the Ten Hours' Bill, struggled for so long, went through Parliament.

The new Factory Act of June 8th, 1847, enacted that on July 1st, 1847, there should be a preliminary shortening of the working-day for "young persons" (from 13 to 18), and all females to 11 hours, but that on May 1st, 1848, there should be a definite limitation of the working-day to 10 hours. In other respects, the Act only amended and completed the Acts of 1833 and 1844.

Capital now entered upon a preliminary campaign in order to hinder the Act from coming into full force on May 1st, 1848. And

¹ "As a reduction in their hours of work would cause a larger number of children to be employed, it was thought that the additional supply of children from 8 to 9 years of age would meet the increased demand" (*l. c.*, p. 13).

the workers themselves, under the pretence that they had been taught by experience, were to help in the destruction of their own work. The moment was cleverly chosen. "It must be remembered, too, that there has been more than two years of great suffering (in consequence of the terrible crisis of 1846-47) among the factory operatives, from many mills having worked short time, and many being altogether closed. A considerable number of the operatives must therefore be in very narrow circumstances; many, it is to be feared, in debt; so that it might fairly have been presumed that at the present time they would prefer working the longer time, in order to make up for past losses, perhaps to pay off debts, or get their furniture out of pawn, or replace that sold, or to get a new supply of clothes for themselves and their families."¹

The manufacturers tried to aggravate the natural effect of these circumstances by a general reduction of wages by 10%. This was done, so to say, to celebrate the inauguration of the new Free-trade era. Then followed a further reduction of $8\frac{1}{3}\%$ as soon as the working-day was shortened to 11, and a reduction of double that amount as soon as it was finally shortened to 10 hours. Wherever, therefore, circumstances allowed it, a reduction of wages of at least 25% took place.² Under such favourably prepared conditions the agitation among the factory workers for the repeal of the Act of 1847 was begun. Neither lies, bribery, nor threats were spared in this attempt. But all was in vain. Concerning the half-dozen petitions in which workpeople were made to complain of "their oppression by the Act," the petitioners themselves declared under oral examination, that their signatures had been extorted from them. "They felt themselves oppressed, but not exactly by the Factory Act."³ But if the manufacturers did not succeed in making the workpeople speak as they wished, they themselves shrieked all the louder in press and Parliament in the name of the workpeople.

¹ "Rep. of Insp. of Fact.," 31st Oct., 1848, p. 16.

² "I found that men who had been getting 10s. a week, had had 1s. taken off for a reduction in the rate of 10 per cent., and 1s. 6d. off the remaining 9s. for the reduction in time, together 2s. 6d., and notwithstanding this, many of them said they would rather work 10 hours." I. c.

³ "Though I signed it [the petition], I said at the time I was putting my hand to a wrong thing. 'Then why did you put your hand to it?' 'Because I should have been turned off if I had refused.' 'Whence it would appear that this petitioner felt himself 'oppressed,' but not exactly by the Factory Act." I. c., p. 102.

They denounced the Factory Inspectors as a kind of revolutionary commissioners like those of the French National Convention ruthlessly sacrificing the unhappy factory workers to their humanitarian crotchet. This manoeuvre also failed. Factory Inspector Leonard Horner conducted in his own person, and through his sub-inspectors, many examinations of witnesses in the factories of Lancashire. About 70% of the workpeople examined declared in favour of 10 hours, a much smaller percentage in favour of 11, and an altogether insignificant minority for the old 12 hours.¹

Another "friendly" dodge was to make the adult males work 12 to 15 hours, and then to blazon abroad this fact as the best proof of what the proletariat desired in its heart of hearts. But the "ruthless" Factory Inspector Leonard Horner was again to the fore. The majority of the "over-timers" declared: "They would much prefer working ten hours for less wages, but that they had no choice; that so many were out of employment (so many spinners getting very low wages by having to work as piecers, being unable to do better), that if they refused to work the longer time, others would immediately get their places, so that it was a question with them of agreeing to work the longer time, or of being thrown out of employment altogether."²

The preliminary campaign of capital thus came to grief, and the Ten Hours' Act came into force May 1st, 1848. But meanwhile the fiasco of the Chartist party whose leaders were imprisoned, and whose organisation was dismembered, had shaken the confidence of the English working-class in its own strength. Soon after this the June insurrection in Paris and its bloody suppression united, in England as on the Continent, all fractions of the ruling classes, landlords and capitalists, stock-exchange wolves and shop-keepers, Protectionists and Free-traders, government and opposition, priests and freethinkers, young whores and old nuns, under the common cry for the salvation of Property, Religion, the Family and Society. The working-class was everywhere proclaimed,

¹ p. 17, I. c. In Mr. Horner's district 10,270 adult male labourers were thus examined in 181 factories. Their evidence is to be found in the appendix to the Factory Reports for the half-year ending October 1848. These examinations furnish valuable material in other connexions also.

² I. c. See the evidence collected by Leonard Horner himself, Nos. 89, 70, 71, 72, 92, 93, and that collected by Sub-Inspector A., Nos. 51, 52, 58, 59, 62, 70, of the Appendix. One manufacturer, too, tells the plain truth. See No. 14, and No. 265, I. c.

placed under a ban, under a virtual law of suspects. The manufacturers had no need any longer to restrain themselves. They broke out in open revolt not only against the Ten Hours' Act, but against the whole of the legislation that since 1833 had aimed at restricting in some measure the "free" exploitation of labour-power. It was a pro-slavery rebellion in miniature, carried on for over two years with a cynical recklessness, a terrorist energy all the cheaper because the rebel capitalist risked nothing except the skin of his "hands."

To understand that which follows we must remember that the Factory Acts of 1833, 1844, and 1847 were all three in force so far as the one did not amend the other: that not one of these limited the working-day of the male worker over 18, and that since 1833 the 15 hours from 5.30 a. m. to 8.30 p. m. had remained the legal "day," within the limits of which at first the 12, and later the 10 hours' labour of young persons and women had to be performed under the prescribed conditions.

The manufacturers began by here and there discharging a part of, in many cases half of, the young persons and women employed by them, and then, for the adult males, restoring the almost obsolete night-work. The Ten Hours' Act, they cried, leaves no other alternative.¹

Their second step dealt with the legal pauses for meals. Let us hear the Factory Inspectors. "Since the restriction of the hours of work to ten, the factory occupiers maintain, although they have not yet practically gone the whole length, that supposing the hours of work to be from 9 a. m. to 7 p. m. they fulfil the provisions of the statutes by allowing an hour before 9 a. m. and half an hour after 7 p. m. [for meals]. In some cases they now allow an hour, or half an hour for dinner, insisting at the same time, that they are not bound to allow any part of the hour and a half in the course of the factory working-day."² The manufacturers maintained therefore that the scrupulously strict provisions of the Act of 1844 with regard to meal-times only gave the operatives permission to eat and drink before coming into the factory—*i.e.*, at home. And why should not the workpeople eat their dinner before 9 in the morning? The crown lawyers, however, decided that the prescribed meal-times "must be in the interval during the working-hours, and

¹ Reports, &c., for 31st October, 1848, pp. 133, 134.
² Reports, &c., for 30th April, 1848, p. 47.

that it will not be lawful to work for 10 hours continuously, from 9 a. m. to 7 p. m., without any interval."¹

After these pleasant demonstrations, Capital precluded its revolt by a step which agreed with the letter of the law of 1844, and was therefore legal.

The Act of 1844 certainly prohibited the employment after 1 p. m. of such children, from 8 to 13, as had been employed before noon. But it did not regulate in any way the 6 $\frac{1}{2}$ hours' work of the children whose work-time began at 12 mid-day or later. Children of 8 might, if they began work at noon, be employed from 12 to 1, 1 hour; from 2 to 4 in the afternoon, 2 hours; from 5 to 8.30 in the evening, 3 $\frac{1}{2}$ hours; in all, the legal 6 $\frac{1}{2}$ hours. Or better still. In order to make their work coincide with that of the adult male labourers up to 8.30 p. m., the manufacturers only had to give them no work till 2 in the afternoon; they could then keep them in the factory without intermission till 8.30 in the evening. "And it is now expressly admitted that the practice exists in England from the desire of mill-owners to have their machinery at work for more than 10 hours a-day, to keep the children at work with male adults after all the young persons and women have left, and until 8.30 p. m. if the factory-owners choose."²

Workers and factory inspectors protested on hygienic and moral grounds, but Capital answered:

"My deeds upon my head! I crave the law,
 The penalty and forfeit of my bond."

In fact, according to statistics laid before the House of Commons on July 26th, 1850, in spite of all protests, on July 15th, 1850, 3,742 children were subjected to this "practice" in 257 factories.³ Still, this was not enough. The lynx eye of Capital discovered that the Act of 1844 did not allow 5 hours' work before mid-day without a pause of at least 30 minutes for refreshment, but prescribed nothing of the kind for work after mid-day. Therefore, it claimed and obtained the enjoyment not only of making children of 8 drudge without intermission from 2 to 8.30 p. m., but also of making them hunger during that time.

¹ Reports, &c., for 31st October, 1848, p. 130

² Reports, &c., l. c., p. 142.

³ Reports, &c., for 31st October, 1850, pp. 5, 6.

"Ay, his heart,
So says the bond."¹

This Shylock-linging to the letter of the law of 1844, so far as it regulated children's labour, was but to lead up to an open revolt against the same law, so far as it regulated the labour of "young persons and women." It will be remembered that the abolition of the "false relay system" was the chief aim and object of that law. The masters began their revolt with the simple declaration that the sections of the Act of 1844 which prohibited the *ad libitum* use of young persons and women in such short fractions of the day of 15 hours as the employer chose, were "comparatively harmless" so long as the work-time was fixed at 12 hours. But under the Ten Hours' Act they were a "grievous hardship."² They informed the inspectors in the coolest manner that they should place themselves above the letter of the law, and re-introduce the old system on their own account.³ They were acting in the interests of the ill-advised operatives themselves, "in order to be able to pay them higher wages." "This was the only possible plan by which to maintain, under the Ten Hours' Act, the industrial supremacy of Great Britain." "Perhaps it may be a little difficult to detect irregularities under the relay system; but what of that? Is the great manufacturing interest of this country to be treated as a secondary matter in order to save some little trouble to Inspectors and Sub-Inspectors of Factories?"⁴

All these shifts naturally were of no avail. The Factory Inspectors appealed to the Law Courts. But soon such a cloud of dust in the way of petitions from the masters overwhelmed the Home Secretary, Sir George Grey, that in a circular of August 5th, 1848, he recommends the inspectors not "to lay informations

¹ The nature of capital remains the same in its developed as in its undeveloped form. In the code which the influence of the slave-owners, shortly before the outbreak of the American Civil War, imposed on the territory of New Mexico, it is said that the labourer, in as much as the capitalist has bought his labour-power, "is his (the capitalist's) money." The same view was current among the Roman patricians. The money they had advanced to the plebeian debtor had been transformed *videlicet* the means of subsistence into the flesh and blood of the debtor. This "flesh and blood" were, therefore, "their money." Hence, the Shylock-law of the Ten Tables. Linguet's hypothesis that the patrician creditors from time to time prepared, beyond the Tiber, banquets of debtors' flesh, may remain as undecided as that of Daumer on the Christian Eucharist.

² Reports, &c., for 30th April, 1848, p. 28.

³ Thus, among others, Philanthropist Ashworth to Leonard Horner, in a disgusting Quaker letter. (Reports, &c., April, 1849, p. 4.)

⁴ I. c., p. 140.

against mill-owners for a breach of the letter of the Act, or for employment of young persons by relays in cases in which there is no reason to believe that such young persons have been actually employed for a longer period than that sanctioned by law." Hereupon, Factory Inspector J. Stuart allowed the so-called relay system during the 15 hours of the factory day throughout Scotland, where it soon flourished again as of old. The English Factory Inspectors, on the other hand, declared that the Home Secretary had no power dictatorially to suspend the law, and continued their legal proceedings against the pro-slavery rebellion.

But what was the good of summoning the capitalists when the Courts, in this case the country magistrates—Cobbett's "Great Unpaid"—acquitted them? In these tribunals, the masters sat in judgment on themselves. An example. One Eskrigge, cotton-spinner, of the firm of Kershaw, Leese, & Co., had laid before the Factory Inspector of his district the scheme of a relay system intended for his mill. Receiving a refusal, he at first kept quiet. A few months later, an individual named Robinson, also a cotton-spinner, and if not his Man Friday, at all events related to Eskrigge, appeared before the borough magistrates of Stockport on a charge of introducing the identical plan of relays invented by Eskrigge. Four Justices sat, among them three cotton-spinners, at their head this same inevitable Eskrigge. Eskrigge acquitted Robinson, and now was of opinion that what was right for Robinson, and now was of opinion that what was right for Robinson was fair for Eskrigge. Supported by his own legal decision, he introduced the system at once into his own factory.¹ Of course, the composition of this tribunal was in itself a violation of the law.² These judicial farces, exclaims Inspector Howell, "urgently call for a remedy—either that the law should be so altered as to be made to conform to these decisions, or that it should be administered by a less fallible tribunal, whose decisions would conform to the law . . . when these cases are brought forward. I long for a stipendiary magistrate."³

The crown lawyers declared the masters' interpretation of the Act of 1848 absurd. But the Saviours of Society would not

¹ Reports, &c., for 30th April, 1849, pp. 21, 22 Cf like examples *ibid.* pp. 4, 5.

² By I. and II. Will. IV., ch. 24, s. 10, known as Sir John Hobhouse's Factory Act, it was forbidden to any owner of a cotton-spinning or weaving mill, or the father, son, or brother of such owner, to act as Justice of the Peace in any inquiries that concerned the Factory Act.

³ I. c.

allow themselves to be turned from their purpose. Leonard Horner reports, "Having endeavoured to enforce the Act . . . by ten prosecutions in seven magisterial divisions, and having been supported by the magistrates in one case only. . . . I considered it useless to prosecute more for this evasion of the law. That part of the Act of 1884 which was framed for securing uniformity in the hours of work, . . . is thus no longer in force in my district (Lancashire). Neither have the sub-inspectors or myself any means of satisfying ourselves, when we inspect a mill working by shifts, that the young persons and women are not working more than 10 hours a-day. . . . In a return of the 30th April, . . . of mill-owners working by shifts, the number amounts to 114, and has been for some time rapidly increasing. In general, the time of working the mill is extended to $13\frac{1}{2}$ hours, from 6 a. m. to $7\frac{1}{2}$ p. m., . . . in some instances it amounts to 15 hours, from $5\frac{1}{2}$ a. m. to $8\frac{1}{2}$ p. m."¹ Already, in December, 1848, Leonard Horner had a list of 65 manufacturers and 29 overlookers who unanimously declared that no system of supervision could, under this relay system, prevent enormous over-work.² Now, the same children and young persons were shifted from the spinning-room to the weaving-room, now, during 15 hours, from one factory to another.³ How was it possible to control a system which, "under the guise of relays, is some one of the many plans for shuffling 'the hands' about in endless variety, and shifting the hours of work and of rest for different individuals throughout the day, so that you may never have one complete set of hands working together in the same room at the same time."⁴

But altogether independently of actual over-work, this so-called relay system was an offspring of capitalistic fantasy such as Fourier, in his humorous sketches of "Courtes Séances," has never surpassed, except that the "attraction of labour" was changed into the attraction of capital. Look, for example, at those schemes of the masters which the "respectable" press praised as models of "what a reasonable degree of care and method can accomplish." The *personnel* of the workpeople was

¹ Reports, &c., for 30th April, 1849, p. 5.

² Reports, &c., for 31st October, 1849, p. 6.

³ Reports, &c., for 30th April, 1849, p. 21.

⁴ Reports, &c., for 31st October, 1848, p. 95.

sometimes divided into from 12 to 14 categories, which themselves constantly changed and rechanged their constituent parts. During the 15 hours of the factory day, capital dragged in the labourer now for 30 minutes, now for an hour, and then pushed him out again, to drag him into the factory and to thrust him out afresh, hounding him hither and thither, in scattered shreds of time, without ever losing hold of him until the full 10 hours' work was done. As on the stage, the same persons had to appear in turns in the different scenes of the different acts. But as an actor during the whole course of the play belongs to the stage, so the operatives, during 15 hours, belonged to the factory, without reckoning the time for going and coming. Thus the hours of rest were turned into hours of enforced idleness, which drove the youths to the pot-house, and the girls to the brothel. At every new trick that the capitalist, from day to day, hit upon for keeping his machinery going 12 or 15 hours without increasing the number of his hands, the worker had to swallow his meals now in this fragment of time, now in that. At the time of the 10 hours' agitation, the masters cried out that the working mob petitioned in the hope of obtaining 12 hours' wages for 10 hours' work. Now they reversed the medal. They paid 10 hours' wages for 12 or 15 hours' lordship over labour-power.¹ This was the gist of the matter, this the masters' interpretation of the 10 hours' law! These were the same unctuous Free-traders, perspiring with the love of humanity, who for full 10 years, during the Anti-Corn Law agitation, had preached to the operatives, by a reckoning of pounds, shillings, and pence, that with free importation of corn, and with the means possessed by English industry, 10 hours' labour would be quite enough to enrich the capitalists.² This revolt of capital, after two years was at last crowned with victory by a decision of one of the four highest Courts of Justice in England, the Court of Exchequer, which in a case brought before it on February 8th, 1850, decided that the manufacturers were certainly acting against the sense of the Act of 1844, but that this Act itself contained certain words that rendered it meaningless. "By this decision, the Ten Hours' Act was

¹ See Reports, &c., for 30th April, 1849, p. 6, and the detailed explanation of the "shifting system," by Factory Inspectors Howell and Saunders, in "Reports, &c., for 31st October, 1848." See also the petition to the Queen from the clergy of Ashton and vicinity, in the spring of 1849, against the "shift system."

² Cf. for example, "The Factory Question and the Ten Hours Bill." By R. H. Greg, 1837.

abolished."¹ A crowd of masters, who until then had been afraid of using the relay system for young persons and women, now look it up heart and soul.²

But on this apparently decisive victory of capital, followed at once a revulsion. The workpeople had hitherto offered a passive, although inflexible and unremitting resistance. They now protested in Lancashire and Yorkshire in threatening meetings. The pretended Ten Hours' Act, was thus simple humbug, parliamentary cheating, had never existed! The Factory Inspectors urgently warned the Government that the antagonism of classes had arrived at an incredible tension. Some of the masters themselves murmured: "On account of the contradictory decisions of the magistrates, a condition of things altogether abnormal and anarchical obtains. One law holds in Yorkshire, another in Lancashire; one law in one parish of Lancashire, another in its immediate neighbourhood. The manufacturer in large towns could evade the law, the manufacturer in country districts could not find the people necessary for the relay system, still less for the shifting of hands from one factory to another," &c. And the first birthright of capital is equal exploitation of labour-power by all capitalists.

Under these circumstances a compromise between masters and men was effected that received the seal of Parliament in the additional Factory Act of August 5th, 1850. The working-day for "young persons and women," was raised from 10 to 10 $\frac{1}{2}$ hours for the first five days of the week, and was shortened to 7 $\frac{1}{2}$ on the Saturday. The work was to go on between 6 a. m. and 6 p. m.,³ with pauses of not less than 1 $\frac{1}{2}$ hours for meal-times, these meal-times to be allowed at one and the same time for all, and conformably to the conditions of 1844. By this an end was put to the relay system once for all.⁴ For children's labour, the Act of 1844 remained in force.

¹ F. Engels: "The English Ten Hours' Bill." (In the "Neue Rheinische Zeitung, Politisch-ökonomische Revue." Edited by K. Marx. April number 1850, p. 13.) The same "high" Court of Justice discovered, during the American Civil War, a verbal ambiguity which exactly reversed the meaning of the law against the arming of pirate ships.

² Rep., &c., for 30th April, 1850.

³ In winter, from 7 a. m. to 7 p. m. may be substituted.

⁴ The present law (of 1850) was a compromise whereby the employers surrendered the benefit of the Ten Hours' Act for the advantage of one uniform period for the commencement and termination of the labour of those whose labour is restricted." (Reports, &c., for 30th April, 1852, p. 14.)

One set of masters, this time as before, secured to itself special seigneurial rights over the children of the proletariat. These were the silk manufacturers. In 1833 they had howled out in threatening fashion, "if the liberty of working children of any age for 10 hours a day were taken away, it would stop their works."¹ It would be impossible for them to buy a sufficient number of children over 13. They extorted the privilege they desired. The pretext was shown on subsequent investigation to be a deliberate lie.² It did not, however, prevent them, during 10 years, from spinning silk 10 hours a day out of the blood of little children who had to be placed upon stools for the performance of their work.³ The Act of 1844 certainly "robbed" them of the "liberty" of employing children under 11 longer than 6 $\frac{1}{2}$ hours a day. But it secured to them, on the other hand, the privilege of working children between 11 and 13, 10 hours a day, and of annulling in their case the education made compulsory for all other factory children. This time the pretext was "the delicate texture of the fabric in which they were employed, requiring a lightness of touch, only to be acquired by their early introduction to these factories."⁴ The children were slaughtered out-and-out for the sake of their delicate fingers, as in Southern Russia the horned cattle for the sake of their hide and tallow. At length, in 1850, the privilege granted in 1844, was limited to the departments of silk-twisting and silk-winding. But here, to make amends to capital bereft of its "freedom," the work-time for children from 11 to 13 was raised from 10 to 10 $\frac{1}{2}$ hours. Pretext: "Labour in silk mills was lighter than in mills for other fabrics, and less likely in other respects also to be prejudicial to health."⁵ Official medical inquiries proved afterwards that, on the contrary, "the average death-rate is exceedingly high in the silk districts, and amongst the female part of the population is higher even than it is in the cotton districts of Lancashire."⁶ Despite the protests

¹ Reports, &c., for Sept., 1844, p. 13.

² l. c.

³ l. c.

⁴ "Reports, &c., for 31st Oct., 1846," p. 20.

⁵ Reports, &c., for 31st Oct., 1861, p. 26.

⁶ l. c. p. 27. On the whole the working population, subject to the Factory Act, has greatly improved physically. All medical testimony agrees on this point, and personal observation at different times has convinced me of

of the Factory Inspector, renewed every 6 months, the mischief continues to this hour.¹

The Act of 1850 changed the 15 hours' time from 6 a. m. to 8.30 p. m., into the 12 hours from 6 a. m. to 6 p. m. for "young persons and women" only. It did not, therefore, affect children who could always be employed for half an hour before and $2\frac{1}{2}$ hours after this period, provided the whole of their labour did not exceed $6\frac{1}{2}$ hours. Whilst the bill was under discussion, the Factory Inspectors laid before Parliament statistics of the infamous abuses due to this anomaly. To no purpose. In the background lurked the intention of screwing up, during prosperous years, the working-day of adult males to 15 hours by the aid of the children. The experience of the three following years showed that such an attempt must come to grief against the resistance of the adult

it. Nevertheless, and exclusive of the terrible death-rate of children in the first years of their life, the official reports of Dr. Greenhow show the unfavourable health condition of the manufacturing districts as compared with "agricultural districts of normal health." As evidence, take the following table from his 1861 report:—

Percentage of Adult Males engaged in Manufactures.	Death-rate from Pulmonary Affections per 100,000 Males.	Name of District.	Death-rate from Pulmonary Affections per 100,000 Females.	Percentage of Adult Females engaged in Manufactures.	Kind of Female Occupation.
14.9	598	Wigan	644	18.0	Cotton
42.6	708	Blackburn	734	34.9	Do.
37.3	547	Halifax	564	20.4	Worsted
41.9	611	Bradford	602	30.6	Do.
31.0	695	Macclesfield	804	26.0	Silk
14.9	585	Leek	705	17.2	Do.
36.6	721	Stoke-upon-Trent	665	19.3	Do.
30.4	726	Woolstanton	727	13.9	Do.
		Eight healthy agricultural districts	340		

¹ It is well known with what reluctance the English "Free-traders" gave up the protective duty on the silk manufacture. Instead of the protection against French importation, the absence of protection to English factory children now serves their turn.

male operatives. The Act of 1850 was therefore finally completed in 1853 by forbidding the "employment of children in the morning before and in the evening after young persons and women." Henceforth with a few exceptions the Factory Act of 1850 regulated the working-day of all workers in the branches of industry that came under it.¹ Since the passing of the first Factory Act half a century had elapsed.²

Factory legislation for the first time went beyond its original sphere in the "Printworks' Act of 1845." The displeasure with which capital received this new "extravagance" speaks through every line of the Act. It limits the working-day for children from 8 to 13, and for women to 16 hours, between 6 a. m. and 10 p. m., without any legal pause for meal-times. It allows males over 13 to be worked at will day and night.³ It is a Parliamentary abolition.⁴

However, the principle had triumphed with its victory in those great branches of industry which form the most characteristic creation of the modern mode of production. Their characteristic development from 1853 to 1860, hand-in-hand with the physical and moral regeneration of the factory workers, struck the parblind. The masters from whom the legal limitation and regulation had been wrung step by step after a civil war of half a century, themselves referred ostentatiously to the contrast with the branches

¹ During 1859 and 1860, the zenith years of the English cotton industry, some manufacturers tried, by the decoy bait of higher wages for overtime, to reconcile the adult male operatives to an extension of the working-day. The hand-mule spinners and self-actor minders put an end to the experiment by a petition to their employers in which they say, "Plainly speaking, our lives are to us a burthen; and, while we are confined to the mills nearly *two days a week more* than the other operatives of the country, we feel like helots in the land, and that we are perpetuating a system injurious to ourselves and future generations... This, therefore, is to give you most respectful notice that when we commence work again after the Christmas and New Year's holidays, we shall work 60 hours per week, and no more, or from six to six, with one hour and a half out." (Reports, &c., for 30th April, 1860, p. 30.)

² On the means that the wording of this Act afforded for its violation of the Parliamentary Return "Factories Regulation Act" (6th August, 1859), and in it Leonard Horner's "Suggestions for amending the Factory Acts to enable the Inspectors to prevent illegal working, now becoming very prevalent."

³ "Children of the age of 8 years and upwards, have, indeed, been employed from 6 a. m. to 9 p. m. during the last half year in my district." (Reports, &c., for 31st October, 1857, p. 39.)

⁴ "The Printworks' Act is admitted to be a failure, both with reference to its educational and protective provisions." (Reports, &c., for 31st October, 1862, p. 52.)

of exploitation still "free."¹ The Pharisees of "Political Economy" now proclaimed the necessity of a legally fixed working-day as a characteristic new discovery of their "science."² It will be easily understood that after the factory magnates had resigned themselves and become reconciled to the inevitable, the power of resistance of capital gradually weakened, whilst at the same time the power of attack of the working-class grew with the number of its allies in the classes of society not immediately interested in the question. Hence the comparatively rapid advance since 1860.

The dye-works and bleach-works all came under the Factory Act of 1850 in 1860; lace and stocking manufactures in 1861.

In consequence of the first report of the Commission on the employment of children (1863) the same fate was shared by the manufacturers of all earthenwares (not merely pottery), lucifer-matches, percussion-caps, cartridges, carpets, fustian-cutting, and many processes included under the name of "finishing." In the year 1863 bleaching in the open air* and baking

¹ Thus, e.g., E. Potter in a letter to the *Times* of March 24th, 1863. The *Times* reminded him of the manufacturers' revolt against the Ten Hours' Bill.

² Thus, among others, Mr. W. Newmarch, collaborator and editor of Tooke's "History of Prices." Is it a scientific advance to make cowardly concessions to public opinion?

³ The Act passed in 1860, determined that, in regard to dye and bleach-works, the working-day should be fixed on August 1st, 1861, provisionally at 12 hours, and definitely on August 1st, 1862, at 10 hours, i.e., at 10½ hours for ordinary days, and 7½ for Saturday. Now, when the fatal year 1862, came, the old farce was repeated. Besides, the manufacturers petitioned Parliament to allow the employment of young persons and women for 12 hours during one year longer. "In the existing condition of the trade (the time of the cotton famine), it was greatly to the advantage of the operatives to work 12 hours per day, and make wages when they could." A bill to this effect had been brought in, "and it was mainly due to the action of the operative bleachers in Scotland that the bill was abandoned." (Reports, &c. for 31st October, 1862, pp. 14-15.) Thus defeated by the very workpeople in whose name it pretended to speak, Capital discovered, with the help of lawyer spectacles, that the Act of 1860, drawn up, like all the Acts of Parliament for the "protection of labour" in equivocal phrases, gave them a pretext to exclude from its working the calenders and finishers. English jurisprudence, ever the faithful servant of capital, sanctioned in the Court of Common Pleas this piece of pettifoggery. "The operatives have been greatly disappointed... they have complained of over-work, and it is greatly to be regretted that the clear intention of the legislature should have failed by reason of faulty definition." (l. c., p. 18.)

⁴ The "open-air bleachers" had evaded the law of 1860, by means of the lie that no women worked at it in the night. The lie was exposed by the

were placed under special Acts, by which, in the former, the labour of young persons and women during the night-time (from 8 in the evening to 6 in the morning), and in the latter, the employment of journeyman bakers under 18, between 9 in the evening and 5 in the morning were forbidden. We shall return to the later proposals of the same Commission, which threatened to deprive of their "freedom" all the important branches of English Industry, with the exception of agriculture, mines, and the means of transport.¹

Factory Inspectors, and at the same time Parliament was, by petitions from the operatives, bereft of its notions as to the cool meadow-fragrance, in which bleaching in the open-air was reported to take place. In this aerial bleaching, drying-rooms were used at temperatures of from 90° to 100° Fahrenheit, in which the work was done for the most part by girls. "Cooling" is the technical expression for their occasional escape from the drying-rooms into the fresh air. "Fifteen girls in stoves. Heat from 80° to 90° for linens, and 100° and upwards for cambrics. Twelve girls ironing and doing-up in a small room about 10 feet square, in the centre of which is a close stove. The girls stand round the stove, which throws out a terrific heat, and dries the cambrics rapidly for the ironers. The hours of work for these hands are unlimited. If busy they work till 9 or 12 at night for successive nights." (Reports, &c., for 31st October, 1862, p. 56.) A medical man states: "No special hours are allowed for cooling, but if the temperature gets too high, or the workers' hands get soiled from perspiration, they are allowed to go out for a few minutes.... My experience, which is considerable, in treating the diseases of stove workers, compels me to express the opinion that their sanitary condition is by no means so high as that of the operatives in a spinning factory (and Capital, in its memorials to Parliament, had painted them as floridly healthy, after the manner of Rubens). The diseases most observable amongst them are phthisis, bronchitis, irregularity of uterine functions, hysteria in its most aggravated forms, and rheumatism. All of these, I believe, are either directly or indirectly induced by the impure, overheated air of the apartments in which the hands are employed, and the want of sufficient comfortable clothing to protect them from the cold, damp atmosphere, in winter, when going to their homes." (l. c., pp. 56-57.) The Factory Inspectors remarked on the supplementary law of 1860, torn from these open-air bleachers: "The Act has not only failed to afford that protection to the workers which it appears to offer, but contains a clause... apparently so worded that, unless persons are detected working after 8 o'clock at night they appear to come under no protective provisions at all, and if they do so work, the mode of proof is so doubtful that a conviction can scarcely follow." (l. c., p. 52.) "To all intents and purposes, therefore, as an Act for any benevolent or educational purpose, it is a failure; since it can scarcely be called benevolent or educational purpose, tantamount to compelling women and children to work 14 hours a day with or without meals, as the case may be, and perhaps for longer hours than these, without limit as to age, without reference to sex, and without regard to the social habits of the families of the neighbourhood, in which such works (bleaching and dyeing) are situated." (Reports, &c., for 30th April, 1863, p. 40.)

¹ Note to the 2nd Ed. Since 1866, when I wrote the above passages, a re-action has again set in.