The more effective the protection, the worse for the revenue, and the nearer protection approaches to prohibition.

But whether foreign goods be wholly or partially excluded, the percentage of duties necessary to enforce such exclusion is evidently the measure of the extra price which consumers have to pay for such goods. If the native producers could produce as cheaply as the foreigner, they would sell as cheaply, and no import duties would be requisite to keep foreign goods away. But taking at 40 per cent, the average duties necessary to effect that purpose, it clearly follows that the native producers must expend 140 coins' worth of labour, &c., to achieve what the foreign producers accomplish by the expenditure of 100 coins' worth of labour, &c. The difference, which in the aggregate amounts to an enormous sum, is simply waste and misdirection of energy. It is a thriftless application of power to the wrong object, just as it would be to set a carpenter to make a coat, and a tailor to make a table. It is easy to infer the enormous loss which hence accrues to the wealth-producing power of the country and of the world at large.

We shall, however, have occasion to recur to this subject when we come to consider commercial isolation as one of the impediments to wealthcreation; and we therefore confine ourselves here to showing how largely free commercial intercourse contributes to the goodly work of promoting the creation, and consequently the distribution, of "all such objects of human desire as are obtained or produced by human exertions."

CHAPTER III.

Capital Intelligently Employed—Capital and its Éarnings go to the Payment of Labour—Machinery and Labour-saving Processes—Their Influence on the Production of Wealth and on the Welfare of the Labour-sellers.

A 3. "CAPITAL INTELLIGENTLY APPLIED" is not merely an aid, but indeed a positive necessity, to wealth-creation. At p. 12 we have shown that the three factors of all wealth are land, labour, and capital. The two former—land and labour—are present in greater or smaller proportions, at all times and in all places, but the latter—capital—is the work of human hands, and owes its existence to man's industry, foresight, and self-denial. Let us frame a clear notion of what we mean by "capital," and then inquire into its functions and

In the first place, we shall find that, although all capital is wealth, all wealth is not capital—far from it. The wealth which human exertions have obtained or created is used by its possessors in a variety of ways, which we may classify under the following four divisions. Wealth may be devoted

- To reproductive purposes; that is, to the creation of fresh wealth.
- To purposes which are not reproductive, but are necessary or useful; for instance, to social arrangements for the security of person and property, to the reasonable enjoyment of material comforts, to education,

- To useless purposes, such as a redundancy of public servants and other non-productive consumers, or the indulgence in superfluous luxuries, ostentatious displays, &c.
- To destructive and evil purposes, such as unnecessary wars — the employment of brute force to crush liberty or perpetrate injustice, &c.

It is that portion of the world's wealth which is devoted to the first of these four sets of purposes—viz., to reproductive purposes—which alone constitutes what we call capital. In the other three ways, wealth is absorbed and consumed; whereas the wealth which is used as capital is not only not consumed, but continuously yields a large accession of fresh wealth. It is like the seed-wheat that is saved for sowing, and that lays the foundation of future rich harvests.

Capital, therefore, is that part of wealth which is devoted to reproductive purposes. It consists of the savings effected by means of an excess of production over consumption. The larger that excess, the more rapid the accumulation of capital. Roughly speaking, then, "capital" and "savings" are convertible 'terms. The working man who puts by half-a-crown out of his weekly wages thereby becomes a capitalist, and not only benefits himself, but the world at large. He is a contributor to that reproductive fund by means of which fresh wealth is created.

To the part which capital plays in the creation

of wealth we have already made some reference at p. 12. We have there shown that without capital labour must be sterile, and could engage in very little work beyond such as would each day provide food for that day. In order to apply labour to work requiring time to yield results, a stock must be previously laid up to provide subsistence during that time. Such stock is the earliest and simplest form of capital. In this shape we see capital sustaining labour, while labour is engaged in creating fresh wealth. Under the complex conditions of old civilised communities, the same principle-a principle on which is founded the mutual dependence of capital and labour on each other-is carried out, but on a far larger scale, and in a less obvious form. The capitalist (that is, the savingsholder) supplies the abourer (that is, the wagereceiver) with the means of subsistence, &c., during the time that the latter is working for him at a task-let us say constructing a railroad-which will not be completed for a year or two, and will yield no return till completed; the contract between them being that, in exchange for the wage, the work done shall belong to the wage-payer. Whether the savings thus used belonged to one person, or consisted of contributions made by many persons, is immaterial. Indeed, all the better if the savings of the labourer have, through the medium of banking accumulations, gone towards forming the capital. In such case the labourer is at once earning interest on his savings and wages by his labour. But it is not only subsistence, &c., in the form of wages that the capitalist advances.

He also supplies—taking a cotton factory as an instance-the machinery with which, the raw materials on which, and the costly building in which, the labourer performs his work.

Not only is capital an indispensable element in the production of wealth, but we may go further, and say that the extent to which fresh wealth is producible depends on, and is strictly proportionate to, the swifter or slower growth of the world's capital. If the accumulation of capital be suspended, the productive power of man will be repressed in the same ratio. Of the three elements of wealth-land, labour, and capital-the two first have scarcely ever, unless locally and temporarily, been otherwise than superabundant; whereas capital has, on the other hand, seldom reached the full limit of the requirements or it. It is the want of capital, not the want of land or of labour, that has fixed the bounds of the world's productiveness. As more capital becomes available, more land will be utilised, more labour will be employed, and more wealth will be created. It is where and when population increases faster than capital that labour becomes redundant and wages fall.

The remedy for the redundancy of labour, and for the consequent competition which depresses wages is therefore to accelerate the growth of capital. In the long-run, be it a little sooner or a little later, capital is sure to find some channel for employment. For it is useless and profitless to its possessors unless it is utilised, and it cannot be utilised without creating a demand for labour. Some one may be found to say that a sum of

money invested in land, or in consols, does not create a demand for labour; but he overlooks that the money paid for land or consols by one person is received by another, and therefore still remains to be employed, directly or indirectly, in some form of labour. We therefore come to this conclusion-viz., that as long as there remains on the globe cultivable land uncultivated, and available labour seeking employment, there can be no redundancy of capital; and that the greater the abundance of the latter, the greater the amount of land and labour that will be utilised. and the more active will be the creation of wealth.

But if, on the one hand, labour is dependent on capital for its employment, on the other, capital equally depends on labour for its utilisation. Unused capital gradually shrivels and wastes away: ships rot, mines get inundated, machinery rusts, &c. Labour is the vivifying principle which preserves capital from decay. Let us inquire in what shape capital (that part of wealth which is devoted to reproductive purposes) exists. We shall find it to consist chiefly of ships, roads, and railways; of farm-buildings, factories, and foundries; of implements, machinery, and tools; of horses, sheep, and other cattle; of mines, docks, and harbours; and of an infinite multitude of other forms of wealth. All these objects we find it convenient to class under the generic name of "fixed capital." A very small and insignificant portion of capital exists in the shape of money (not wealth of itself, but counters entitling the bearer to a definite

quantum of wealth), and this portion is designated "floating capital."

Without labour, neither of these two classes of capital are in the slightest degree available for the reproduction of wealth. Of the floating capitalthat is, the money—every farthing of it goes, directly or indirectly, immediately or mediately, to payments for labour; that is, to wages. Trace the course of a sum of money carefully, you will find that its eventual destination is the payment of wages. Supposing it placed on deposit in a bank, the bank may with it perhaps discount A's bill; A may then with it pay his rent to B; then B may perhaps use it to pay his tailor; but ultimately, after a few transfers, it will, before long, find its way into the pocket of the labour-seller. It may, like a snow-flake, float a little while in the air, but finally it will drop and melt into wages.

In the same way, the whole of the earnings of fixed capital are, directly or indirectly, appropriated to the remuneration of labour—that is, to the payment of wages. Take, for instance, a railroad. Of its receipts, a large proportion goes directly to the payment of the men in its service, another portion is appropriated to the purchase of coals, repairs to rolling stock, maintenance of permanent way, &c., of all which purposes wages form the main item of cost, and, on balance, a dividend (probably small) is distributed among the capitalists who have subscribed the money for its construction. But even that dividend itself goes (more or less directly) to the payment of wages in the way we have described above in the case of floating capital.

By no device can capital evade the inevitable law that, if it is utilised at all, it must be by the employment of labour, and therefore by the payment of wages. Machinery cannot be used, ships cannot be navigated, mines cannot be worked, except by human hands; in short, fixed capital is unavailable and valueless, unless under the condition that it shall devote its earnings, more or less directly, to the hire of labour and the payment of wages.

It is, we think, essential fully to develop and definitively to establish this principle, in order that it may be clearly seen how much the interests of the labour-sellers are benefited by promoting the growth and accumulation of capital. As yet, this is neither understood nor recognised by a large proportion of those who are most interested in the inquiry. The chief complaint of the labour-sellers is, that in the distribution of the wealth created by combined labour and capital, the capitalist receives an unduly large, and the labour-seller an unduly small, share. That is a legitimate subject for investigation.

But many go much further, and a great number of honest and truth-seeking working men not only underrate capital as a factor in the creation of wealth, but omit it altogether, and proclaim themselves the sole producers of all wealth. That this is a great mistake plainly appears, we think, from the foregoing considerations; and we shall have done good service to the working men by removing this erroneous impression from their minds. All error is misleading, and it is a very grave one to ignore the joint action of capital in the production

of wealth. Both capital and labour are indispensable agents in the creation of wealth, and both are entitled to participate in the enjoyment of it. The question may arise, in what proportion respectively? By what process, and under what law, is that apportionment to be determined? We may probably in another work specially consider how far, and in what way, the present competitive system may be reformed, readjusted, or replaced by the co-operative principle. But, meanwhile, we shall proceed to point out how, under the existing competitive method, that apportionment does take place, and in what respects it is susceptible of considerable modification.

The proportion in which the wealth obtained or produced by human exertions is divided between labour and capital-or, in other words, the wagerate-depends, within certain limits, on, and varies with, the ever-varying relative supply of labour and capital. If labour is abundant in proportion to capital, the labour-sellers, eager to turn their commodity, labour, to account, will compete with and underbid each other, and wages will fall. If, on the other hand, it is capital that is comparatively abundant, there will be a pressing demand for labour, and wages will rise. There are therefore two sets of conditions under which an enhancement in the market value of labour may occur. One is a diminution in the supply of labour, the other is an increase in the supply of capital. The same effect on the rate of wages is produced by cither alternative. In the one case, the rate of increase in the population has to be retarded; in the other, the rate at which capital is created has to be accelerated. The first process implies prudential restraint, late marriages, emigration, &c., and is at best an unpalatable remedy. The second is quite as efficacious, as we have shown, and entails no hardship on any one. Can there be a doubt as to which of the two courses is the more eligible?

It may be objected that, granting the benefits derivable from a more rapid accumulation of capital than now takes place, such rapidity of increase is practically unattainable. This we utterly deny. Indeed, the very aim and scope of this work is to show the contrary. We believe that there is hardly a limit to the possible creation of wealth; and that there are so many aids to production which are foolishly neglected, and so many obstacles to production which are foolishly maintained, that the adoption of the former and the removal of the latter would almost indefinitely extend man's power to create wealth.

It is clearly the interest of mankind, and especially of that large class who live by the sale of their labour, that the largest possible portion of created wealth should be set aside as capital for reproductive purposes, so that the growth of capital should do more than merely keep pace with the increase of the population. Capital and labour act and re-act on each other, and alternately become cause and effect. The more there is of capital, the more labour will be employed; the more there is of labour employed, the more wealth there will be created, and the more will be put by as capital; and then, recommencing the cycle, the

more there is of capital, &c. &c. But if the portion of created wealth set aside as capital for reproductive purposes be small, and an undue proportion of that wealth be absorbed for the three consumptive or evil purposes enumerated at p. 27, then the accumulation of capital becomes slow, the employment of labour is checked, and the amount of wealth created is curtailed. Meantime, the number of the labour-sellers still goes on increasing, while less is produced for distribution among them.

We conclude, then, that capital is one of the most efficient aids to wealth-creation, and therefore that all influences are evil which tend (a) to check its increase by devoting too large a proportion of wealth to mere consumptive purposes; (b) to waste capital by using it unintelligently—that is, by applying it to injudicious and unprofitable enterprises; and (c) to discourage the local employment of capital by rendering it insecure, or thwarting its operations, or minimising its returns, and thus driving it away into other channels.

A 4. MACHINERY AND LABOUR-SAVING PRO-CESSES.—It is so self-evident that the wealthcreating power of labour is enormously multiplied by the use of tools, implements, and machines, that proofs are superfluous. It may, however, be useful to advert to the impression that did once almost universally, and does still partially, prevail among working men—that the introduction of machinery is injurious to their interests. That such an impression should have existed is perfectly natural. How, indeed, could it have been otherwise? We will suppose that in some industrial enterprise,

whether agricultural or manufacturing, a certain quantity of work which had required the labour of ten hands had suddenly come, by the use of a machine, to be performed by two, and that consequently eight men were thrown out of work. Could these eight men by any possibility view the machine that took the bread out of their mouths otherwise than as a curse? They had worked, and were willing to work, to gain an honest livelihood by the sweat of their brow; but here they were supplanted, ousted, and turned adrift into poverty and despair by this substitution of wood and iron for human hands and human industry. What could they see as the end of it?-ultimate advantage to working men? Certainly not. Nothing but (through no fault of theirs) destitute homes and starving children.

The rioters who, in 1779, destroyed Arkwright's mill were men whom the rapid introduction of machinery into the manufacture of cotton goods at that stirring period had thrown out of work. To these men the labour-saving processes adopted had brought misery and starvation. Take it from their point of view, what more could they see than this: that the means of earning their daily bread was taken from them, and that the cause of this was the use of machinery? Is it wonderful that they should have waged war against the machines to which they traced their sufferings? That their views were erroneous, and that the introduction of machinery has proved an immense benefit to the working class, is now all but universally admitted. But even now, is the process of reasoning that explains in what way that benefit accrues to the working class obvious to everybody? We doubt it very much; and if our doubt be well founded, who shall blame the working man of a century ago for not seeing that which, even in the present day, is to many not obvious?

Of course, on the principles laid down in this work, the explanation is easy. Machinery largely increases the production of wealth; all that increased wealth is distributed and used; the greater the accumulation of capital, the greater the demand for labour, and the better its remuneration. But abstract considerations of this nature could not possibly enter the minds of the suffering men, and they were left to brood over their wrongs, and to seek redress in their own rough and lawless manner.

Moreover, it must be noted that, signal and permanent as are the benefits which labour-sellers derive from the wealth-producing power of machinery, it must necessarily, in the first instance, inflict some injury on a certain number of them for a short time. Some interval must elapse before those who are thrown out of work by the adoption of a new machine can dispose of their labour elsewhere, and the interim is necessarily a period of inconvenience, if not of suffering. True that the same amount is paid away in wages as before-indeed more; but the wages are no longer paid to the same labourers, or for the same kind of labour. The amount of wealth now produced by the labour of the ten men whom we suppose to have been engaged in a certain manufacture, and of whom eight were displaced by the adoption of a new machine, is considerably greater than it was before the change was made. For now, two produce as much as the ten did before, and all that the other eight produce, who now labour at other pursuits, is so much in addition. This increased wealth gives proportionately more for distribution among the producers of it.

The only drawback from the universal benefit accruing from this enlarged amount of wealth created, is the temporary displacement of a certain number of workers, who have to transfer their labour to other employers—perhaps to other occupations. But, ultimately, they, along with the rest of their class, largely profit by the increased demand for labour arising out of increased capital. A similar displacement, most frequently of capital as well as of labour, follows, or rather accompanies, every stage of scientific improvement or of social progress. In olden times, as in modern times, every step forward leaves some few persons behind, temporarily entangled in the old arrangements which have been departed from. Thousands of honest scribes, who, four centuries ago, gained a livelihood by copying and illuminating manuscripts, were rudely displaced by the invention of printing, and had to seek other fields for their labours. When, less than a century ago, wigs were discarded for natural hair, thousands of wigmakers, thrown out of work, had to devote themselves to other pursuits, and, meanwhile, suffered dire distress. So it was with the displacement of stage-coaches by railways, &c. &c.

Indeed, there will occur to the reader innu-

merable instances, constantly arising, of similar displacements of capital and labour occasioned by acknowledged improvements, accompanied by the same loss or inconvenience to a certain portion of the community. But whereas the advantages of such improvements are permanent and universal, while the evil thereof is only temporary and partial, our duty is to submit to and sympathise with the latter, but by no means to falter in our adoption of the former. To do so would be a grievous mistake, and yet it is one frequently committed. Protective import duties are only another form of the principle which would compel the population to wear wigs in order to save a few barbers from the inconvenience of shifting their labour into other channels.

All labour-saving processes tend to the same end—that is, to the production of a given quantity of wealth by means of the smallest possible expenditure of capital and labour. The application of the capital thus liberated, and of the labour thus saved, to other industries gives rise to a proportionate addition to the sum total of the world's wealth. There is in the aggregate no less labour employed, although less is needed for the production of a particular article, because the wage-fund is augmented thereby, not diminished, and the whole of it goes to the payment of wages—that is, to the employment of labour.

Some have argued that, since machinery supersedes and displaces a certain quantity of human labour, then, if the use of it were multiplied in all departments of industrial produc-

tion, and if its application were, by scientific processes, to become universal, and thus (extreme hypothesis!) human wants were supplied without the agency of human labour, a large proportion of the working population would be redundant, and the pressure of competition among them would be so severe as to reduce wages to the lowest limit compatible with bare existence. The fallacy of this deduction is obvious. The very terms of the supposition—viz., that "human wants were supplied "-argue ample sufficiency for all, which is incompatible with the inferred destitution of the majority. The supposed universal application of machinery to the production of wealth implies the creation of at least as much wealth as was before produced by human labour, and therefore human wants would be supplied in at least the same abundance. The correct inference is that there would be sufficient supply for all, without subjecting, as now, the majority of mankind to the necessity of devoting a great portion of their existence to mere physical labour. Such a result would surely be beneficial, not injurious.

In order to make out that the result of the supposition would be detrimental to mankind, another assumption must be superadded, viz., that the wealth ample to supply human wants, thus created by machinery, would only be partially used for that purpose, and that the balance left, after supplying the wants of the minority, would, instead of being distributed among the majority, be either wilfully destroyed, or remain to rot undistributed! The first supposition is paradoxical enough, but the second assumption is utterly monstrous and inconceivable. As we have before shown at p. 3, "all the wealth obtained or produced by human exertions is actually distributed and used."

WEALTH-CREATION.

Machinery (using the term generically for all labour-saving processes) is then a powerful coefficient to wealth-creation. All honour to those true benefactors of mankind whose scientific discoveries and mechanical inventions have supplemented man's physical weakness, and have added immensely to his power over the material world -who have pressed nature into the service of man, and have placed her forces as instruments in his hands!

CHAPTER IV.

Facilities of Inter-communication Promote the Creation of Wealth-Scientific Discoveries Lessen the Expenditure of Human Labour on the Production of Given Results, and Largely Increase the Ultimate Demand for Labour.

A 5. FACILITIES OF INTER-COMMUNICATION.— Until the progress of navigation had led to the discovery of America, the inhabitants of the Eastern and Western Hemispheres were as much cut off from all knowledge of and intercourse with each other as though they existed in two different planets. If it be admitted that Columbus has by his achievement benefited the world (though at the cost of partial cruelty and injustice), the admission is tantamount to asserting that the isolation of one part of the globe from the other is an

evil. The opinion of mankind (excepting, perhaps, of the Chinese and, until recently, the Japanese) has been in conformity with that conclusion, and the general principle may, without further discussion, be taken as conceded.

Our business here, however, is specially to point out in what ways the creation of wealth is promoted by "facilities of inter-communication." One of the most efficient modes in which these facilities act towards that end is by fostering, assisting, and extending the operations of that great contributor to wealth-creation, the division of labour. The full beneficial effects of those operations cannot be realised if the means of conveying the cheaper and better productions of one country to be bartered for the cheaper and better productions of another country, be slow, cumbrous, and expensive. There will be nothing gained if the advantages of such barter be absorbed and neutralised by the difficulties or dearness of intercommunication. Were it not for rapid transit and low freights, cotton from America or wool from Australia could never have come to England to be wrought into fabrics by English labour and machinery, and to be re-exported in that shape to all parts of the world. The superior cheapness of the manufacture would be overborne and outweighed by the extra cost of dear conveyance. In countries where there are no roads, or few and bad roads, intercourse is restricted, the benefits of division of labour are hardly felt, and general poverty prevails. The principle (subdivision of labour) works at its maximum rate in densely populated