between Great Britain and all her Colonies is mooted by those with whom the claims of loyalty and tradition are still paramount. Of the first, it need only be said that the United States "N. P." is worse—more aggravated—than our own. She has more resources within herself than we have, which enable her to stand it longer without utter destruction. But the day must come, is coming rapidly, when the American Eagle must claim freedom and room to soar; or take the place amid decaying nations. She cannot continue to develop her resources beyond a certain point without free communication and free interchange of commodities with all the world. Canada would do best to join her politically after she has taken that step, and not before. The second is a fevered dream bred from our inherent selfishment. That Great Britain should choose, with her twenty millions or so of colonists, to fight the world of trade, is as mad a scheme as it would be to fight a united world physically, on the same terms.

The whole theory of trade protection, national and intercolonial, is the product of a spirit of arrant and uneducated selfishness. It is the spirit of the miser, not that of the utilitarian. It is to say that we, with a country vast and fertile, would fain preserve it all to ourselves, and rather gain less, than permit others in any way to make a gain out of us. Can a country which adopts these miserly ways increase rapidly in national wealth? The question is not what progress this or other countries have made with protection, or rather in spite of it, but what progress might these have made with the same facilities set absolutely free?

To leave theory and come down to hard facts. Canada is naturally placed in a position which peculiarly fits her for Free Trade. She is knit by the closest ties of relationship to the vast markets of Great Britain, and through her connections there, can find access to the products of all lands. She can select what she requires from any or all of these, and by the same channels find every possible opportunity to offer in each what she has to sell. In addition to that privilege she has what no other colony of England's possesses, an immense Nation, the United States, stretched along her whole frontier, from whom she can obtain either raw material or manufactured articles. What then is the use, to this country on a whole, of an "N. P."? Is it to "protect" us from these advantages? We do not need to buy either from England or from the United States, unless we, at least, think we are getting good value in articles for which we can find a use. A law which compelled us to buy from both or either commodities which we did not need, would be exactly as hurtful as an "N. P." which endeavours to compel us not to buy what we do need. The "peculiar circumstances" which are supposed to necessitate the protection of our "N. P." are in reality an immense advantage to us, making our country, if wholly free from protection, a very paradise for manufacturers. Our grand water ways, our enormous water powers, the one readily available for cheap transit, the other inexpensive as a motive power for machinery of every kind, require only capital, brains, inventive faculty, industry, and a desire to make articles of real use to the various peoples of the world, to render us a leading manufacturing nation. Cheap labour is not wanting, at least in the Lower Provinces. Cheap food is likely for ages to be a condition of life in Canada if any due care and attention be bestowed on agriculture. Any manufacturer can import the skilled labour he has been using elsewhere and maintain it cheaply in this land of plenty. He can take the raw materials which exist or can be grown here, or he can import the raw material of other countries at as little cost in freight as either Great Britain or the United States. What does he want more, if he possess the needful skill and capital, except this-that he shall be assured of absolute freedom in his operations; that he shall be subjected to no competition which is not a natural outgrowth; that no Government interference with the laws of trade shall make and unmake tariffs at will and so continually upset his calculations by artificially increasing cost of labour or cost of what to him may chance to be raw materials. What inducement is there for the investment of capital and skill in a country which has a Government possessed of so little practical wisdom that when it decides upon "protection" as a policy, merely experiments—flirts with the fair (?) creation of its fancy-and calls that a "protective" tariff which affords no real barrier to outside competion, which yields only enough so-called protection to destroy its usefulness either as a means of increased revenue or thorough encouragement to native industries; nor yet has faith enough in the ability and energy of its people to declare absolute free trade, cut down relentlessly the extravagant expense of administration, and raise its needed revenue by direct taxation. The latter is the wiser-indeed the only-course, which sooner or later this country must adopt. The party now in opposition when it finds a leader wise enough to start that "cry" will sail into power with as little effort, as did the advocates of a delusive and puerile "N. P."

The changes which the adoption of such a policy entails will be by no means so sweeping as some suppose. It is merely the change which occurs in the life of every one who resolves to become really a man—the change from doing wrong to doing right. No man—no Nation—has ever suffered long or hopelessly by adopting that line of life. Granted that the American "drummer" will at once invade our every village with his wares. He cannot sell unless the American speculator accompanies or follows him to buy our

products. Trade is mutual. It is an exchange of commodities, which requires no government interference rightly to adjust itself; nor will it long suffer it here or elsewhere. The people are already convinced of the evils of an indirect taxation which fosters monopoly, and will welcome the man as leader who has love for, and faith enough in truth and in the people's loyalty to it, to set them free to trade and free to pay openly and directly, without hoodwinking, for the expenses of a government which they can see is useful and economical. They know that they will see the more clearly whether it is so or not, the more directly they pay for it.

It is time that the press of Canada should adopt these views of the people, and strive to form them into a settled policy, which can be conveniently and practically carried out. It will take time, and it will need wisdom, to repair gently with the least possible suffering to the few, the folly into which, as a Nation, we have been permitting our leaders to guide us.

Utilitarian.

## LABOUR-SAVING MACHINERY.

It is supposed by many people that articles made by machinery are introduced to the machine as raw material, and come out finished for use like rifle bullets or the daily newspaper. The principles of labour-saving machinery have long been understood in this country, and consist in the division of the article. To divide out any article means to separate it into the simplest parts, and to give to each workman only one part to make, so that by the repetition of the operation practice may both perfect the part and the method of manufacture. When an article is resolved into its simplest parts, it is easy to calculate whether a special machine, with unskilled labour, will be more advantageous than a man working with less expensive plant, and paid in proportion to the amount of skill employed on each part. The machine, so far as it can be applied, works at a greater speed, and produces more value in a given time, where it is substituted for hand labour, and saves the time otherwise lost in changing tools and in passing from one operation to another. As long as machinery is fully occupied it can, no doubt, compete favourably with any system of division coupled with similar manual labour. All machinery must, however, be provided for the maximum output of the factory, and cannot be sent away as labour can when less production is required. Few articles of manufacture can be divided into simple parts, all capable of economical manufacture by machinery. Some part usually, and the putting together of the simple parts almost always must be done by skilled labour. Such skilled labour is necessary to the machine, and may be able to command such a price as to nullify the saving by using machinery for the other parts.

The Americans have applied machinery more than the English to the system of division owing to the scarcity of skilled labour in their country, and the greater cost of any labour over wages in England. In many cases the system of division, coupled with cheap labour, competes favourably with special machines with higher labour. In most cases in which the Americans compete successfully, their manufacturers employ men only trained to do one kind of work, either with or without aid of a machine, whilst the English manufacturer in such cases employs men who can do a variety of work without special machinery, but not so quickly or well as the man who devotes his time to the perfecting of one particular part. The result of this is that such American factories produce one kind of manufacture, whilst in England a great number of different manufactures may be made, the more general knowledge of the men permitting a variety of work.

The methods which the Americans have had to adopt, owning to scarcity of labour and its unskilfulness, are being adopted more and more in this country, and factories devoted to the manufacture of one or two articles are becoming common, and are superseding those factories which produce a great variety of goods with less economy. The cotton mills of the Manchester district are examples in this country of the system of division of labour assisted by machinery. Many ingenious machines, largely worked by women and children, perform operations which supersede, with great economy, while doing the work better, the old methods employed. In this case expensive machies, each performing a simple part of the complex work formerly done by manual labour, are now to produce a better and cheaper result.

But all English manufactues are far from being organized in this manner. Some of our industries have remained, as far as the application of mechanical force has been concerned, almost, it may be said, in the condition of the handloom weavers. That they have not succumbed to competition is rather due to the fact that mechanical enterprise has not yet adapted itself to take their places than to any inherent vigour of their own. An example of simple division of labour, as yet but little assisted by machinery, is shown in the manufacture of brass work at Birmingham. Here families work in their own homes, each man, woman, or child making the part best suited to their skill or strength. Long practice, hereditary skill, perhaps natural aptitude, enable these manufactures to hold their ground, but all examples show that in the long run fewer and less skilled labourers, assisted by suitable machinery, will beat specialist workmen off the field. One reason for this is that the unassisted workman can