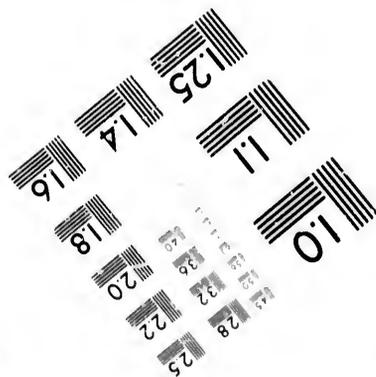
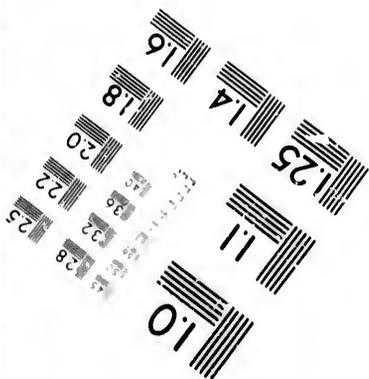
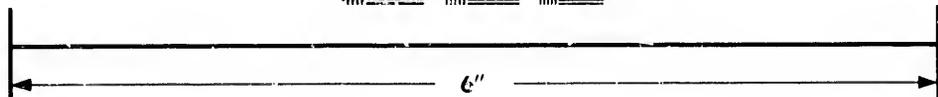
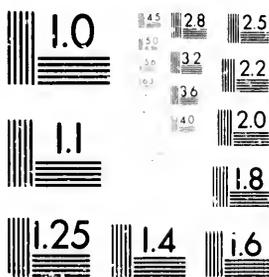


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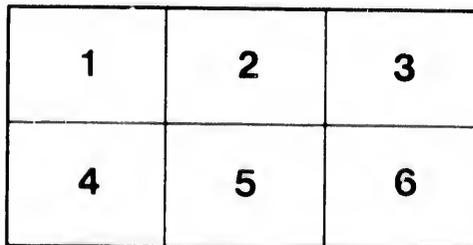
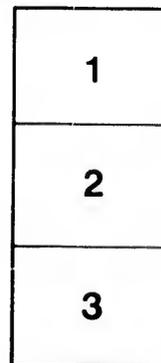
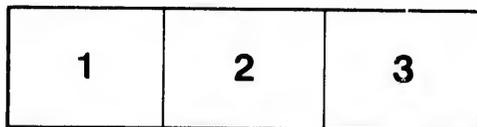
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# INDUSTRIAL CANADA.

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THE DUTY OF DEVELOPMENT AND  
HOW TO ACCOMPLISH IT.

BY

A. BAUMGARTEN, Ph. D.

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MONTREAL :

"GAZETTE" PRINTING HOUSE, NEXT THE NEW POST OFFICE.

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# INDUSTRIAL CANADA.

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"There's something rotten in the State of Denmark."

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Any Canadian who has an insight into the industrial and mercantile position of his country, and cherishes its welfare either from patriotic feelings or because monetary interests are involved, must feel regret at seeing the prosperity of each and every branch of business at a stand still or in a state of stagnation, such as the last two years have brought on. Prospects of an improvement are eagerly looked for, but to an impartial eye are not obvious. The question how did this state of affairs occur, how can it be changed, and where will we be drifting to if no change for the better occurs soon, are matters of serious contemplation. It is the object of the present lines to solve some of the mystery surrounding these questions, and we shall be fully compensated for the difficult task if we succeed in shedding some light on the situation.

A good many people attribute to Government the sole cause of our misfortune, others to an overproduction and overstocking of the different merchandises, combined with a rotten credit system, others to the unfavorable climatic situation of Canada, which in the strife of competition throughout the world it evinces more and more difficulties in overcoming. A great many others are satisfied with the sad consolation that business is bad in all parts of the world, and wait for the return of better times in the shape of an exceptional good crop of cereals, which they think, must eventually make up to the people at large all previous losses.

Admitting that Canada has developed, especially so far only the industrial branch of agriculture, it remains to be seen whether any nation qualified in every way to develop most other industries can remain and does right to remain exclusively an agricultural country.

Let us therefore first see what is the industry of a country, what aims has it and what means for development are at her command.

By industry we must understand the task to raise, rear and transform the products of nature into such shapes and forms as human ingenuity adapts for the different purposes the state of culture in a country may require. The requirements of industry are, in the first place the special technical knowledge, secondly capital, to realize such chances as this knowledge may venture to open.

It is clear that those countries and nations who combine all conditions, natural products, knowledge and capital have a great advantage over those where only one or the other of these conditions prevail. But whilst knowledge and capital can be acquired, the natural products must be given in a certain state and at a certain figure, so that the transformations turn out advantageously. It is the answer to the question—whether Canada naturally contains such products, — which must decide whether we are doomed to remain only an agricultural country, and further, if we find that we have as many resources as any other country let us look for the reasons why we have not brought them to bear ere this.

Before doing so, however, let us consider for an instant the humanitarian and idealistic principles which the so-called school of Manchester teaches. The theory of this school has been adopted by the now domineering English statesmen, and their indirect influence affects naturally also the affairs of this country. By the principles of this school each nation is to procure its wants only from those countries, where by local advantages the special article can be furnished the best and cheapest. The general application of this principle would exceed the most sanguine expectations, for it would include universal fraternity and harmony all over the globe. All difficult questions of duty would be settled by it, and all sham industries, industries which only owe their existence to protection would be extinguished

and, indeed, a state equal to the millennium would be the result. Any practical observer will admit, however, that human character is not yet adapted to such a state, and indeed in some respects it would have to undergo a change for the worse if it were satisfied with it. Such a state would develop each country and individual only very onesidedly. But to achieve the highest aims, human ingenuity must be at liberty to develop and make use of every branch of knowledge to the largest extent, and must have the facilities of examining, comparing and adapting the most modern methods in all branches and of all nations for its own purposes, if further improvements shall be made at all.

These principles may be of practical use to England, which, in consequence of her eminently favorable position, her industries of long standing and her natural resources, is the possessor of monopolies, which are of vast importance for all nations. As illustrations we mention only their manufactures of soda ash, bleaching powder, a host of crude chemicals, a great many metallic products, and their privilege of being the builders of steamships and iron vessels for the world.

Assured of her strongholds, England is in a position to draw advantages from universal free trade, and with Manchester teachings to hoist the flag of humanity on the mast of her trade policy. For most other nations, the principle of giving the poorer class the benefit of the cheapest prices for

the articles of its subsistence can naturally only be a secondary one. The principal one must be to give it remunerative work and all the advantages to become producers who, by their own exertions and industry, may be enabled to enjoy independence as well as certain luxuries and comforts. It must not be forgotten that England has not cherished Manchester and free trade principles before she attained the supremacy in the most important articles of modern industry, and before she was able to adopt them she had, not very long ago, to use even extravagant means for securing the development of her manufactures.

For instance, the manufacture of linen was inaugurated by a government premium of 16 to 25 per cent., whilst an import duty from foreign countries of 15 per cent. was exacted, and when the invention of cotton looms was made, England prohibited blankly the exportation of any of these machines, which could be procured by other nations only by the payment of a most extraordinary premium by the way of smuggling.

This only as an instance that even England, to introduce new industries, which afterwards retained a lasting monopoly, had first to protect their early growth most strongly, and what were first sham industries, developed themselves into monopolies.

But to return to Canada as an agricultural country we have reason to doubt whether the term agricultural is in its place. Agriculture means

something scientific ; is now-a-days something more than to reap harvest year after year from a soil whose virginity will give ample crops for a decade and even longer, but at last, by indiscriminate exhaustion of its most valuable ingredients without re-placing them systematically by fertilizers, becomes unable to produce any more remunerative crops.

If exhaustion takes place, the owners sell out and emigrate to some place further west, where new soil is treated on the same principle, till again exhausted nature puts a stop to it. Only the large scope for emigration and the richness of the soil are the cause that the country at large has not felt the effects of this self-abuse more directly. But sooner or later our injudicious, empirical way of farming must impair our grain exportations, upon which we have accustomed ourselves to look as our strength, and by the scale of which we measure the prosperity of the country.

Should, however, these grain exportations give out, what then ? Or what would be our resources if the supply of excellent wheat from India should materially reduce our exportations, and if the returns from lumbering, which we carry out on the same short-sighted, suicidal principles, should fail ?

A country like ours, where large tracts of soil of unparalleled richness still exist, tempts, of course, to such one-sided, as the least troublesome policy. But such country, even with due regard to the great many excellent labor-saving machines and

mechanical implements used, can be called but a farming country. It would only, then, become an agricultural one if science had a share to some extent in it, if it were connected with some of those agricultural industries which our climatic nature might permit, and if the raising of crops conjointly with these manufactures would be carried out in such a way as to augment the fertility and capacity of our acres and woods instead of exhausting them.

There is no attempt to be seen in this direction, and unfortunately it seems there is even no understanding for these fundamental principles of agrarian as well as national economy, with either our government or people.

Having extended ourselves only in one direction, we have not entered like other nations, and especially our American neighbors, into the spirit of the age, which exhibits itself by universal competition and emancipation in all branches, as well as the creation of entirely new industries. As an example, and coming from quarters from whence it could least be expected, it must strike us that even lazy Mohamedans have entered into this spirit energetically and successfully, as shewn by the Viceroy of Egypt's exportations of sugars, molasses and alcohol into England, with which latter article he actually largely influences that market. Russia, whose climate is similar to ours, from a farming country has become an important agricultural one, by the introduction of the beet-root

sugar industry and of chemical factories. Besides, by strict and powerful tariff regulations she infused life into all branches of industry, so that at present she supplies most articles herself which ten or fifteen years ago were imported, and she is now enabled to relinquish the high tariff rates. The success of Russia in that respect is most astonishing, especially in consideration of her difficulties in abolishing serfdom, and the comparatively insufficient education of her working classes.

Of all other nations, however, our neighbors have been most successful, and whether their government anticipated the result or acted merely instinctively and under pressure of their industrials, the fact that they have emancipated themselves most thoroughly by the adherence to their strict protective system, remains the same. Although not sympathizing with certain characteristics of Americans in general, we do not hesitate to pronounce that, leaving abstract sciences and arts out of consideration, our neighbors now stand at the head of modern progress, and have become the most important industrials of the world.

With such energetic neighbours it remains a mystery, why the contagious spirit of competition has not entered more into Canada, why hardly in one branch of industry we are their equals, and why we are utterly helpless to follow in their wake.

To prove that our neighbours have made such enormous advances and have outdone Europeans, is

a difficult matter, as a basis for a generally admitted comparison is wanted. England has had so far the lead in almost all industries; we may therefore be allowed to accept the theory of their most eminent chemist and technologist Muspratt, who says that the intelligence and the development of a country should be measured by its consumption of Sulphuric Acid, Iron and Sugar.

The estimate of the present American production of Sulphuric Acid at four hundred million pounds per annum, is decidedly an inside one, and the consideration that of this vast amount not one pound is used for the manufacture of Soda Ash, of which for reasons mentioned before, England has the monopoly is a proof of the extraordinary producing and consuming powers of the United States. Besides for refining petroleum, this large quantity is used in all kinds of chemical industries, for which it is the basis, as iron is for all mechanical purposes.

At least three quarters of this amount has been produced only since the war of the Union, after which by amassed fortunes a great many industries received a stimulus.

Since that time Americans have started in all possible branches, and we find them now the largest manufacturers of mineral acids, tartaric, citric, acetic, oxalic, and chemically pure acids, of the Alkaloids and all kinds of chemicals, dyeing and photographic preparations, fertilizers, drugs, mineral and organic colors, paints and varnishes, etc.

In many of these productions they have invented entirely new methods. Carefully guarded manufacturing secrets for difficult preparations, from which some European manufacturers drew great fortunes, are not secrets to them any longer. Such as the manufactures of Quinine, Morphine, Camphor, Vermillion, etc., in which articles they have outdone Europe.

Last year's statistics show a production of 2,100,000 tons of raw iron in the United States, and we can judge their consumption of this article by their industrial development and the great many appliances of modern comfort which their households contain.

This industrial progress comprises specially the cotton-weaving, printing and dyeing establishments, the textile industry generally, and the carpet and oil cloth manufacture, all sorts of machinery establishments, plated wares, and of these specially the cobalt and nickel plated wares which are entirely their own in this state of perfection, hardware, glass-ware and pottery, and even the silk and velvet manufactures, and a host of others too numerous to mention.

At last the consumption of sugar given at 44 lbs. per head per annum according to the latest statistics is an amount which is not approached by any other nation, and needs no further commentary.

If we admit Muspratt's basis, the above examination must contain the proof of our previous assertion. But we are fortunate to have this year the op-

portunity of examining by personal observations the progress of all nations at the Centennial Exhibition and if we allow that the articles exhibited are fair representatives of each country's best production, the careful judge will come to the same conclusion.

Making every allowance for the superior taste in the display of their productions, which is apt to prejudice in their favour, the cool, impartial observer and technic, after comparing prices and inspecting American manufacturing establishments, will come to the conclusion that our neighbours have really become the most successful and enterprising manufacturers, and are dangerous competitors in almost every industry in the world.

This conclusion must receive a sound corroboration by the last statistics, which show in the United States an excess of exportations over importations during the last six months, of nineteen million dollars.

In the face of all these facts, what have we to show?

Is our production of about one million and five hundred thousand pounds of Sulphuric Acid from the two works in London and Brockville, which have a capacity of about eight million pounds, not a ridiculously small amount in comparison? Do we know anything at all about chemical industries, and does the state of our embryonic mechanical workshops, with a few exceptions, give room to the idea that we

are large consumers of iron? Or, are the natural resources with which Canada abounds in the shape of pyrites, ores of every variety and of great richness, phosphates, alkaline earths, salts, coal, etc., less productive, and therefore the unfortunate cause that no fair trial has been allowed us? Have we not as many natural resources as our neighbors, wherever we cast our eyes? We must admit we have such resources, which in many respects are better than those of our neighbors, with the exception of the more precious metals. By our close connections and relations with Europe, our want of knowledge might have easily been supplied from home until we would have been able to rear ourselves a new and ambitious generation of industrials; and as to capital, if we had only been able to give a fair guarantee of success the old country would willingly have supported our enterprises if our own means had not been sufficient.

So the principal conditions for becoming an industrial country as well as our neighbours have not been wanting, and we must look for other reasons which have impeded our development.—

The more difficult it is to earn capital, the more careful mankind becomes to invest it. A new business must show a large and sure margin, exclude almost any risk whatever, and it must be assured beyond doubt that the favorable conditions under which it may start will last until at least the amount for its plant is earned, before we are willing to entrust it with our hard-earned savings. As we

never have been in a position, individually, as our neighbours, to amass riches as they did during and after their war, and in as easy a way, our reluctance to encourage new industries is somewhat excusable, especially so, as we never have had the occasion to show as good profits as the American industrials.

In other words our tariffs have never favored in a similar way the starting of a home production, and all speculation why we should not be able to rank amongst the industrial nations is futile before we have had a fair chance with reasonable margins to try our strength. Although in the beginning we would have to learn and undo a great deal, we do not hesitate to express the belief that with a guarantee of such conditions, another decade would see us in a position to compete in the markets of the world, with other products than those of farming and lumbering, and which are not based upon the exhaustion of our lands. For not having done so before, the blame equally rests with Government and the people, for the urgent necessity of developing our producing capacity in another direction but farming, has never been pressed sufficiently with Parliament.

Our interests have been represented mostly by a large importing business and the exportation of cereals and lumber. As long as the former gave good returns, that is, as long as consumption was improving and competition amongst importers and exporters not overdone, matters went on smoothly in the *laisser-aller* style, and no complaints were

heard. Not seeing the abyss to which we were drifting, we quietly have allowed our country to become the dumping ground of all foreign nations, and in a state of constant vacillation and undecidedness in our tariff regulations, between prohibition, reciprocity, and free trade, we thought we could cut out a road of our own and created the abnormality of our present tariff, which is meant to satisfy all classes, and especially prides itself on the moral satisfaction of having done the best under the circumstances also for the poorer classes. But who is the poor man, and what benefit has he had from these regulations? Has not the position of the farmer, the tradesman and mechanic become worse from year to year, although the common articles of life since the last three years have declined materially. In the unsatisfactory position of these classes we have to look for the causes of the country's calamity, they are the bulk of the population and trade ebbs out and flows with their prosperity. If we find they never have been yet in a flourishing position, the present crisis, which more or less affects all nations, must open our eyes to the fact.

Our climate allows our farmer only about seven months in the year to bring his productive power to bear, the rest of the year he is a consumer on account of his previous earnings, and to do the necessary work in that given time almost the double number of hands has to be employed to prepare the

soil and to reap. The capacity of the single individual thus employed is therefore reduced to only one quarter what it might be and his value to the country can be estimated only in this proposition. Our mechanics and tradesmen do not fare better. Only the season of open navigation sees the former regularly employed, and the chances of the latter for work depend almost entirely on the overproduction of other countries, who from time to time overflow our markets with their goods, sold at almost any price and stop our young undeveloped industries, which, under such circumstances, can never reach a state of perfection with a view to compete in the world's market thereafter.

The depreciation of values all over the world, caused by the wiping out of enormous capitals in Asia and America (in Railroads, steamship lines, mines, and factories,) which have proven total failures, and of loans contracted by states almost bankrupt, such as Turkey, Egypt, and the Argentine Republic and of other gigantic losses which appeared in Germany after the French war, during the so-called period of inflation,—has indirectly also affected us. In consequence of the diminished consumptive power of a portion of the world's population, formerly living in extravagance, the balance of the average consumption has been disturbed. Lower prices were the consequence, and manufacturers, to make up for shortcomings, intended to reduce expenses by augmenting their production. As the consumption

of the lower priced articles did not advance in proportion, and also the filling up of transatlantic markets came to an end, the state of stagnation over the world is accounted for. That a country like ours, whose industries are in a state of infancy, must suffer the most by it, is a natural consequence.

As we cannot emancipate ourselves from these effects directly, we can expect an improvement only from the revival of business in other countries, or from an unusually good crop of our cereals with the realization of extra good prices.

As crop prospects are proverbially uncertain, we can only consider the chances of a better business in other countries. To do so we have to look for the healthy growth of business in general.

The latter is dependent upon an augmentation and amelioration of all productions. This can only improve in proportion to the capacity to spend of the consuming public, which makes only slow advances in proportion with the amelioration which individual circumstances derive from the increased total production. Production and consumption are closely related and cannot be reduced or enlarged without affecting each other and their equilibrium.

In proportion to the progress of culture and the advancement of the lower classes, articles of modern improvement and comfort, which formerly were only accessible to the best classes, by degrees become the property of all. Many articles, the use of which

some fifty or one hundred years ago was considered extravagant and luxurious are now necessities of living for all. For instance, sugar and tea. The well modified wants of humanity become therefore larger and more manifold with its advancement, and in comparison to it the most urgent ones are still insufficiently supplied. From this point of view we can certainly not produce too much. With overproduction, however, we generally mean a production of more than what is wanted or above what can be used. This term is therefore not correct and leads to misunderstandings. What is called overproduction is simply, not economical production.

For if the production of an article increases considerably and rapidly the supply will overreach the demand, except this supply can be furnished at such a reduction in price that the individual expense for it will not increase with the increased quantity used, or that for some cause whatever the capacity to spend more has improved. All other changes of production which cannot be traced to economical causes such as those before mentioned, must disturb the existing balance between the different branches of production, must impair the prosperity of the producers and indirectly that of the community. If, however, all branches of produce increase simultaneously according to their established proportions, the possibility to increase all productions within time is almost unlimited. An increase outside of

these proportions is not economical and the name overproduction has been adopted for it. The total production can never be too large; a decrease of it indicates a deterioration, an increase an amelioration of the welfare of the human race.

The present calamity in foreign countries is the consequence of enormous losses of capital sustained as previously mentioned and further of the spending of fortunes in establishments erected for the purpose of reducing prices by an increased production, which are not paying interest, and for the time being add to the burden of dead losses.

The proper remedy cannot be a reduction of production, but the reestablishment of the equilibrium between the different branches of industry and their improvement. The tendency therefor is, that better articles will be offered for less money and it will be a long time before we can expect higher prices. As we have seen that the capacity to spend,—the demand,—can make only slow progress, a long time will elapse before this equilibrium is established again. We can for the same reasons not expect from foreign countries a decrease of articles of practical and daily use at figures which would allow us to compete with them in our own country in the state of our present development. It remains, therefore, to find means, to put our industries in a competing position, to improve not only the present situation, but to strengthen us in such a way that we shall not have to suffer again for economical sins of other nations

in which we took no part. We can certainly acquire the ability to compete in the world only after we have learned to supply our own wants. We must therefore become larger producers in all directions, for which the first stimulus can only be received by means of a stronger protection! If we exclude the flooding of our markets with foreign goods, industries which are now carried on under difficulties and only periodically, would then become remunerative, they would be continued steadily throughout the year. We would naturally work cheaper and by wholesome competition within the bounds of the country, not only prices would be reasonable, but our inventive spirit which we have no reason to consider inferior to our neighbour's, would receive new impetus. New industries which we have made no attempts yet would spring up, and our merchants would not become losers, for instead of the manufactured articles they would import a great many raw materials, and the augmenting consumption would also benefit the retailer, as it would allow him to adopt the principle of "large sales and small profits."

The argument brought forward that a country of four millions and one half inhabitants cannot support industries is a farce and a miserable excuse for our impotence.

If it were correct, it would be our duty not to hesitate a moment at amalgamation, as the basis of Canada's present existence—farming and lumbering—

lacks all economical principles with no future before us. In fact no civilized country even if climatically better situated can nowadays exist on such basis for any length of time without detrimental consequences and the destruction of its resources.

Farming alone cannot be carried on scientifically and in harmony with principles of national economy; it must be connected with agricultural and chemical industries.

The faint attempts that have been made by farmers to introduce the beet-root sugar industry into Canada show the desire to farm on a more rational basis and to provide work for the laboring classes during the time of their present idleness in winter.

Some provincial government has even offered a premium for the first establishment starting and if we are informed correctly the assurance from government has been acquired by some fictitious company that for ten successive years no taxes on beets raised in Canada or sugar therefrom should be exacted. But these are only half measures.

If Government were convinced that this industry would be a benefit to the country, and we cannot doubt that it must have this conviction, it should be made the careful matter of its study; it should provide the best seeds, distribute them over the land with instructions where, when and how to plant them, rear them and conserve them, and offer prizes for the best crops so attained, the best for the purpose in view.

If America cannot furnish chemists and technical men who have a thorough insight into the matter it should communicate with experts of high standing in Europe, and if these pronounce the character of the crops remunerative, it would then be time to draw the attention of our farmers to the fact, open facilities for the starting up of such works, and pronounce publicly the intention as to the duty connected therewith. The single individual, even a society cannot accomplish this task well, and we must look to the fathers of the land to solve questions of this character.

The defective organization of the Department of the Interior, its unwillingness or inability to help us, is the reason that important questions of this sort are not solved, and the same qualities with our tariff regulators, the cause that our manufactures can neither live nor die.

But also industries, of which we might have been justly proud, for the high intelligence of their management and state of perfection, from a technical point of view, and which, for these reasons, could have defied the competition of the world on even terms, have been allowed to close their establishments by our short-sightedness and want of judgment. In this respect we have especially our sugar refineries in view. One of them six years ago gave up the task of overcoming the difficulties of an unfavorable tariff, which allowed English and American refined sugars to supply a large amount of the consumption of Canada.

The other after giving proofs of wonderful endurance, closed only this spring, in consequence of the establishment of the late American drawback system which refunds to the manufacturers on an average one quarter of a cent per pound more on their exportations of refined goods, than actually was paid duty on the raw material, and no redress could be obtained from our Government.

The reasons for not taking repressive measures against this action were principally argued thus : that the loss of work to some four or five hundred workmen could not be guiding in the case, but the cheapness of the article so received from which the people at large derive advantage.

Now, taking the population of Canada only at four millions and their average consumption of sugar at 32 lbs. per head per annum, their yearly consumption would amount to one hundred and twenty-eight million pounds and the advantage gained would be eight cents per head or \$320,000.00 in all.

The working expenses for refining sugar in the shape of wages, salaries, interests, insurances, commissions, repairs of all kinds, cartage, general trade, business and travelling expenses, internal revenues, fuel, cooperage, animal charcoal, etc., etc., amount to at least 95 cents for every hundred pounds refined, and if Canada was in a position to supply its own refined sugar the sum of \$1,216,000.00 would every year be gained and remain in the country which now we pay to England and America. The last mentioned

sum does not include any allowance for commission to the merchant importer of raw sugar, nor of the advantage the country must derive from a large and direct communication with countries producing raw sugar. We leave the reader to draw his own conclusions from the figures given and only wish to mention that our refiners have never been in a position yet to supply more than half of Canada's sugar consumption. After having submitted to the loss of almost their entire plant, after losing their skilled laborers, who are mostly driven to the United States or scattered over the land, our sugar refiners will certainly not easily be tempted to start their works again, except under better guarantees than heretofore given them.—

This closing of our best industries, and the state of stagnation and imperfection of others compared with the enormous progress of our neighbors, leads to the firm conclusion that the spirit in which the tariff question has been treated is detrimental to the development of the country and the principal cause of our present misfortune; and further, that whilst some ten years ago, more gentle means might have had the desired effect, nothing will do now but a strong and real protection which will give us the courage to confront the encroachment and threatened extinction of all branches of industry in Canada.—

But it cannot be denied that we ourselves and individually are also to blame to a great extent for the present state of affairs.

In the first place it is our widespread credit system which has done a great deal of harm, and we feel its bad effects every day. The farmer purchases on credit and pays if he can with the yield of his crop. If the crop is favorable he settles his account at the end of the year, if not, his note is taken on account of his next chance to pay, and so on. The mechanic follows this example as much as possible, and even our best classes adopt the plan of settling their bills only once a year. The merchant is thereby not able to sell with a reasonable profit, for he must take into consideration his chances of not being paid, and loss of interest, therefore neither well-to-do people nor poor can get the full benefit of low prices. That the difference of purchasing and selling prices is not still larger, can only be accounted for by the great competition of our country merchants and little shop-keepers, which suggests an overdoing of business, or more properly the disproportionate number of people not actually working and producing, but living by the thrift of cheap brain-work.

The cause of most of the numerous late failures can be traced to the above mentioned defective system, and it is high time that our large merchants unite and by combined action establish a short credit system. A vast amount of money has been sunk in consequence of failures. Stocks of merchandise had to be sold at auction prices, with which houses of ample means and of first class standing could not compete. Reduced consumption would even

not readily buy at those figures, and the reaction on our wholesale dealers and importers has become most distressing. This distress and disgust prevails to such an extent that a great many of our merchants and importers would willingly sacrifice a large amount of their capital if they only could sell out and leave the country.

A second cause, hinted at before, is that the proportion of our actually working population and that which should make the mediator only is not in its healthy limits. In our better educated classes we meet with an unwillingness to do actual work and to soil their fingers, which is conspicuous especially in our cities, where we can find numbers of men, who are satisfied with the smallest salaries in offices and as middlemen, who could, even under existing circumstances, double their earnings by some mechanical pursuit.

To do work is still more or less a disgrace with us, whilst our neighbours have overcome the prejudice. They keep their independence even if working at a trade, and add considerably to the average standing of their working classes.

To this spirit can be attributed some of the best results of our neighbors, and a great many of their labour-saving machines owe their origin to the superior intelligence brought to bear on the work. Besides this unwillingness to enter upon mechanical pursuits, we find also that either for want of stamina or actual capability we do not get the same amount

of work out of our men, which in some branches is no small item. For instance a brick-layer will not lay more than six to eight hundred bricks a day with us, whilst the American contractor can calculate one thousand bricks, laid in a straight wall, to be a days work. Not as a criticism, but simply as another reason why we do not get the fullest benefit of our productiveness, we may be allowed to hint at the great many holidays of our French population, which in some parts of the year interfere materially with steady work.

Further, in our schools no due notice is taken of the technical sciences. It is the cause why so little knowledge about them and their close relation is to be met with, and why being quite an out of the way and foreign matter to us, we do not enter more readily into promising enterprises. The results of engineering and mining so far attained fail to prove that our academies which make these studies specialities are efficient. If we want to do something important in these branches we have to send to Europe for experts.

Further, there is no spirit to promote technical knowledge amongst our industrials themselves or to exchange practical experience in their different lines. We are in want of a popular organ, which would have especially this object in view and which by the close observation of the world's progress in all directions would give hints and practical advice to our tradesmen and manufacturers.

Further, if the industrials of similar branches would unite for the purpose of representing their common interest before the people and Parliament a great deal of good might be derived, especially so if this would have the effect of doing away with existing jealousies, promote an even and healthy mode of business and a sharper division of work amongst the different branches with a better and cheaper production in the end.

Lastly, our freighting and shipping within the bounds of the country might be improved and new facilities opened. A decided change for the better can be recorded since the last two months. Before this time, however, bulky and weighty goods could be laid down cheaper into Toronto and Hamilton from New York, Boston, Portland and even Philadelphia and Baltimore than from the principal ports of our own country, which was the cause that a deal of business had to be left to our neighbors.

It is also to be hoped that the expectations connected with the opening of the Intercolonial Railroad will be realized, and that the interests of the maritime provinces become more identified with ours, which would no doubt facilitate the settlement of difficult tariff questions materially.

The opening of a direct line of vessels to the West Indies would also,—be of great advantage to the country, but as long as our tariffs prohibit the refining of sugars, we cannot predict long life to such a line, which must remain a chimera as long as

no abundant freighting material between the two countries can be secured.

#### TO SUM UP.

Let Government give us a judicious, but stringent protective tariff to foster our industry in its infancy.

Let it organize the Department of the interior on the model of the American one so as to distribute widespread knowledge in regard to fertilizers, the latest improvements in agriculture, and let it use all energy to promote the starting of agricultural industries.

Give us legislation making the replanting of forests compulsory or offering premiums therefor.

Then the duty of the people will be plain. Industrials insured of stability must reorganize their manufacturing establishments, mills and shops on the latest improvements, regulating their production according to the demand and supply on a more rational and economical basis, open out new branches of industry, for which with a fair assurance of success capital will not be lacking.

Merchants must take a firm stand to abolish the pernicious credit system. Farmers and agriculturalists must give their soil, in the shape of fertilizers, what they take from it, and rich crops will soon repay them for the outlay.

Let every one, Government and individuals, put their hands energetically to the wheel and we shall

soon enough run smoothly on the high road to fortune.

If any of the above improvements urged were not feasible, the writer would be to blame for laying bare the sore spots of our commercial legislation, trade and industry. Only united and vigorous effort is required to promote these improvements; it becomes therefore the duty of every one to do his share. The writer's only motive in penning these lines is to contribute his mite towards paving the way to renewed prosperity of the country.

