

CANADIAN MANUFACTURES.

Manufactures in Canada having been the subject of much discussion, the suggestion having even been made that the Community at large should contribute to their support, beyond the protection our new Tariff affords, we will consider—

What relation Manufactures bear to other branches of industry, what we now possess, and what will develop themselves as the country advances.

Here, we naturally recur to the order of progress in other nations—and, as we can get no hints from the Ancients, for their Manufactures were domestic ones—and, as few countries have made the progress that England has, we have to turn to her for an example. But unfortunately, our proximity to the United States, has induced us to take pattern by them, leading us too often to copy their greatest errors.

We will, therefore, in the first place, enquire in what order Manufactures have arisen in England.

The Britons were originally a pastoral people—the Romans introduced agriculture—the Saxons united both. The preparation of Leather seems to be the earliest manufacture, as skins were worn for covering; and although Wool was raised in some quantity and exported, and was spun and wove in the household, it was not until the immigration of a number of Flemings, acquainted with the weaving of Cloth, that the Woollen Manufactures sprung up. About the same time, Artisans from Flanders practised the making of Steel, and our Hardware trade arose. The Silk trade was introduced by French immigrants,—and the Cotton Manufactures, of so recent a date, owe their progress altogether to the large capital, insular position, allowing imports and exports with the greatest

facility, and to the progress that had already been made in the other branches of textile fabrics.

In all this we find a certain order,—First, Food was plentiful, and the land cultivated sufficiently to provide for the common wants of life; then, Materials of Manufacture were raised—Skins for tanning, Wool for weaving, Flax, and Hemp, used in some counties in place of Flax. Iron mines, chiefly those easy of access, were worked, and this led to the Steel and Hardware Manufactures. The seats of manufacture were generally near where the raw article was produced, or where water-power was at hand. In modern times, easy access to the sea and cheapness of fuel, have much to do in the matter.

But, after all, Agriculture was at the foundation of the whole; and, although England raises neither Cotton nor Silk, as she produces largely of the rest, and as she exports fabrics greater in value than her imports of raw material for manufactures, it may be said that, after all, her home consumption is derived from home products,—she may use foreign Cotton and Silk, but she exports quite as much of her own Wool and Metals. And we must steadily take into calculation, that England is the first agricultural country in the world; and although food may often be lower in other countries, still, under the present Corn Laws, the price of grain is more steady than elsewhere, she being at present the grain Emporium of the World.

In the United States, on the other hand, not waiting for natural progress, not properly taking into account that Agriculture, and that properly conducted, must precede everything else, they have forced themselves into manufacturing beyond the natural order of progress. In time, various branches would have sprung up,—Cotton Yarn would have been made where the Cotton is grown, had enough capital been allowed to accumulate, to buy the cotton from the planter; Hemp manufactures in Kentucky, and Woollen manufactures in the Western States; Iron and Steel manufactures, when the beautiful ore of many of the States should be applied to its legitimate purposes. The Eastern States, in time, with soil well cultivated, producing an excess of food, and with abundant water power, would also have made up the produce of their own and other

States, to an extent sufficient for the wants of their vicinity, and even of trade with their neighbours.

All this has been reversed ; by inconsiderate legislation, and by a desire to imitate British industry, without that old precaution of considering that circumstances alter cases, trade and manufactures have been looked upon with favor, and agriculture neglected. With a fine climate of every diversity, and abundance of rich soil, Food is nearly as dear as in Great Britain, the price of grain fluctuating more than in many other countries. Manufactures protected by a thirty per cent. duty, giving a profit less than common Interest, (few of the New England mills giving over seven per cent., others much less) and their goods actually exported at prices under those of Great Britain, being made quite in excess of home production, making the farmer at home pay the losses on an unprofitable foreign trade ; converting Iron fit for machinery, at a great expense, into common Pig-metal ; inverting the usual order of things and becoming merchants and manufacturers, instead of being the producers of food and raw material for the whole world.

Now this is precisely what we ought not to imitate. We should not be induced, by any amount of rhetoric, to divert our attention from the natural order of progress,—of Agriculture, Manufactures, and the Arts.

We will first consider Agriculture as affording Food.

The simple fact, that before the comforts even of life can be thought of, we must have food,—abundant, agreeable, and cheap—that it must be produced in sufficient quantity so as rather to have a surplus than a deficiency—that with abundance of good land and a fine climate, we are perfectly inexcusable if we are not well and steadily supplied—should be our guide whether we are fit to undertake *other* occupations. Cheapness of food is the first element of Manufactures. Under the old English Corn Laws, Wheat was so cheap in Prussia that a number of manufactures sprung up, to be abandoned the moment free trade in grain raised Prussian prices. Our Timber Manufactures do not pay the moment they are extended too far in advance of agriculture. The Lake Huron Mines suffer from their being no farms near them. Wages both in the shanties and the mines are higher in consequence of the deprivation of agreeable food. In short, whatever the trade, Agriculture must

precede and accompany it,—first the Plough, and then the Loom and the Anvil.

The next thing after abundance of cheap food, is the raising ourselves the materials of manufacture.

We have one manufacture, a very extensive one indeed, that nature has furnished us the material all to our hand,—this is Lumber,—if properly conducted, a source of great wealth, but which from various circumstances, has not yielded the results it ought. Now, strangely enough, in all the outcries about the importance of manufactures, this enormous one has been either overlooked or treated with indifference, forgetting that it is a business we are particularly suited to, having the raw material on the spot, that it employs a great number of people, gives rise to a large trade, and if properly conducted, would become the most valuable manufacture we could possibly have. The errors belonging to it are, pushing the cutting of timber too far in advance of agriculture, so that the price of provisions become double, even treble what they might be, and of a much less agreeable character,—cut off too much from civilized life, and not being able to take advantage of the spare labor, both of men and horses, that could be afforded during winter by an agricultural population. The other error is at Quebec,—just as the United States, will manufacture whether they lose or not, so we prefer being merchants to being merely manufacturers. Were we in Canada to confine ourselves to getting out Timber, and let the British Merchant send his ships to us to buy it, instead of our going to him a year in advance, and then hiring his own vessels to send it to him,—we should make money steadily, accumulate capital, and although doing a smaller business, doing it much better. I do not doubt that confining lumbering to districts where agriculture could supply our wants, and by letting the British merchant carry on his own trade, a profit to Canada of more than ten millions of dollars, would be annually set aside. Fears as to the permanence of this source of industry alarm many, the waste being considerable, and the question of planting is yet in the future. After being cut over and destroying as little of the young trees as possible, the groves, if left for some twenty or thirty years, will be found fit for the axe again. However, the timber raised by planting

is in many cases of so superior a kind, that it is quite desirable that the matter be properly considered. The English Oak could be as readily raised in Western Canada, as in any part of the world, and if grown in the fields, it would be that gnarled Oak with the tough silver grain that makes it so valuable, selling for double the present price of ordinary Canadian Timber. The Black Walnut could be easily cultivated, as also the English White Ash, for Coach Builders. Hickory, raised out of the Bush, is a tougher and more valuable wood. Levant Shrub Oak would not only give us fuel in its wood, Valonia from its acorn cups, Galls for dyeing from its branches, but also, what we want most sadly, Oak Bark, of peculiarly fine quality for the production of all the best kinds of leather. Almost any kind of Shrub Oak will give us Valonia and fine Bark, if cut young; whilst the Sumach, an indigenous plant of rapid growth, will, if prepared, serve to make Hemlock Bark Leather as good for use and color, as if Oak tanned. It is singular that it is not raised for that purpose, or even for export, as its money value in Great Britain is very nearly that of wheat. It is prepared by cutting down the plant annually in August, drying the branches, (which must be of one year's growth) and then grinding them fine in a mill. For export, the Sicily Sumach would be preferable, and the seed could be easily obtained.

Willows for Basket Making, I am glad to hear, are now raised—they furnish material for most useful articles of convenience, and which can be applied to a vast number of purposes. One of the most ludicrous points of United States manufacturing was, that while they made a dozen things they could get better elsewhere, they actually imported half-a-million dollars' worth of willows from France—an article they could raise in any swamp.

The Horse Chesnut, yielding the best wood in the world for brush makers' use, is a rapidly growing tree and very ornamental.

Large quantities of Sugar are annually made from the wild maple, and although it has been stated that the native made Sugar in the two Canadas equals the quantity imported, still, it will only be when the Maple is planted in orchards, that its real value will be known. Young trees, on a slope if possible, and where attainable, on a limestone rock, will pay all the expense of their care, and we could with

but little trouble, raise all the sugar we require. A gentleman, who had been a planter in Jamaica, stated in a communication to the Natural History Society of Montreal, that his experience with the Wild Maple in the Eastern Townships convinced him, that if planted, the Maple was a more desirable sugar-bearing plant than the Sugar Cane. True, it requires four acres of Maple to produce a ton of Sugar, and one acre of Cane gives as much, but compare the expenses of the two. I need not add, that the Maple when done giving sap for sugar makes good fuel, and that fresh orchards could be planted annually.

Pot and Pearl Ashes, the latter merely a refined product of the former, are produced largely in Lower Canada, wherever land is cleared, and also in moderate quantity from house ashes, boiled down to "black salts" by the farmer, and further prepared by the manufacturer. An objection has been raised, that the ashes ought all to be returned to the ground again, as the leaching injures their quality as a manure. This is not the case; the potash extracted is but a small portion of that contained in the rough ash, and would be readily washed away and lost. The real manure is the silicate of potash, the phosphate of lime, the sulphate of lime, and other minerals remaining behind; and it may be questioned, whether the lime used in the preparation to take the carbonic acid from the potash, does not favourably take the place of the alkali extracted.

There remains one other product of the forest—Pyrolignite of Lime—a rough acetate of lime. This is used in the arts to a very great extent, in preparing the acetate of alumina, or red liquor, the mordant with which all the Madder Reds and Quercitron Yellows are dyed or printed. It sells for about the price of potash, and costs far less to make. The mode of preparation consists in cutting Hardwood timber, preferably Beech or Maple, letting it dry some six months, and then distilling it in a retort, somewhat as coal is distilled for gas. The products are Tar, admirable for preserving timber from decay, and a liquid, a kind of vinegar, but so impure that it has to be mixed with lime, in order to get rid of the tar and creosote. In this state, as acetate of lime, it serves for export. For home use, this acetate is decomposed by sulphuric acid, and after one or two more processes, gives a strong vinegar well suited for

pickling. The charcoal left in the retort would serve either for domestic use, smelting iron, or, if burnt would yield potash. This manufacture was attempted many years ago on the Ottawa, but for want of sufficient capital and the unfortunate destruction by fire of all his apparatus, the projector did not succeed.

We now come to manufactures which depend on agriculture, not only for their support, but for the very materials themselves. Wool forms the principal. We have, generally speaking, a sufficiently good article from our farmers, and our Woollen fabrics are quite as numerous and extensive as in their very young condition can be looked for. Blankets, especially, are produced in large quantities at Dundas and elsewhere, and where quality forms any object, compete favourably in price with any. Some of these Dundas Blankets took the prize at the Great Exhibition, and were pronounced superior to any in the world. What we want, is a cheaper article, and long wool for stuff goods, or for warp and weft of different kinds. The Woollen Hosiery used is chiefly domestic, but no doubt a Manufactory would answer well. For some descriptions of hose, also, long wool is desirable. Cloths of Canadian make are good, cheap, and durable; but here, fashion has much to say,—goods of bad wool, twice as coarse, of particular pattern, have much the preference. Our wool, also, is not well put up by the shearers, the coarse and fine are too much mixed to be easy of sorting, making it difficult to produce the finest kind of cloth; our dyes are hardly good enough, and scarcely attention enough is paid to the wants of the community. Time will no doubt rectify this.

Much of our wool is exported, and it is to be hoped this will long continue to be the case; nothing so much tends to production as constant demand—nothing so much tends to successful manufacture as constant supply; and where an article can be profitably exported, for home purposes it can generally be profitably made up. Besides, for many purposes, our wool is of a quality that is useful to mix with the poor wools from Barbary and other places, so that the New England Manufacturers pay for our wool a price beyond what we can afford who use it unmixed; in the same way that American Millers pay an extra price for Canadian Wheat, as without it they cannot produce “pure Genessee” Flour.

Flax could be raised to advantage in all the deep rich soils in both Upper and Lower Canada. Deep ploughing, however, with the preceding three or four crops, is essential, and it requires careful cultivation. Fortunately, improved modes of preparation, comparatively easy, have been discovered; instead of rotting the flax in water, or still worse, on the field, ruining the color and obliging us to resort to tedious and injurious processes of bleaching. This new process consists in cutting and drying the flax, so as not to injure the color, keeping it dry until wanted; then placing it in a vessel with cold water, introducing steam, until by boiling, the fibrous parts of the flax can be separated from the rest of the plant,—the liquid and the parts separated affording food to animals, totally lost by the rotting process. It is easily bleached, coming out of the water nearly so, and retains its full strength. After separating the fine and middling flax, the residue can be further rendered finer by using alternately carbonates of the alkalis, and acids, which by producing gas among the fibres, tear them apart and produces, it is true, a shorter fibre, much resembling cotton, but quite as useful. This last process was spoken of a few years ago as a process to make cotton out of flax. This would be destroying a good article to get an inferior one, and was consequently neglected. Had it been only applied to the refuse it would have been successful. Flax for finest linens and cambrics must not be allowed to ripen—but for ordinary use the seed may be gathered. It is of the greatest importance as furnishing linseed oil and oil cake.

But we have another plant which grows still more readily, and coming close to cotton, both in price and in many good qualities. I allude to Hemp, supposed by many to be only good for cordage, but which in some parts of England—Suffolk for instance—takes the place of both Cotton and Linen. It requires richer and deeper soil than even flax; and the seed, though furnishing an oil that would take the place of Olive on the table, and of service in the Woollen Manufactures, is not so extensively in request. The cake answers for poultry. The same process adopted as with flax give, an equally white linen, stronger and more like cotton to the feel; the coarser parts treated like inferior flax furnishing a substitute for cotton both in price and quality. Some of the long, coarse fibres

could be used for Cordage and Sail Cloth, and the long fine for Shoe Thread. To make cordage from imported hemp, seems inconsistent in a country where it grows wild.

Silk could be raised in Canada, as easily as in Italy or France,—the Mulberry grows sufficiently well to produce leaves, and we have sufficient heat during the summer to rear the worm; the drawback is the amount of labour required; and this has made it a failure in the United States. The labour of mere children would, however, answer all purposes.

Before leaving the subject, I will just make a remark or two on manufacture of articles, the raw material for which is not produced in Canada. Of these, Cotton Goods are the most important.

Now, here we may go into the question, Under what conditions are manufactures desirable?

Where we raise the raw material ourselves we have the profit of the grower, say 10 per cent.: what the freight would be, were the raw material sent to England, say 10 per cent.: the freight of food consumed in labour, say 10 per cent.: charges, buying, brokerage, packages and insurance, say 10 per cent., total 40 per cent., besides any incidental protection duties may give, which, if 20 per cent., gives a protection of 60 per cent. Now, if we do not raise the raw material, we have *against* us, say with *cotton*, greater freight on raw material than manufactured goods, say 10 per cent.: and other packages, freight, &c. about the same, but say less by 5 per cent. which makes 15 per cent.: freight of food, 10 per cent.: total 25 per cent.: leaving only 5 per cent., or with the new duty, say 25 per cent. Now the influence of protective laws in the United States, and the superior capital and skill in England would swallow up all that, and indeed goes far to diminish the larger profit: but the difference between the two is great. I believe myself, also, that hemp and flax are better textile materials than cotton, and that the exclusive use of the latter article is an evil that ought to be opposed, and that the old materials, flax and hemp, products of the north, should again take their legitimate position.

Returning again to materials for manufacture we may note the raising of dye plants. Madder, producing the most permanent shades of scarlet, pink, purple, and brown, requires very deep soil,

and two years' careful cultivation ; it amply, however, repays this, especially for home use. Woad, producing a blue more permanent than indigo, and almost essential in dyeing broad cloth, offers no difficulties ; and the Querection Oak, the bark of which gives a yellow dye of various shades, or with woad, a green, is easily cultivated. Black Dyes we have already noticed, under products of the forest.

The preparation of Leather, and the subsequent adaptation thereof to the wants of man, naturally the first art practised, on account of the bulk of the raw material required, has in Canada also, taken the lead : quantity, rather than quality, seems unfortunately to be the rule. I have already adverted to some possible improvements.

The bulk and perishable nature of Hats, leads to their being made at an early period. Furs are made up also, both as being obtained on the spot, and on account of fashions peculiar to the country.

Of course, there may be circumstances where Manufactures take place that may overthrow general rules, thus some few manufactures of cotton may succeed, where the waste can be used as battings and engine waste ; and on the other hand, we may in Canada be willing to wear inferior goods, or articles out of fashion. Thus, in Printed Cottons, we can get from Britain goods costing as little as the cloth they are printed on : in Earthenware, we use the rejections of Great Britain, quite as useful, but having defects we do not care for : Paper, we get a rejected article, but which answers our ends, and so on with many others, precluding, in all these instances, successful competition on our part.

The manufacture of paper has succeeded well, the rags being in a good measure collected in Canada. The great bulk of printing paper used, induces that to be made here preferably to other kinds. The use of Basswood for paper makers would much assist our manufacture, as we have plenty of the raw material ; especially mixed with straw, the two working well together, the mucilage of the Basswood answers instead of size. The cotton of a plant called the Cotton Tree, in Lower Canada, has been suggested as fit for making paper. I was astonished to see in Chambers' Journal, that this cotton was useful for Cloth. Years ago it was tried in Lower Canada, but was so short in fibre that it could not be spun.

The Refining of Sugar has the last few years been carried on successfully in Montreal, but I believe only by one gentleman, Mr. Redpath. This forms one of the exceptions to the rule, that manufactures of imported articles, afford small profits. There are several reasons why Refining answers,—first, loaf sugar is easily injured by damp air. Much of that imported is a good deal out of condition, and Raw Sugar can only be profitably imported by purchasing of the merchant whole parcels of various kinds, the entire produce of estates. To pick out the fine qualities costs much more than buying them all round, and without refineries the low qualities cannot be bought, and we pay, perhaps, ten per cent. additional. The new Tariff being an *ad valorem* one, will also assist. There seems no reason why a Refinery should not be established in Toronto.

Manufactures of Metals are those that must now engage our attention. And here we find that, with the exception of England, mining and reducing of ores precedes manufacture, and even in that country, iron fit for making steel, and zinc are almost the only metals procured from foreign countries. We must, therefore, before we become extensive metal manufacturers, become miners. Nor have we been wanting in enterprise in this respect. The Three Rivers Iron Works have been in profitable operation for more than a century. The Marmora Iron Works have been worked to good purpose, and may be again; and there has been expended on the Copper Mines of Lake Huron upwards of a million of dollars, not with much success hitherto, but with promise of better.

But, once more, let us not forget, that although mining must precede metal manufactures, agriculture must go hand in hand with mining. The indifferent success of some of our mines arises from their being so far in advance of agriculture, nay almost as bad, too far beyond the civilised world,—not only without the many comforts that we derive from a farming neighbourhood, but deprived of society, and the enterprising spirit that we acquire from contact with our fellow workers. It may be safely stated that mining at Lake Huron costs in labour twice what it does in England; and as instead of men offering themselves for employment, we have to procure them from a distance, and the work is only half done. We

have the ore as good as in Britain, but it costs four prices to work it.

On Lake Huron we have Iron Ore, composed of perfectly pure oxide of iron, capable of being reduced by the new French process, and will produce Bar Iron by simply driving off the oxygen, and taking only a ton of charcoal to a ton of ore, producing about two-thirds of a ton of Bar Iron, equal in quality to the Hoop and Iron of the Dannamora Mine in Sweden,—hitherto the only iron capable of producing fine cast steel. We have on the same lake, also, extensive Copper Mines at work.

Now, there is nothing to prevent the cultivation of the land near these mines; for, although about equally divided into rock, water, and earth, that third of earth is extremely fertile, and the water abounds with fish, and the climate is healthy; and as there is wood enough to supply charcoal all along the numerous rivers that run past these mines, and as water power is abundant, there is nothing to prevent Agriculture, Mining, and Manufactures, from being successfully prosecuted on the north shore of Lake Huron. I believe that the same may be said of the north shore of Lake Superior,—and with the Saskatchewan and Assinboin as a back country, and Canada West in front, we may well be enthusiastic, and feel, that properly developed, going hand in hand with her sister branches of industry, Manufactures of Metals may become a very important element of Canadian prosperity. A few branches are now even successfully carried on,—Edge Tools made in Galt, have, like our Dundas Blankets, been pronounced without a rival. Spades and Shovels are made both at Montreal and Gananoque, with much success. In both cases, local demand of a peculiar article, and consumption near at hand, have developed these in advance of the natural order. On the Ottawa, Chains and Axes are made on the spot, so as to have artisans ready to make repairs. Liability of Sheet Iron and Tin plates to damage will, in time, lead to rolling being carried on here. Rolling and Slitting Mills for Bar Iron we ought to have had ere this, to work up Scrap Iron, and to re-adapt unservicable sizes, or even to make Bar Iron from Blooms. Once, however properly work our Iron Mines, all this would follow naturally. One article we could certainly then make ourselves,—out of the pure Soft Iron of Lake Huron, all kinds of Tin Ware,

like those we now get from France, beat (like the Brass Kettles) out of a single piece of iron. The English Iron will not bear this.

Reading of the quantity of Cannon now being cast in Great Britain, it does seem singular, that the very superior quality of our ores does not induce orders being sent out to have them cast in Canada. Either Three Rivers or Marmora could turn out Cannon, having fully double the strength of the British castings, much softer and more infusible, so that the touch holes would not be so easily spoiled. Indeed, I believe, that in many respects, the Three Rivers Cast Iron is equal in tenacity to much of the English Wrought.

The want of Coal, by many considered so great an evil, is, as far as Manufactures (of any kind except common castings) is concerned, is by no means an injury. We have Hardwood, to turn into Charcoal, and Charcoal-refined Iron is the only kind that will make Steel, and indeed, that can be properly used for rolling or any of the fine purposes. With pure ore also, the quantity of charcoal used is so small, that it makes very little difference. Even Copper, smelted with Charcoal, is superior to Coal-smelted Ore for some purposes; and even in England, Charcoal has to be used.

Were it not as with Prints and Paper, that we use rejected articles of *Earthenware*, Manufactures of that article would have introduced long ago, even if we imported the clay used, as freight and breakage would give considerable protection. Under present circumstances it will hardly answer, until we discover fine clays, and in the absence of flint in the vicinity of the manufactory, use white quartz or quartz sand. The north shores of Lake Superior produce both these.

Glass, especially Window Glass, has been made in Lower Canada, using a White Quartz Rock from the neighbouring States, instead of flint, and potash as the alkali. Very inferior glass from Belgium and elsewhere drove this business out. I have no doubt they were rejections also. When quality becomes an object, and civilization extends to Lake Superior, Glass making may become an important art there. White Quartz, unequalled in purity, is in abundance, and not only is potash to be procured from the ashes of wood, used in the other manufactures, but soda can be obtained from decomposing the salt so abundant there.

Many other things will also be attempted on those shores. The abundant deposits of sulphuret of iron will afford sulphuric acid, so important in the arts, and so expensive to import on account of the danger of carrying it. This acid, used to decompose salt when making soda, gives us Muriatic Acid, Chlorine in various other combinations, Alum, and Green Vitriol can also be made, all of great use in the arts; the residue even, of these preparations forming as paints, articles of some economical value.

I have, as yet, but little adverted to the description of manufactures to be found around us, by which the half prepared material is fitted for immediate use. I have not done so, as they are as much developed in Canada as can be possibly required. Making up of Clothing, Shoemaking, Harness Making, Copper Works, Tin Works, Casting of Stoves and Machinery, Boiler Making, Steam Engine Factories, Brick Making, Tile Making, and many others, we are quite as far in advance as any country. Even Locomotives have been very successfully made, but the want of continuous demand militates against us. These have advanced and will advance just as fast as they are wanted; they require no protection, and will start up in every village as required, and no more. Local demand requires often local supply, the few exceptions being where certain places, having peculiar advantages, produce either a superior or perhaps a cheaper article than we do.

We have many Domestic Manufactures. The late Exhibition shewed a great variety, produced by our farmers and their families. They might be far extended. They need not always have recourse to the common Spinning Wheel, for there are contrivances by which a hundred threads may be spun at once. Stocking Looms might be put up in every farm house instead of knitting by hand, doing ten times the work with the same labour, and Shoemaking, like in England and the Eastern States, might be a profitable winter occupation, occupying only the time that would otherwise be altogether lost.

Before concluding, I cannot help referring to certain fallacies which have been brought before the public, and repeated so often that many take them for self-evident facts. One is that money brought into the Country by the British Government to support

troops, by our own authorities to construct works, or Railway Companies to make their lines of communication, is so much, as it were, *given* to the Province, and that we may naturally look to depression when those works cease. Now, far be it from me to deny the importance of defence of our homes, the utility of our great Canals, and especially the great importance of railways, which, although not themselves producing anything, put the right commodities in the right place, at a cost far below any kind of land conveyance previously known, encouraging the settlement of distant quarters and spreading civilization by bringing the most remote districts in immediate contact with far advanced cities. Allowing all this, do not let us imagine for one moment that the expenditure during their construction, was any thing more than a substitute for exports—for putting aside the cost of rails—which being furnished in Great Britain neither do us good or harm commercially; the other expenditure in labour or otherwise, is merely by paying for commodities that if not consumed by the labourers on their works would be exported, but if so used of course cannot be, but in any estimate of the trade of the country must be so considered. There may be more profit made by selling food to the Railway labourer, or selling oats to feed contractors horses, than if the same were exported. Granted, but only such profit; the expenditure is no gift—it is money paid it is true, but for value received.

And this leads to the other fallacy—Our Imports and Exports. Imports taking place, generally at ports connected with large towns; the object being to have a variety in one place, to be afterwards distributed over a great extent; this swells the imports at those places—while the exports, bulky goods, that will not bear much expense, and of few descriptions, not generally requiring variety for shipment, are sent direct from numerous shipping ports, smaller or larger, shewing an excess of imports in cities, while the exports are in excess in the smaller ports. Now this can be of little consequence if they balance pretty nearly at last.

But it will be stated our Imports are nearly always greater than our Exports. So they ought to be, our income should be always greater than our expenditure. However, the great difference between them can be otherwise explained.

Money introduced by Immigrants, by half-pay officers, by the British Government for pay to troops, for public works, by loan companies, by railway companies and many others, not taken into account in exports are effectively such; they consist of cash paid in Canada for the produce of the country instead of being paid in England or elsewhere for the same produce exported. To this may be added profits on exports and freights of Canadian ships sent for sale and making part of their value.

The fact is we have a much better guide for the relation that our Imports and Exports have to each other, than any table we can consult, it is the rate of Exchange. The moment our Imports seriously exceed our Exports the unusual demand for Bills drawn against Exports, causes shippers to raise their rates. When this rate becomes too high specie becomes an object of export itself. There is a drain of that article and serious inconvenience is felt. The value of a sovereign in England is one pound sterling—here the exact value is one pound four shillings and four pence—the dollar integer of our money, selling for four and two pence sterling, and a per centage being between gold and silver gives us the par of Exchange. According to the old mode of reckoning $9\frac{1}{2}$ per cent premium. Now it requires about 1 per cent. above or below that rate to cause any extensive movement in specie, and as the rate has seldom much fluctuated above or below that (excepting for a short time during the panic of 1857,) we must consequently infer that as no great egress of specie has taken place, or we would have seriously felt it, and that in spite of tables, our Imports and Exports must have been pretty nearly alike—any excess of Imports being, is to be hoped, to be put to the account of profit.

I will just recapitulate—without farming, no materials, no mines, without materials and Mines, no successful manufactures. That agriculture mining, and the arts, must go together in proper order of precedence—That united they stand, divided they fall—and that the best and the most lasting protection all or any ought to receive is comprised in the motto of the City of Toronto,

“INDUSTRY, INTELLIGENCE, INTEGRITY.”

