

## DEVELOP MANUFACTURES!

WE are now as it were passing into a new era of our commercial existence. Our future prospects, and the course we should pursue with regard to the encouragement of our commerce, and the increase, or at least, in the meantime, the maintenance of our present prosperity, becomes a theme which is peculiarly interesting to every Canadian.

Although ours is essentially an agricultural country, still our manufactures, to the development and extension of which we intend to devote some space, hold no mean place. Certainly many branches are on a limited scale, and, with the exception of square timber, lumber and flour, none have aimed to any extent at more than a provincial consumption; but, as an aggregate, they are far advanced for a new country. Ours must now be an aggressive policy, and a more favourable opportunity to develop manufactures could scarcely have fallen to our lot. Within the past four years the American export trade has seriously declined. This is owing to the heavy taxes levied on their productions, rendering them unable successfully to compete with other countries in foreign markets. A large portion of those exports embraced many manufactures, which, from a similarity of position and resources, we, as a country, are able to produce; thus it will be seen that a large trade lost to them is within our grasp. Besides, the termination of the reciprocity treaty will be a signal for our government to impose prohibitory duties on many goods at present extensively imported from the other side, for the encouragement of our own manufacturers. Some manufactures which are, by the foregoing circumstances rendered fields for profitable investment, we will here enumerate, giving statistics and additional reasons to substantiate their practicability.

**TIMBER MANUFACTURED IN WHOLE OR IN PART.**—In this the American export trade was very extensive, and principally to the West Indies and Brazil; it amounted as follows in the year 1857:

	1857	1861.
Staves and headings	\$2,065,990	\$1,959,392
Shingles (a large kind)	212,505	108,610
Boards, plank and scantling	4,170,088	2,032,949
Square timber	510,735	97,874

Shows a decrease of one-half.

A large portion of this is, of course, the production of Canada and New Brunswick, shipped via New York. By shipping direct ourselves we would save freight, commission and other charges, which would yield a very considerable profit. The duty which will shortly be imposed will, of itself, induce direct shipment from here. Our shipments of timber and manufactures of wood to Great Britain, for the twelve months ending 30th June, 1855, amounted to \$5,978,334. While Norway, our competitor in the same market, exported thither in 1854, timber, &c., to the value of \$5,839,006. That country also exports a like amount to Holland, and to France about a sixth less—to neither of those do we export any; this is because we are unable to compete, except under differential duties. If we make a good display of our native woods at the approaching French Exposition, it will go a long way towards obviating this difficulty.

**WOODEN WARE.**—This comprises principally patent pails, tubs, measures, and includes an endless variety of minor articles. The exports of this from the United States, previous to the war, were quite large, amounting in each year from 1857 to 1861 inclusive, to \$3,158,124; \$2,231,678; \$2,839,361; \$2,703,096; \$2,334,079; and this, too, under the disadvantage of a scarcity of timber, of which we have an unlimited supply. Eight or nine years ago pails, tubs, &c., of pine, and made by machinery, were unknown in Great Britain; but since their introduction by Americans they are extensively used, with an increasing demand. The British import duty on this class is merely nominal, being but one shilling per ton, with a clause admitting them free, if made of certain kinds of wood. France levies an *ad valorem* duty of ten percent. The price of pails may seem too low to allow their being profitably made; but we must consider that the process of manufacture is very rapid, and the cost of material, in a pine country, per dozen pails, is insignificant—nine men, with attendant boys for removing the work, will, with Whitney's improved machinery, turn out one thousand pails per day.

**FURNITURE.**—The manufacture of furniture, with a view to exportation, has been advocated many times in the Canadian press. Messrs. Jacques and Hay, of Toronto, have shipped to England, to a limited extent, and it is their intention to attempt it this year on a more extensive scale. The Oshawa Cabinet Factory,

a large establishment, has passed into the hands of English capitalists, under the Joint Stock Co.'s Incorporation Act, under the style of Edward Meal & Co., limited. They have commenced to manufacture extensively, solely for the English market. This establishment shipped, last summer, a lot of furniture, valued at \$2000, to Australia via Liverpool. To manage this branch successfully, the furniture must all be made and shipped in what is familiarly known in the States as the "knock down style," that is, in pieces. This is done to economize room,—for instance, by this plan, one hundred and ten common Windsor chairs occupy but forty cubic feet, the amount allowed to the ton by forwarders. The cost of freight to Liverpool, inclusive of duty (very small) and primage, will be ten cents per chair. Taking our present scales of prices as a guide, and allowing for exchange, they could be profitably delivered at Liverpool at 2s. 1d. sterling each. Now the commonest kind of English made chair (unpainted) retails for 4s. 6d. sterling. But we need not confine ourselves to this market,—there are those of other countries, only adapt the style of furniture to that used where it is our intention to ship. American exports of this class of goods amounted, in 1857, to nearly one million dollars.

**FLAX.**—The climate of Canada is so peculiarly adapted for the growth of flax, that this fact, and the rise in the price of cotton, induced the government to recommend its cultivation. A quantity of seed is being imported for distribution in the spring; but unless some thorough understanding is arrived at between farmers and capitalists, some time will elapse before the manufacture of linen will rise to any importance. Indecision on the part of the capitalist arises from the fact that, unlike cotton and wool, which only require to be freed from their impurities previous to being spun, flax requires to have its filaments separated from each other by long and careful treatment which necessitates the use of various machines known as hackling or scutching machinery—were all the machinery adapted for cotton, the place might be transformed into a cotton mill should the farmers refuse to grow flax. To obviate this, mutual engagements must be entered into. This is certain that the price of cotton will never fall to what it was before the rebellion, and some time will even elapse before it comes to a normal figure. The unsettled state of the South, the change in its cultivation, taxes, &c., preclude this. On this account the exports of linen from Great Britain rose from \$19,261,905 in 1851, to \$32,649,850 in 1853. Our imports in 1855, amounted to \$624,429. There is no reason why we should go abroad to purchase this; we could at least make the coarser qualities such as baggings, towellings, sheeting, &c. A new article, called linoleum, has recently been produced from flax. This, it is said, will supersede india rubber; and should its manufacture be commenced, it will be an additional inducement for the cultivation of flax.

**CHEESE.**—We cannot say that we could advocate a more profitable investment, for the small capitalist, than the erection of a cheese factory. In 1854 we imported, principally from the States, 3,076,706 lbs., valued at \$321,337; in 1855, 2,680,950 lbs., at \$318,591, which shows the rise in price; since we paid, in 1855, the same amount that we did in 1854 for 500,000 lbs. more. Our export of the same, in 1855, was \$70,321. We subjoin some very valuable statistics of factories in the State of New York, which will be of service to intending manufacturers. The values are in American currency. In 1855 there were, in the State of New York, 425 cheese factories, the aggregate summary of which is as follows:—

Cost of buildings and apparatus	\$862,831
Male persons employed	705
Female persons employed	781
No. of cows used (average)	128,526
Pounds of milk used	307,677,242
Pounds of cheese made	32,663,014

The reports of 133 factories, for 1854, present the following aggregates:—

Cost of buildings and apparatus	\$378,187
Male persons employed	253
Female persons employed	362
No. of cows used	67,034
Pounds of milk used	187,882,338
Pounds of cheese made	18,942,435
Pounds of milk to a cow	2,802
Pounds of cheese to a cow	258
Value of cheese at 20 cts. per lb.	\$3,789,637
Average value of cheese to a cow	\$56 75
Average quantity of salt used to 100 lbs. of cheese	3 lbs.

At the close of the treaty a duty will be levied on this article which will make it doubly profitable.

**ICE.**—Although the cutting of ice can scarcely be called a manufacture, still the profits arising from it

are so large, the capital required so small, the management simple, and the consumption steady that we cannot resist advocating its export from Canada. The season has not yet advanced too far to house a large quantity for shipment. The present ice trade in the United States is very extensive. The originator of the trade, Mr. Tudor, of Boston, had, in 1835, extended his operations to the West Indies, South America, New Orleans, and India. The ice shipped from Boston (the only point of export) amounted, in 1847, to 74,478, and in 1855, to 123,025 tons. The ice trade would be a gain to the country, as the ice itself, the labour expended on it, the materials for its preservation, and its transportation would be worthless without the trade. The sawdust used for packing it, which would otherwise be thrown away, is worth, in Boston, \$3 per cord.

**BUTTER.**—It may be curious, but it is nevertheless a fact, that South America annually imports from Great Britain a large amount of butter. Brazil alone imported it, in 1851, to the value of \$603,705; and in 1852, \$608,621. This is a trade we might have just as well as not—our exports to Great Britain amounting to \$900,000 annually. Besides, by inspecting the New York trade returns, we find the export of butter from there, in 1851, was 23,169,391 lbs.; in 1852, 30,003,325; but in 1853, when prices of everything rose, it diminished to 14,174,861 lbs. From where is the balance exported now? Here is a field for enterprise, combine the butter and ice trade together.

## THE DUNDAS COTTON FACTORY.

EVERY one is aware of the great importance to Canada of its manufactures of textile fabrics, and it is of much interest to watch their growth. We find in the Hamilton *Spectator* an account of the above establishment, the largest cotton factory in the Province. From very small beginnings, it has grown in eight years to a capacity to give employment to from one hundred and fifty to two hundred persons, and to be able to turn out 12,000 lbs. of yarn, and from 15,000 to 20,000 yards of cloth. The very best and newest English machinery is employed in the carding and spinning departments, while the looms are made in Dundas, under contract, for the energetic proprietor, Mr. Wright, and under his personal supervision. In this factory are carried on simultaneously, all the processes by which the raw cotton is changed into yarn and cloth, ready for the market.

There is first a large room where the cotton obtained principally from Memphis and St. Louis is received and unpacked. Next is the scutching room, containing three scutching machines; after passing through which the cotton is passed into the carding rooms, of which there are two, with ten carding machines, one drawing machine, two shippers and five rovers in each room. Thence it is passed into another room, where there are twelve spinning frames, by which the cotton is wound on bobbins ready to be woven. In another room there are three large self-acting spinning mules, where the cotton is spun and wound on to caps. From here it is removed to another room, where it is prepared for the looms, and in which are one warping frame and two winding frames, so delicately constructed that the breaking of a single thread stops the machines: also doubling frames, where the cotton yarn is prepared for mixed goods; and eight machines where the cotton yarn is wound on frames and tied into bundles. Then comes the weaving room, where there are seventy looms now at work, which number is shortly to be increased to one hundred and ten. The cotton fabric from here is taken to the packing room, where there is an ingeniously constructed folder, which not only folds it, but indicates the number of yards in each piece. It is then pressed, when it is ready for market. In this room, also, the cotton yarn is put into bundles and packed, passed to a lower room where it is weighed and checked, and then sent to the merchant.

The machinery of the establishment is driven by steam engines, of which there are two, one a high pressure and the other a condenser, in which the steam is exhausted, saving a large percentage in fuel, and giving eighty horse power. Everything about the premises is kept scrupulously clean. They are lit by gas, manufactured on the premises from petroleum, which gives a much more brilliant light than coal gas, at a great reduction in cost.

—The ships supposed to have been lost on the British coast during the recent gales number between 300 and 400. A letter from Torbay states that thirty-one fine vessels and eleven fishing sloops, were dashed to pieces on the shore, and it is feared that 150 men perished.