

THE INDUSTRY OF MASSACHUSETTS.

THE Legislature of Massachusetts pass at intervals of ten years the necessary "Act to obtain the industrial statistics of this Commonwealth." The first was passed in 1833; the last was approved in 1866, and the returns were made last year; the successive reports exhibiting the following as the annual amounts of industrial products:—

| | |
|---------------|---------------|
| In 1833 | \$ 35,000,000 |
| 1845 | 124,000,000 |
| 1855 | 295,000,000 |
| 1866 | 617,000,000 |

This increase is certainly very remarkable, and even after allowing for the inflated currency of 1866, the increase in the last decade is astonishing, especially when we consider that the contemporary increase of the population was only three per cent. This business represents over a million and a half dollars for each working day in the year, employs a capital of \$174,499,650, and engages the attention of 271,421 persons in manufacturing, and \$8,686 in agricultural pursuits.

The leading products—not mentioning those of agriculture—are thus set down in 1866:—

| | Value. | Capital. | Hands. |
|-------------------------------------|--------------|--------------|--------|
| Cotton | \$54,436,881 | \$31,233,986 | 23,678 |
| Boots and Shoes | 52,916,243 | 10,067,474 | 55,180 |
| Woolens | 48,430,671 | 14,755,830 | 18,433 |
| Calico and Delaine | 25,258,703 | 4,222,000 | 4,208 |
| Clothing | 17,748,894 | 4,634,440 | 24,722 |
| Tanning & Currying | 15,821,712 | 4,994,943 | 8,847 |
| Paper | 9,008,621 | 3,785,300 | 3,664 |
| Rolls and Silt Iron and Nails | 8,896,602 | 2,827,300 | 3,194 |
| Whale Fishery | 6,618,370 | 6,879,862 | 8,496 |
| Printing & Newspapers | 5,353,148 | 1,919,400 | 2,400 |
| Mackerel & Cod fish'y | 4,822,218 | 8,767,761 | 11,618 |

But it is the smaller industries in which we think Canadians should feel the greater interest. All the above products are known to our mechanics and business men; perhaps almost as well as to those of Massachusetts, but it will be observed that they only comprise half the industrial products of the State, and we will proceed to enumerate some of the minor manufactures which are less familiar to us, but are equally profitable; equally deserving of attention, and whose more beneficial to the labouring population as requiring the capital, and thus offering a readier means for the artisan to rise in the social scale.

Passing over the carpeting and hosiery factories we come to factories for making bread nets and head dresses, of which there are eleven, and a capital of \$22,500, employs 25 male and 189 female hands, and turning out \$159,500 worth of goods.

There is one factory for making feathers and artificial flowers, one for bugle trimmings, one for jet pins.

Six establishments manufacture worsted dress braids, worth \$539,240, on a capital of only \$166,700. Ten make dress trimmings, gimps, cords, &c., worth \$260,125, on a capital of \$164,600.

Nine factories, capital \$929,500, manufacture \$2,046,200 worth of wire; seven, capital \$185,000, make \$239,764 worth of nuts and screws, two, capital \$20,000, butts and hinges to the value of \$65,000; four, capital \$25,750, locks worth \$61,547, twenty-four, capital \$439,000, make \$1,269,866 worth of tacks and brads.

No less than eleven establishments are engaged in making the apparently insignificant article of buttons. The metal buttons produced are valued at \$293,403; the covered buttons at \$192,000; the wood buttons at \$123,217, besides a quantity made of horn and bone and vegetable ivory.

There are five factories for the manufacture of portemonnaies, pocket books and wallets, eight for that of photograph albums, and these apparently insignificant industries employ respectively 119 and 134 hands, to produce articles worth \$186,600 and \$306,202. Capitals \$37,500 and \$67,600. Besides these, thirteen establishments make ink envelopes, and small articles of stationery.

No less than twenty-three factories are engaged in making combs, and 506,670 dozens of combs are made, valued at \$507,656, out of \$223,866 worth of stock. Capital \$173,500, hands employed, 446 males, 163 females.

Eleven make palm leaf into fans, &c.; twenty-six make it into hats. There are twenty blacking factories, six razor shop factories, eighteen factories for pickles and preserves, and one thousand and nine establishments under the head "not elsewhere enumerated," among which we find, in the body of the work, such as Firebrick factories, Billiard Table factories, Rubber works, Whalebone establishments, &c. &c.

Coming then to natural products we find a number of smaller industries connected with agriculture. Onions are largely cultivated for export, also cabbages. Garden seeds are largely prepared for sale. The Basket

willow is cultivated to some extent, not to speak of Cranberries, Winter squashes, and "garden seeds" generally at which we may enoe, but which yield handsome returns nevertheless, and give a total which is of great importance to the political economist.

It would be tedious to enumerate all the industries specified in a volume of 800 pages; we have mentioned those which it appears to us are least practiced or over thought of in Canada, and which we think might be made profitable here. We have very successfully established a variety of new establishments here within the last few years. We hope this notice may lead to fresh progress in the same direction.

MINERAL RESOURCES OF NEW BRUNSWICK.

THE mineral resources of New Brunswick are rich and varied, and though only as yet very partially developed, sufficient progress has been made in some particulars to lead us to indulge the hope that the application of capital and skill are alone required to enable the Province to take a high rank among mineral producing countries. As everything connected with the undeveloped resources of the Maritime Provinces is just now of more than ordinary interest and importance, we propose to give a series of sketches illustrative of what has already been accomplished, and pointing out the grounds that exist for believing that in this direction lies a large and promising field for judicious investment. We commence with

COAL.

This mineral is extensively diffused throughout the central portion of the Province, and although it has as yet only been worked in a few easily accessible places, yet it seems to be beyond a doubt that it occupies, in nearly a triangular shape, a vast area, extending from Bay Chaleur to the head of Grand Lake on the St John, and from thence across the Province to the Gulf Shore. Geologists are divided in opinion regarding the degree of productiveness to be expected, but as by far the largest portion of this region known to contain these coal measures remains wholly unexplored, and some portions are already profitably worked, we cannot be far wrong in concluding that a thorough exploration would result in the discovery of some workable deposits. This opinion is strengthened by the remarkable facts that both at Bay Chaleur and at Grand Lake (the two extremes of the triangle before mentioned) the same description of plants have been discovered, and further, that these plants are only known to exist in the middle or productive coal measures. This being the case, the thickness of the deposit is the principal thing to be determined, and on this point Professor Hind says:—"The supposed thinness of the New Brunswick coal fields is opposed to the expectation that seams of workable coal will be found to occupy very wide areas, yet the structure of the country has been shown to support the views that in a bay or bays penetrating the carboniferous area from the East, thicker seams than those which exist at Grand Lake (22 inches) may be sought for with a probability of success."

Most of the coal hitherto raised at the Grand Lake has been taken from a 22 inch seam at a place appropriately called Newcastle. The existence of coal in this locality has been known for a number of years, but no regular system of mining has ever been pursued, and it has been brought to market in an irregular and haphazard sort of a way. Professor Hind writing in 1865 says:—"Any farmer who finds the seam on his land, employs persons to dig out a certain quantity of coal; this is bought up by agents, and shipped to Fredericton, Saint John, and elsewhere. It sold at Fredericton in 1864 and '65 at \$6.60 per chaldron, and it appears that about 5,000 chaldrons were shipped from Grand Lake during the season of 1864." In 1865 and '66 the quantity was considerably increased, and probably amounted in each of those years to from 8,000 to 10,000 chaldrons. A somewhat more systematic method of mining is now pursued, but all the operations are still carried on in a very rude and primitive sort of a way. The quality of the coal is good, and for blacksmith's use especially, is preferred to any imported. It leaves very little ash, throws out a great heat and in a properly constructed grate makes an excellent fire. Professor Hind enters into some details to show the quantity of coals to be obtained from the working of a persistent 22 inch seam, and states that each acre would produce 1,600 chaldrons, and each square mile 1,024,000 chaldrons, and if, as suggested by the late Dr Robb, the Grand Lake seam extends towards Coal Branch on the Rich-

bucto, and there appears with a thickness of 15 inches; the total mass of coal on a length of 40 miles, by a breadth of 15 miles, would amount to the enormous quantity of six hundred millions of chaldrons. But to return to the actual operations: and still keeping at the head of the Grand Lake and distant about eight or nine miles from the Newcastle mine, is situated the property of the Coal Creek Mining Company. The seam of coal here laid open is about 18 inches in thickness, lying in a horizontal position on the bank of the creek with from twenty to thirty feet of rock above it. Here a main level has been driven in 100 feet, and the coal produced is very bright and black, and is free from rust and slate. It is also much harder and stronger than the Newcastle coal. One peculiarity about this mine deserves notice: It has been stated that the seam lies in a horizontal position, but this is not strictly correct; it has rather an upward inclination, which has the effect of not only completely draining the level, but also of reducing to a minimum the labor of getting the coal to the mouth. The company own some 600 acres of land in this vicinity, which, it is estimated, will produce 729,000 chaldrons of coal. They are building a wharf where vessels can lay alongside the mouth of the seam, and are making preparations for prosecuting the work vigorously in the spring.

We think that enough has been stated to show that there is here a promising opening for the employment of skill and capital, for if, with the rude and wasteful methods hitherto used, the working of these coal seams has been found profitable, what might not be expected from the employment of skillfully directed labor and means; at all events, a more thorough exploration than has yet been made can hardly fail to be productive of good results. The Intercolonial Railway, in the course of its construction, must pass in the direction of this coal field, and should workable deposits be found to be situated at or near to the line, the importance of the subject, both to the railway and the country at large, can scarcely be over-estimated.

We must reserve the Albert coal mines as the subject of a future paper.

THE TOBACCO CROP.

THE quantity of tobacco raised in the United States is exceedingly large. In no less than twenty-eight of the States is the plant grown, and the yield during 1866 is set down at no less than three hundred and thirty millions of pounds! This quantity seems to be, and no doubt is, enormous—but the figures are given for each State, and we suppose, may be taken as approximately correct. Before the war, the South raised over one hundred millions of pounds more per annum than are given in last year's returns. Virginia and Kentucky were then as now, among the largest producers, but their crop was less last year than it was in 1860, the former by fifty-four, and the latter by forty-seven millions of pounds. The principal tobacco growing States yielded as follows last year:—

| | |
|----------------------|----------------|
| Connecticut | 8,300,000 lbs. |
| Illinois | 16,000,000 " |
| Indiana | 7,100,000 " |
| Kentucky | 61,000,000 " |
| Maryland | 35,300,000 " |
| Missouri | 10,500,000 " |
| North Carolina | 85,000,000 " |
| Ohio | 26,000,000 " |
| Tennessee | 29,500,000 " |
| Virginia | 70,000,000 " |

Besides these States, considerable quantities of tobacco are grown in others farther North, Iowa, Michigan, and Minnesota, being among the number. The farmers of Canada now grow tobacco to a moderate extent. We have seen it growing in the fields, and its appearance was very luxuriant. Although not equal to tobacco grown under a Southern sun, the Canadian article smokes very well, not a few farmers using scarcely any but what is of their own growth. There is no reason why our tobacco crop might not be greatly increased in quantity and improved in quality. It is not difficult to cultivate, and grows very readily on suitable kinds of soil.

THE CHAUDIERE GOLD MINES.—Mr Richard Pope, Inspector of Gold Mines, reports the discovery of another large nugget of gold in the Gilbert river, weighing fifty-one ounces, and valued at \$300. It was dug out of a pit at a depth of 18 feet, in lot 18, Dolary (Concession Seigneuriale Rigaud Vaudreuil), by a party of Reciprocity miners. There is no doubt that the whole of the Chaudiere mining region contains immense deposits of the precious metal, which needs only enterprise and industry to develop it. From the indications of the strata in which these large nuggets have already been found, miners confidently speak of the discovery, at no remote date, of nuggets weighing as much as thirty pounds.—Quebec Daily News.