

WILL IT PAY?

THE speculation of employing the *Great Eastern* Steamship to carry sight-seers from New York to the Paris *Exposition Universelle*, has not commenced favourably. It was doubtless anticipated that there would be a great rush to obtain berths even for her first voyage; but although the *Exposition* was formally opened on the 1st of April, these anticipations have not been realized. Telegrams from New York indicate that the first voyage of the big ship will be a heavy loss. She sailed from that port, one day last week, taking only 191 passengers at \$100 each, making a total revenue of \$19,100. For tonnage dues, &c., on entering New York harbour, those who chartered her had to fork over at least \$7,000, which would leave a balance of only \$12,000 to pay cost of voyage, seamen, and all other expenses. Some estimate the loss on this trip at no less than \$60,000! By her next voyage, which will be about the middle of May, the *Exposition* will be in full operation, and the tide of travel to Europe will be at its height. It is to be hoped that the *Great Eastern* will then make up for present losses. We should not be surprised if, at her next trip, she were crowded from bow to stern, and that a large profit will accrue from the voyage. Whether profit will be earned by her May, June, and July trips, to pay present losses, and some unprofitable return trips, remains to be seen.

CHEAP RAILWAYS.

IN a new and undeveloped country, where money bears a high, or comparatively high rate of interest, it will generally be found advantageous to make improvements, such as the building of railways for instance, in as economical a manner as is consistent with a fair degree of permanence. If a railway be built through an unsettled tract of land at a cost which necessitates delay in constructing, and subsequent high rates of freight, the opening up and cultivation of that land, though rendered more easy than if there were no means of communication are still retarded, as compared with what would have taken place had the railway been earlier built and its charges been more moderate. Under such circumstances, it will be found better to construct a narrow gauge, light rail, road, rather than a broad gauge road with rails of Bessemer steel. The rolling stock, also, should not be of the most expensive, but, on the contrary, of the most economical kind, so long as it does not fall below the point of unserviceableness. Before the cheap road shall have worn out, it will, probably, have earned money enough to gradually re-lay it in a more permanent manner, and settlers will have been attracted to lands which previously had been almost valueless, but which, by being brought within reach of a market, have become highly profitable to their cultivators.

Mr. G. Laidlaw, of Toronto, has published as a pamphlet a letter addressed by him to the people of the Counties of Bruce and Grey, shewing the advantages, practicability and cost, of a cheap railway through those Counties; and in so far as he confines himself to his text, we think his proofs and arguments are, for the most part, incontrovertible. From the testimony of various engineers, including Mr. Fitzgibbon, Chief Engineer to the Government of Queensland, Australia; J. E. Boyd, New Brunswick; C. Pihl, Chief Engineer of the Norwegian Government railways, and the English firm of Sir Charles Fox and Son, it would appear that the first cost of a narrow gauge road, say of 3 ft. 6 in. gauge, is fifty per cent. less than one of a 4 ft. 6 in. gauge, the gain being made on every single item almost, in the construction of the road; in earth, masonry, rails, chains, engines, rolling stock, &c., &c. A narrow road also can be built with sharper curves, and can, therefore, be adapted more readily to the country through which it is to run. And although as high a rate of speed may not safely be reached on this style of road, still a uniform speed of 15 or 20 miles per hour can very well be maintained. On this point, however, Mr. C. Pihl is of opinion that, were it necessary, there would be no danger in running at a much greater speed. He says he has run an engine at "upwards of 40 miles an hour with as much feeling of ease and security as I have felt when running any engine on a broader gauge." It would also seem that, should the traffic of the road increase so much as to exceed its carrying capabilities, it would still be no more costly to build a second line on the cheap principle in addition to the one already laid, than it would have been to have built a broad gauge road in the first place.

In portraying the advantages to be gained from a railway, Mr. Laidlaw specially insists on the immense profit to be derived from the shipping of cordwood to Toronto and a market, instead of farmers being obliged to spend much time and money in clearing their land and destroying the wood unproductively; and there is no doubt that even a small profit per cord on fuel sent to Toronto and there sold would foot to a very large total in favour of that section of the country through which the railway is intended to pass.

We should be glad to see this railway in course of construction; and we have no doubt that if the cheap system be proved to be as well adapted to this country as it has been in India, Australia, Norway and Sweden it will be introduced generally throughout the rich and undeveloped sections of the Province whose progress would be thereby stimulated and increased in a ratio equal to that of Canada at large under the benefits derived from the great but expensive railways already in existence.

BRITISH REVENUE AND TAXES.

THERE is no nation in the world which has a heavier debt than Great Britain, or one which raises annually a larger amount of taxes. But we believe there is none in which the principles of political economy are better understood, or taxation adjusted so as to bear more equally upon all classes. Were it not for the sagacity of her statesmen the public burdens would be very seriously felt. But by the ability of such men as Gladstone, the load of taxation is so adjusted as to bear with the least possible weight on the community.

We have lately been glancing at statistics of the amount of taxes raised in Great Britain during the last three years. These figures afford evidence of the wisdom of British statesmen to which we have referred, and are, withal, somewhat remarkable in other respects. It is to be regretted that they mirror to some extent the vices of the people. That tobacco, spirits and wines should figure so largely in this statement is not a very creditable fact, proving as it does, an indulgence in these pernicious articles, which must injuriously affect both health and morals. The entire list of articles upon which Customs duties are levied, has been reduced to thirteen, and the total receipts of duties during 1864, '65 and '66 were as follows:

	1864.	1865.	1866.
Tobacco	£6,091,727	£6,245,489	£6,535,944
Sugar	5,334,377	5,445,621	5,643,488
Spirits	3,240,889	3,167,330	4,018,628
Tea	4,431,867	3,189,290	2,568,164
Wine	1,319,261	1,374,859	1,411,038
Corn	625,232	647,089	824,442
Fruits	385,595	408,490	398,402
Coffee	334,879	384,302	386,818
Chicory	123,060	127,892	109,038
Pepper	120,426	124,460	28,636
Timber	283,340	308,802	25,631
Cocoa	17,380	17,871	19,196
Other articles ..	64,176	58,518	35,961

Totals.....£22,498,211 £21,799,972 £21,998,351

The amount of revenue received from tobacco is something astonishing, and certainly indicates that the people of the mother country love "the weed" and no mistake. Little could Sir Walter Raleigh have imagined when he introduced tobacco into England that the day would come when his countrymen would chew and smoke sufficient of it to yield a revenue of over six million pounds sterling! Tea occupies a lower, and sugar a higher place in the list than we had supposed likely to be the case. However, it must be remembered that we are considering the duties collected and not the quantity consumed, and that on teas the charges are lower than on most other articles.

During five years, from 1862 to 1866 inclusive, there was the immense sum of £283,350,391 stg. paid by the British people in the way of taxes. This is an enormous sum, and much in advance of what formerly was collected; nevertheless, taxation has largely decreased. This arises from the increase of population, and the increased aggregate wealth of the nation. About fifteen or twenty years ago, the population of the mother country was only some 23,000,000, and the taxation averaged about £2 5s 5d per head. Last year the people numbered within half a million of 30,000,000, and the amount raised from each person was not more than £1 15s. This is a large reduction, and evidences that improvement is steadily taking place in the position of our countrymen at home.

In conclusion, we would recommend others to take note of the wise policy pursued by the Statesmen of

England with regard to revenue. Their commercial policy in most particulars, is sound and judicious, and they certainly know well how to adjust their Tariff so as to ease the public burdens as much as possible. Our Yankee neighbours, cute though they be, have much to learn, and not a little to unlearn, in this respect, and it would be well for that people if their taxation were laid on with wisdom equal to that which is shown in that little but great country, of which some among them are so jealous.

MINERAL RESOURCES OF NEW BRUNSWICK

(Continued.)

IRON.

THIS valuable mineral is extensively diffused throughout the Province. In the valley of the Kenebecasis, it occurs in the form of bog ores, at Springfield, in King's Co., it assumes the form of a magnetic ore; yet notwithstanding the abundance of fuel to be found in the rich bituminous shales of the locality, (as described in a preceding paper,) no attempt has yet been made to turn either of these rich deposits to a profitable account. It is, however, at Woodstock in Carleton Co., on the River St. John, and about 150 miles from its mouth, that the most remarkable and extensive beds of iron ore have been discovered. These deposits have been worked at intervals since 1847, about which time a company was formed in St. John for prosecuting the enterprise. As in the case of the Albert mines, this first effort was unsuccessful, and the property ultimately passed into the hands of an English company, by whom the works have been energetically carried on for some years past. The furnaces themselves are situated on the bank of the River St. John—and consist of two blast furnaces with the necessary steam-power—together with kilns for roasting the ore, and for reducing the wood used as fuel to charcoal. The capacity of the works, with both furnaces in operation is stated to be equal to about 5000 tons of iron per annum, consuming in its production 630,000 bushels of charcoal, which at 7c. per bushel, (the price given by the manager of the works as its actual cost) will amount to \$8.2 as the cost of fuel for each ton of iron produced. At Durdogne in France, the cost is \$11 60 per ton and for France generally, the average cost of fuel per ton of iron produced is supposed to be nearly \$15.00. The mine from which the ore is obtained is situated about three miles from the works. Professor Hind, who visited the spot in 1861, describes the ores as being "vast sedimentary deposits many feet in thickness, varying somewhat in composition, and producing on an average 32 per cent. of metallic iron." This iron is of an extraordinarily good quality, and has hitherto been exported exclusively to England, where it is in demand, both for rolling into plates for armoured vessels and also for conversion into steel. On the River St. John, during the summer season, it is a matter of almost daily occurrence to see a boat laden with pig iron on its way to England, passing another boat similarly laden with pig iron from England on its way to the interior of the Province, so great is the difference between the quality of the common English iron and the product of the Woodstock mines. Geologists have observed that similar deposits of ore extend in an easterly direction nearly across the Province, and it has been found in several places cropping out to the surface in the same way as at Woodstock. Referring to this part of the subject Professor Hind remarks: "It appears clearly established that on the east side of the St. John, there are not less than three undulations which have brought up the red and green slates with their iron ores, and associated beds of limestone. These immense deposits of ore occur in a country possessing an excellent agricultural soil, a splendid forest of birch, beech, spruce, and maple, and limestone in abundance. It will not fail to be noticed that these are elements of local industry belonging to the higher class. * * * Now that this iron has met with so much favour in England, it is not improbable that it may yet be profitable to export the best quality of ore from those beds nearest to the St. John. Under any circumstances it is probable that in a short time the abundance of fuel, either as coal or gas from the highly bituminous shales of Sussex vale, both of which are cheaply procurable in the lower portion of the river, will render the construction of gas furnaces for obtaining iron of a very superior quality, a matter of pecuniary advantage and provincial importance." In another part of his Report the Professor says: "There is ore and