terior with the great arteries. It is for this work that the Manchester manufacturers now require government aid. What they ask is, that the Government shall continue the policy of State aid to the railroads through the undeveloped cotton districts, the same as was given to the main lines. The Government is asked to guarantee the payment of five per cent. interest upon the capital advanced by private parties. Upon these terms all the money required will be duly forthcoming. The roads projected are: A railroad from Kharwar into the southern districts of the Mahratta: a line from Ahmedabad to Verumgoon: a road communicating between the Punjaub and Kurrachee, through the Valley of the Indus; and, finally, a railroad from Trichenopoly to Juticareen, with a branch line to Tinnevelly.

A glance at the map shows that these railroads traverse the richest cotton districts in India. Their construction will undoubtedly have an important influence in developing the supply of cotton which will be almost immediately doubled or trebled. But there is also another object. Only a very small proportion of Indian cotton finds its way to a market on the sea coast. The bulk is retained for native manufacture into the coarse cotton goods worn by the people. It is calculated that, with increased facilities, the high-priced and coarser native manufactures can be run out of the market by the cheaper and better products of Manchester looms. Lancashire, in fact, wants all the cotton of India, and in return will supply it and the rest of the world with manufactured goods.

There is very little doubt that, for the reasons already given, the English Government will lend its powerful aid in support of this policy. Already government engineers have been sent to survey some of the projected lines, and Lord Mayo, the new Governor-General of India, is co-operating in the work Within five years, at the farthest, these proposed lines of railroad will have been completed, and then an almost indefinite source of cotton supply will be open.

We anticipate that, in any contingency, American cotton-producers will always be able to hold their own in competition with the world. They possess many advantages of soil and climate. The demand for cotton is steadily increasing, and the probabilities are that it will always more than keep ahead of the supply. By the time of the completion of the new Indian ines of railroad, the increased consumption of cotton may more than absorb the increased supply from that quarter. But however this may be, the spectacle of the cordial co-operation of the English Government and capitalists should not be lost upon the American people. Anything that State and Federal legislation may effect in the way of encouraging capital and labour in the Southern States should not be wanting. The cotton trade is a matter of national importance, and its prosperity should be stimulated by all the appliances of legislation in co-operation with private enterprise and capital.—*New York Dry Goods Reporter.*

PROGRESS ON LAKE SUPERIOR.

The following letter to the Ottawa *Times*, written from Fort William, Lake Superior, is of very general nterest:—

"Sir.—This region has long been represented as rich in minerals, and has been allowed to remain in the peaceable possession of the Hudson's Bay Company and the native red skin, but is now beginning to show its importance.

"A few miles from Fort William, and near the terminus of the Red River Road, the Thunder Bay Mining Company (a Montreal company) have about completed an extensive crushing mill, and a saw mill in connection with it. Their mine continues to produce a rich show of metal.

"The American Company, of which so much was said a year or two ago, has apparently turned out a Yankee fizzle, at least as far as working the mine is concerned. I am told that one man is all the force they have had on the work for the last twelve months.

"The old Montreal Mining Company, with which so much fault has been found by the grumbling political party of the country, are again in the field, and not only surveying the outline of their locations, but actually subdividing them into sections of one mile square. They are also developing several mines, some two or three of which are turning out exceedingly rich in silver. They have also Thomas McFarlane, Esq., an eminent geologist and mining engineer, making a careful geological survey of their property after the surveys had been made, and I am informed provisions are being made for extensive operations at once.

"There are a number of parties exploring for silver mines, and, I believe, several new sections are being taken up.

"The Ontario Government, not to be outdone by the Montreal Mining Company, have two extensive surveys in operation in this region. This looks as if they meant business, and were bound to clear the way for private enterprise.

"Prof. Bell, of the Geological Survey of Canada, is also in this locality, and is to make a geological survey of Lake Neepigon (of which nothing officially is known) and of the Dog Lake region.

"The Dominion Government have S. J. Dawson, Esq., with from two to three hundred men, building the Red River Road, which he expects to complete next season. This looks like opening up the North-west in earnest.

"A number of ladies and sweethearts can be seen every day and evening strolling along the banks of the Kaministiqua, pulling wild roses and fanning off the flies, accompanied by a few gentlemen and about a dozen litt'e girls and boys."

"H. W."

MANUFACTURE AND EXPORT OF CANADIAN PETROLEUM FOR FOREIGN MARKETS.

We have at various times called the attention of our readers to the valuable crude petroleum developments at Petrolea, in the County of Lambton, and to the refining industry now carried on at London, Hamilton, Petrolea and Wyoming for the home and foreign markets. It is gratifying, however, for us now to be able to announce that the business, no longer one of doubt or speculation, has settled down as a regular industry, and one that bids fair to afford very lucrative returns to those engaged either in pumping crude oil or refining the article for daily use. Crude oil in large quantities, was first discovered at Oil Springs, in Lambton, in 1861 and 1862, the result of the patient investigations of Mr. Williams, now the Hamilton member for the Ontario Legislature, and large flowing wells were tapped, which yielded enormously; but of a sudden, to use a trade term, "played out." Then, in 1864, fresh oil fields were discovered at a spot now the village of Petrolea, and a few small wells were pumped there with indifferent success. In 1865–66 Bothwell attracted the attention of oil men, and during these years about 300 wells were put down in that locality principally by American adventurers, but the yield of most of the wells was small and uncertain, and on the fall in prices the cost of operating them proved too great, and the place as an oil producing territory, collapsed. In the winter of 1866, Capt. King operating at Petrolea for a Company of Canadians at St. Catharines, struck a large well known as the "King well" at Petrolea, and which for many weeks flowed at the rate of 400 brls a day. Attention was immediately drawn to the spot, about two miles from the eastern limits of Petrolea village, and in 1867-68, and this year. some 200 new wells were struck, some proving brilliant successes, while others turned out equally great failures. On the whole, however, the new oil region first explored by Capt. King has proved of an extraordinary rich character, and during the past 2¼ years about 750,000 brls of crude oil have been procured. A large portion of this oil, about 400,000 brls, is now stored in iron and wooden tanks above ground, and in huge underground tanks sunk in the blue clay which underlies the surface of Enniskillen township. At present the wells produce about 3,000 brls per week, and fresh ones are being constantly sunk with varying success. Such is a brief resume of the history of the crude oil industry of Ontario, and is necessary to be recapitulated here in order properly to explain the subsequent operations of refining, to which we wish principally to draw attention.

We believe it is pretty generally understood that the petroleum of Canada differs greatly from that found in Pennsylvania in several particulars. In consistency it is heavier, being of a gravity as tested by Baume's hydrometer of 30° to 34°, and is of a dark green hue, and has a pungent odor. The American article is of a gravity of from 45° to 57°, and is therefore lighter in specific gravity and contains more volatile properties, such as benzine or benzole, than the Canadian. The Americans, with their usual business energy and commercial acumen, were not slow to turn to profitable account the valuable stores of oil discovered in Pennsylvania, and in addition to supplying the wants of the Union in 1868, exported to foreign countries about 2,600,000 brls of refined oil, in brls and tins. This industry has increased fourfold since 1864, and is now the leading export of the States. Up to the fall of 1868 no Canadian oil had been exported fit to compete with the American sample, owing to the strong pungent smell which clung to it, and which acted as a barrier to the successful sale of the article Last summer, however, several shipments were made, one by Messrs. Spencer & Keenleyside, of London, another by Mr. S. Peters, P.L.L., of London, and a third by Mr. McMillan, of Petrolea, on behalf of an English company. These oils have received a more scientific treatment than the common stuff previously vended to the Canadian trade, and though not coming up to the required standard, still gave evidence of highly creditable progressive efforts in the right direction.

In the winter of 1868 a Mr. Allan, an American, introduced a new method of treating Canadian oil, which improved the article in color, and wonderfully raised its value so far as odor is concerned, removing to a great extent the bad smell, and rendering the samples fit for comparison with the American standard white—a high grade of American oil On this success being established, a company was formed for refining our Canadian oil on a large scale, with works at Petrolea and Hamilton, the members of the firm being Judge Higgins and E. Higgins, of Chicago, Mr. Williams, M.P.P., of Hamilton, Duffield Brothers, of London, Parson Bros., of Toronto, and Mr. Allan. They have erected very large refining works at Hamilton, with a view to foreign shipments, while the distilling process was to be undertaken at Petrolea. A few particulars of these works may be interesting:—At Petrolea, a mammoth still has been erected, at a cost of $14,600, and which is calculated to use up 2,000 brls of crude oil at each charge, and will be run off once a week; the distilled oil is conveyed by tank cars to Hamilton, where the chemical or treating process is carried on, involving the erection of large agitators, cooper's shops, and other conveniences. At Hamilton the oil is finished, inspected and branded and placed on New York Central cars direct for New York for shipment. The large still alluded to has been built by Mr. T. Brown, of our city, and will be in operation in about a week.

Attracted by the prospective profits of the business, another large firm, Messrs. Englehart & Co., of New York, entered the business at London last spring, and are putting up large works here Previous to the comp'etion of their premises, this firm, which has displayed an energy and perseverance rarely to be met with, has already shipped three or four cargoes direct to Germany, having the oil made for them by refiners already in operation. Messrs. Englehart's works are on the Hamilton road (formerly the London City Oil Works), but are being entirely remodelled and greatly added to by the new firm. Two stills of a capacity of 750 brls each (in addition to 6 small stills), a 2,000 brl iron crude tank, large refined oil tanks, settling tanks, and long ranges of barrel sheds are nearly completed, and will soon be in active operation. A store of 6,000 new petroleum brls has been made, and every preparation completed for doing an extended export trade. In the meantime, the oil works of Messrs. H. Waterman & Bro., Duffield Bros., Spencer & Keenlepside, Minhinnick & Co., S. Peters and other minor works here are all in full blast making refined oil for Messrs. Englehart & Co , who are prepared to handle any amount that may be forthcoming. When their arrangements are all complete, by the end of the summer, 8 000 brls a month will be refined and shipped from London alone, in addition to the Hamilton turn-out, which it is expected will amount to 5,000 or 6,000 brls a month more.

The attention of refiners to the great question of a proper chemical treatment of the oil has set many heads at work, and Mr. Spencer and Mr. Minhinnick have succeeded in improving upon the Allan treatment, and an oil of brilliant color and free from objectionable odor can now be insured. It is claimed by a Mr. Lambe, of England, that the new treatment is similar to that patented by him in England and Canada; but, however that may be, the important fact is established that our Canadian crude, hitherto of little value, is daily being converted into an article that favorably compares with, and will eventually rival, the American oil. When we say rival, we mean in one particular—the very important one of a sure fire-test. Canadian oil is practically non-explosive, which cannot be said of a good deal of American manufacture, and it is merely a question of time when Canadian brands will be purchased for shipment to hot climates like Cuba, India, South America, and other places within the tropics. As yet, the export trade is but in its infancy; but, thanks to the firms already alluded to, its further development is assured. It is a matter of satisfaction to record that, while last year Canadian crude went begging at 30c. to 35c. per barrel, the price is now $1.25, with the prospect of an advance when the foreign market shall have been thoroughly opened. In addition to the operations of the two leading American companies referred to, the well-known firm of Waterman & Bro., are doubling their works with a view to manufacture for the foreign market, and everywhere activity to the same end is displayed.

This new development of manufacturing industry is giving employment to thousands of men. Apart from the boring of new wells and the pumping of crude—sustaining the village of Petrolea, with about 1,500 souls—large numbers of boiler-makers, blacksmiths, carpentors, bricklayers, refiners, barrel-makers teamsters and laborers find remunerative employment. All the coopers are hard driven, but are unable to turn out the quantity of brls immediately demanded, and an importation of 10,000 new barrels by Messrs. Englehart & Co., is now going on in order to provide receptacles for their oil. Once fairly set a-going, the foreign trade will develope and increase, and the time is at hand when the oil business will be the leading industry of London, if it is not so already. American capitalists have taken the lead in this enterprise, and while Canadian men of business are content to invest their surplus means in stocks and mortgages, they allow Americans, as in the lumber business, to come over here and lead the development of the resources of the country. We wish them every success in their honorable venture; they are taking our hitherto valueless oil and turning it into a marketable article, and showing Canadians how slow they are to take advantage of the wealth which lies at their doors. We observe that a sale of 10,000 brls of Canadian refined oil was made in New York at about 1½c. per gallon below that of the best American standard, and insuring a remunerative profit. As we have before stated, we believe the time is not far distant when our oils, hitherto scoffed at and abused by interested brokers and dealers in American oil in New York and elsewhere, will now assert its superiority, and claim to rank A No. 1, with any that can be made across the lines.—*London Free Press.*

THE COTTON TRADE ABROAD.

The London *Shipping List* gives the following account of the cotton trade abroad:—

The cotton trade is still in a very peculiar position. The struggle between Liverpool and Manchester, which has been going on for so long a time, has resulted in the partial defeat of the latter. The position of the raw material is statistically strong, while stocks of cotton goods throughout the world have been greatly reduced, in consequence of the restricted exports from this country. Holders of raw cotton have been further favoured by the fact that money has continued cheap, which has given them a considerable advantage in the contest with the spinners. There is very little doubt, however, that the latter have pursued the right policy in limiting their purchases to the utmost extent, and they may not have cause to regret having done so. The restricted consumption which has been going on has imparted a healthy tone to both the Liverpool and Manchester markets, and more activity may be anticipated in both, until, at least, present wants have been supplied. The immediate cause of the return of activity is the condition of the Eastern markets, which must by this time be pretty well bare of goods. The shipments to India, as we have frequently p inted out, have been on an unusually small scale for some time past, and altogether out of proportion to the requirements of so large a population. On the other hand, the exports to China have been greatly on the increase. These, however, have been rapidly absorbed, especially so far as the Northern ports are concerned—a fact which goes far to prove that we are yet unaware of the great