

amount of 156,000 tons, but, on the other hand, the quantity of coal raised was considerably in advance of the output of the previous year, although prices had been low in consequence of the severe depression which had prevailed in the iron and steel trades in Europe and America. Since the beginning of 1905, however, a marked improvement has set in, prices have advanced and consumption has increased. The same story is revealed in the report of the Dominion Coal Company, which, moreover, records a considerable falling off in business with United States customers in 1904, owing to the reimposition of the coal duties. There was also a loss of profit due to the payment of duty on shipments to the New England Gas and Coke Company.

"The history of the Dominion Coal Company is instructive to all who are watching the development of Canadian industries. Formed in 1893, there was, in the first year of working a total profit of over \$300,000. Last year—that is, after about ten years' work—the net proceeds of sales of coal and income from other sources amounted to \$1,620,475 which represents a very satisfactory development in so short a time, especially in view of the fact that all has not been by any means plain sailing, and the company has had more than one set-back of considerable importance. Of these mention may be made of the disastrous fire which broke out in 1903 in Dominion No. 1 Colliery, to extinguish which the waters of the Atlantic had to be admitted and the workings flooded. Pumping operations extending over a whole year were necessary to pump out the mine. The experiment tried in 1902 of leasing the concern to the Dominion Iron and Steel Company turned out to be of somewhat doubtful advantage, and a new agreement has now been entered into whereby the Coal Company undertakes to supply the Iron and Steel Company with fuel under more favorable conditions than those fixed by the leasing agreement, whereby it was possible for the Steel Company to call for an unlimited supply of coal at times when prices were barely remunerative.

"The most noteworthy feature of the report, however, is the result of the investigation which has been made of the company's property and prospects by Messrs. Emerson Bainbridge and George Blake Walker. These gentlemen, after an exhaustive examination of the Dominion Coal Company's properties in Cape Breton, find that:—

"1. The company possesses a combination of properties of great and unique value, with special advantageous conditions: (a) An immense proved and working coalfield, with enormous reserve areas, which will be worked by future generations; (b) a very large capacity of output; (c) thick seams of good quality at moderate depths; (d) the possession of shipping wharves at the chief markets; (e) the control of a private railway, enabling it to give prompt despatch to its shipments.

"2. The favorable conditions of working, coupled with the fact that the Cape Breton coalfield has a practical monopoly of the St. Lawrence market, and (unless barred by future legislation) can face any competition in the New England ports, are of great value. "The collieries, under present management, should yield profitable returns, and we do not believe that any existing coal company enjoys advantages so favourable."

"3. The present collieries with the suggested extensions have a capacity for output which are estimated at 4,000,000 tons per annum.

"Another important feature is the labour question. A three years' agreement has been made between the company and its employees, having in view the improvement of mining operations and an equitable adjustment of wages, in order

that the company may be in a position to enter into long-term contracts if necessary.

"On the whole, therefore, there is very good reason to hope for a speedy return on the \$15,000,000 of the common stock of this company, which has received no dividend for some time past.

"The coal and iron fields of Nova Scotia, although they have hitherto been rather disappointing to the investor, are too valuable a property to remain in their present position. New markets are opening up with the growth of population in Canada, and over the vast area of lands, which, with the extension of railways, are destined for speedy settlement, the internal demands alone should be sufficient to ensure prosperity for those mines which are taking care to maintain efficiency and economic working.

A NEW TYPE FOR COAL BOATS.

The Dominion Coal Company, in furtherance of its intention to obtain a share of the Ontario market, is having a boat built in Toronto of a type which will obviate the necessity of the ocean coal boats tying to a wharf before being able to load river craft.

The type is known as a "Tubular" steamer, and will load from the larger boats in mid-stream. Belt conveyors are to be utilized for unloading and loading, and will have a capacity of 400 tons per hour. The smaller coal boats have a capacity of 2,000 to 3,000 tons, and will be able to discharge in ten hours' time; the larger boats, those having a capacity of 10,000 tons, will operate four sets of conveyors, making the unloading time no longer than for the smaller boats. It is figured that by these new boats the cost of carrying coal to Toronto will be cut to \$1.10 per ton, all charges included. As the cost of American coal delivered at Toronto averages \$3.35, it is figured that the margin of \$2.25 will permit of successful competition with United States coal.

The new boat is to be launched about the first of June, and she will have a long enough season this year to demonstrate the possibility or otherwise of securing the Ontario soft coal market, which is figured at 2,000,000 tons per year.

PRODUCTION OF PIG IRON IN THE UNITED STATES.

The active capacity of the furnaces producing pig iron in the United States during January was 377,879 tons, or at the rate of 20,000,000 per annum. These figures are startling in the revelations they make of current consumption. In addition to the monthly output of over 1,600,000 tons, stocks are declining at the rate of 100,000 to 120,000 tons a month. The consumption is chiefly by the steel companies, whose orders for rails and structural steel are very heavy. Using this trade as a barometer, the press is uniformly optimistic about the summer of 1905.

STEEL BRIDGE SPANNING THE ST. LAWRENCE.

A steel bridge now under construction over the St. Lawrence river at Quebec is a remarkable structure. The weight of this bridge will be about 25,000 tons. Its span of 1,800 feet crosses the entire St. Lawrence river at such a height as not to interfere with navigation, and will be the longest in the world, the Forth bridge in Scotland being 1,710 feet long, the Brooklyn bridge 1,680 feet, and the new East river bridge in New York 1,600 feet. There have been manufactured by the Phoenix Bridge Company, Phoenixville, Pa., to date, and partly shipped to the site of the bridge, about 10,000 tons of steel. It will take about two more years to complete the structure. The masonry piers are entirely finished, and the temporary false works, of steel, are now in place on the south shore, upon which erection will begin at the opening of spring of this year. The 1,800 feet of steel bridge work between the piers will be effected without any false work in the river. The bridge is to be 80 feet wide over all, carrying a double-track railroad, a double-track trolley and highway, and two sidewalks. Many novel features have been adopted in the design and manufacture of this bridge. The total length of the bridge will be 3,300 feet; length of channel span, 1,800 feet; ship clear headway, 150 feet above highest tide; height of cantilever towers 850 feet above the river. The Phoenix Bridge Company are the contractors for the superstructure.