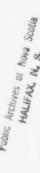
Vertical File V.126 # 19



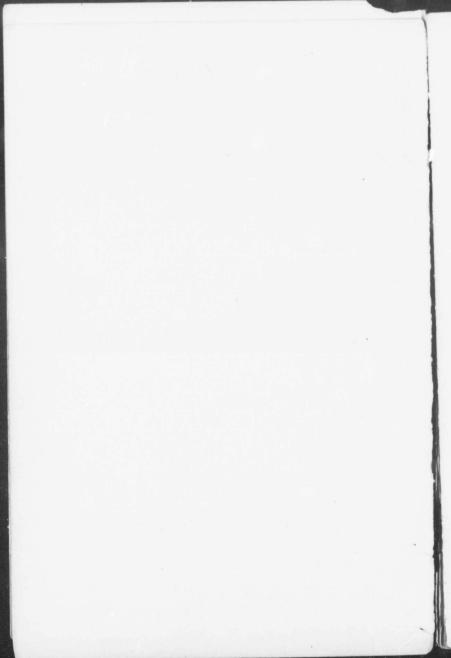


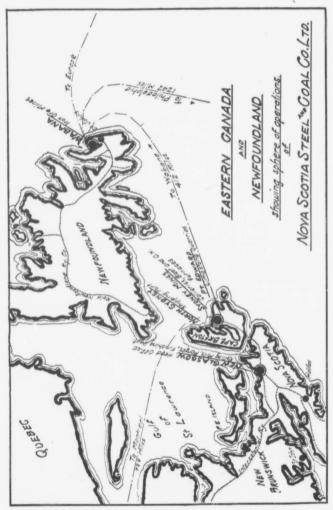
SCOTIA





How Canada's Pioneer Steel Corporation was evolved from a country forge.







MR. ROBERT F. HARRIS, K.C.
PRESIDENT OF THE NOVA SCOTIA STEEL AND COAL COMPANY. LIMITED.

THE NOVA SCOTIA STEEL & COAL COMPANY,

LIMITED



ROUND the growth of the Nova Scotia Steel and Coal Company and its parent organizations is woven in a large measure, the history of the Canadian coal and steel trades. Forty years ago a country forge, today the highest dividend paying steel or coal corporation in America, with business activities embracing two continents; such in brief, is "Scotia's" record.

Merged in it are the companies which mined the first coal and smelted the first steel in Canada, and first in the field, it has ever continued in the van of progress, having introduced and developed very many of the most important advances and improvements in these trades, not only in Canada, but on the American continent. Progress and activity combined with conservative forethought, has ever been the keynote in the development of the company, and its reward has been reaped in a striking record of continuous solid expansion and increased earning power.

Basing all its operations on the two elements essential to all modern industrial progress, possessing unlimited stores of raw materials and controlling every stage in the manufacture of the most highly finished steel, "Scotia" is in an unrivalled economic position, being ever assured of a market for all its products by the continued growth and progress of Canada and the tidewater location of all its works, with consequent low freights to all the world's

markets.

When the Hope Iron Works started in 1872 with four thousand dollars capital and ten employees, it was an important step for the little village of New Glasgow, but the most vivid imagination could not have forseen that in 1912 this wayside forge would have grown into a corporation with fourteen millions of dollars capital, six thousand persons on its payrolls, operating on land and sea and under land and sea, owning its own iron ore and coal mines, blast furnaces, steel works, rolling mills, forges, steel finishing shops, and annually freighting over one million tons of ore and coal to two continents under its own house flag.

But withal, the growth was solid and substantial and always progressive. The company's advance was on the whole, continuous and careful, but when convinced that a striking step was necessary it never hesitated, and consequently can claim at least to have done its share in the industrial development of Canada. Not only was it the first to mine coal in a commercial way in Canada, but it was the first company in America to win coal from submarine workings. It produced the first Siemens-Martin steel and the first basic steel made in Canada. It was the first Canadian company to establish a cogging mill and roll an ingot into billets, it was the first company in Canada, and possibly in America, to wash coal in a commercial way, or to build and operate retort coke ovens. It was the first Canadian company to convert native ores into steel bars and forgings, or to make steel railway axles. To it is due the development of the now widely known Wabana ores, for it was the first to mine them, the first to smelt them, the first to introduce and export them to the markets of Europe and America, and it was also the first to win these ores from under the sea. By demonstrating the value of the Wabana ores and almost simultaneously proving that the culm coals of Cape Breton could be washed to remove sulphur and produce satisfactory blast furnace coke, when treated in retort ovens, it laid the foundations on which has been reared the entire steel industry of Eastern Canada.

It has continued this career of achievement down to the present time by this year installing the first steam hydraulic forging plant and the first fluid steel compression plant erected in Canada, and backed by such a record "Scotia's" claim of leadership in its particular fields can scarcely be questioned.

For many years it was the only self-contained Canadian steel company, and there are very few companies anywhere that enjoy this distinction. It began by manufacturing forgings and other articles of iron and steel for which there was a market and gradually worked backwards until it controlled every stage in the production of its raw material, and to a very considerable degree its success is due to this varied range of operations. With three separate businesses—mining iron ore, mining coal, and manufacturing iron, steel and their various finished products—it has weathered the periodical cycles of financial depression with the minimum of inconvenience.

It was inevitable that this record of progressive and efficient management should have its material reward, and this is found in "Scotia's" securities yielding a larger return and selling higher in the markets than those of any similar company in Canada. There are three centres where the company's operations are principally conducted, Wabana, Newfoundland, where it mines iron ore; Sydney Mines, Cape Breton, where it operates five collieries, 150 coke ovens, a blast furnace, four open-hearth furnaces and extensive repair shops; and New Glasgow, Nova Scotia, where are located the head offices, together with the rolling mills, forges and manufacturing departments. Subsidiary lumbering operations are carried on at Gander Bay, Newfoundland; and Bridgeville, Nova Scotia; while the fluxes for its iron and steel furnaces are secured from limestone quarries at Point Edward, Cape Breton. Each plant is exceptionally well located for its particular work and all blend into one organization which has won for itself a very high reputation for efficiency and service.



TIPPLES AND ORE POCKETS, WABANA.



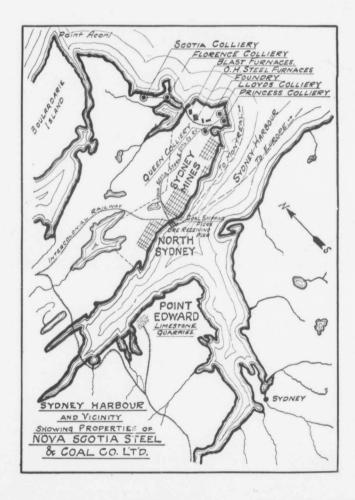
MR. THOMAS CANTLEY,
SECOND VICE-PRESIDENT AND GENERAL MANAGER.

GROWTH AND DEVELOPMENT.

Twas an augury of "Scotia's" future that its parent company started by turning out an article then in wide use, but of a design far superior to anything produced elsewhere. Shipping was then Nova Scotia's chief industry, and in the construction of the wooden craft that in those days made Nova Scotia known in all the ports of the world many small forgings were required. Chief of these were the iron "knees" used to fasten the frames to the deck stringers. The general custom was to use two pieces of iron and weld them, but the men back of the new forge company had a better plan. They evolved a knee forged in one piece, a solid throat as it was called and far stronger than any hitherto manufactured, and from its inception, the new company prospered accordingly. Gradually the business expanded, the manufacture of railway car axles from forged scrap iron being next undertaken, also railway track spikes made from imported iron rods.

Within six years, the original site in the town limits of New Glasgow, between the Intercolonial Railway and the East River, became too small, so the company was reorganized as the Nova Scotia Forge Company, and built a new plant at a point two miles down the East River, now Trenton, or North New Glasgow. In 1882 it was decided to cease importing steel and manufacture it locally. Accordingly the proprietors of the Forge Company organized another corporation called the Nova Scotia Steel Company, which erected works to make steel from imported pig iron and scrap steel by the Siemens-Martin open-hearth process, and in 1883 produced the first steel ingots made in Canada, installing the first cogging mill in Canada in the same year, several finishing mills being added shortly. In 1889 the two companies amalgamated under the name of the Nova Scotia Steel and Forge Company, the capital than being \$392,000.

By this time the company was turning out a large variety of bars and forgings made from its own steel by its own mills and hammers, but still it was dependent on outside sources for the pig iron for its open-hearth plant. This difficulty was practically solved when in 1891 some of the directors of the company, and others associated with them, organized the New Glasgow Iron, Coal and Railway Company, with a capital of \$1,000,000, purchased extensive ironore lands on the East River of Pictou and elsewhere, built a line of railway from Ferrona Junction, on the Intercolonial, to Sunny Brae,



and also built a large coal-washing plant, retort coke ovens and a blast furnace with Massick-Crooke hot blast stoves at Ferrona, seven miles from New Glasgow. The blast furnace was "blown-in" in 1892, and at the time was one of the most efficient in existence. Two years later this company acquired the Wabana iron deposits, destined to play such an important part in its affairs and those of its successors.

The next step was, logically, the amalgamation of the New Glasgow Coal, Iron and Railway Company and the Nova Scotia Steel and Forge Company, which occurred in 1895, the old name of the Nova Scotia Steel Company being resumed and the capital brought up to \$2,060,000. The new company made rapid strides in the next few years, adding many important lines to its finished products and installing new machinery, but one important step had yet to be taken before it reached the point where it was completely self-contained—to procure its own coal supply. This was accomplished in 1900, when the properties of the General Mining Association at Sydney Mines, Cape Breton, were purchased, securing an unlimited supply of the best metallurgical coal. This called for another and the last change in the company's identity, the present Nova Scotia Steel and Coal Company being organized in 1901, with a capital of \$6,600,000.

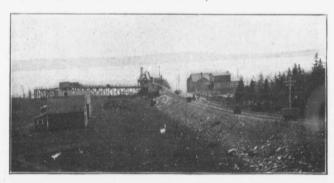
In the next few years there followed the transfer of the Ferrona operations to Sydney Mines, which, in addition to being the site of the collieries, possesses much greater facilities for assembling all the material entering into pig-iron and steel. The larger and greatly improved plants installed there have gradually replaced the original blast furnace at Ferrona and the open-hearth steel furnaces at New Glasgow. The development since has been extremely rapid. company has forged to the front until now it is one of the most important maufacturing concerns in Canada, and so efficiently has it been conducted that for several years its securities have yielded a larger return than those of any similar company in America. confidence with which the financial and investing public, both in Canada and Europe, regard its operations is shown by the fact that whenever additional capital was required in the past six or seven years it was obtained on better terms than any other similar Canadian company was able to secure in the same period, the total capital investment up to this year being fourteen millions of dollars.

•

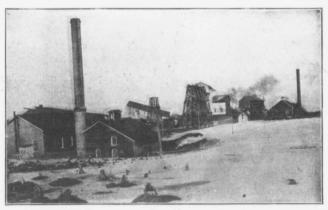
THE WABANA IRON MINES.

ITH an unequalled geographical position, commanding the markets of both the European and American continents and a deposit of hundreds of millions of tons of high grade ore, practically at tide water, the Wabana iron mines, on the eastern coast of Newfoundland, are probably the best known of all "Scotia's" varied operations. One of the chief achievements in the company's long record of progress has been the development of these deposits and they have proved one of its most profitable investments.

Bell Island, twelve miles in area, in Conception Bay, is the site of these operations. Outcropping on the island are six seams of red hematite ore, three of which only are economically important at present. All outcrop on the northern side of the island and extensive prospecting has shown that the land ore is but the outer segment of a great elliptical basin lying far under the sea. During the last seven years, these under-sea deposits have been opened up by slopes driven from the land workings, and as a result the company now finds itself possessed of ore deposits which at the most conservative calculations of eminent mineral authorities are sufficient to supply three times its present requirements for centuries, although but a very small portion of the areas have been opened.



TRAMWAYS AND TIPPLES, WABANA.



ENGINE HOUSE AND DECKHEAD, SUBMARINE MINE, WABANA.

In quality, the ore is a non bessemer red hematite, containing 48 to 58 per cent. metallic iron, 8 to 13 per cent. silica and 0.7 to 0.9 per cent. phosphorous. The three seams worked, the lower, upper and little upper seams, have a thickness on land of twelve, eight and four feet respectively, increasing somewhat as they are followed into the submarine workings. Development of the property was begun very shortly after its acquisition by the New Glasgow Coal, Iron and Railway Company in 1893. The south side of the island offering



STOCKPILE AND DECKHEAD, WABANA.

deep water and good shelter, a pier was constructed there, and an endless rope tramway built to the ore beds. The ore was extracted by open cutting, and on Christmas Day, 1895, the first cargo was shipped. At first it was used only in the company's blast furnace at Ferrona, but was soon introduced to the markets of the world, sales being made to American, British and Continental furnacemen.

In 1899 the lower bed, which hitherto had been the only one worked, three submarine areas adjoining the shore, and all the equipment were sold to the then recently organized Dominion Iron and Steel Company, and the 'Scotia" Company began to open the "upper" or "Scotia" bed, which they reserved because it contained the highest grade of ore found on the island, its analyses showing 53 to 56 per cent. iron and less than 1 per cent. of phosphorus. Not until 1902 was actual mining begun, all the ore having previously been quarried. In that year two slopes were sunk about half a mile apart, equipped to produce 2,000 tons daily, and have since supplied the greater part of the output.

Even in the earliest days the possibility of the deposits extending under the sea was considered. "Scotia" began acquiring its present submarine areas in 1900, and gradually increased its holdings until they now total 83½ square miles. An agreement having been reached whereby the Company was enabled to drive through the intervening areas to reach its own outlying property, two slopes were commenced in May, 1905, and two years later the "Scotia" submarine areas were reached. These slopes have now (July, 1912), reached a point 7,100 feet from the north shore of the island, and the results show that the bold policy of driving these long tunnels has been more than amply justified, the ore seams in the submarine areas being much thicker and considerably richer than on land.

A very extensive and complete equipment has been installed to operate these areas. The most powerful set of winding engines in British North America haul the specially designed steel-bottom dump cars in which the ore is transported to the surface. A new type of deckhead, in which the ore is handled automatically at a great saving over old methods, has been erected, containing a very complete set of crushers, picking-belts and conveyors. Haulage on the underground levels is by side dump cars, operated by small electric locomotives, the ore being dumped into large storage bins over the hoisting slopes. From the mines to the shipping pier the ore is transported by a double track tramway using over seven miles of cable.

The loading equipment consists of two piers, on which bucket conveyors operate. Each conveyor is fed by a separate storage pocket constructed in a natural gulch in the precipitous cliff, the bottom of which is two hundred feet below the dumping trestles on to which the tram cars run. By taking advantage of nature's handiwork a cystem was secured at a comparatively small cost which enables steamers of 13,000 tons capacity to be fully loaded in three hours. An electrical plant adjoining the shippinig pier supplies power for ventilating, unwatering and lighting the mine.



LOADING PIER SHOWING CONVEYORS, WABANA.

THE COLLIERIES.

ONTAINING, it is estimated, over 2,500,000,000 tons, the Cape Breton coal areas of the "Scotia" Company rank high in their list of assets, and are among the most important holdings in Canada. When the General Mining Association secured the Duke of York's grant of all the minerals and inaugurated systematic coal mining in Nova Scotia, it commenced operations in the Sydney Mines district on account of the excellence of this coal. During the 80 years of that association's history, it worked nearly every district now operated in the Province, but when absorbed by the present owners it held only the areas first mined, having retained these in preference to all others because of the superiority of the coal. For steam, metallurgical and general purposes it is regarded as the best in Nova Scotia, being the purest and having a very high calorific power.

Four different blocks of coal areas are held by the company, the Sydney Mines land, Sydney Mines submarine, Boulardarie land and the outer submarine areas. The first three areas run continuously from the north side of Sydney harbor to the south side of the Great Bras d'Or, some 10 miles, while the outer submarine areas extend from Cape Dauphin to Cape Percy, covering the entire Cape Breton coalfield, and within their area of 71 square miles are supposed to contain every seam which exists in this district, by far the

most important and extensive in Canada.

A comparatively small portion of these areas has been worked in the 90 years that mining has been carried on here, operations having been confined almost entirely to the southern part of the Sydney Mines land and submarine areas. Collieries have been opened in the central portion of that district only within the last two or three years, while as yet not a pound of coal has been taken from the northern side or from the Boulardarie or the outer submarine fields.

The thickness of the coal operated in by the various mines runs from 5 feet to 6½ feet, the dip being uniformly about 8 per cent. The coal is largely mined by the room and pillar system in all the collieries, but several different systems of mining, pumping, haulage and ventilation exist in different mines to meet varying conditions. Nos. 1 and 3 mines are equipped to produce 1,000 tons per day, the remaining three collieries' output varying from 500 to 600 tons.

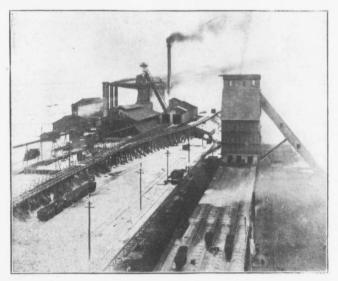
The General Mining Association, of London, was organized in 1825 to operate the coal deposits of Nova Scotia, of which a lease had been secured from the Duke of York, to whom they had been granted by his brother, George IV. The first pit was sunk at Sydney Mines about 1830. Operations were also carried on at the Albion Mines, in Pictou County, and in other parts of the Province. Agitation later developed against the monopoly enjoyed by this company, and for many years the "Duke of York's Lease" was one of the chief political questions of the Province, being finally settled by the Government of Nova Scotia arranging with the General Mining Association whereby its operations were confined to certain portions of Cape Breton, Pictou and Cumberland counties. For many years the company was the most important in the Province, and contributed in a very marked degree to the very successful development of the Nova Scotia coal mining industry.

Since "Scotia" took over these properties a tremendous amount of development has taken place at Sydney Mines. Where in 1900 one colliery was in operation, with an annual output of 240,000 tons, to-day five well-equipped mines are producing about 900,000 tons, and there is a modern steel plant with a blast furnace and open-hearth steel capacity of about 100,000 tons per year,

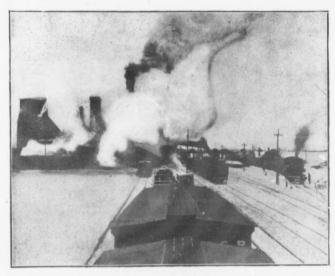


"SCOTIA'S" COAL AND ORE PIERS AT NORTH SYDNEY. VIEW FROM LAND,

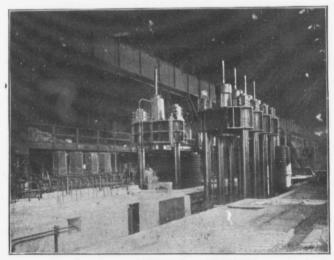
equipped with all the necessary coke ovens, coal washers and engineering shops. The railway system has been practically rebuilt and greatly extended, while at the shipping port of North Sydney, three miles only from the collieries and steel works, extensive docks, with the most modern facilities for coal shipping and ore receiving, have been constructed. This development has given new life to the sister towns of Sydney Mines, and North Sydney, and they have developed into one of the most important industrial centres of the Maritime Irrovinces.



COKE OVENS AND BLAST FURNACE, SYDNEY MINES.



PRINCESS PIT, SYDNEY MINES.



FLUID STEEL COMPRESSION PLANT, SYDNEY MINES.

METALLURGICAL PLANT.

LL the raw material for the New Glasgow mills and forges is supplied by the Sydney Mines steel plant, one of the most efficient and modern in Canada. Its construction was commenced in 1902 and completed three years later, and now it has replaced the original metallurgical works

in Pictou County.

The iron ore is reduced in a blast furnace with a capacity of 300 tons daily. This furnace is 80 feet high, 12 feet 6 inches diameter at stock line, 18 feet 10 inches at bosh and 13 feet at hearth, and has nine tuyeres, its equipment includes four Cowperair-heating stoves, each 85 feet high and 12 feet in diameter, and two compound blowing engines of the Southwark latest type, with air cylinders 72 in. diameter and 60 inch stroke, which are supplied with steam by Sterling water-tube boilers. These are fired by the furnace gases, which also heat the stoves. The furnace is fed by a skip hoist supplied with coke, ore and limestone from a modern storage bin system, and has a double bell-filling apparatus.

Four batteries of retort ovens, 150 in all, supply coke for the furnace. Thirty ovens, of the Bauer type, are at No. 1 colliery, the

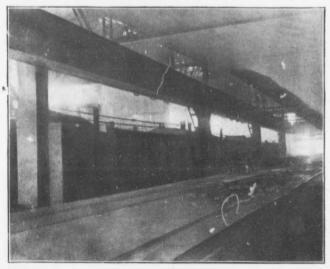
remainder, of the Bernard type, at the furnace.

In the open-hearth steel department are three 50 ton basic furnaces, one tilting hot-metal mixer, with a capacity of 180 tons, all of the Wellman-Seaver-Morgan type, and the hydraulic fluid steel compression plant. The furnaces are ranged in one row, and hot metal direct from the blast furnace may be charged into either side. Sixteen Duff water-sealed producers supply the necessary gas fuel.

The hydraulic fluid steel compression plant, which is the first installed in Canada, is located in line with the ingot casting floor, and consists of one 4,000 ton press, handling ingots up to 30 tons in weight, and a group of four 1,250 ton presses, for compressing ingots up to five tons. Considerable trouble with "pipes" and "blow holes" is ordinarily found, these defects being caused by gases evolved from the metal and which did not escape prior to solidification. Frequently from 10 to 20 per cent. of an ingot must be rejected because of these flaws. The application of hydraulic pressure to the molten metal has been found the best means of overcoming this difficulty, the gases being literally squeez d out of the pasty mass of cooling steel, leaving the interior completely sound.



STEAM HYDRAULIC FORGING PRESS, NEW GLASGOW.



INTERIOR OPEN HEARTH PLANT, SYDNEY MINES.

THE NEW GLASGOW WORKS.



SHIPPING AND MANUFACTURING BUILDINGS, NEW GLASGOW.

T New Glasgow, the home of the industry, are located the rolling mills, forges and other departments, where the great variety of finished steel products for which the company is noted are manufactured. This plant is housed in a group of modern steel and concrete buildings extend-

ing over 25 acres, and the various departments are all equipped with the latest and most modern machinery. To-day it stands unrivalled

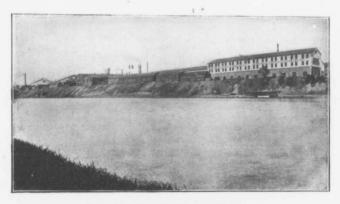
among similar works in the Dominion.

The rolling mills consist of a 28 inch cogging mill on which the steel ingots, weighing 6,600 lbs., are reduced to billets of the various sizes required by the finishing mills, one 20 inch 3 high plate mill, one 18 inch and two 9 inch 3 high bar mills. The spike, rivet, bolt and nut, polished shafting, tie and fish-plate, reeled machinery steel and other finishing departments are located in two steel and concrete buildings, which have over two and a half acres of floor space and are equipped with all the latest machinery. Some idea of the magnitude of the operations carried on here can be gathered from the fact that over seven hundred varieties of bars, plates, etc., are annually turned out from these mills and their attendant finishing departments.

It was by making forgings that Scotia entered the steel industry, and it is fitting and appropriate that the new steam hydraulic forging plant, recently installed, should be the first of the kind adopted in Canada, and perhaps, the most efficient in America. This equipment comprises one 4,000 ton press, handling ingots weighing 30 tons and upwards, and one 600 ton press for smaller work. These presses, built by Breuer-Schumacher, of Kalk, Germany, replace the steam hammers so long used for this purpose, and enable

the company to furnish forgings from fluid compressed steel equal in quality and dimensions to any produced abroad.

The axle shop is one of the most up-to-date departments of the plant, containing, it is claimed, the best railway car axle manufacturing plant extant. This department produces a greater daily and monthly output than any other works in the British Empire, and there are no shops on the European continent with an equal output. There are extensive carpentry, pattern, woodworking, structural and engineering shops as adjuncts to the works, while the shipping and store room, the whole of which is served with a 25 ton travelling crane, is exceedingly efficient, being 850 feet long and 75 feet span. This entire plant has been practically rebuilt in the last two or three years and is conceded to be easily one of the best equipped in Canada.



SOUTH-WEST END, NEW GLASGOW WORKS.

TRAFFIC AND TRANSPORTATION.

ITH its large tonnage of material yearly handled, the transportation problem is one of the most important in the company's organization. In, the wide range of its activities it has to deal with freight handling of all kinds, from the trucking of a load of logs, to shipping over a million tons of coal and ore annually. A fleet of fifteen to twenty steamers, mostly built to the company's specifications and secured on long term charters, are engaged in this trade. Among these are the two largest ocean-going bulk cargo carriers afloat, the "Tellus" and the "Themis," each with a deadweight capacity of over thirteen thousand tons.

There is an extensive railway equipment in connection with the Sydney Mines plant. The main line is eight miles long, and there are upwards of 12 miles of sidings.

At North Sydney are situated the coal loading and ore discharging piers. There are two coal piers, high and low level. The former is 60 feet above high water, is 1,000 feet long, including approaches, and is equipped with bins to hold 5,000 tons. Seven thousand tons have been handled over this pier in six hours. The low level pier is 34 feet above high water and 1,300 feet long, and is used principally for loading small craft and for bunkering. The commanding geographical position and fine harbor of North Sydney together with the high grade of "Sydney" coal and the quick despatch secured, giving the company high rank in the bunkering trade.

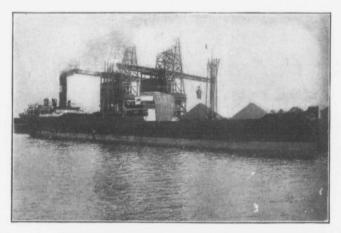
The ore-receiving pier is 42 feet above high water and 1,140 feet long. It is equipped with two Wellman-Seaver-Morgan steam discharging cranes, which have a working load of 20,000 lbs., and a capacity of 5,000 tons per day.

The company also possesses extensive docks at Montreal and Quebec. The Quebec plant consists of two gantry cranes and two smaller hoists, situated on the Louise Basin, which discharge direct into cars or for local delivery without further handling. The plant has a capacity of 3,000 tons per day. The Montreal plant consists of two quick-acting Brown hoists with a capacity of 3,000 tons per day, located on Bickerdike Pier, on the tracks of the Grand Trunk Railway.

Public Archives of Nova Scotia

THE NOVA SCOTIA STEEL AND COAL COMPANY, LIMITED.

To furnish an adequate supply of suitable limestone for the Sydney Mines furnaces, the company has secured a property at Point Edward, within nine miles of the steel works, which is connected with the main line of the Intercolonial Railway by a branch two and a half miles long. This property is about 250 acres in extent. The stone is carboniferous, occurring in layers, is of high grade and very uniform quality. It is operated by a Lidgerwood overhead cableway with two towers, with a radius of 800 feet.



MONTREAL DISCHARGING PLANT AND A SCOTIA COLLIER.

THE DIRECTORATE.

N the last analyses the strength or weakness of any company is due to the calibre of the men who manage its affairs, and "Scotia" has always been exceedingly fortunate in the men who have served on its directorate.
The present board consists of
ROBERT E. HARRIS, K. C., President, Halifax, N. S President Eastern Trust Company. Director of the Acadia Sugar Refining Company, Limited. Trinidad Electric Company, Limited.
HON. JAS. D. McGREGOR, First Vice-President, - New Clasgow, N. S Lieutenant Governor of Nova Scotia and Senior Member of the Firm of J. D. & P. A. McGregor, Shipowners and Lumbermen.
THOMAS CANTLEY, Second Vice-President and General Manager New Glasgow, N. S
J. WALTER ALLISON, Halifax, N. S Director of the Bank of Nova Scotia, Acadia Sugar Refining Co., Limited. Eastern Trust Co., &c.
HON. J. S. PITTS, C. M. G St. John's, Newfoundland Senior Member of the Firm of J. & W. Pitts, Merchants and Shipowners.
JAMES C. McGREGOR, New Glasgow, N. S. Member of the Firm of J. & W. Carmichael & Co., Steamship Owners President of I. Matheson & Co., Limited, Engineers and Foundrymen.
HON. ROBERT JAFFRAY Toronto
Member of the Canadian Senate, Director of the Imperial Bank of Canada, President of the Globe Printing Co., &c.
GEORGE F. McKAY, New Glasgow, N. S. Former Manager of the Nova Scotia Forge Co.
ROBERT E. CHAMBERS, M. E., M. A. I. M. E. &c., &c., New Glasgow, N. S. Ore Mines Manager of the Company.
W. D. ROSS, Toronto, Ont. General Manager Metropolitan Bank.
FRANK ROSS, Quebec, P. Q.
LORNE C. WEBSTER, - Quebec, P. Q. Vice-President Quebec Railway, Light Heat and Power Company.
K. W. BLACKWELL, Vice-President Merchants Bank of Canada, Director Canadian Steel Foundries, Limited.
FRANK STANFIELD, M. L. A., · · · · Truro, N. S.

Mr. R. E. Harris, K. C., the president of the company, is one of the most prominent men in the public life of Eastern Canada. A resident of Halifax and senior member of the legal firm of Harris, Henry, Rogers & Harris, he has served several terms as president of the Nova Scotia Bar Society. He is also president of the Eastern Trust Company, and is a director of the Bank of Nova Scotia, the Acadia Sugar Refining Company, the Trinidad Electric Company, the Demerara Electric Company, The Camaguay Electric Company, and many others. It is, however, as president of "Scotia" that he is best known. His connection with the company began in its early days when he was legal adviser to Mr. John F. Stairs, for many years its president. Mr. Harris early took a seat on the board, and in 1905, after the death of Mr. Stairs, became president.

Mr. Thomas Cantley, second vice-president and General Manager, entered the services of the company in 1885 as sales agent, the capital then being less than \$160,000. Four years later he became assistant manager, He was appointed commercial manager in 1900 and general manager a year later, becoming second vice-president in 1909. Thus he has been in the company in all the important stages of its growth, and its greatest progress has been attained since he

assumed its management.

FINANCIAL AND RESOURCES.

T HE capitalization of the company at the publication of the last annual statement was \$12,990,000, made up as follows:

Capital Stock.		
PreferredOrdinary	\$1,030,000 6,000,000 \$	7,030,000
Bonds.		,,-
Total issue	1,040,000	
Debenture Stock	-	4,960,000 1,000,000
	\$1	2.990.000

Since then the \$1,040,000 of Bonds in the treasury has been sold bringing the figures up to \$14,030,000. Against these obligations the properties owned by the company are carried on the balance-sheet at their cost, \$14,489,286.39, but this amounts represents only the actual sum spent on them and affords no indication of the value obtained from this expenditure, this being particularly true in the case of the iron-ore and coal reserves.

In 1909 the properties of the company were examined by Mr. H. Kilburn Scott, M. I. M. M., London, who made a very exhaustive report thereon. He particularly investigated the mineral reserves, and reported that these were of almost inestimable value. Since then, further development, particularly at Wabana, has enormously increased the proved extent and value of the deposits. Since Mr. Scott examined these deposits, the submarine slopes have been driven a further 2,500 feet. Of this property, Mr. Scott reported: "I estimate the amount of ore that may be mined from the land and near submarine areas" (about one-tenth of the company's entire holdings), "as 104,000,000 tons of mineral practically proved, and 291,525,000 tons of mineral reasonably supposed to exist. No calculations are made in regard to the ore of the outside marine areas as the 'practically proved mineral' is sufficient to furnish several times the present output for over 100 years." The extensive development since then may be considered to have transferred the mineral which Mr. Scott stated could "reasonably be supposed to exist" into "mineral proved," and to have afforded every indication that the seams extend throughout the entire deposit in at least equal richness and greater thickness than

in the developed portions.

Of the coal reserves, Mr. Scott reported: "I estimate the land and inner submarine areas of Sydney Mines and Boulardarie to contain 176,935,600 tons of 'mineral practically proved,' and the submarine areas on the south of Sydney Harbor and in the Lingan and Glace Bay sections to contain 641,001,600 tons of 'mineral reasonably supposed to exist.' The coal in the submarine area north of Sydney Harbor is not estimated, as the quantity of 'practically proved mineral' is so great as to supply double the present output for a very long period."

"In drawing up these estimates I have made ample deductions for loss in working the mineral and other possibilities, and consequently I expect the quantities to be realized. So great, however, is the extent of the deposits that I give figures as approximate and subject to variations incidental to calculations of ore reserves."

It is, of course, difficult to place a value on unworked iron-ore and coal, but a generally accepted figure is 10 cents for iron-ore and 5 cents for coal in the ground. Taking Mr. Scott's report as to quantities, and assuming the value of the ore and coal to be only one-half of the above figures—5 cents for ore and 2½ cents for coal in the ground—it will be seen that the value of the iron-ore contained in the proven portions of the submarine areas would be approximately \$20,000,000, and the value of the coal in the land and inner submarine areas alone would reach a further total of approximately \$4,400,000, while there is still the ore supposed to underlie the outer submarine Wabana areas and the enormous quantities of coal supposed to exist in the outer submarine coal areas of the company, upon which no attempt is made to place a value.

In addition to this, there is the value of the company's extensive mining equipment, furnaces, mills, forges and other varied properties. Its outputs last year in the various departments were:

Iron ore mined	TONS. 521,011
Coal mined	780,468
Coke made	97,580
Limestone and Dolomite quarried	72,237
Pig iron made	
Steel ingots cast	
Steel billets rolled	78,004
Total shipments of finished steel, forgings, etc	69,716

So that it will be readily apparent that in view of its assets and the extent of its business, its present capitalization is extremely moderate and is based on assets manifold more valuable.

Canada's growth is only beginning, but she does not yet supply one-half her own requirements of steel and coal, the importations during 1911 being sixty per cent. of the total consumption. Great as is the demand of the home market now for these essential elements of modern industrial progress, it is bound to increase proportionately with the development of the Dominion, and the strong position of "Scotia" and its exceedingly bright prospects for the future must then reap rewards for its shareholders even greater than in the past.

× .4/20 Bullic Believes of Hour Scotta

