

The Steel Works of Cape Breton

Interesting Contribution on the Great Industrial Activity at Sydney.

FREDERICTON BOY TELLS OF A VISIT TO THE ENTERPRISE.

(Geo. W. Massie in the University Monthly).

During the summer which I spent in Sydney, Cape Breton, through the kindness of a friend the opportunity was afforded me of visiting the plant of the Dominion Iron and Steel Company, and a very interesting and instructing visit it was.

The steel works are situated to the eastward of the town and extend for upwards of a mile along the harbour front. Three piers jut out into the water like immense peninsulas, and these are fitted up with all the mechanical appliances for loading and unloading vessels. The construction of these piers alone cost upwards of three millions of dollars. Immense scoops on swiveling cranes drop down into the hold of a vessel, and closing automatically bring up a load of coal, or whatever the cargo is and drops it into cars. Each of these machines will handle about 1500 tons in two hours.

As we all know from reading any book on "Science of familiar things" there are three ingredients necessary for the manufacture of pig iron, viz: iron ore, dolomite or limestone, and coke.

The ore is brought from Belle Isle in Newfoundland, the dolomite from Marble Mountain on the Bras d'Or lakes and the coke is manufactured at the coke ovens belonging to the same plant.

These articles, as I have said, are unloaded at the pier and carried in cars to the stock yard where it is mixed into the right proportions for the making of pig iron. There are four blast furnaces with a capacity of about 40,000 tons of pig iron per day. The mixture of ore, coke and limestone is carried to the top of the furnaces, a height of about 200 feet in small cars run by electricity, which dump their contents into the furnaces. Every eight hours a cast is made. A hole is driven in the bottom of the furnace, and the molten metal runs out and along channels in the sand into moulds about two feet long. The waste matter or slag is separated and run off into cars to be dumped on the shore. On account of the extreme heat in this place it is impossible for a white man to work, and the labor is all done by genuine Alabama coons. When the cast is run off the hole is filled up with clay, and the iron in the moulds having cooled off are turned out of the sand in the shape of short bars of iron, and known as pigs. Then comes what is probably the most interesting part of all—the manufacture of steel.

Before passing on to this however, I shall allude to the engine house. Here are immense engines, weighing about 25,000 tons, each known as blowing engines which deliver about fifty thousand cubic feet of air per minute, to make a draft for the blast furnaces and the roar of this sounds very much like the roar of the breakers beating on the shore.

Passing on to the Open Hearth and ten more furnaces for the manufacture of steel. Here the pig iron, carbon and other ingredients are put in and melted for ten hours. Immense fifty ton ladles running on cranes are filled with the molten metal and carried to the end of the building, where the metal is poured into large upright moulds or ingots on cars. When the metal has cooled off they are taken along to a small building in which are the stripping machines, a most ingenious contrivance. Two immense tongs descend and lift the mould off the car, while in an instant a huge ram descends, and knocks the ingot of steel out of the mould. Space prevents me from going into the process much farther. The steel ingots are taken to the blooming mill, where they are put under huge rollers and rolled out into plates, which are again put into a chopping machine and cut into short lengths or billets of steel, which are shipped to the different markets of the world.

Everything in the way of labour saving devices abounds, and one cannot help being amazed at the vastness of the ma-

chinery, and the very small number of men employed to handle it. These men however, must be of a superior class of intellect to handle such complicated and costly machinery. What impressed one most strongly perhaps was the number of automatic labor saving devices. The human hand seemed to play an inferior part to the brain, even although the hand was always on the lever. Brute force was replaced by higher intelligence and in mastery of intricate problems of mechanics. Muscular and monotonous labour was superseded by science and a high order of intelligence. The majority of men in the works were head and shoulders above the workmen of the past age, as their needs were greater, their earning power was greater, for the perfecting of the machine increases rather than diminishes the worth of the human brain which controls it.

Extensive additions are being made to these works in the way of mills for the manufacture of steel plate for war vessels, and rails which will find a ready market in this country as well as in the old. We Canadians, especially in the Lower Provinces, should feel proud we have such a flourishing industry in our country, which can compete with the best of the old established steel industries of the United States.

ALCOHOLISM CAN BE CURED.

Rev. Father Quinlivan's Opinion of the New Antidote.

The good points of this new 'discovery for the cure of the liquor habit, in my opinion are the following:—First if taken according to directions, it completely removes all craving for liquor in the short space of three days; its use for a longer time is intended only to build up the system. Second, it leaves no bad after effects, but, on the contrary, aids in every way the health of the patient whilst freeing him from the desire for drink. Third, the patient may use it without interfering with his business or leaving his home. All other liquor cures I have yet heard of are very costly, operate slowly, are doubtful as to effects, and often impair the health and constitution of the patient. I therefore look upon this remedy as a real boon, recommend it heartily to all concerned, and bespeak for it here in Montreal and elsewhere every success.—J. Quinlivan, S. S., pastor of St. Patrick's, Montreal.

Full particulars of this new medicine mailed free to all applicants. Address Mr. Dixon, 81 Wilcocks Street, Toronto, Canada.

DELAGOA BAY NOW BRITISH.

The Hague, Oct. 29.—Germany and England have agreed on the division of south-east Africa, according to a high diplomatic authority, who has furnished the following version of the pact to the Star correspondent: Germany gets the territory from the Zambesi north to the borders of its own colony. England gets everything south of the Zambesi, including Lorenzo Marques, Delagoa Bay and Beira, which will then be the most northerly point in British south east Africa. Portuguese sovereignty will be superseded, but whether Germany and England will buy the region or simply establish a control similar to the Anglo-Egyptian arrangement is uncertain. The purchase plan is regarded as the most likely to be carried out.

TREATY STILL KEPT SECRET.

"This acquisition of Portuguese territory was determined more than three years ago in a treaty between Germany and Great Britain, which contained a secret clause to the effect above described. The facts were withheld at first because Great Britain desired the Portuguese territory to be free from war operations on the part of the Boers, and latterly because Germany is anxious that a more amicable feeling toward England should develop in the fatherland before the people are informed that whatever hope Germany may have of acquiring Lorenzo Marques has been given up."

It is believed the British Government will begin extensive harbour improvements at Lorenzo Marques as soon as its sovereignty has been awarded. The new territory is a very valuable addition to King Edward's South African possessions.

Lorenzo Marques, on the north-west side of Delagoa Bay, has long been the

only Portuguese settlement on the east side of the continent. The British have long desired to possess it. One time a British captain hoisted the British flag on part of the land unoccupied by the Portuguese, but the home authorities refused to uphold his annexation by right of discovery. The Portuguese a few years ago were anxious to sell the bay and offered their rights in it to the British for a few thousand dollars.

The British Foreign Office referred the matter to the arbitration of Marshal MacMahon, then President of France, who promptly awarded the land to the Portuguese. Now it is safe to say that millions will be paid for the district. It is the great port for the Transvaal, and through it the Boers got most of their guns and ammunition during the recent war. Beira is another port of immense value to the British for the development of Mashonaland.

Theodore Roosevelt on "The Presidency."

Before his nomination for the Vice-Presidency Theodore Roosevelt wrote expressly for The Youth's Companion an article on "The Presidency." It will be published in the number for November 6th, this being one of the remaining weekly issues of 1902 sent free from the time of subscription to every new subscriber who at once sends \$1.75 for The Companion's 1903 volume. When this article on "The Presidency" was written no one could have foreseen or dreamed even that its author would so soon be called upon to take up the duties of the great office. For this reason alone what Mr. Roosevelt has to say possesses extraordinary interest, and will be eagerly awaited by persons of all shades of political opinion.

A twenty-eight page Prospectus of the 1903 volume of The Youth's Companion and sample copies of the paper will be sent free to any address.

THE YOUTH'S COMPANION, 144 Berkeley St., Boston, Mass.

Pope Likes Canadians.

Rome, Oct. 30.—The Pope yesterday received Archbishop Bruchesi, of Montreal, in a private audience. The pontiff showed great interest in Canada, and spoke in flattering terms of Premier Laurier.

His holiness said: "If the Canadians love me, I have a special affection for them, of which I have given proofs during the whole of my pontificate, the last being sending an apostolic delegate to strengthen the bonds between Canada and the Papacy."

Lost Hearing Quickly Restored.

No matter whether of long standing or not deafness can be permanently cured by Catarrhazone, which never fails even in the worst cases. The pleasant-scented vapor of Catarrhazone allays inflammation, prevents and cures the catarrhal condition that causes deafness and relieves right away. Thousands have proved the efficiency of Catarrhazone, and with such a valuable remedy within easy reach there is no longer any reason for people to remain deaf. Catarrhazone is recommended also for Coughs, Colds, Catarrh and Bronchitis. Complete outfit, \$1 00; trial size, 25¢. Druggists, or N. C. Polson & Co., Hartford, Conn., U. S., or Kingston, Ont.

Hamilton's Pills Cures Constipation.

"Are you fond of birds?" she asked innocently, as she stood at the piano fumbling with the music "I dearly love them," he replied with never a shadow of suspicion. Then she ran her slender fingers over the keys and began to sing: "O, Would I Were a Bird". A new net will be built in the spring.

The girl is the mother of the woman just as "the boy is the father of the man." The period when the womanly functions begin is one to be carefully watched and considered. Irregularity or derangement at this time may be promptly met and cured by the use of Dr. Pierce's Favorite Prescription. But neglected at this critical period may entail years of future suffering. "Favorite Prescription" acts directly upon the womanly organs giving them perfect vigor and abundant vitality. It removes the obstructions to health and happiness, and delivers womanhood from the cruel bondage of "female weakness."

You pay the postage. Dr. Pierce gives you the book. The People's Common Sense Medical Adviser, 1008 pages, 700 illustrations is sent free on receipt of stamps to defray cost of mailing and customs. Send 31 one-cent stamps for the paper bound book, or 50 stamps for cloth bound. Address Dr. R. V. Pierce, Buffalo, N. Y.

TALES TOLD BY HUNTERS.

Bangor, Me., Oct. 29.—The moose-hunting season is in full swing in New Brunswick, and exciting stories come from that province of encounters with the kings of the forest. Among the parties who met with fighting moose was one composed of W. E. Mason, of the Canada and Western Mortgage company; Drs. J. and George Ryan, of Paris, France, and W. W. Lodge. Mr. Mason is the hero of the party, for it was he who brought down a 1,400-pound moose as the animal was charging upon him.

The party was encamped thirty miles north of Grand Falls, in Victoria county, and early one morning Mr. Mason, accompanied by the guide, while tramping in the woods, came upon an exciting combat between two bull moose. As they stood gazing upon the terrible conflict of the monster suddenly from the rear they heard fearful bellowings, with the pounding of hoofs as of a stampede of wild cattle. Mr. Mason, turning sharply, saw an immense bull moose bearing down upon them, not fifty yards away. The animal carried a magnificent set of antlers, and the ponderous horns swung low to the ground as he came charging on with blood in his eye and rage in every bellow.

Mason had just time to get his Winchester to his shoulder and fire once before the bull was upon them. The bullet struck at the shoulder, and the moose fell. The shoulder blade was shattered, but this seemed only to enrage the bull the more, for in an instant it was up again and rushing upon Mason and the guide. A second shot from Mason's rifle stopped the bull, however, which then turned and fled, and as it ran the guide put in two more shots.

Both hunter and guide followed, the trail being plainly marked by trampled undergrowth and blood-stained leaves. From 9.30 o'clock in the morning until 2.30 in the afternoon the chase was kept up, but without once getting sight of the moose. They found a place where the animal had lain to rest, but here the guide lost his bearings, and it was decided to camp for the night. Next morning the chase was again taken up, the blood-stains were seen no more, but it was evident that the moose was weakening, and finally they came in sight of him, far ahead, and still game, although badly wounded. In the course of an hour they came so close that the guide was able to put in the finishing shot.

When the moose was skinned it was found that he had five bullets in his body. The head is one of the best of the season thus far, the antlers being fifty-five inches across, with thirteen points on one side and twelve on the other. The carcass weighed fourteen hundred pounds.

To Increase Your Appetite.

Nothing will stimulate a keen, healthy relish for food, insure good digestion and perfect assimilation like Ferrozone, which is the most successful tonic and health renewer known to medical science. Ferrozone is a positive cure for Anaemia, Impure blood, Boils, Pimples, Indigestion, Dyspepsia and all Stomach and Bowel troubles. Ferrozone cleanses, strengthens and purifies the blood, it invigorates the heart and nerve, banishes sickness and pain, and makes ailing people well. Try a box or two of Ferrozone, the result will be a surprise. Price 50c. at Druggists, or N. C. Polson & Co., Kingston, Ont. Hamilton's Pills Cure Constipation.

Her Protest.

"Darling," said Edwin, "your eyes are like diamonds, your teeth like pearls, your lips resemble the most glorious rubies, and your hair"— "Edwin," said Angelina sternly, "remember that you work in a jewelry warehouse and that it's disgusting to talk about."

The Usual Kind.

Nodd—What do you mean by saying that my baby is just an ordinary baby? Todd—Why, he is precocious and beautiful and the best that ever lived, isn't he?—Life.

Stomach and Bowel Troubles.

A promptly satisfactory cure for Cramp, Colic, Indigestion, Heartburn, Bilioousness, Sick Stomach and Summer Complaint, is a few drops of Nerviline in sweetened water. Nerviline at once relieves pain and suffering, eradicates the cause of the trouble and cures permanently. Polson's Nerviline is the best general purpose remedy for internal pains known; it acts so quickly that no household should be without it. Buy a 25c. bottle of Nerviline to-day, it's all right. Hamilton's Pills Cure Constipation.

NEW MARYLAND.

(Special correspondence to the Herald.)

Oct. 30.—We are all glad to hear that Allen Price who has been seriously ill at the Hospital is slowly recovering.

Mr. Dunphy of Kingsclear is going around with the threshing machine. He will soon finish in this place.

John Dunbar spent last Sunday with his mother Mrs. Thomas O'Leary.

Miss Hattie Pugh paid a flying visit to this place last week.

Miss Ray O'Leary of Fredericton spent Sunday here with her mother.

The farmers are all complaining of a poor potato crop this season.

Why Savages Turn In Their Toes.

In the first place, the foot naturally takes that position when it has never been confined by boots or the ankle distorted by high heels. Convenience is also on the side of the natural position of the foot in the case of the savage, for he has to do much walking through long grass and undergrowth in forests. Consequently his progress would be much impeded if he turned his toes out to catch these obstacles. Instead of brushing them aside and outward, as he now does. Lastly, the savage uses his foot much more as a help to his hands than we do, and it is obvious that in doing this he must turn his toes in.

European Arithmetic.

At the custom house we were obliged to make a deposit of 8 francs 40 centimes on each wheel before entering Switzerland. Since that day faith in the advantages of higher education has wavered. There were nine bicycles, and the government official found the entire amount of our indebtedness by putting down 8.40 nine times and then adding up. Why should one vex one's self with the multiplication table when straight addition combined with unlimited time reaches the same result?—Caroline S. Donnett in Chautauquan.

A New Crop of Corn.

Isn't very hard to raise with the aid of tight boots. Best remedy is Putnam's Painless Corn and Wart Extractor, which cures in one day. Refuse a substitute for Putnam's, it's the very best.

She—He's very much in love with his wife. He says if she should die he doesn't know what he'd do. He—What's the matter. Hasn't he got money enough to bury her?

Judge—You do not seem to realize the enormity of the charge against you. Prisoner—No, I ain't got my lawyer's bill yet, but I'm expecting the charge'll be enormous, all right.

That makes 13 times I've kissed you, darling, he said, as he put on his hat in the doorway at 11 p. m. O. George, 13 is an unlucky number, she answered thoughtfully.

In washing woollens and flannels, Lever's Dry Soap (a powder) will be found very satisfactory.

"That young doctor says he is treating some swell patients. People with pedigrees? No; people with mumps."

SEVEN TO ONE

From reports received we figure that one bottle of Scott's Emulsion sometimes builds seven times its weight of solid, healthy flesh! Why is this so?

Because Scott's Emulsion is itself the richest and most digestible of foods.

Because Scott's Emulsion gives strong appetite.

Because Scott's Emulsion makes all good food do good—strong stomach—strong digestion.

Because Scott's Emulsion wakes up the dormant system—new life to the tissues—so that the body uses it's food for bone making and flesh building.

We'll send you a little to try if you like. SCOTT & BOWNE, Chemists, Toronto.