

The Westinghouse Co. is said to be negotiating in England for the establishing of large smelting works and pulp mills at the Chats Falls on the Ottawa.

E. V. Tanner, perceiving the needs of the west, has a proposition to manufacture straw fuel, and believes that he can supply inexpensive machines for the purpose. The straw will be packed in the shape of cordwood, and will, he claims, make splendid fuel.

The Belleville Portland Cement Works, to be built at Point Ann, near that city, will, it is stated, be one of the largest cement works in the world, and will turn out as much as all the other works in Canada put together. Enough material has been quarried to manufacture from 600,000 to 1,000,000 barrels.

Work on the Nova Scotia Steel & Coal Co.'s blast furnaces, at Sydney Mines, is soon to commence. The Rarig Engineering Co., of Columbus, Ohio, who have the contract, have a force of machinists and engineers on the spot getting the structural material, which came from Germany, ready to be placed in position.

The Dominion Iron and Steel Company will erect two more large piers at Sydney, one, similar to the present one, near the blast furnaces, to ship the products of the steel company; the other, of steel, to be used as a coal shipping pier. The company has decided to manufacture steel rods on an extensive scale.

The Wm. Buck Stove Co., Brantford, have purchased the Canada Cycle & Motor Co.'s building, and will remodel it, and add new buildings to give them increased facilities, at a cost of about \$100,000. The company at present employ 265 men; the new works will cover about six acres, and will give room for 365 men at the start, to be increased to 400 or 500. The new foundry will be one of the largest stove works on the continent.

The Canada Foundry Co. will erect new buildings at Toronto in 1903, equal in extent to those built in 1902. A large rolling mill, and ultimately locomotive works, are in contemplation. As some of the directors of the Foundry Company are directors of the Dominion Iron and Steel Company, it is likely the pig iron for the rolling mill will come from Sydney. The Toronto Steel Co. will also use Sydney iron.

The Imperial Oil Co. has now four large storage tanks at Fort William, Ont., two of a capacity of 426,000 gallons, and two of 211,448 gallons. The oil comes in tank steamers from Cleveland, Chicago and other places, and is pumped into the storage tanks at the rate of 10,000 to 12,000 gallons an hour. Some is barrelled, but the bulk is shipped in tank cars for points west as far as Vancouver. The company has a splendid wharf and modern power house and sheds at Fort William.

Andrew Carnegie, in the *World's Work*, points out that the home market of America takes 96 per cent. of all manufactured articles, only four per cent. going to foreign markets. Even Britain's home market takes four-fifths of her manufactures, only one-fifth going abroad. If the people of the United Kingdom could spend one pound per head more per year her home commerce would be increased more than the total value of her exports to Australasia, British North America and China combined. He reasons, therefore, that home conditions should be studied and improved rather than so much attention given to foreign markets.

Owing to the trouble caused by soft coal clogging pipes and chimney flues, the following suggestion is worthy of note: Zinc is a peculiar metal in many respects. It volatilizes easily, and the oxide thus produced has a strong affinity for carbon. If one's furnace chimney is clogged up with soot and the owner desires to get rid of it, all that is necessary is to throw a little zinc scrap into the fire. Any old zinc will do, and very little will suffice to keep the chimney clean if used about once a week. The vapor of zinc oxide seizes upon the carbon of the soot and forms a new chemical compound, part of which goes up the flue and part falls to the bottom to be shovelled out as ash. The editor of *The Canadian Engineer* can vouch for the efficacy of this remedy.

At the annual meeting of the hardware and metal section of the Toronto Board of Trade, it was stated that business had been good during 1902, prices comparatively steady, the demand large and losses from failures small. There had been unnecessary competition, difficulty in obtaining goods owing to limits of manufacturers and shortage in raw material. Congestion of freight and shortage of rolling stock had caused slow delivery by the railways. The outlook for 1903 is regarded as bright.

The prospectus of the Canadian Steel and Coal Company, with a capital of \$6,000,000, is being extensively advertised in the United States papers. It was organized for the purpose of utilizing the iron deposits of Natashquan, Quebec, and the coal measures of Cape Breton. Natashquan is on the north shore of the St. Lawrence, opposite Anticosti. The iron ore runs from 68 to 72 per cent. metallic iron. The company owns 9,600 acres of coal property in Cape Breton, known as the New Campbellton Colliery. The officers of the company are: President, Louis B. Jennings; vice-president, F. S. Ashley; treasurer, James C. Sinclair; secretary, John G. Pearse, and a long list of directors.

Alexander Graham Bell denies that he has been trying to make a flying machine. He is interested in the problem and has come to the conclusion that a properly constructed flying machine should be capable of being flown as a kite if anchored to the ground, and that conversely a properly constructed kite should be capable of use as a flying machine if provided with suitable means of propulsion. His experiments have had as their object the building of a kite of solid construction, capable of carrying up, in a moderate breeze, a weight equivalent to that of a man and engine and so formed that it could be suitable for use as the body of a flying machine, and with supporting surfaces so arranged that when the kite is cut loose it would come down gently and steadily and land uninjured. He has successfully accomplished this, he says, but does not care at present to make public the details of construction.

The following fires have occurred in industrial works: Villeneuve & Hardy's piano factory, Montreal, damaged.—Stony Creek basket factory, burned.—McClary's stove foundry, London, seriously damaged.—Small roasting building of London coffee and spice mills, burned.—Municipal acetylene gas plant at Bittle, Man., burned.—Delhi, Ont., canning factory burned.—Peck, Benny & Co.'s cut nail and horseshoe factory, Montreal, burned. Rolling mill saved. Loss, \$50,000.—Shannon & Co.'s sawmill, near Prince Albert, N.W.T., burned.—Beamsville brick works damaged.—Tweed, Ont., electric plant burned.—Chadwick Bros. brass works, Hamilton, damaged.—Propeller Myles, lying at Toronto, damaged to the extent of about \$2,000.—Kerr & Coombe's foundry, Hamilton, damaged.—Defective acetylene gas generator exploded at Manitou, Man., and caused loss by fire of \$20,000.—Robt. Muir & Co.'s mill and elevator at Gladstone, Man., burned.

At the municipal election of Jan. 5th, Brussels voted a loan of \$5,000 to Lottridge Bros., to put in operation the woolen mills there; Windsor, Ont., defeated a by-law to aid the Erie Tobacco Co.; Waterloo, Ont., carried a by-law to aid the Schierholtz & Co. in establishing an upholstering factory; Dunnville carried a by-law to lend J. D. Pennington, of Dundas, \$15,000 to establish a refrigerator and wood working factory; Port Hope, carried a by-law to assist the Standard Ideal Sanitary Co.'s works; Markham voted to exempt the Lount Brush Handle factory; Goderich voted exemption for a mill and knitting factory; Belleville voted to give the balance of a bonus voted to Abbott & Mitchell, for a rolling mill, to T. M. Kirkwood, for the same industry; Collingwood, to bonus a wire and nail factory, and to buy the Toner & Gregory factory; Fort William voted a site and exemption from taxes for 35 years to the Ogilvie Flour Mills Co. who are to build a 1500 barrel mill and 500,000 bushel elevator; Pembroke voted free water and exemption to the Delahay scale factory; Peterboro defeated a by-law to give J. J. Turner & Sons exemption on their tent and awning factory; Smith's Falls refused exemption and to fix the assessment for ten years of the Gould Stove Mfg. Co.