

THE chewing gum manufactured in Toronto by Mr. C. T. Heisel, under the management of Mr. S. T. Britten, is composed chiefly of gum chicle, imported from Mexico, no objectionable materials whatever being used. The gum is imported in a crude condition and refined in the Toronto factory, the other ingredients being pure sugar, liquorice and flavoring extracts.

MR. ROBERT CAMPBELL, Hamilton, Ont., has invented an appliance for the burning of fuel gas. It consists of a perforated fire-clay back to the grate. Through the perforations in the back the gas is forced as required, and a supply of atmospheric air secures perfect combustion. On the perforated back or base are piled irregular pieces of fire clay, which become red hot, and diffuse their heat throughout the department.

THE Dodge Wood Split Pulley Co., of Toronto, inform us that they have lately completed arrangements for the handling of two leading standard Friction Clutches, which they are introducing in connection with their popular split pulleys. They say a strictly reliable and first-class friction clutch pulley is becoming a necessity in modern establishments, and to meet the demand they have placed themselves in a position to be able to supply a standard article at a reasonable price. They invite correspondence from those interested.

A NUMBER of gentlemen in New Brunswick and Nova Scotia have decided to form a company to build a charcoal iron blast furnace on Grant farm about twelve miles from New Glasgow. A very large deposit of high grade iron ore, with belts of limestone running through it, has already been opened up, and large forests of splendid hardwood in the vicinity have been secured, from which the charcoal will be made. Application is to be made at once to the Government for letters patent. Mr. Earnest A. Sjostedt, a man of much experience in this business, is to be manager of the company.

MESSRS. S. R. FOSTER & SON, St. John, N.B., at the recent industrial exhibition in that city, showed a nail-making machine in full operation, illustrating in a practical way the manufacture of nails. In the firm's factory thirteen machines are running full blast all the time turning out immense quantities of nails of all sizes. Besides these there are forty-two other nail and tack machines and a spike machine weighing about eight tons, and these turn out cut and clinch nails, tacks and spikes, ranging from the smallest tacks to the largest spikes. Nine polishing machines brighten up the products of the factory. About sixty hands are employed.

OUTSIDE Mr. John Meston's blacksmith shop, on Broad street, stands a new-fashioned cart. This cart is the same as all others in many ways, the only difference being in the axle and wheels. Each wheel has a very small wooden axle of its own, and, as fast as the wheel revolves, the axle turns with it. The axles are placed one above the other, which necessarily leaves one wheel several inches smaller than the other, the axle of one being higher off the ground than the other. The cart, which is the first of its kind ever built in British Columbia, was tried, on Monday, by a milkman, who pronounced it very easy to draw, comfortable to ride in and much easier on the wheels, owing to the spring in each wheel's axle.—*Victoria, B.C., Colonist.*

THE new building for the manufacture of worsted goods being erected on the Paton mill grounds, is progressing favorably. D. G. Loomis & Sons have the contract for the masonry and brick work, and have one wing of 104 feet up; they expect the warp room will be occupied in the course of two or three weeks, when the present warp room building will be torn down and the other wing of the main building put up, which will make it 208 feet in length by four storeys high. The contractor, Mr. G. G. Bryant, is putting on the roof of the wing now up and getting the floors ready to lay (the upper ones to be of birth), and the painters are at work on their part, so the whole thing is being hurried along satisfactorily. It will be a fine building when completed.—*Sherbrooke, Que., Gazette.*

THE Inlaid Silver Company, Toronto, have acquired the right to manufacture in Canada, under the Warner patents, silver spoons, forks, etc. These goods are made of the usual white metal, and are inlaid with pure silver at the points usually brought most in contact with other articles when in use. It is to be observed that plated forks and spoons, after having been in use a while, usually disclose the composition metal of which they are made on the bottom of the bowl and handle, the silver plating wearing through at these points. In the goods made under the Warner patents plates of sterling silver are inserted, thus ensuring a permanency of color always indicating the presence of pure silver. These goods are meeting with great favor in the trade, and the factory of the company is being run to its full capacity. This is an evidence of the benefit of the N.P. to Canada.

THE right for the United States of the automatic hosiery knitter, belonging to Messrs. Feodor Boas & Co., of St. Hyacinthe, Que., was sold in Boston a short time ago to an American syndicate for \$300,000. This is probably the largest sum ever paid to any Canadian for a single patent and speaks well for the mechanical ability of the joint inventors, Mr. R. W. King and Mr. Moritz Boas. Mr. King has been making knitting machines in Georgetown, Ont., and lately moved to Montreal, with a larger building with increased facilities for turning out machinery. Mr. Boas has been for some years manager of the Granite Mills in St. Hyacinthe. The machine is said by those who have seen it to be a marvel in its way, and requires only to be supplied with yarn to turn out hosiery.

MR. S. J. RITCHIE, of Akron, O., who has already applied to the Government of Ontario and the Dominion for subsidies to aid in the development of the nickel and copper mines of Sudbury, Ont., has made the Board of Trade of Trenton, Ont., a proposition. He asks for a bonus of \$75,000 with exemption from taxation. Mr. Ritchie says that the company will at once put the Edison method of reducing the iron ore into operation. The crushers are being built at Chicago and the plans being made for their erection at Coe Hill, where the ore will be pulverized and shipped at Weiler's Bay docks. Twenty-one crushers, capable of crushing 1,500 tons per day, will be built, requiring 1,000 men in the mines and about 500 men attending the machinery, producing 1,000 tons of prepared ore daily.

A QUESTION that has aroused some interest in Manitoba is that looking to the development of the iron deposits west of Fort William and the establishment of smelters in the vicinity of that town. It is known that there is some movement in that direction, and that the C.P.R. authorities are co-operating in the enterprise. Negotiations are in progress with European capitalists for the opening up of the mines and utilization of the ore, Messrs. Fresez and Macquet, two Belgian experts, have been inspecting the district for the past two or three weeks, and arrived in the city yesterday, proceeding to the Pacific Province a few hours after. In a general conversation it was inferred that the gentlemen were very well satisfied with their investigation, and that their report will be favorable. They stated that the surface showing of the ore was exceptionally good and the quality of the highest.—*Winnipeg Tribune.*

THE manufacture of carpets, so called, is traced back in the records of French monastic orders as far as the 10th or 11th centuries, but in all likelihood they were merely embroidered and not woven fabrics. The actual manufacture of carpets in Europe is assigned to the reign of Henry IV. of France, and is said to have been introduced there direct from Persia. But an earlier attempt had been made by an Englishman who earnestly promoted new discoveries and improvements. This was Richard Hakluyt, who directed Morgan Hubblethorn, a dyer, to proceed in 1579 to Persia to learn the arts of dyeing and making carpets. An artisan who had quitted France established the industry in England about 1750. The well-known Brussels carpet was first made in Wilton, where the manufacture was introduced from Tournai, in Belgium. Carpets may be described as migratory manufacture. In almost every instance the industries, after being successfully established in a town, have been taken elsewhere, though still retaining the names denoting the place where they were first made.

YESTERDAY afternoon H.M.S. *Warspite*, all spick and span, painted and polished to perfection, and looking as if she had just been built, floated out of the Esquimalt dry dock like a sea bird. As early as eight o'clock orders were given to open the sluices, and the water began to rise gradually until the big ship, weighing nothing short of 15,000 tons, was lifted gently off the basin, and after a period of three months found herself once more afloat. She was hauled out of the dock by hand, and the tug *Lorne* took her in tow across the harbor to No. 1 moorings, where she was securely anchored. Admiral Hotham expressed his pleasure at the manner in which the *Warspite* was taken out, and said it demonstrated beyond doubt that the dry dock was capable of accommodating vessels of the largest size, and that it would be able to answer all demands made upon it for years to come. Captain Devereux, too, is naturally pleased at the manner in which the *Warspite* has been put through. He told a *Colonist* representative that nothing could possibly have worked more satisfactorily. There was one and a half feet to spare on each side of the vessel when she floated out, and, though the strain on the basin, owing to the great weight on it for so long a time, must have taxed the strength of the dock to the utmost, he is confident that no damage whatever has been done.—*Victoria, B.C., Colonist.*