

Consignors of Butter and Eggs

BUTTER has held at the same price for some time past and is not likely to advance. Therefore our old plan of selling immediately instead of holding stock and taking chances has more money not only for ourselves but also consignors.

EGGS For good, fresh Eggs there is a big demand and as they don't improve with age ship promptly and receive prices paid for fresh stock.

Returns as usual 1st and 15th of each month.

NOTE—After November 1st we will occupy the Turner and McKeand Warehouse on 147 Bannatyne Avenue East.

J. Y. GRIFFIN & CO. PORK PACKERS
COMMISSION MERCHANTS

WINNIPEG VANCOUVER VICTORIA NELSON CALGARY HAT PORTAGE

To Lumber Purchasers

WHOLESALE
AND
RETAIL

We are manufacturing all kinds of BRITISH COLUMBIA FIR, SPRUCE and CEDAR LUMBER. We also carry in stock a full supply of Pine, Native Spruce, Building Material. Also Perfect Maple and Birch Flooring, (end matched, hollow back, bored and polished), Red and White Oak, Lath and Shingles, Sash, Doors and Mouldings, Cedar and Tamarac Posts, Building Paper, etc., etc., at bottom prices, guaranteeing satisfaction.

No trouble to show you our stock. See us before placing orders.

THE B. C. MILLS TIMBER AND TRADING COMPANY

GEO. W. CAMPBELL, Manager.

P. O. Box 604

OFFICE AND YARD, COR. PRINCESS AND FONSECA ST., WINNIPEG, MAN.

Telephone 777.

Apples!



Now is the time to close your contracts for car lots. Subject to prompt acceptance by wire or letter we offer straight cars, well assorted varieties, principally colored, guaranteed equal to export pack, at **\$1.50** f.o.b. Ontario, subject to 30 days terms.

Why go to Ontario, when a reputable and responsible Manitoba firm is prepared to protect you and see that you get what you want.

Apples!

R. A. ROGERS & COMPANY

WINNIPEG, MAN.

Aluminum.

The first electro-chemical enterprise to be established at Niagara Falls was that of the Pittsburg Reduction Company for the manufacture of aluminum. Aluminum is a subject in which I have always been deeply interested, having listened to Woehler's account of the discovery of aluminum, having been shown by Heinrich Rose the aluminum which he first extracted from cryolite, having known St. Claire Deville, who first manufactured the metal on a commercial scale, having been a warm friend of Castner, who, by his cheap sodium process, at one time monopolized the manufacture of aluminum, and being the intimate friend of Hall, whose electrolytic process now produces all the aluminum of commerce.

It was a remarkable fact, after all the attention that had been devoted to the subject of aluminum by St. Claire Deville and other chemists, that it remained for a young graduate of Oberlin college, Charles M. Hall, to devise the process by which all the aluminum in the world is now manufactured. It occurred to young Hall, whose attention was drawn to this subject while he was still a college student, that some way might be found for extracting aluminum by electrolysis. Satisfied that it would be impossible to employ an aqueous solution, he sought for other solvents, and finally discovered that a melted bath of the double fluorides of aluminum and metals more electropositive than aluminum, such as sodium or calcium, was a perfect solvent for alumina, taking it up as promptly as hot water takes up sugar, and dissolving as much as 25 per cent of its weight. Having thus found an anhydrous solvent for alumina, the next step was to ascertain whether the solution would yield up the aluminum promptly to electrolysis. The most gratifying success attended his experiments, and with great intelligence and patience Hall worked out the practical application of his discovery first establishing works at Kensington, Pennsylvania, and subsequently moving to Niagara Falls. At the present time the company has two works at Niagara, one takes 5,000 electrical horse power from the Niagara Power Company, the other takes an equal

The vessels or pots employed in the making of aluminum are rectangular iron boxes, thickly lined with carbon, and exhibiting a cavity in the carbon about 4½ feet long by 2¼ feet wide, and about six inches deep. The carbon lining constitutes the cathode. The anodes, 40 in number, four rows of 10, consist of carbon cylinders about 3 inches in diameter, and 18 inches long when new. They are supported above the pot, dipping into the bath of fused fluorides. No external heat is employed, the heat developed by the resistance to the current being all that is necessary to maintain fusion. Alumina is added from time to time as required. The process proceeds quietly, the resistance offered by the bath charged with alumina being very low, but the moment the alumina is exhausted the resistance increases fourfold. In order that the workmen may be made aware of the state of the bath, an incandescent lamp is attached to each bath, which emits no light during the low resistance, but which shines brightly when the resistance, and consequently the electromotive force, at each bath increases sufficiently, so whenever one of the incandescent lamps begins to shine the workmen hasten to stir in a fresh supply of alumina. The process proceeds quietly day and night. It is only necessary to keep the baths supplied with alumina, and every 24 hours tap the pots and draw off the metal. There are over 100 of these pots altogether, and the yield is about 100 lb of aluminum per pot every 24 hours, or about 10,000 pounds altogether.

Now uses are being constantly found for aluminum. One of the most important in its application is its application to the casting of steel. It is regularly used now in all the steel works, being added at the rate of 4-6 ounces per ton to the steel just as it is poured into the ingot mould, the result being an ingot which is perfectly solid and compact throughout its mass. The metal is also beginning to find important application as a substitute for copper as a conductor for large currents of electricity.—From address of the president of the Society of Chemical Industry 1899-1900.