31st August, 1893. [In thousands.]

Description.	Banks in Quebec.	Banks in Ontario.	Banks in other Prov's.	Total.
	$	$	$	$
Capital paid up	34,722	17,597	9,710	62,029
Circulation	16,806	10,612	5,890	33,308
Deposits.....	84,537	67,873	22,881	175,291
Loans, Disc'ts & Investments...	113,617	82,466	32,913	228,996
Cash, Foreign Balances (Net) & Call Loans..	30,441	20,406	6,787	57,634
Legals	6,151	4,491	2,108	12,750
Specie.....	3,958	2,536	1,212	7,706
Call Loans..	5,016	7,880	1,502	14,398
Investments.	6.752	8,594	3,320	18,566

THE GROWTH OF WINNIPEG.

It is very gratifying to observe that the capital of our prairie Province is showing signs of steady and healthy growth. We are told that while the number of houses built in 1892, in Winnipeg, was over four hundred, the new buildings of the present year will exceed five hundred in number. Indeed, a list of new buildings on no less than eighty-seven streets of that progressive city, shows by actual count between three and four hundred houses either finished or in course of erection, and more are projected. While the value of new buildings erected in Winnipeg during 1890 was $400,000, that figure became $600,000 in 1891, and $900,000 in 1892. But this year already it is, according to a tabulation made for the *Free Press*, counting new houses and improvements to existing ones, close upon a million and a half.

Among the structures that go to make up this handsome total are: the Court House, the Fort Osborne barracks, the Bank of Ottawa building, two schools, a synagogue, Carscaden, Peck & Co.'s buildings, Griffin's pork-packing house, the Canadian Rubber Company's building. Then, among additions to or improvements of existing buildings are: those upon Ogilvies' mill and Sprague's mill, the first Baptist Church, the C. P. R. shops, the Clarendon Hotel, the Seymour House, the Gerrie Block, and something over $100,000 being expended by the Hudson's Bay Company and by various loan companies. Besides all this, there are undertakings which, while they cannot be called new or improved houses, merit notice as enterprises which add to the assessable value of the city. These include $90,000 for Norwood bridge, expensive improvements by the Bell Telephone Company, $300,000 for the laying of the Electric Street Railway and civic improvements estimated at $200,000. On Main street alone the new erections or improvements are placed at $96,000; on Notre Dame street, $58,000; on Young street, $24,000; on McDermott street, $20,000. And yet, with all the new residences erected, the *Free Press* tells us that "vacant houses are as scarce as ever, which indicates very accurately the increase of the city's population." So far as we can discover from the list not more that a dozen or two of the new structures are warehouses, stores or factories, which lends color to the complaint of the journal quoted that "a notable feature of this year's operations is the lack of new business blocks, although fine office buildings and first-class stores have been a crying need for several years. No other city of similar size furnishes such poor accommodation in the business quarter, and it is no wonder that several large and modern office and business blocks appropriate to a great western metropolis are projected for 1894."

A reason alleged for this lack of new business buildings is the stringency of money, preventing investment of outside capital in Winnipeg lands or new buildings. A surprising fact is that the land values, though low, have not increased materially; but "with the relaxing of this tightness more money, it is expected, will come this way," and next year "the value of city improvements promises to be double that of 1893." Meanwhile it is very pleasing to learn that the class of residences now being built is "far superior to that of any former year in the history of the city, and the fact that they are being largely built by citizens for their own occupancy is a gratifying sign. Those being built to rent are in great demand, and have as a rule tenants awaiting their completion." Winnipeg has a great future before it; surprising as the city now is, while scarcely of age in respect of years, the development of our Great West must render the capital of Manitoba yet more worthy of its admirable situation and of its enterprising citizens.

NOT ALUMINUM, BUT NICKEL STEEL.

It is perhaps ten years since aluminum began to attract the attention of the press as a substance which was to play a conspicuous and important part in construction. We were told that its strength was great, it was ductile and easily malleable, while its lightness would render it preferable for many uses to iron, copper, tin and other metals, while it would readily make alloys with them. True, its costliness told against it, for the metal was worth, some thirty years ago, as many dollars per pound as it should be cents if it were to be available for general uses. But we were assured that its plentiful presence in clay, granite, and other rocky or earthy substances must render it available in the arts when experiment should have found out some cheap method of utilization.

Among the various processes adopted for the separation of this mineral from the earthy or rocky substances with which it is found associated, the one which seemed most promising was the one adopted only two or three years ago by the Cowles Company at Cleveland, Ohio. This was separation by electrolysis. And it is understood that by this process the cost has been reduced to 50 cents per pound. But it must be got cheaper than this before it can come into general use. Just at this time, too, comes an opinion from a scientific source which is calculated to give rather a rude shock to the expectations formed of the value of aluminum for construction purposes. Mr. Edison, the electrician, was asked by the New York *World* whether this metal would not solve many problems of science when it became as cheap as iron. His reply was, "No, there is nothing in it. No matter how cheap it may become, it will be of no practical use in machinery or construction, for it has no strength. You might as well use lead. It is as soft as lead. Its only peculiarity is its lightness, and it will only be useful in making ornamental objects. Aluminum has fallen in price from some $15 a pound to about the cost of brass, 50 cents a pound; and it is cheaper than brass, because you can get more to the pound. Having no strength, this new metal, as it has been called, is not available for machinery."

Being asked if it could not be used for building steamships, the sage of Menlo Park answered: "No; because it lacks the strength, and weight does not count in the construction of a ship. An aluminum ship would hardly be stronger than one made out of paper. It only gains strength when alloyed with some other metal, like copper."

Mr. Edison was next asked by the interviewer what metal, in his opinion, is the metal of the future, and without hesitation replied, "Nickel-steel is the coming thing." This he explained to be steel with an addition of about 5 per cent. of nickel, which gives it ductility and increases its hardness and resistance. It is now used to some extent in battle-ships and guns, and makes splendid armor. The Harveyized steel is one variety of this metal. Steel will crack. Nickel-steel you cannot crack. Iron you can bore, but nickel-steel is hard to bore."

"It will then make the burglar-proof safe for which the world has been waiting?" suggested the reporter of the *World*. "No," said Mr. Edison, "you can no more make a burglar-proof safe than an unsinkable ship. Even with a safe which you can neither bore nor crack, the burglar with a dynamite cartridge has it at his mercy. The burglar can carry in his pocket what is equal to 100 horse-power. Ten pounds of coal may have the same horse-power as a dynamite cartridge, but the coal in burning expends the power over a long time, while the dynamite concentrates it into a fraction of a second. No sooner is some new resisting substance found than we go to work and learn how to destroy it. This is the history of armor and guns, and they are now experimenting as to how the nickel-steel armor is to be pierced. Indeed, nickel-steel has already been turned against itself, and is being made into guns, for which it is admirably adapted. The modern battleship with nickel-steel armor gains in space, and strength and lightness."

Advices from abroad, describing recent experiments with aluminum as an alloy indicate that here, at any rate, the value of the metal is great. Used in conjunction with copper it produces a compound of great value for bronze goods. And a small percentage of it —1 to 5 per cent.—is said to cure "blow holes" in steel or iron castings. A despatch of 22nd August last from Duluth, says that a chemical expert was sent by the Patent Office authorities to that city, because of an application for a patent for a new process of obtaining aluminum from its oxide. "The process includes chemical combinations heretofore supposed to be impossible, and on this ground the ap-