

of the pumps. A large gathering dam will ensure a supply of close on 2,000,000 cubic feet of water per minute, the needs of the station being estimated at 700,000 cubic feet. The overflow will pass over the top of this dam in a cascade, adding to the picturesqueness of the Falls.

The water thus gathered will be conveyed downward through steel tubes to the water wheels located in the bottom of the wheel-pit, and the differences of level provided by the design are such that, after deducting losses from friction and the velocity of approach and discharge, there will remain an operating head of 143 feet to be used by the turbines. This wheel-pit is provided with masonry lining, the provision that the turbines and all the machinery above them shall rest upon solid rock foundations, instead of artificial supports, is an element newly adopted for this construction, the value of which is apparent.

The eleven generators will be installed on masonry foundations at the level of the power house floor, and the connection between the generators and the turbines at the bottom of the wheel-pit will be made by the use of a hollow shaft, travelling in a vertical position, and having a total length of approximately 115 feet, supported at three intermediate points by solid masonry bearings.

INCENDIARISM IN MASSACHUSETTS.

Not very long ago there was established in Massachusetts the office of fire marshal. The beneficial results of this appointment are clearly set forth in a paper read a few days ago by Mr. F. R. Cutting, commissioner of insurance for that State. In Massachusetts, incendiarism is looked on, and no doubt rightly, as the cause of a large proportion of the fires which occur there. According to the commissioner's report for 1903, there were in that year 209 incendiary fires and 64 convictions. Prior to the establishment of the office of fire marshal, the number of convictions was less than 18 per cent., while last year these numbered over 80 per cent. Besides this, there can be little doubt that the actual incendiarism has been largely reduced by this plan of detection and prompt punishment. To show to what a dangerous extent this crime may grow, it may be stated that within eighteen months, two young men were discovered to have set no fewer than 38 fires, with an aggregate loss of \$1,500,000. One 12-year-old boy set twelve fires with a loss of \$70,000. A man of 74 years was found to have collected insurance fifteen times on practically the same furniture in his dwelling. Of the incendiary fires 35 per cent. were found to be frauds on insurance companies, 11 per cent. were from pyromania, 5 from revenge, and 2 to conceal crimes. Of the insurance frauds 11 per cent. had had more than one fire and one case had had 17 fires.

BANKING AND FINANCIAL MATTERS.

The Sovereign Bank of Canada has opened a branch at Jacob's, Ont., with Mr. L. P. Snider in charge.

An office was opened in Woodstock by the Crown Bank of Canada on 1st October. Mr. S. B. Fuller is manager of it.

An issue of \$40,000 of 4 per cent. bonds of the Southern Judicial District of Manitoba has just been successfully made at par. The money will be used in the erection of judicial buildings at Morden.

Two new branches are announced by the Traders' Bank of Canada. One is at Cargill, on the Wellington, Grey and Bruce division of the Grand Trunk, between Walkerton and Paisley; the other at Elora, near Guelph.

For the month of September the total capitalization of corporations chartered in the eastern States was \$66,000,000, or more than twice as much as in August. The latter month, however, was the lowest on record for a number of years. While there is manifested a certain revival of productive energy, there is evidently no desire to lengthen the list of those huge consolidations of capital which figured so largely in the public eye a year or two ago.

We learn from the Gazette that the new Eastern Townships Bank building at Richmond is completed at a cost of twelve thousand dollars. Also that a branch of the same bank was opened last week at Thetford Mines, Mr. F. A. Briggs, of the Waterloo branch, being acting manager.

A recent despatch from Windsor, Ont., said that the finance committee of the city council had arranged the sale of \$25,000 debentures to capitalists without the usual form of advertising, and have secured better than 96 per cent., which is said to be one of the highest figures paid to any municipality in Ontario.

Messrs. Ussher, Playfair & Co., the Toronto stock and insurance brokers, have entered into a partnership with Mr. A. H. Martens, who was formerly with Messrs. A. E. Webb & Co., and Robert Beaty & Co., both stock-broking firms of the same city. The new firm, which will be known as Ussher, Playfair & Martens, has purchased the seat on the Toronto Stock Exchange formerly held by the late Mr. C. C. Baines, and now, under promising auspices, is opening out a business in buying and selling securities on the 'Changes of Toronto, Montreal, New York and Boston.

LIFE INSURANCE NOTES.

Advantage was taken of the presence in Toronto of Mr. Richard Teece, F.I.A., F.S.S., by members of the insurance fraternity to entertain that gentleman at luncheon at McConkey's. Hon. George A. Cox occupied the chair, and there were present Messrs. F. Sanderson, L. Goldman, E. W. Cox, F. Sparling, C. H. Fuller, T. Bradshaw, J. J. Junkin, R. Junkin, P. C. H. Papps, J. K. Macdonald, E. Marshall. Mr. Teece is general manager and actuary of the Australian Mutual Provident Society, the largest of its kind in the British Empire, and for thirty-nine years he has been connected with its management, which is among the most successful known in the profession. Mr. Teece has left for his Australian home via C.P.R. to Vancouver.

Mr. B. F. Steben and Mr. A. H. Vipond, of Montreal, are what may be called the champions of a section of the insurance agency world. The New York Life, the company which they both represent, maintains an association, known as the \$200,000 club, membership in which is restricted to agents securing at least \$200,000 of new paid business in the year. The official positions in this club are, it is needless to say, eagerly competed for, that of president being looked upon as a very high distinction indeed. This is what has been achieved by Mr. Steben, the result having been made known at the recent convention of the club, at West Baden Springs. In the last twelve months he secured no less than \$1,107,000 new insurance, certainly a remarkable showing for a Canadian agent acting for a foreign company. Mr. Vipond's championship is that for the Eastern Department of the same company's business, which makes him vice-president.

GROCERS AND PROVISION DEALERS.

A large fruit canning factory is to be erected at Hull, Que., at a cost of something like \$50,000.

The Regina Board of Trade invites correspondence on the subject of establishing a live stock market at that place.

Mr. P. A. Barry purposes to start a fruit canning factory near Kamloops, B.C., together with a plant for turning out tin cans under an improved process.

Prices for apples in the Old Country are a little better this week. A cable from Liverpool says Kings No. 1 were selling at 11s. to 14s.; No. 2's, 9s. to 10s. 6d.; Greenings, No. 1, 7s. to 8s. 6d.; No. 2, 5s. 6d. to 6s. 6d.; fancy sorts such as Blenheim Orange, Ribston and King Pippins, 7s. to 11s.; Snows, 13s. 6d. to 14s. 6.

A few days ago, a car of fall wheat was received in the Winnipeg market, which is said to be the first of its kind, for it is spring wheat which is grown in our North-West as a rule. It came from Claresholm, in Southern Alta. No