

BUILDING NEWS.

The Montreal Fire Committee at a recent meeting discussed the draft of a by-law authorizing the inspection of buildings with a view to preventing fires. The by-law will permit officers of the fire brigade to make a general inspection of buildings, and to note what should be done to lessen the danger from fire. Cellars and basements will be visited, as well as the main floors and attics of warehouses, and a record kept of the same. The attention of proprietors will be drawn to what should be done for greater fire security, and after a certain time another visit will be made to see if the orders have been complied with. The by-law will be sent to the City Council.

Owing to the splendid natural location of L'Etang, N.B., the C.P.R. are said to be seriously considering this place for an Atlantic terminal. L'Etang is situated about fifty miles west of St. John and has a fine harbor. Impression is lent to the report by the recent purchase of the New Brunswick Railway, which runs within six miles of L'Etang.

The Royal Commission, which for several weeks has been conducting an exhaustive investigation into the works of the Phoenix Bridge Company, in connection with the Quebec disaster, have issued a report in which the cause of the catastrophe is attributed to an engineering miscalculation, proper provision not having been made for the support of the extra span. The fall of the bridge is laid directly to the change in the unit stresses. In ordinary railroad bridges, the "unit stress" is usually 12,000 or 15,000 pounds per square inch. In the Cooper specifications for the Quebec bridge, the "unit stress" is shown to have been 24,000 pounds per square inch. When estimating the stress upon any bar or chord or other member in a bridge, the cross section of the piece is taken and the total stress divided by the number of square inches. The result is the "unit stress." In an ideal bridge, the load is supposed to be evenly divided over the entire structure. For example, when a train crosses every part of the bridge, every important piece of metal bears its share of the strain. The "unit stress" is therefore constant all over the bridge, and expresses itself both in compression strains and in tensile strains.

Application is being made for the incorporation of the Alberta North Western Railway Company to construct and operate lines in Alberta, Saskatchewan and British Columbia; also for the incorporation of the Ontario and Michigan Power Company to develop power on the Nepigon, Black Sturgeon and Pigeon Rivers.

The Church of the Sacred Heart, Ottawa, which was destroyed by fire last June, is to be replaced by an imposing edifice of Roman architecture and fireproof construction at a cost approaching \$150,000. Architect Gauthier, of Montreal, prepared the plans, which have been sent to Rome for the approval of the heads of the order. Contracts will be let as soon as this formal approval is obtained, so that building operations may commence early in the spring.

While an increase of \$1,877,712 is recorded in the civic building department of Toronto from January to October of the current year as compared with the same period of last year, the building permits issued during October, 1907, totalled only \$776,555, whereas the figures reached in October, 1906, were \$1,536,595. From January to October, 1907, there were issued in the "Queen City" 243 permits in excess of the total for the first ten months of 1906.

The Canadian Northern Railway have applied for Parliamentary sanction to increase their capital stock by \$19,250,000, also for authority to carry out extensive construction plans in the west.

The contract was signed by Mayor Scott at Ottawa last week for the construction of the new Grand Trunk station and hotel in that city.

Edison's scheme for building concrete houses within twelve hours at a cost of \$1,000 to \$1,200 has attracted the attention of Henry Phipps, a wealthy steel manufacturer of New York city, who will likely co-operate with the inventor and form a company for the erection of these dwellings.

In order to increase their water supply, the municipal authorities of Campbelltown, N.B., have purchased a lake surrounded by sixty acres of land. It is estimated that this will augment the reserve supply by two billion gallons. A large concrete reservoir was built last year, and now, with the present additions, the town has one of the best water systems in the province. Campbelltown can also boast of an up-to-date sewer system and the best and most economical lighting system in New Brunswick.

A sum of \$68,000 has been expended at Fort William, Ont., in the purchase of 115 acres of land, which will be applied to free sites for factories.

The new \$50,000 Collegiate Institute at Picton, Ont., was badly damaged by hurricane last week. The pediment was blown down, crashing through the two main stories of the building and wrecking it to the extent of \$2,000.

A new cement bridge has been constructed at St. Thomas, Ont., which will be called the "King's Bridge" in honor of King Edward. The local authorities have decided to draft a resolution expressing their appreciation of the work of Engineer Bell who designed the structure.

The building of the new \$70,000 Y.M.C.A. institute at St. John, N.B., will entail the demolition of an historic old building, the Chipman house, which was the scene, nearly half a century ago, of lavish entertainments in honor of the present King Edward, then Prince of Wales.

Winnipeg seems to be particularly unfortunate of late in the matter of fires. Hardly has the city had time to recover from the conflagration of the Winnipeg Paint & Glass Company when another great blaze has occurred at the Rat Portage Lumber Company's factory, on Higgins Avenue, where the ravages of the flames brought about a loss of \$144,000. The origin of the disaster has not yet been discovered. While some people are inclined to attribute it to incendiarism others more charitably assign the cause to sparks from a C.P.R. locomotive. The buildings destroyed and damaged were: The Rat Portage Lumber company's factory, wholly destroyed, \$82,000 worth of stock; the Frost & Wood warehouse, wholly destroyed, valued at \$1,000; the Dyson pickle factory, damaged by smoke, fire and water to the extent of \$3,000; the Merrick-Anderson track warehouse, damaged to the extent of \$5,000 on building and \$25,000 on stock. Other minor losses amounted to \$2,000. The insurance on the burned properties is estimated as follows: Rat Portage company, \$115,000; Frost & Wood, \$1,000; Merrick-Anderson, \$20,000, total \$136,000.

Building permits issued in Montreal last month aggregated \$1,091,344.

At Moosejaw, Sask., an addition which was being made to the civic power house suddenly collapsed, bringing instant death to a workman named Nethercott and causing serious injury to Contractor Lawrence, who had the work in hand, and to a carpenter named Fenwick.

The Avenue road Presbyterians, Toronto, have just completed the erection of a fine new church at a cost of \$50,000. It is built of Kingston limestone and is of Gothic architecture. A feature of the construction is the roof, which is entirely of steel bridge work resting upon the walls as its only support. The architects were Symons & Rae, of Toronto.