

Canadian side, by agreement approved by the Ontario legislature, the power company has the right to take water for a power station occupying a tract of land not to exceed 100 ft. by 1200 ft. The present station on the American side which is of 50,000 H. P. capacity, measures 68 by 200 ft., therefore the limit of the Canadian concession would be about 300,000 H. P., or about 1,200,000 cubic ft. of water. These two principal undertakings would therefore amount to 3,200,000 cubic feet, which the electric railway on this side, the old hydraulic canal on the other side, and existing private and town rights on both sides, would easily swell to 3,600,000 cubic ft., or 20% of the natural flow as given in the *Encyclopædia Britannica*. One fifth reduction in the volume of Niagara Falls, would involve a ruin of their natural beauty, which would be a disgrace to us as one of the custodian nations of this wonder of the world. Such a catastrophe is only a possibility, and a remote possibility. Unless further powers are granted, on the Canadian side, the concession is probably limited to less than the amount estimated above, by the provision in the agreement that the water shall be led off by the natural channel between Cedar Island and the mainland. But even the possibility of such a catastrophe in the far future, fully justifies the action which has been taken in New York. No shadow of excuse could be urged for destroying Niagara Falls for the enrichment of a few capitalists and a locality. We are far from the time when any pressure of the population on our national resources could justify such utilitarianism.

WE often hear the statement that it is a favorable time to carry out building enterprises during periods of general business depression, such as we have lately experienced, on account of the low prices for material and the eagerness of men for work enabling contractors to tender much lower than usual. There is much truth in this, and it is a perfectly natural condition, but contract prices are in many cases cut lower than there is any reason for within the limits of legitimate business. No building should be erected for less than its value, which should include the cost of all material and labor with a reasonable profit for the contractor. The whole question of prices for building work of ordinary kind seems to be in a badly mixed condition. People have grown into the habit of expecting too much for their money in this kind of work and are inclined to believe it can be done for whatever they choose to pay if they can only get hold of a contractor who will tender as low as possible. Evils too numerous to mention are the result, and if they are lessened or cured it must be by effort on the part of the more intelligent contractors. Briefly we wish to notice a few of the conditions which might be improved by the right kind of effort. When prices are too low in any business there is sure to be an attempt to lower the quality of material or workmanship, and nowhere is this plainer to be seen than in the building trades. Every contractor worthy of the name should stand for first-class work and fair prices. If the contractor for one trade does really good work and the work of another trade forming part of the same job be inferior, the good work must suffer by its proximity to the bad. Contractors can generally ill afford to carry out work for less than value, but it is most likely to be the one who is least able to stand a loss who will cut prices. Nor is the loss to him alone, but because he is unable to handle his work in a business-like way, all other trades are liable to be interfered with and put to actual loss. Contractors should be quite as particular as to who they are associated with as co-contractors on a job, as they are in the selection of their own foreman or other help. There are many items which the contractor should include in estimating besides the cost of material and labor, such as the use of capital invested, risks by accident, bad weather, fluctuation in prices, wear and tear of plant, his own time, etc. After these are allowed for, he should have a profit of at least ten per cent., but we believe comparatively few contract prices are sufficient to leave even this moderate margin. No cure-all remedy can be applied to every case of the low price disease, but if contractors were well organized and working under some carefully prepared code they would be able to remove the greater part of these difficulties. In this way only their combined influence can be made available, and much could be done to prevent the business being handled at unreasonably low prices.

## ILLUSTRATIONS.

## CHURCH AND PRESBYTERY OF THE PARISH OF THE SACRED HEART, MONTREAL.

The church was built in 1882 from plans by Mr. Jos. Venne, architect, now of the firm of Perrault, Mesnard & Venne, who are now building the presbytery adjoining it. It is of Montreal limestone, roofed with slate; and with a plain and tastily decorated interior. Plans are now being prepared by the above firm for stained glass windows to adorn the aisles and chancel windows, representing the rood of the Holy Cross. The highest spire, on Plessis street, rises to a height of 220 feet above the sidewalk. The presbytery adjoining the church, now in course of construction, is in the style of Francois II, and is also built of Montreal limestone and covered with slate. The interior will be finished in Columbia cedar and nicely decorated.

## UNION STATION, TORONTO.—STRICKLAND &amp; SYMONS, ARCHITECTS.

This new station, which is now being constructed by the Grand Trunk Railway Company for the joint use of that Company and the Canadian Pacific, will, when completed, be one of the most convenient and best arranged stations in Canada. There will be two large train sheds, one for the use of eastbound and the other for westbound trains, with three tracks through each shed. The platforms will have an average length of about 1,000 feet, and there will be ample room to accommodate as many as twelve trains, averaging eight cars each, at the same time.

The approach to the station from the city will be by means of an entrance from Front street, the level of which is sufficiently high above the rails to enable passengers to pass from the street over the tracks to any platform, by means of bridges, and without having to ascend any steps, the various platforms being accessible from the overhead rooms and bridges descending to them.

The passenger who is leaving by train enters the station at the main entrance on Front street, opening into a spacious and lofty entrance hall, fifty feet square and thirty-five feet in height, on one side of which are ranged the ticket offices, and upon the opposite side the baggage counter, across which he can claim his baggage, and have it checked for its destination. This entrance hall is being finished in red sandstone, imported from Scotland, and pressed brick work, the floor being laid in marble, the whole presenting an appearance equal in artistic elegance to that of the main waiting room of most of the large modern stations on the American continent.

Having taken his ticket and checked his baggage, the passenger will proceed through a handsome arcade, with shops on either side, where travellers' requisities can be purchased, or where he can pass any leisure time he may have before leaving, to advantage.

The arcade opens at its southern end into a magnificent waiting room, eighty feet square and forty-five feet high. The floor will be of marble, and the walls to a height of ten feet will be of the same material, highly polished; above that it will be finished in carved red sandstone and pressed brick, and lighted from upper story windows on all sides. There will be a colored glass dome in the centre of the ceiling. First-class waiting rooms, lavatories, and ladies' retiring rooms open from this room on the east, and a luxurious restaurant and smoking room on the west. At the south end of this waiting room the eastbound train shed is reached, and across it is being constructed a closed bridge, twenty-six feet in width, fitted up so that when required it will serve as an overflow waiting room. From this bridge access down to the platform is obtained by various convenient stairways, and still farther to the south across the westbound train shed; and this bridge open to the shed gives access by stairways to other platforms.

These platforms extend both east and west, and the bridges are as nearly as possible in the centre of their length, so that the distance from the stairways to the cars is made as short as possible, no matter where the train is standing. All the platforms are being laid with asphalt, and those which extend beyond the ends of the train sheds will be covered with umbrella roofs.

The exterior of the building, of which the principal front is on Front street, is being constructed of Credit Valley brown stone from Messrs. Carroll & Vick's quarries, and red brick, and will have a very handsome elevation. The lofty tower will form a noticeable feature in the landscape. The upper floors of this building will accommodate the general offices of the Grand Trunk and Canadian Pacific Railway Companies.

Mr. Edmund Wragge as Chief Engineer, and representing the Grand Trunk and Canadian Pacific Railways, has the general supervision of the entire work, Messrs. Strickland & Symons, of Toronto, being the architects.

A practical paperhanger says that the best way of removing solid bronze or gold papers, through which water does not quickly penetrate is to apply two or more coats of very thin paste, then to use a paint burner, taking care to employ the latter cautiously, and following up immediately with a scraper. The burner will not set fire to the paper, as the paste and wet paper will not burn, but it is well to have a pail of water handy in case of need.