

enormous dimensions. The wood cells are much more devoted to mechanical purposes than in the soft woods, such as the poplars and willows. The cavities of the cells are nearly obliterated by the great secondary thickening of the cell walls in certain patches. Mingled with these are cells with larger cavities. This explains the unequal grain of the oak. The vessels become filled with intrusive cells, and when this occurs they become functionally useless and are only of service as a means of support and strength. In the white oak there are vast numbers of medullary rays of ordinary size, but every now and then we have very prominent medullary rays, and this is important in cabinet work. This gives the quality of quartered oak.

Red oak (*Quercus tinctoria*) is a wood of far more uniform grain than the last. The vessels are more uniform and smaller. Although the wood is of much closer grain it is more workable. We have medullary rays of one row of cells and now and again very broad rays.

The live oak (*Quercus virens*) of the Southern United States is very hard, and was used greatly for shipbuilding before iron came into use.

We thus see that different qualities of hardness and durability depend partly on chemical and partly on structural properties.

MONTREAL NOTES.

Whilst the official figures of the Building Inspector's office give the value of building carried out in 1906 as somewhat over \$8,000,000, the annual report of the Builders' Exchange reckons this as a merely nominal figure, representing about 60 per cent. of actual value, which it estimates somewhat enthusiastically at about \$15,000,000. However this may be, activity in building certainly continues to be rapidly increasing, and prospects for the coming season would appear to be good. In the down-town section, the Light, Heat & Power Company's building, the Royal Bank, the Macintyre building, Mark, Fisher & Company's building, and the Canadian Transport Company's building are amongst those whose structures are in a fairly completed state, and will probably be in occupation before the close of the summer. Of new buildings likely to be soon under way in that quarter, some of the principal are: The new Eastern Townships Bank, at the corner of St. James' street and Victoria square, and a new building for the Credit-Foncier, at the northeast corner of St. Lambert Hill and St. James' street, to be a fireproof structure fifty or sixty feet high, with two main fronts, 100 and 90 feet long respectively, in Indiana limestone, Messrs. Cox & Amos being the architects. The Jas. Coristine Company are to build a seven-storey office block on Lemoine street, to cost about \$82,000. Mr. H. C. Stone is the architect, and Mr. C. E. Deakin the contractor.

Up-town Drummond street seems to be much in view for new buildings. Emmanuel Church is there approaching completion. Almost directly opposite the Natural History Society are in the possession of a fine site and are making arrangements for the erection of a new museum. The Y. M. C. A., who will probably very soon be quitting their premises in Dominion Square to make way for in view for their new quarters. They are said to be

a great hotel, have also a site in Drummond street having plans prepared in the States, therein adhering to a somewhat antiquated tradition which they ought to have good reason to mistrust. In University street the Ross Realty Company are to erect a new apartment house on a lot above Sherbrooke street, and which has the property of McGill University adjacent in the rear. This is quite nice for the apartment house, but one would like to see McGill University in possession of the whole of this block. The University, however, is not in affluent circumstances financially, and is strenuously endeavoring at present to obtain benefactions to make up for the annual excess of expenditure over revenue and to make its buildings adequate to its enterprises.

The W. Henry Bell Furnishing Company has leased the building at the corner of St. Catherine street and Peel street, and is to remodel the interior. A little farther east the Royal Bank is to erect a new branch office, and the season will see the completion of the St. Catherine Street Branch Postoffice.

The Prince of Wales Fusiliers are to erect a new armory on Esplanade avenue, facing the park.

In regard to the loss of life by fire which recently occurred at the Hochelaga Protestant School, many criticisms have been offered of the laxity of authority over such matters. What was said in these notes with regard to a disaster occasioned some time ago by the falling of a tank can only be repeated. We have the outline of an organization; it remains to fill it up efficiently, to give due assistance and authority to the office of the Building Inspector.

P. Q. A. A. SKETCHING CLUB.

On February 13th Mr. Philip Labee, electrician, addressed the Sketching Club on the subject of "Electric Installation." Mr. Labee defined the terms in use and explained the relationship of pressure and resistance. He enumerated the various ways in which electric energy expended itself in ordinary installations, pointing out that a low percentage of loss of energy was not the all-important consideration some people were apt to imagine. The benefits of inspection were insisted on, and the awkwardness arising from changing standards and rules and from the want of a uniform national standard. The lecturer then reviewed the ordinary requirements of house and office installations, pointing out the advantages of easily accessible main switches, metal conduits and other provisions. In conclusion, he pointed out how desirable it was from the electrician's point of view that an architect calling for tenders should have outlets and switches marked in red ink, not only on his own copy of the plans, but on that from which the estimate had to be made up. A table of outlets and switches attached to the specification was also desirable.

On February 20th Mr. J. P. Anglin read a thesis on the development of the Corinthian Capital, illustrating the theme by more than eighty drawings and photographs, besides lantern slides. The sequence included Egyptian prototypes, the early examples of Greece, the fully developed types of ancient Rome, and the variations of the Renaissance, with related forms occurring in Byzantine and Gothic architecture.

Mr. Bvers, on February 27th, described a three years' ramble in Europe, illustrating his route with numerous slides, prepared from his own negatives.

On March 6th a series of slides illustrating Scottish domestic architecture, lent by McGill University, was exhibited and discussed at large.