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## PAGES

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# The Canadian Architect and Builder 

Vot. XVII. No. "9,
Competitive Deaig" for Golf Clab House.-Geo. W. Gouinlock, Architect.
Old Scotch Chair is a Blangow l'anter's Studio.
Hoese in Fratswick Averure, Toronto,-Bond \& Nmith, Arclsitects.
Durham Castle Staircase.

ADDITIONAL ILLUSTRATIONS IN ARCHITECTS' EDITION.
Sketches of Ohd Ruilding* in Monseal by "(iargoyle" and Mr. Cevil Burgess.
ILLUSTRATIONS IN TEXT.
Viaws of Keest Toronto Fire.
Portraits of Officers of Winnipeg Builderx' Exchathge.

## CONTENTS



SPECIAL CONTRIBUTORS.


## OUR WINNIPEG OFFICE.

The publishers of this Journal have recently opened a branch office at No. 310 Mcintyre Block, Winnipeg. A resident representative has been appolnted who will be exclusively employed in advancing the circulation of this Journal and in keeping owr readers informed regarding the latest developments throughout the west. The kind co-operation of our friends in the west is solicited in behalf of the suceess of this enterprise.

The demands of other matter
Publication Deferred. upon our space compels us to defer to a future issue publica. tion of a number of specially prepared articles on cement construction intended for this number.

Workmen's Compensation Act.

The variety of interpretations put upon the British Workmen's Compensation Act is such that contractors are kept in a state of constant anxiety and uncertainty with regard to their liability under the Act for damages to workmen. One of the latest decisions awards damages to a workman upon whom a wall fell while engaged in eating his lunch. The fact that usually this workman went home for his lunch, and that had he followed his usual practice he could rrot have been said to have been injured while engaged in his usual employment, seems to have had no weight with the court.

A curious illustration of the many War and Linseed Oil. unexpected influences which may aflect the prices of commodities in everyday use, is afforded by the present war between Russia and Japan. As is well known in consequence of this war the price of wheat has advanced to the highest point reached in many years. This has led to an increase in the area sown to wheat and a decreave in the area sown to flax. In the Dakotas the reduction in the flax acreage is placed at 50 per cent. As a result linseed oil, the product of flax, and the basic material of all good paint, seems destined to be high in price. This in turn will aggravate the evil of paint adulteration. with which everybsdy wanting to secure a good and lasting quality of work has had to contend for some years past.

When last year the City Council Protection of Workmon. of Toronto, at the instance of the labor unions, passed all amend. ment to the building by-laws compelling contractors to lay duwn temporary floors at every storey of buildings under construction, the new regulation was regarded hy architects and contractors as a hardship, involving unnecessary expense and trouble. Its necessity was, however, shown by the death of a workman in Montreal the other day, who in attempting to cross from one side of a building to the other stepped on the end of a plank
which tipped, precipitating him to the ground from a height of five stories. If temporary floons had been laid down as required by the Toronto huilding by-law, this man's life would have been spared, and his wife and family of five young children would not have been deprived of the bread-winner. Workmen have a right to insist that every reasonahle precaution be taken for their safety. The cost of necessary safeguards for this purpose should be inchuded in contractors' estimates.

## Timber Tests.

A plea is made by the EngineerRecord for a contionstion of the timber tests conducted some time ago under the direction of Prof. Fernow of the Forestry Department at Whshington. It is very properly urged that future tests, to be of practical value to architects, engineers and builders, should deal with timber as it must be purchased from the dealer, not with selected specimens, from which much better results will be secured. On thix point our contemporary says:- While engineers already possess a large amount of experimental data in regard to the resistance and durability of timber a far larger amount of information than yet secured is most urgently needed, not only as to the ultimate resistance under different kinds of miress but also a much more complete knowledge of the conditions under which greater durability may be secured. The resisting value of the details of framing, the effect of preservative processes on both elastic and whimate resistance and a great variety of other similar data are also still lacking.

With the rapidly increasing use of cement in construction work, the lime has come when a systematic system of testing cement should be established. It is quite as much to the interest of cement manu. facturers and dealers as to the interest of owners, architects and builders that all cement should be subjected to test. If this plan is not followed, we may expect to see failurex in cement construction which will tend to weaken confidence in the material and greatly restrict its use. That there is a great deal of cement of poor quality on the market is a well known fact, and steps should be taken to prevent this material from getting into works of construction. A Canadian manufacturer of cement submitted a sample of his material to one of the Canadian scientific schools recently, and it failed to stand the hot test. If such was the result with a cement that may be supposed to have been specially selected for testing purposes, there is every reason to suppose that much of the cement Bought and sold in the ordinary course of husiness is lar below the proper standard of quality. In what way the testing of the material should be carried out is not quite clear. It has been suggested that the Government might inspect the material at the mills, as is done in fiermany, but Governments are slow to act, and the adoption of a system might be indefinitely postponed if the Government were depended on to undertake the work. Perhaps a better plan would he for each city and town to adopt a regulation compelling all cement used within the municipality to be subjected to test. It is to be hoped that action will be taken in this direction at once, in order, as stated, that the development
hich cement consiruction is now baving, may not be retarded.

Probably nowhere on this Con-

## Hullding in the North West

 tinent is there to be found greater activity in building operations than may be witnessed at present in the city of Winnipeg. Population is flowing into this city at such a rate that it is found impossible to build rapidly enough to ineet the requiremeots for houses and buildings for business purposes. The value of new buildings erected last year was in the neighborhood of $\$ 6,000,000$. This year the figures will probahly reach $\$: 0,000,000$. The population increased last year by 13,000 , and will probably show a greater increase this year. The city directory shows a present population of 70,000 . As a result of the demand for huildings, the number of architects and builders is rapidly increasing. Thare are at present about thirty practising architects in the city. Several eastern firms have recently opened branch offices. Huilding materials of every kind and skilled mechanies are in urgent demand. Fears are expressed lest the recent great fire in Toronto should interfere with the supply of materials and worketen required for this seavon's operations.It is a fortunate thing for the city that, at the outset of its career several of the leading banks have erected on the principal business thoroughfare buildings which, in point of architectural beauty and substantiality, would do credit to any city. These buildings will serve as good examples for those to come after them, and will be likely to prevent the putting up of uninteresting and ugly hui'dings. Unfortunately, it has not been possible in the past to obtain red bricks at reasonable cost. Those nianufactured in the immediate vicinity are grey and, while substantial in quality, give to the buildings an uninteresting effect. In such a bright clear atmosphere und a climate which in winter is sometimes severely cold, the use of warmer tints of color is desirable. The Dominion Bank, built of red sandstone from Lake Superior, has a very pleasing appearance, and should lead to the use of this stone is important buildings in the future. In view of the high price of stone and brick, it is probable that cement construction will become popular when a good quality of cement shall be manulactured is the Northwest. At present the miterial must he imported at a cost of \$5.o3 par barrel, which prohibits its use on a large scale.

There are many differences to be observed in methods of construction employed in the Northwext, as compared with thove in the Fast. The severity of the climate in winter makes it necersary to give the occupants of buildings greater protection agdinst the cold. Hollow walls and box construction for windows are prominent features. Houses are built as far as possible without projecting features, chimneys being kept inside the walls in order that as much heat as possible may be retained within the building. It has been found that a thin bollow wall is of greater service as a protection against cold than a solid wall however thick. As during the period of frost there is little or no rain, no coping is required for brick walls and chimneys, and the exterior of huildings is not subject to disintegration by alternate thawing and freezing, as in a milder climate.

## ANCIENT LIGHTS.

The House of Lords has delivered an important judgment, on the ques ion of ancient lights, which de-
finitely settles and finitely settles the hasis of equitable adjustment of the opposing interests, in this respect, of the owners of old buildings, and the promoters of new ones ; not only in England but throughout the Empire, where the House of Lords is the final Court of Appeal.
The case was one of injury done to a tenement on One side of a street by adding to the height of the tenthe emposite. The complaint was that a room on the ground floor of the complainant's (or plaintiff's) to the tenement werceptibly darkened by the height added The tenement of the defendant.
appear to toning was a matter of fact which does not there were to bave been disputable. On the other hand sympathy with the defendant: Thanstan which excite was darkened ran througdant:-That the room which and had no window through to the back of the building in any case, and for at the back; so that it was dark required artificin for many purposes would have always ant's building, even when the back:-that the detendthat of the plaingen when added to, was lower than ordinary plaintiff. These circumstances, which to an than the onlooker seem to exhibit the plaintiff rather the case, before cont as the oppressor, serve to show as the defendant in the Coming to the Lords, had gone against the Statute hat in the Court of Appeal-how decidedly disturbance of been interpreted on the side of the non-
The Statute existing rights.
gave a prescritammonly called the Prescription Act, enjoyed for a prestive right to light which had been put upon this period of 20 years. The interpretation if a building has receivedts has apparently been, that, ${ }^{20}$ years, the received a certain amount of light for amount of light fore is entitled to claim that same this stiff interpretation her. According to the Times, the part of building has given rise to an attitude on
merely self-defensing owners that has grown from the
a building is pule senve to the extortionate. The moment one, the neighted down, to make way for a larger as "ancient light" "ing owners placard their windows tion than to lights"; in most cases with no other intenThey no to extort paymient under threat of a lawsuit. right to their lightieve that they have a proprietary interfered with embarrassment of he effect, at any rate, has been an there has beent of building improvement about which The history much complaint by architects.
trial (Dec. ${ }^{\text {D }}$ of the present case was that in its first farled because theo ) the Judge found that the action op:nion, "be well plaintiff's premises would still, in his purposes of well and sufficiently lighted for all ordinary Court of Appeal, of oncy as a place of business." The on the Appeal, (Dec. 20, 1901) reversed this decision the owner ground that, according to the law of England, amount of the ancient light is entitled to the whole The appeal light which has ever reached his windows. Lords ineal was twice argued before the House of Was delivered and in December of 1903, judgment The I I red on May 2 last.
that, it the Chanc. llor pointed out, in his judgment Were the principle laid down by the Court of Appeal grow ; be applied consistently, towns would not had for because any dweller on the edge of a town, who had for 20 years enjoved free access of air without
buildings near him, would be in a position to restrain any interruption of this enjoyment by the extension of buildings beyond him. Indeed under this principie, no vacant piece of ground could be built on in the city ; and the rights of people to utilize their own land would be formidably restricted. The right of access to light not being a proprietary right in the light itself but only a right to its enjovment which is common to all, he concludes that the test of the right is whether the obstruction complained of is a nuisance. That is to say, a dweller in towns cannot expect to enjoy absolute daylight any more than he enjoys as pure air, as much
fre freedom from smoke and smell, or as little disturbance
from from noise, as if he lived in the country; yet as an excess of smoke, smell or noise mily give a cause of action so it is in the question of deprivation of light-the question is one of degree. And the test of right must further have some elasticity that
it it may fit the surroundings and circumstances of each case, since these affect the amount of light required.

The Lord Chancellor having thus, by the investigation of elementary principles, endeavoured to get over what he calls "the danger of attempting to put a principle of law into the iron framework of a statule," the four other judges gave judgments to the same effect, with such further considerations as show the conclusion of the whole matter to be that a 20 year user of light acquires no prescriptive right beyond such consideration as one would think would be given by common law without the intervention of a statute ; for the owner of a building of any age is declared to have no more than an equal right with the owner of the newest building near him to an amount of light, "sufficient according to the ordinary notions of mankind, for the comfortable use and enjoyment of that house as a divelling house, or for the beneficial use and occupation of the house if it were warehouse, shop or other place of business." The owner of a new building, built on a lot previously vacant can of course only $g$ gt a share of what light is going, but he is entitled to that ; and nobody else seems
to be to be entitled to any more. If there is less light going after the advent of the new building, the owner of a 20 years old building opposite must be content with the change so long as his building "reta ns its substantial identity." It seems therefore that an exceptional need for light in an old bailding cannot claim full considera-
tion. tion. This would be to uphold the right to an average maximum of the light that had been shed on the windows in the past ; and this view, which was that of the Court of Appeal, the Lords reject. It is unfortunate for definiteness of decision in the matter that Lord Davey, who alone considers this aspect of the question in a concrete way, gives, in illustration, suppositional cases of one class only, viz., of premises converted from a purpose requiring less light to one requiring more; and he says that a man, in thus calling upon his neighbor to leave him a supply of light which is rendered necessary only by such alterations, imposes an increased burden upon his neighbor, which no man can do by any act of his own. This seems to limit indefensible claims for extraordinary amount of light to those which are made on behalf of a building which has altered its substantial identity so as to require more light. But he can hardly intend this limitation for he introduces his illustrations in the middle of an argument which, accepting
what he says "is agreed on all hands", that a man doe ${ }_{s}$ not lose or restrict his right to light by not using the full measure of light that the law permits, asks:-"I $I_{1}$ the actual user is not the test where the use falls below the standard of what may reasonably be required for the ordinary uses of inhabitancy and business, why (it may be asked) should it be made a test where the use has been of a special or extraordinary character in excess of that standard." And he concludes that the only test of right is a fair standard which, under the titie of a "supposed standard," is more than once alluded to in these judgments as having been objected 10 in a former case by one of the judges of the Court of Appeal whose decision in this case these judgements reverse. Lord Davey's final statement seems to be definite enough :-"I am of opinion," he sums up, "that the owner or occupier of the dominant tenement is entitled to the uninterrupted access through his ancient windows of a quantity of light, the measure of which is what is required for the ordinary purposes of inhabitancy or business of the tenement according to the ordinary notions of mankind, and that the question for what purpose he has thought fit to use that light, or the mode in which he finds it convenient to arrange the internal structure of his tenement does not affect the question. The actual user will neither increase nor diminish the right. The single question in these cases is still what it was in the days of Lord Hardwicke and Lord Eldon (whose decisions were given before the Prescription Act), "whether the obstruction complained of is a nuisance. I do not myself think that this rule is difficult of application in practice." In support of this latter statement which, as applicable everywhere, may perhaps be thought a strong one, his lordship adds:-"The experience of surveyors who are practically conversant with this matter is entitled to great respect ;" and also :-"The rule of 45 degrees is not, of course, a rule of law, and is not applicable in every case. But I agree with Lord Selbourne, 'City of London Brewery Company v. Tennant,' that it may properly be used as Prima facie evidence."

> W. A. Langton.

## MOISTURE IN WOOD.

According to M. Deploy, green wood when cut down contains about 45 per cent. of its weight of moisture. In the forests of Central Europe wood cut down in the winter holds at the end of the following summer more than 40 per cent. of water. Wood kept for several years in a dry place retains from ${ }^{1} 5$ to 20 per cent. of water. Wood that has been thoroughly dis. sicated will, when exposed to air under ord nary circumstances, absorb 5 per cent. of water in the first three days, and will continue to absorb it until it reaches from 14 to 16 per cent, as a nurmal standard. The amount fluctuates above and below this standard, according to the state of the atmosphere. M. V olette found that by exposing green wood to a temperature of 212 deg. Fahr. it lost 45 per cent. of its weight, which accords with observations of M. Deploy. He further lound that by exposing small prisms of wood $1 / 2 \mathrm{in}$. square and 8 in . long, cut out of billets that had been stored for two years to the action of superheated steam for two hours, they lost from 15 to 45 per cent. of their weight, according to the temperature of the steam which varied from 275 deg. Fahr to 437 deg. Fahr. ( 125 deg . Centigrade to 225 deg . Centigrade).

## NEW BUILDING REGULATIONS FOR TORONTO. <br> The City Council of Coronto will shortly take up

 consideration of a new set of regulations to govern the construction of buildings in that city. Mean while at the request of the City Architect, the Council have authorized the following amendments to the exildings regulations, in order that the replacing of buildins destroyed by the recent fire may be proceeded with:Section 46 of the said By-law is repealed and the follawill inserted in lieu thereof:
" 46. No building shall be erected or placed on of or fid wiles? foundations, or on foundations partly new and partly old, whll ill the same shall he built with main walls of the thickness with the for in the following tables, said walls to also comply other conditions as to heights and openings as hereafter specific Walls for Buildings Used as a Dwelling house, ap arib ment House, Tenement House or Lodging Houst.


Walls for Buildings Used as Hotels, OfFice Bulb ${ }^{N^{2}}$ Warehouses, Factory Buildings and Public Bullo ${ }^{\text {N }}$


In the foregoing tables of thicknesses of walls the per lar distance from the top of joists in one storey to the ponding point in the next storey is to be understood to me ${ }^{\text {a }}$ mere than 12 feet in the basement or cellar, 19 feet for ground floor, 16 feet for the first storey, and 15 feet each storeys above the first, except the top storey, which may if a an additional five feet in height at the highest point. storey exceeds these respective heights the walls of such one and all the storeys below the same shall be increased onich brick, or about four and one-half inches more than the thic th given in the tables, and if basement or cellar walls exceed ${ }^{\text {sed }}$ feet in height they shall, if built with stone, be increat inch inches in thickness, and if of brick four and one-half in thickness for every additional ten feet or part thereof, in ${ }^{\text {e }}$ of twelve feet.

All cellar or basement walls built of stone or brick shal allad $^{\text {be }}$ laid in cement mortar. If solid buttresses or iron teol not over 18 feet between centres, with suffici
carry trusses or girders, are used, then the thickness of the walls may be reduced one-half brick, or about $4^{1 / 2}$ inches, proinches in there, that no brick walls shall be less than fourteen factory or thickness in any hotel, office building, warehouse, The or public building.
tables thickness of walls specified herein and set forth in the terior for the various buildings are intended to apply to all exrequired foring walls, and all such interior walls as may be An incred the support of floors and roofs.
thickness of wall one-half brick or about $41 / 2$ inches in the support trussed shall be made in all cases where the walls where walls for woofs, and are over seventy-five feet long, and hundred and fifty wrehouses and factory buildings are over one height. All
All non-bearing walls of buildings may be four and one-half
inches less in however, that thickness than called for in the tables, provided,
The outside nune are less than nine inches or one brick thick. opera houses walls, if of brick work, of all public halls, theatres, are carried on other buildings in which the roofs or ceilings shall not be of less or girders of a span of fifty feet or more, ground bloo of less thickness from the bottom of the first or the underside of the lowest point in the main auditorium to (t) If the walls trusses or girders than the following :
high, they are to be over twelve and not over twenty-five feet (2) It more than not less than eighteen inches thick.
teet high, they are to be not feet high and not more than fifty for the first twenty-five feet less than twenty-two inches thick remainder of twenty-five feet, and eighteen inches thick for the (3) If more height.
five feet more than fifty feet high and not more than seventythick for the firstey shall be not less than twenty-seven inches thick for the first twenty-five feet in height, twenty-two inches for the remainder twenty-five feet, and eighteen inches thick over seventy-fiver of the height. For any increase in height in the above ratio feet, the thickness of walls shall be increased thickness of watio. An increase of four and one-half incbes in one hundred feet shall be made in all cases where walls are over
(4) In case theng without cross walls of equal height.
public hall, theatere shall be one or more storeys built above a on trusses or girde, or opera house, such storeys being carried by four and girders, the thickness of walls shall be increased storeys or part therelf inches, or one-half brick for each two (5) If solid thereot aboye every such room.
teen feet or less asonry buttresses are employed and placed sixgirders, carryingart, and extended to the foot of the trusses or are inserted in such ceiling and root, or if iron or steel pillar and at distances walls for the support of the superstructure, such pillars extendint more than eighteen feet between centres, and girders, thending to and carrying the super-imposed trusses portion to the thickness of such walls may be reduced in proor pillars; but increase or strength afforded by such buttresses teen inches thick no case shall any such wall be less than fouror one-half brick in the top storey, four and one-half inches or for each brick being added going downward for each storeys blank wall. If iron, or for each twenty-five feet in height of the brick work iron or steel pillars are introduced in said walls, connecting walls, and the same shall be bonded into that of the than nine walls, and each of such pillars shall have not less ured from inches of brick wall around it, the brick being measpillars. (6) If construction, and the theatre, or opera bouse is of skeleton imposed loan, and the steel framework carries the entire super shall consist of floors, roof and walls, then the enclosing walls inches of hist of fourteen inches of solid brick work, with two properly bonded tile, or four inches of hollow brick on the inside,
be protected against ther, the balance of the structural parts to All walls against the effects of fire.
reinforced with in the tables shall be increased in thickness or be ing are the conditions. When wall anditions :
shall be walls are more than twent $y$-five feet apart, one-halt brick half feet, added for every succeeding interval of twelve and onetermed, or part thereof, of distance between them without inWhen any division walls or rows of column and girder supports. twenty-five per cent, reduction section of walls shows more than ir $y$-five per cent. reduction of area on account of flues, open-
ceeding interval of ten per cent. or part thereof reduction, provided that in walls of uniform thicknesses such reduction does not exceed fifty-five per cent. of the whole, or in masonry pier construction not more than seventy per cent. for each bay.
Wherever walls less than eighteen inches in thickness are uti$l_{\text {ized }}$ for the support of ordinary joists in buildings used for the sale, storage, or manufacture of merchandise, or public livery, boarding or in sale stables ledges four inches wide shall be corbelled out in not less than four courses, of brick for the support of such joists, and in buildings of all classes where furring strips, whether combustible or incombustible, are used on bricks walls, there shall be ledges equal to the thickness of such furring strips upon such walls, and in all cases where such ledges are built, they are to be commenced at the bottom of the joists, and are to be carried up to and levelled off at a line at least one inch above the top of the joists.
All wooden joists, beams or other timbers in the party wall of every building built of stone or brick or other incombustible material, shall be separated from the joist beam or timber entering the opposite side of the wall by at least four inches of mason work. timber in walls prohibited.
No timber except inside lintels, as hereinafter provided, braceblocks, or wood brick, not more than nine inches in length, shall be used in any wall of any building where stone, brick or iron is commonly used. And the rooting in Limit " A " shall be of incombustible material. All brick walls shall be carried up on the construction aforesaid to the underside of the roof boards, whether front, rear, party or gable walls ; and all gable or parapet walls surmounting roofs of mercantile buildings shall be at least one brick and a half, or fourteen inches in thickness, and shall be carried to the full height of three feet above the roof, on a square line therewith. All the exterior walls of sheds abutting on lanes or passages other than streets shall be constructed of brick or stone, not less than nine inches in thickness.

Section 69 of the said By-law is hereby repealed, and the following inserted in lieu thereof:
" 69 . All buildings erected in terraces or rows must have one brick party wall to at least every thirty feet in length of frontage, and such party walls must be equal in thickness to that required for outer walls, and be carried eighteen inches above the roof, as before mentioned. The party walls in all semi-detached houses must be carried up close and flush to the root boards to divide each separate tenement, and to go through the roof to every second tenement, with parapet walls."

## PERSONAL

Mr. J. W. Siddall, architect, left Toronto recently for a visit to Europe.

Mr. Brydgeman, architect, late of New York, has recently opened an office in the Canada Life Building, Winnipeg.
Mr. Robert Wilson, formerly a well known Tornnto contractor, is now local manager at Winnipeg for Mr. H. C. Stone, architect, and is also superintending the construction of the new Union Bank Bullding in that city for Messrs. Darling, Pearson \& Over. Sproatt,Rolph \& Chrysler,architects, have established an office in the Thompson block, Main St. Winnipeg, in charge of Mr . Chrysler. The firm have prepared plans for alterations and additions to the Commercial Club, and have also on hand a considerable amount of other work.
Mr. George Browne, one of the pioneer architects of Winnipeg, is about to retire from practice and take up his residence on the Hudson, about twenty-five miles from New York City. Mr. Browne has been a resident of Winnipeg since 1878 , and has designed and superintended the erection of many of the important buildings of that city. His removal is very much regretted.

The Galt Art Metal Company, Limited, is a new concern which has recently started business in Galt, Ont., for the purpose of manufacturing architectural sheet metal material. The directors of the company are prominent business men of Galt, the manager being Mr. J. H. Hayhurst who was for a number of years manager of the James Warnock Company, Limited, and who, on severing his connection with that Company, was made the recipient of a gold headed cane by the employees.

## THE CANADIAN ARCHITECT AND BUILDER

## WINNIPEG BUILDERS' EXCHANGE.

## At various times during the last fifteen years organ-

 ization has been attempted by contractors in the building trades at Winnipeg, but none of these was ultimately successful. The Winnipeg Builders' Exchange, organized last month, is founded on a broader basis, and we believe is destined to endure, and to serve a useful and important purpose. The Exchange has already a membership of nearly one hundred of the leading contractors and supply firms in all lines. Convenient and commodious quarters have been secured in the Rialto Block, $4821 / 2$ Main St., where a number of important
meetings have already been held. The success of an organization of this kind depends very largely upon the Secretary. In Mr. W. W. Daly the Exchange have secured a most painstaking, obliging and efficient officer, who may be depended upon to do everything possible for the success of the organization. The other officers, directors and memhers of the Committees are


Mr. G. W. Murray,
Ist Vice-President Winnipeg Builders' Exchange.
as follows :-President, E. Cass ; First Vice-President, G. W. Murray ; Second Vice-President, Joseph Bourgeault; Treasurer, T. D. Robinson; Sergeant-at-Arms, Alexander Irwin. Directors, E. S. Harrison, Angus Browne, W. A. Irish, D. Cameron, John Douglas, J.
W. Morley, Thomas Cotter, J. A. Girvin, R. Wats $5^{\text {n }}$, Victor Bouche, William Alsip, and C. H. Simp ${ }^{5010}$ Legislative Committee, Mayor Sharpe, Chairmand William Garson, T. D. Robinson, William Irish and Wm. McFarlane. Finance Committee, A. T. David son, Chairman ; Duncan Sinclair and Angus Browne.


Mr. Jos. Bourgeault,
2nd Vice-President Winnipeg Builders' Exchange.
Resolution Committee, A. J. Hammond, Chairman C. N. Sharp, W. H. Fraser, W. Malcolm and A. N, McCutcheon. Membership Committee, Philip Burniph wrig Chairman ; A. B. Anderson, W. Wilson, J. W. W Co ${ }^{\mathrm{m}^{-}}$ and William Hanbury. Labor and Grievance Cll, C. mitee, George Mitchell, Chairman ; F. Powell, d $^{\text {h }}$ Gate, A. J. McMartin, C. A. Bell, S. B. Ritchie, Jo


Secretary Winnipeg Builders' Exchange.
Douglas and J. H. Neil. We have the privilege presenting herewith the portraits of the chief Executive Officers of the Exchange.

The objects of the Winnipeg Builders' Exchange, ${ }^{\frac{,}{9}}$ set forth in the Constitution, are as follows : -1 . ers $^{\text {s }}$ join in one Association all contractors, manutactur city and dealers of good repute doing business in the or aforesaid, whose vocation connects them, wholly ${ }^{5}$ generally, with the industry of building, either employing contractors in any branch of the buildip business or as manufacturers of or dealers in tater
ised and employed in the erection of buildings or other structures, and who are not members of any Journeymen's Trade or Labor Union,
2. To establish and maintain among the individuals so associated a just and equitable system of dealing, and a uniformity in commercial usages by rules and


Ivey Building.-H. C. McBride, Architect.
regulations:
valuable inf to acquire, preserve and disseminate they are severmation regarding the business in which 3. To severally engaged.
and maintacure (either by lease or purchase), furnish for meeting suitable rooms for the use of its members 4. Toeting rooms, offices and other purposes.
4. To establish and maintain a system of adjustment
its all disputes or controversies which may arise between and other or between its members and their employees cert with persons, and for that purpose to act in conert with similar organizations.
$\mathrm{O}_{\text {ne }}$ of the first subjects brought before the Exchange for its consideration was that of a uniform contract to all the with a view of securing justice and fairness where, thentracting parties. In Winnipeg, a: elsekeenly felt. In its ant of form of contract has been obliged to consult and pay for the services of a lawyer to examine every contract which they were called upon to sign. Frequent objection was made by the lawyers
to the to the terms and conditions of the contract, causing ${ }^{\text {trouble }}$ and delay. It is the hope of the Builders' Exchans that a form of contract may he adopted which wil be sa isfactory alike to architects, owners and
contractors, and which will do away with the difficulties which have been experienced in the past. As a united body the Exchange will also be in a position to deal with other difficulties such as inadequate transportation, delayed cars and unfair and excessive demurrage charges, labor troubles, etc. The Exchange will furnish a list of its members with their names and addresses to the architects of the city, and request will be made of the architects to furnish the Exchange with a copy of all plans and specifications for its members only. It is expected and hoped that next winter lectures and papers on subjects of interest to the members may be obtained and presented at the meetings.
Taken altogether the Winnipeg Builders' Exchange will be, as in other large and growing cities, a source of great benefit to all identified with the various building interests, and if loyally supported by the members will become, as elsewhere, indispensable.

THE TORONTO FIRE.
The accompanying photographs illustrate the class of buildings that met their fate in the recent conflagation.


Effect of the Fire on Warehouses Immediately East of the Ivey Building.
Part of a Copyrighted Photograph by Galbraith Photo Co.
Some idea of the intense heat can be had when stone fronts like this are fairly melted.

The Ivey building was saved only on account of the fire wall at the side. It is one of Toronto's modern warehouses - the front above the ground floor windows being built of New York pressed brick and trimmed with Roman Stone which is in itself a fireproof material.

## WHAT CONSTITUTES BEAUTY IN ARCHITECTURE.*

## By Barry Parker.

Mr. Barry Parker recently delivered a lecture (in two parts) at the Glasgow Exhibition before the International Association for the Advancement of Science, Arts and Education, under the main title of "Wherein Beauty in Architecture lies," and the sub-title of "Placing of Light and Shade, Detail, Masses and Ornament."
Mr. Parker said that he had been led to the choice of this subject by a feeling which had grown upon him more and more, year by year, that those interested in the development of the knowledge and percsption of truth in art do, in their attemps to help one another, almost invariably miss what is perhaps most important. Anyone setting out to help others to a knowledge of architecture, whether it be to train students with a view to their practising it as a profession or with the aim of guiding others to some understanding of what they see, always approaches his subject from some point of view other than that of trying to show them some main principles or guiding instincts which have led to beautiful results in all styles and periods, and at all times, throughout the history of the art.
He teaches his pupils building construction; he teaches them architectural drawing; he teaches them any amount of the history of architecture, its development from style to style; or even some abstract mathematical systems of proportions, to their infinite and irrevocable loss of ability for any broader grasp. He teaches them the art of planning economically and conveniently ; perhaps even the adaption of the architecture to the climatic conditions of a country, and the habits and mode of life of a race. He will probably go so far as to state that he feels this building to be beautiful and not that, but does he ever attempt to teach wherein lies the beauty of the one and the failure
of the other?
Mr. Parker did not ask that the teacher should point out why the attainment of beauty lies in the recognition of this or that broad principle or æsthetic instinct; that would, he said, in most cases, be beyond what it would be fair to ask. But by a thoughtful comparison of many buildings belonging to all styles and all periods he could discover and points out right instincts, always followed, and factors always duly valued in successtul work the world over-in fact, wherein the beauty of a building lies.
He went on to point out that this absence of any attempt to create a power to analyse into its constituent elements the beauty of one building, and to see what has led to the absence of beauty in another, was another characteristic of our art training today, which made for the increase of that army of copyists (incapable of the least originality) by which the progress of the art of architecture is so lamentably hindered. For he who has merely seen that one building is beautiful and another not, and has never approached either with any attempt to discover the qualities making for success or failure, will have no idea of doing anything
more than reproducing what he has seen to be beauti ful as slavishly as the new conditions in which he is placing it will admit. He will have no power to see the he commands the qualities which have made for success.

[^0]By means of a sketch of a window in Florence he had recently made for this purpose, and a photograp ${ }^{\text {b }}$ of a pulpit in Milan, and another of the Duomo in Florence, he showed how rightly to meet the differ ences in ornament demanded by considerations of dis ${ }^{*}$ tance from the spectator; how only vulgarity resulted from simple magnifying ornament because it was to be seen from a distance, and unly irritation in the be holder by so designing that it could not be properly seen; how a truly happy result could only be got by designing ornament which was to be seen from ${ }^{\text {d dis. }}$ tance, simple but refined in detail, avoiding above all things multiplicity of different forms, that it may be easily grasped from a distance and satisfactory on close inspection.

Not the least interesting part of these lectures was that treating of the province of design in tringing into harmony the works of nature to the works of man; the province of design in introducing growing forms amo ${ }^{0.5}$ architectural forms, and architectural forms amo $0^{0 \circ}$ those of wild nature; the due fusing of the one into the other, and the softening of the abrupt contrast by fran ${ }^{k^{\circ}}$ ly acknowledged art.

Finally, among the main principles in design which Mr. Barry Parker laid down as forming as it were the framework, he laid great stress on the following: "Everything anyone is called upon to design has certain clearly defined requirements, purposes and conditions, and the form must be given it which will best enable it to fulfil these betore any other considerations may be entered upon. It is doomed to certain artistic failure if, from mistaken notions of the distates of aesthetic ${ }^{5}$, it is given a form which will make it less able to perform its functions than would some other form; and the ability and inability of the designer is shown in the degree he makes it satisfactory to our aesthetic in ${ }^{-}$ stincts, while at the same time he enables it to perform its functions as perfectly as possible." He also ${ }^{\text {m }}$ phasised that its form must at the same time be one which revealed and explained the construction; not one which attempted to conceal it.
From his want of power to analyse the beauty of his model into its constituent elements he would be certail so to adapt it to its new conditions as to destroy that beauty. Mr. Parker showed on the screen photograp ${ }^{\text {hs }}$ and sketches of many European buildings, pointing out how the disposition and placing of the main mas ${ }^{5^{55}}$ of light and shade must take precedence of all other questions if beauty, and not entire loss of dignity is to result. He demonstrated the truth of this by showing various examples of buildings where there was massing of light and shade ; the light was all brokeln up, and the shade was all broken up and spread in little patches and strips universally over the whole building. He went on to show that to gain beauty it was necessary there should be not merely restraint in the use of detail, and a sense of fitness in the parts selected to be finely detailed, but the right perception of the way in which the detail should be concentrated or grouped. "No truly happy effect ever was or $e^{\text {ver }}$ can be produced where small and great are disposed universally over the whole surface of a building, and where no thought is given to the enhancing of the light parts and details by opposing them to the massive, the broad and the simple, where all parts are equally $e^{a^{-}}$ riched, whether greatly or slightl $1_{\text {ere }}$ at moulding
ornament, colouring, or in any other way, as is the richment is many modern buildings in which all enallow, equally spread, profusely or sparsely as funds He deplored over the whole facade."
surfaces, and showed of power to rightly value plain much of the beauty of the work of the past resulted from due appreciation of these.

## The lighting of a house and its effect UPON THE DECORATIONS. <br> A good part of the usefulness of a house comes at

 night; it is then that we most generally throw open our house, so the problem of artificial lighting becomes a very $\mathrm{Y}_{\text {ou cant one. Many houses are ruined by bad lights. }}$ it seem quinish a room ever so elaborately and make Wrong place ; you by having a blaze of lights in the fortably, and ; you can seat your guest ever so comdirectly in mis eyes his visit a torture by having a glare ever so cooly fores; and you can furnish your room ing point by ill-advised attempts to illuminate the boil-Fortunately, ill advised attempts to illuminate.
adhered to will as it happens, one simple rule rigidly
The light should you safely out of any difficulty. eyes. There is, perhaps, only directly in anyone's rule. At one's dressing, only one exception to this left bare, for thats dressing table the lights are rightly quite plainly, and where place where one wants to see would be a hindrance. Comfort ahsolutely
so does decerative ahsoly demands the shaded light, and to be preferative beauty. A mild, soft light is always shades of the lights a glaring white light; and the cessfully introdights are really the easiest way of sucessfully introducing colour into your scheme of decora-
tion. It is possible to haps the is pest effible to have various colours, but perin a room best effect is obtained by having all the lights the lights in pank colour. A drawing room with all which women look may be made a delightlul spot in good colours, look their best. Red and yellow are the room in whe increase the rich and mellow look of green, with which they are used. A library papered in and studious, with theodwork, looks peculiarly restlul lined greens, whades the somewhat old-fashioned whiteBlue and most on the reading lamps.
the room most greens are to be avoided as giving whole effect of a people in it a ghastly look. The which lights it. As to the it. lighting, anyone to dive difference between high and low furnished room can bear witness. Light a ring of gas
jets uper lived in a sparsely jets up near the ceailing, and the whole room of gas barren. The ceiling the and the whole room looks feature of the ceiling itself becomes the most prominent the whole apartment. Put your lights down a little
lower, and lower, and let the lights fall on your rugs and what
furniture corners you have; let a slight dimness in the farthest you will fistract too much attention from them, and take on a the room which was formerly barren will The same comfortable, snug look.
to their fulleste applies to rooms which are furnished to be emphasized capacity; the ceiling is not the feature sure to bring about this result. Of course, to this
are wanting to light a ballroom, the ceiling of which is so high that lights up there are safely out of the range of the eyes. The effect of spaciousness is what you want; the room is to be filled with people, and a clear general view must be possible. In such a case the hard brilliancy of uncovered lights is exactly what is needed.

And for those who can employ electricity there is also a possible lighting from the ceiling. A very successfully lit dining-room in New York has a rich coffered ceiling. In the squares between the cross-beams have been placed four flattened hemispheres of pinkish opalescent glass. Behind these and next the ceiling are electric lights, which diffuse a soft pinkish light all through the room. They are not called upon to do all the illuminating, for around the side walls incandescent lights with pink shades and on the tables candles, similarly protected, furnish light. The effect of the lights on the ceiling is very good. The ceiling itself is rich enough to stand illumination, and high enough to bring the lights out of the immediate range of the eye. But the scheme is rather elaborate, and for the simpler type of house out of the question.

There is very little to be said for the ordinary chandelier, depending from the ceiling's centre. In a hall, where it usually assumes the form of a hanging lantern, it is perhaps at its best. In other rooms it had best be removed. If this cannot be done, at least light all jets and turn them very low, rather than have a flaring jet at one side, while the rest of the chandelier is in hideous uselessness.

## ARCHITECTS' FEES.

The American Institute of Architects has lately revised its schedule of minimum fees for professional practice. These are now substantially as follows :-
For prelimmary studies, working drawings, specifications, large scale and full size details, and the general supervision of the work, the minimum charge is 5 per cent. on the cost of the work. By supervision is meant such inspection by himself or his deputy of work in studios, shops and on the building site, as he finds necessary to ascertain whether his drawings, specifications and directions are being carried out. If the constant presence of a superintendent is necessary, the owner is to pay the cost. For new buildings costing less than $\$ 10,000$, and for furniture, monuments, decorations and cabinet work the charge is to be 10 per cent. "None of these charges covers alterations and additions to contracts, drawings and specifications nor professional or legal services incidental to negotiations for site, disputed party walls, right of light, measurement of work or failure of contractors; when such services become necessary, they shall be charged tor according to the time and trouble involved." When heating, ventilating, mechanical, electrical and sanitary problems in a building are of such a nature as to require the assistance of a specialist, the owner is to pay for such assistance. The fees are to be paid in the following order: On completion of the preliminary sketches, one-fifth of the entire amount ; on completion of working drawings and specifications, two-thirds ; the remaining two-thirds from time to time.

Only those who have laid a sidewalk can realize the vast difference between work in the abstract and work in the concrete -Princeton Tiger.

## MURAL DECORATION.*

## By F. S.Challoner

Some one has well said that "all painting should decorate." Decorative painting, strictly so called, however, may be broadly defined as the appropriate filling with graceful lines, subtle or strong, light or dark, masses and harmonious colors, of spaces of various shapes and sizes which are made by the architectural lines of a building. These spaces may be either modelled in low relief or smooth, domed, saulted or flat. They are sometimes on the ceiling, in the cove and frieze, or around the walls. In every instance they are influenced by their architectural environment. To fill all these panels with great art there are certain qualities other than the best composition, drawing, molelling and technique, that must be present in the work. These qualities which are essentially "mural" are always seen in the best decorative painting, and often are there at the expense of some of the others. One of these mural qualities is harmony. No scheme can be iruly decorative unless harmony exists between it and the other parts of the building to which it belongs. To secure this, architect and artist must "pull together," so to speak. Else, though you may have good architecture and good painting, you will have a poor "ensemble." As an illustration, let me quote an article that appeared in Scribner's amongst the Art Notes for April, 1897; dealing with this very aspect of the question, and in connection with the newly decorated Library at Washington. The writer of that article goes on to say: "Many of the mural decorations considered separately are very satisfactory, but considered as a part of a whole they have often failed in conformity and harmony. This has resulted almost entirely from the lack of a systematic plan covering the whole building to be decorated. In place of general supervision there has been individual license. There is variety in it, to be sure, and so there is in a crazy quilt, but what is needed in decoration is not variety but quiescent unity, unostentatious oneness of effect. Some of the pictures not only swear at each other, but at the building generally." Continuing, the writer says: "If our buildings are to be decorated in a proper manner, a schene of form, light and color, planned and controlled from cellar to roof, by some person or persons, would seem absolutely necessary. The true artist never yet suffered by architectural or decorative restrictions. The axiom of the whole being greater than any of the parts, is as true in art as in matiematics; and the great aim in decoration should be 'ensemble.' An 'omnium gatherum' of wall paintings, however good they may be separately considered, is not decoration."

In order, too, to be in harmony with its setting, a mural painting must, in artists' parlance, "cling to the wall." There should be no aton a solid wall and level surface. neither seem as though it were modelled in must nor make a hole in it, but should lie quied in relief flatly in its place.

A decoration, th

* Paper read at the annual convention of the Ontario Association of
Architects January, 1904.
scopic, for the moment you introduce deptl of atmospheric perspective, and focus an effect in onte place only, as is done in picture painting generally, you at once do break through the wall.

A mural decoration, like a tapestry, should the as a whole from one corner of the subject to the other. It should also be kept as simple as pond sible, since a lack of simplicity is disturbing and also prevents it being effective when seen from ${ }^{\text {a }}$ distance as mural decorations very often are.

Now, simplicity does not mean emptiness, ${ }^{110}$ a bit of it; it does not mean wholesale leaving out, but skilful leaving out.

The attainment of harmony in color is $e^{v e} e^{s}$ 11: ore difficult in decoration than in other brant hes of painting. Color is largely governed by light ing, and in decoration every problem is one, as far as illumbination is concerned.

Thus, pure colors, such as yellows, reds, blues and gold, which produce an admirable effect ${ }^{1 /}$ the subdued light of some buildings, would $10^{\text {s }}$ garish indeed in others that are well lighted.

Where artificial light is used it should be kcp at a proper distance from the paintings or that will be cancelled; no pigment can fight againt either gas or electricity. In this respect I nino mention a couple of ceiling paintings which so in of you are familiar with; they are $\sqrt{ } c^{-}$ the front dining-roons, upstairs, at fout Conkey's; they are about seven by for of teen feet in diameter, and in one ${ }^{\text {non }}$ ind these the artist has represented the "Con 1 nole Day," and a Cupid with a torch lights the whos composition. In the centre of that panel a $a^{11^{2}}$ branch electrolier has been placed, and as aries tural result that torch that the youngster car $o^{11^{t}}$ does not count for much, it is quite knocked fit by the electric lights. Some other form of lirdre ing that room satisfactorily could easily hater been devised, it seems to me, had the mat and been given more attention by the architect, $\mathrm{sin}^{11}$ the painting would have looked far better. Secot plicity of modelling is another factor in deco tive harmony-a factor of the greatest imp en $^{11}$ ance. Sirong Rembrandt-like shadows are tirely unsuited for this class of work.

Of the evolution of mural painting throus the ages to what in the fulness of time has be come the splendid art with which we are falnil iar, its suitability as a means of beautifying the home and the place of worship; the ineditil ${ }^{1{ }^{\text {b }}}$ used; the choice of appropriate subjects for 'arious classes of buildings and rooms; the scal upon which these should be executed, and otile matters connected with the execution of the wot interesting to architects, might also be toticie upon, had I but a little more time. I will, the te fore, proceed to take up the aspect of the $\mathrm{q}^{\mathrm{t}^{e^{5}}}$ tion as an educational factor in the municipa ity. In its minor forms it is little more that mere embellishment, but even then it helps . make life easier and pleasanter, but whell comes to be applied to the decoration of $\mathrm{p}^{2 \mathrm{t}}$, buildings it should be significant, either symbo cal or commemorative, and it has been so in ir its best instances. The people of the past- 1 t ens, Florence, Venice and other Eutopean felt the value of art in this respect.

## THE CANADIAN ARCHITECT AND BUILDER

They believed that certain benefíts arose from the cultivation of beauty; that the pleasures of private life, the dignity of public life were increased thereby. It seemed only natural to such cities that the buildings which belonged to all should be the finest of all; consequently it was on the walls and ceilings of these buildings that the native artists were set to work. Go where you will among the great cities of the past and you will find these painted glories still, works which will make these cities famous and splendid for all time. Those cities made the interior of every public building beautiful. Why should not the cities of Canada? History tells us that Athens spent more money upon her art than upon it wars. And this art was the property of all; it welonged to every citizen who had eyes to see; it was "of the people, for the people, by the people." The history of the city was not shut up $i_{11}$ libraries; it was made living upon the walls so that the humblest and least educated citizen knew its principal and worthiest events. Eivery one is more or less impressed through the eyes, especially so are the masses owing to their lack of imagination. "lictures are the books of the ignorant," said si. Augustine.
To-day, I have been told, the same citizen in $\mathrm{Pa}_{1}$ is walks around the court-yard of the Invalides, and easily gets the battles of the Republic
by heart by heart. At the Pantheon he is taught who civCharlis country and who fought for it; he sees Charlemagne as civilizer, St. Louis as law giver, Jeanne d'Aic as liberator, and St. Genevieve as its patron saint. It is the same with the other civic buildings; they are all either decorated or being decorated and dignilied by her leading artists, and so, whichever way he turns, he sees on the walls the figures and the stories of those who liave helped himures and the stories of those who lhariot of progress. In this way the modern Parisian is taught who are the benefactors of
France, and whis France, and when he next sees it he understands the great inscription in letters of gold upon the pediment of the Pantheon, "A grateful country 10 its gieat men."
It is the same in other cities of Europe; they have all followed the example of the people of the past, and if the pictured lessons are good for ${ }^{t}$ elli such would be good to-day for all of us Who have occasion to use our own civic buildings.
In our own municipal buildings, above the inwer series of arches of the main entrance, you will see some decorative panels and over them the following words: "Hail pioneers; their names and deeds remembered and forgotten, we honor here." If you look around you won't find many of those famous men nor many of their deeds upon those walls. At present, barring the stained glass window, and the portraits, the place is but ${ }^{2}$ whitened sepulchre. This should not be, for What Athens, Rome, Florence and Venice have done in the past, New York, Boston, Washingthe following their example, are still doing in the present; Montreal, Toronto, Ottawa, Hamilton, London and Winnipeg, and the other cities
of our fair Dominion may do in the future. If these countries thought it worth while, why not Canada? She has much to celebrate, the settlement of the country, the exploration of its rivers and lakes, the achievement of Confederation, our national industries, and lots besides.
muril paintings as an investment.
In every country there are those who when anything new is suggested ask, "Will it pay? Is there any money in it? Is there a practical side to this celebration of national, civic, corporate and individual achievement?" Most assuredly there is. There are scores of illustrations to be cited to show that the decorations of public buildings may be of some financial benefit to a city or corporation. Everybody recognizes the immense amount of money which the artistic preeminence of Paris brings to her yearly in the hundreds of thousands who go to see, to study to buy. Some day, Toronto will be a great art centre, and tourists will pour into it by the hundreds of thousands too; but not until the municipality spends a little money along those lines, because visitors are attracted to a city largely in proportion to the amount there is to see there, its beauties in the way of monumental buildings and sculpture, its parks; magnificent drives; its museum and art gallery; and also the pictured history of the past that is displayed on the walls of its most important buildings.
In the 16 th century one of the Popes, Leo X., I think it was, commissioned Michael Angelo to decorate the ceiling and the end wall of the Sistine Chapel, and to-day, if the money could be collected logether, which has gone into copies, photographs, and the books that have been written about those decorations, how many such chapels would not the sum suffice to decorate? The same might be said of the Vatican, that was decorated by Raphael, to see which an army of pilgrims have tramped to Rome for nearly four hundred years.
Coming nearer home I might say that the Richelicu and Ontario Navigation Company had thought it worth while to spend a little money in this way in the decorations of their palatial steamers; some sketches of my own are around these walls; they thought it worth while to spend some money in that direction; as it made those boats that much more attractive. When there was nothing else to see out of the windows people required something to see inside. They have not done by any means all that is possible along those lines, they have but started.

The same might be said of some of the theatre companies, some of which have spent a little money in mural decorations, notably the Russell Theatre at Ottawa. Between acts, when the curtain is down, people get tired looking at each other-I suppose so any way-and long for something to rest their eyes on that will have a nice restful feeling in contrast to the movements on the stage. The restaurants also find it pays; you will often find quite elaborate decorations in palatial restaurants.

As for the decorative possibilities of our im-
portant public buildings, they are boundless. Surely no one needs to be told what opportunities are afforded by a great library-such as we are going to have some day, what evolution of civilization by intellectual development may be unrolled upon its walls; what celebration of every sort of literary knowledge from the scrawl of one of our savages upon bark, to the letters of Cadmus, and on to the printing press and modern book. No one for an instant doubts the possibilities of a court house, where all the attributes would show to all onlookers, the wisdom, justice and power of th:e law; the judgment, moderation, fortitude, clemency that govern the deliberations of a court. In banks, the history of money as a medium may find its legitimate expression; from the earliest barter of savages to the first coin, and from the first coin to the earliest letters of exchange, and so on, down through all the different developments of the interesting listory of exchange. Agriculture from the time of the sharpened stake of Abraham's time down to the latest steam plow or other farm implement, might be treated in our markets,
The postoffice and railway station are somewhat akin to each other and for them I would suggest the history and evolution of transportation with all its variety and picturesqueness. Some of the railway stations in Paris are decorated, the Gar de Lyon is a notable instance; in that station there is a series of panels by good landscape men, forming panels around the buildings, of bits along the different branches of the road; by "bits" I mean those particular features in the landscape that are usually illustrated in the time tables or souvenirs given away by railway companies. Our own Grand Trunk Railway and the C. P. R. are trying to do something along somewhat similar lines, but a little more pictorial; they still cling to their framed picture, which, I think, is a great mistake. Between the waits at stations everyone naturally longs for something to look at; at present there is nothing but the time table and a few photographs of views of different parts of the country; and lithographs and show cards of steamship and other companies. How much better it would be if the architect in planning such a building took into consideration that very fact, and instead of using up quite so much marble around the base left a few agreeable spaces which could be filled with landscapes, views of cities, or the battle fields of the country, if there are any-we have a few-and a number of other features; I am sure the time would pass very much more pleasantly and a great deal faster.
When art was at its highest tide the artists' best patrons were the great corporations, the syndicates of the time. To-day, in Canada, there is plenty of room for the celebration by our corporations and industrial companies of our cortrical, mining, lumbering, manufacturing, insurance and various other companies, whose history or business possess great decorative opportuni-
ties.
I do not think it would be out of place just
here-I might have quoted it earlier-to read a ${ }^{\text {a }}$ clipping from an American newspaper whic deals with Pennsylvania's new state capital. Thas article states that the State of Pennsylvania has determined to make the new capitol at Hart ${ }^{\text {is }}$ burg one of the foremost examples of a building in which the architect, sculptor and $\mathfrak{m u t}^{\text {ta }}$ painter have worked in absolute harmony. the show the magnitude of the opportunities and mon $0^{17}$ liberality of the architect and of the comm his wealth. The first detailed announcement of thire important project involved $\$ 300,000$ for sculpture and $\$ 150,000$ for mural painting; the mural paint ings are to be by Mr. Edwin A. Abbey, who is ${ }^{\text {a }}$ native of the city, and the sculpture by a sculp tor who was also born in that State, Mr. Georg Grey Barnard.

I think it would cause some discussion in the press if Mr. Ross and his Cabinet were to likewise; still, there is no reason why they sho do not do it, and 1 think it would pay them to of it, as it will pay Harrisburg, in the number see reople that will go to visit that town to sculp those mural decorations and to see that sculp ture.
On mural painting as the greatest forms of painting still I will now say a few words. Must people is all seem to have an idea that mural painting is iture inferior branch of art as compared with pich and portrait painting. This impression, the ever, soon passes away when they take oll $^{11}$ trouble to read ari history or to seriously surface sider the decoration of any important sumate with all its difficulties, intellectual and mate ial.
A mere enumeration of the names of decor $\mathrm{m}^{2-}$ tive artists ought to convince those who ha not seriously considered the matter.
The greatest works of many of the greatest ${ }^{\text {at }}$ tists who ever lived, Michael Angelo, Raphat in Leonardo di Vinci, Correggio, Veronese, toretio and others were essentially decoratione great The landscape schools have arisen since the grefore decorative days of the Renaissance, theterions they had litule practical part in the decoration of the past; but in a new decorative Renaissal a there is no reason why they should not play ${ }^{\text {tal }}$ part and a brilliant part too. For monume ${ }^{\text {at }}$ public buildings it is probable that the greal symbolical ideal, call it what you will, pict art will remain the highest expression of mural $\mathrm{Sor}^{\text {r }}$ as in the Vatican, the Ducal Palace and the So pic bonne; but besides this and the historical ple ture, every other form of art finds place in at coration; the landscape and marine may be asel once decorative and commemorative; the cand picture, if properly placed, properly lighted $\mathrm{m}^{0^{10}}$ properly hung may decorate a room even the delightfully, because more subtly, than would the finest porcelain or metal work.
Realistic portraits also would make magniil cent decorations if properly panelled into wa and over mantels; this has been done in sonte the "old world" buildings with magnificent ults.
In our own City Hall there is an excellent it lustration of how bad pictures look hung on a white wall without an architectural setiong; the make nothing but a series of black holes an spots all along that corriclor. That hame $\mathrm{cos}^{1 \mathrm{~T}^{-}}$ dor could easily have been panelled so as to have made a suitable frame or setting for tho pu ${ }^{\text {r }}$ traits of the various or setting for the past and to come.

NEW BUILDING REGULATIONS FOR TORONTO.
Attention is called to some of the new building regulations for the city of Toronto printed in this number. These comprise only a section of the new building by-law which it is proposed to put in operation at an early date. The city architect and city council are to be commended for having taken prompt action in this matter, thereby forestalling the erection of an undesirable class of buildings. Unfortunately a
difference of difference of opinion has arisen between members of the architectural profession regarding the new regulations which have already been adopted. The chief objection raised is in relation to the clause specifying the percentage of window openings in walls, and providing for an increase in the thickness of the walls it itere percentage of openings is increased. While it is desirable that the cost of buildings should not be
unduly increase tarded, increased, and building enterprise thereby retion the new by-laws should compel the construction of substantial structures capable of withstanding
fire, One should be of the chiet requisites of such buildings
It is gre substantial brick walls.
district is being to note the energy with which the burnt ings. It is not cleared and prepared for new builddestroyed will bely, however, that all the buildings ably not more be immediately reconstructed. Probrebuilt this year, trom one-third to one-half will be built. A suffic, and probably some will never be reto insure an unusuicient number will be erected, however, the demand for bricks active building season; already rial is greand for bricks and certain other lines of matematerials is likely the supply. The scarcity of these new buildings likely to interfere with the progress of city.

## NOTES FROM QUEBEC. <br> [BY A CORRESPONDENT.]

Just at the present moment there is no great activity manifest Just at the prospects, however, for ine near future are very good, many of the leading architects he near future ans for erection of new buildings, as well as the have in hand plans old ones within the city, (mostly business rebuilding of many old hou es), these in the agg wave of prosperity to the various trades and should mean a goodent unsettled state of "labour" is conconcerned. The present unsety, and is making itself felt in the sequently causing no little anxiety, great difficulty experienced quotations.
There is a movement on hand among the labour unions to open heir shops and undertake contracts for its members, but this is not expected to meet with great favor, one of the strongest objections being the difficulty there would be in getting guarantee ace, which is now obtainable through a substanial contracting firm.
stanial contracting firm.
It is hoped that the painters difficulty will be settled before the
It is hoped that the pailly expected that this will be the case.
ist May and it is generally expected force a strike, as is threatened,
Should, however, the carpen character as to cause serious loss the effects may be of suck's business, and the carrying over to and hindrance to this year's busiopects on hand
another season of several of the work referred to in the city itselt
In addition to the immedrate work ree hand some important everal of the leading and districts, many of which are eccelesiaswork for other towns avelopment in the labour situation, would tical buildings. Any developmen a menace to the sleady run of therefore be greatly deplored as ars to have set in.
substantial business which appears clear away the old and unsightly
The project to pull down and clear has now taken tangible form buildings at the top of Mountare expected to be called for shortly; and estimates for the will give an additional area to open space of some 4,000 sq . ft . in a fine and imposing position.
It is also in contemplation, when this is done, to erect on this space a statue in honor of Mgr. de'Laval, the founder of Laval University, which is in close proximity.

The cor miltee hater this mater in handerThe as to the best course to follow, whether to call for drawings ing as to the best course to to be submitted for consideraitidual architect to do the necessary able, or to instruct an individual actions.
drawings to the committee's imstor improving the public buildings
The continued steady system of flowed by the municipal and open spaces, which has or fifteen years is now making a authorities during the past ten or fite of the city and general satmarked difference in the appearesult.

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ada or the United States on the folloxing will be mailed to any address in Can year；Regular Edition，$\$ 2.00$ per year．The price to forchitects Edition，$\$ 3.00$ per payable in a vance．The Journal will Edition， 12 shillings．Subscriptions are or，if so stipulated by the subscriber；will be discontinued at expiration of term paid be continued until instructions to discontinue are such understanding exists，wil scription paid．

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## bUILDING CONDITIONS IN MONTREAL．

Until quite recent likely to arise this year believed that no difleyers in the building trades in Morkmen and employ，however been disappointed．A partial strike expectation has，${ }^{\text {aread }}$ occurred．The painters＇demand that the rate of wages increased to 25 cents per hour and also that the working hour be reduced to 54 per week has failed．There is also difficulty oil the part of the plumbers and bricklayers．

Mandy，d＇ye recollect how Henry Wiggins used to ${ }^{\text {pay }}$ marbles all the time when he was a little feller？＂
＂Goodness，yes．
＇Well，he hain＇t got over his hankerin after＇em yit；this piect in the paper＇bout millionaire＇ finest collections of Italian marbles ines say he has on orok Life．

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## MONTREAL LETTER.

No, II.
The remarks of "Gargoyle" in the last issue called torth in certain quarters some indignation as if it had been the intention to
cast a slur architectural the fair name of Montreal, on account of practices in fail to sut their facs in which the men who build in these parts have at least so fares "straight to the instant need of things" or 7 and adequate and soiu-

${ }_{20}^{20}$
C.SB. Mootral May/9a4.
lions in the
Climate-perhaps partly of the most pressing demands of the Canadian will persistly for the very reason that the optimistic are entirely overestimathinking that the rigours of his climate be met in any old way. Thed the rest of the world and can really ties, though they may. These off-hand ways of meeting difficul-- may serve their utilitarian purpose for a while,
are little likely to be satisfying as a matter of art, least of all in architecture which demands before all things evidence of skillful forethought and the suggestion of permanence. Bacon's idea of art as the "adaption of the shows of things to the desires of the mind" is the golden rule that must inspire whatever of the handiwork of man is to find any lasting favor or good repute.

Though Montreal may not be a sinner above all other cities in these matters, yet the instances quoted by "Gargoyle" show that here as elsewhere we are far from any finality in the problem of meeting the case. To get our window sashes and other simple essentials efficient and at the same time satisfying to the eye is to have laid well the foundation of our architectural design. With.. out this the framework of our buildings may ascend to heaven but their souls will still cleave to the dust.
Some of the humbler old Montreal buildings referred to last month as exhibiting the sati-tactory result of perfectly simple and at the same time perfectly unselficonscious methods of providing desirable accommodation and comfortable protection agains ${ }_{t}$ climate are illustrated by sketches this month. They exhibit the common sense of a tradition inherited from intelligent workmen, wanting their buldings to be strong from the pleasure all men take in strength and to be comfortable because comfort was an idea that appealed to their own minds and they took a natural delight in finding themselves contributing to the sum of human happiness. At the opposite pole from these old homes stand the inanities which have been obvioully considered by their builders as machines for turning coin into other men's pockets.
Amongst Montreal's old buildings however are to be found some of a more imposing air and of a public character, which whilst standing distinguished from their private and less assuming neighbors, still wear without affectation the mantle of directly inherited tradition. There is the Inland Revenue Building facing the river and there is a row of buildings in Notre Dame Street almost upposite the hzad of St. Lambert Hill which is quaint and pleasant. The building near the east end of St. James Street occupied by the Credit Foncier has more than a reminiscence of Adam's work. The Goverument Offices in St. Gabriel Street

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## nearly opposite the wing of the Law Courts now in progress is a fine old building ne old building.

On the last mentioned building certain young gentlemen have lately been observed hard at work in their shirt sleeves with footrules, tape-lines and sketch-books, and it is understood that the McGill College School of Architecture is in this way seeking to preserve an authentic record of some of the ancient land marks of Montreal and at the same time to wean its students from drawing paper, photographs and plaster casts and to introduce them to things as they are in solid fact. As the sight of the student at hand to hand grapple with his subject is usually an inspiring and infectious object lesson to aspiring minds it will be surprising if others outside of McGill do not also take up this, the most natural and most delightful introduction to the study of architecture. Montreal may not possess many monuments of a quality to repay this sort of study, yet such as they are they make this city rich indeed in comparison with others that are entirely without them. They are sufficient to give the key to unlock the treasure-house of the past for all desirious to make the history and tradition of architecture of some value to their minds, and inasmuch as they are not so very far removed in date and sentiment from the present day they are all the more within the capacity of the young student to appreciate and derive benefit from
Whilst on the question of architectural training it should be observed that the Province of Quebec Association of Architects has just announced a Scholarship which it is offering to students. This takes the form of four years training in the course for the Bachelor of Architecture Degree at McGill University offered free to one student presumably-each year. There is nothing very formidable in the list of subjects set for examination and any beginner who should be afraid to enter the contest would do well to seek his life's amusement and instruction in some other line of life than architecture. It is a common complaint against young architectural associ tions that they do little for the training of the youth of the profession-the complaint in members who fail course from the somnolent and unimaginative members whe fail to realize that such an association bas objects
to fulfil which it not more important, do at least require fir ${ }^{s^{t}}$ attention. The Province of Quebec Association seems bow to be making a beginning in this direction, and one must no look to students themselves to respond and to take some of han common interest in things which carries men so much farther that individual interest alone can do. combined with the lapsing of old and entering upon of new le ${ }^{\text {ase. }}$. on that date occasions a special stir amongst the building Hence the time becomes a favorable one for strikes amo workingmen. The painters, the marble cutters and the plumber have each had their various grievances to ventilate. If these matters have sharplimate becomes a factor which ${ }^{\text {ca }}$. be ignored. If work is to be impeded during the coldest the the of the year working hours must naturally be longer during her favorable season or the country will fail to keep abreast neighbors. It is only cutting according to one's cloth.

GARGOYL

## BUSINESS NOTES.

The new organization of the Locomotive \& Machine Montreal, Limited, is making rapid headway. They recently moved to a fine suite of new offices in the Imperia building, Montreal, overlooking Victorid Square, and at fully organized for business. Their extensive work Point are under way and well nigh completed, and are for almost unlimited expansion. The whole of the steel for these buildings, which is of a most complete na manufactured by the company themselves, and are a completeness. It is intended that while keeping company quite separate, at the same time to keep secured for the Canadian company.

## NOTES.

The Master Plumbers' Association of Winnipeg held their first annu +1 dinner on the 13th inst., which proved to be a most enjoyable event.

In a recent lecture on geology in Glasgow, Mr. A. McWilliams, A. R. S. M., stated that granite consisted mainly of two minerals, quartz (hardncss proportionately 6) and telspar (hardnes, 7), whilst the harduess of a best-quality Sheffield pocket-knie blade was $61 / 2$, the wearing powers of granite would theretore be readily understood. Pure clay with less than about 2 per cent. of potash and soda was a fireclay; it white, a china clay or a pipeclay; while containing 5 per cent. of oxides of iron and generally a fair amount of polash and soda it became an ordinary red brick clay.
A contractor with very large experience in Portland cement work, particularly in the making of walks and floors, asverts that he bas never used any mixture of cement and sand for such purposes that has not been notably improved in wearing qualities by the addition of black color. Nor has he ever taken up work where hack and grav tiles alternated in which the gray tiles were not inferior. When Mr. J. C. Plant finished the Phoenix building in Minneapolis with Portland cement was so new as to be and offices, the idea periments. Red and classed with the exand the difference in the two is were used able at present, and all in is very noticcolored tiles. Lampblack is far of the used for coloring these tiles is generally used for coloring these tiles black, and in predict advantage to come one would not but so much evidence in favor of its use, ed tiles must be taken avor of the colorWestern Architect.

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Old Scotch Chair in a Glasgow Painter's Studio



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Durham Castle Staircase.




Sketches of Old Buildings in Montreal.
By "Gargoyle" and Mr. Cecil W. Burgess.

THE "ELIKAY" BATHKOOM.
The accompanying illastrations show a portable bath, for use in bed-rooms, which when not in use can be folded up. This cabinet hathroom when closed occupies but little space and adds rather than detracts from the appearance of the noom. The me


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surements are only about att. gin. wide, 2 ft . tin , deep, 6 ft , 6 in high, and by means of these bathrooms tywo or more full-size baths can now be available in places of limited accommodation, where only one Bath is now possible, and even that at the cost of a separate room.

Bathroom.
enclosed in the cabinet where there is no hot water supply, The Ellkay Patent Rath Syndicate, Idmited, Orchard street, Victoria street, Wextminster, S. W., Loudon, Eng., the manufacturers, have received many letters of recommendation from persons who have used this invention.

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The building is constructed of clear rock crystal quartz, with a balustrade all around it making an especially attractive exhibit, and when lighted up by numerous electric lights, the effect is in" deed beautiful.
This company has also another exhibit in the Forestry Building, Block 14, consisting of various oative woods all finished naturally finish being oblained by first filling with Wheeler's trans. parent No. 1 Wood Filler.

In both exhibits is also shown a full line of the various specialties made by this company, such as Breing's Lithogen Silicate Paint, Lithogen White Lead, Lithogen Primer, Japans, Dryers, Wood Stains, Polishers, etc.
The exhibits of this company are in charge of Mr. John Borden, who has had charge of its exhibits at various expositions for many vears.

## BUSINESS NOTES.

P. Oslin \& Co., builders, have opened at Grenfell, N. W. T.

The Canadian Petrified Brick \& Stone Co., Limited, of Winnipeg, has been incorporated, with a capital of $\$ 100,000$.

In the make up of any building which is to have inhabitants, the lighting fixtures is a most important feature, for on them depends much of the finished appearance of the structure. There are many lines of gas and electric lighting fixtures offered for sale throughout the world, out one that deserves the careful consideration of every purchaser is that which is manufacrured by The James Morrison Brass Manufacturing Company. Limited, of Toronto, Ont. This old established house is noted for the excellont and superior gas and electric lighting fixtures which it manutactures and in its comprehensive showing of stock patterns are included almost everything that any fancy might desire, while the facilities of the company enable it to advantageously make to order special fixtures from specifications. If you are likely to be a purchaxer of lighting fixtures, the Morrison Company's annoucements will certainly be of interest to you.


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## PRISMATIC GLASS.

The piismatic lighting of dark interiors has of recent years eccived considerable attention, siays the Irish Builder, as it mitgates an evil necesuarily associaled with the crowding into great imprave mecton of high buitdings. Prismatie glass is a on y an eyevore, but generally finefficient, and all which was not on $y$ ath ey evore, but generally hiefficient, and all torms of such glass are to be recommended, thaugh of course some are better that oiters, the most salisfactory test in commercial use being personal observalion of the degree of improved lighting produced by various makers, for as ench problem requires separate trestment and the glass needs to be proportioned as it were to the situation, it means that scientific application and intelligent sthersision are often better than greater theoretical officiency. The "MAXimum Light Glass" (an American invention) at the same time possenses many theoretical advantages. As regards the theoretical value of this patent form of prismatic glass, the fact that the Jobts Scote tegacy medal of Edinburgh was awarded it testifies to its scientific design. The distinctive feature stead of the usual plane surface $(i$ is that it has a lenticular inof rounded ribs or panels, whice (i. e., its front side has a number of rounded ribs or panels, which are virtually lenses.1 The lense
ribs run transversely to the direction of the prisms on rits run transversely to the direction of the prisms on the inside
surface. We would point out what this men surface. We would point out what this means.
By way of introduction we may state that the object of all
prismatic glass is prismatie glass is to gather lightit impinging in a downward direction at a more or less sh irp angle, by reason of the narrowness into the room. This is to alter its direction so as to transmit it should be suited to the done by the prisons, the angles of which furthest corner ; but this bas led to the erroneous conclusion the as muest corner; but this bas led to the erroneous conclusion that as much of the light as possible should be transmitted parallet to the walls, floor and ceiling of the coum. The result of such a pro-
cedure is that shadows are cast by objects in the cedare is that shadows are cast by objects in the room. Atter extraneous lignt as possible shall be dirceted intot that as much and practically all the desigos in prismatic into the interior, theoretically in this respect, the next considerass are equal theoretically in this respect, the next consideration is how to
direct it to the best adyanta direct it to the bost advantage, and, as shadows are most objece-
tionable, 10 diffuse the tionable, to diffuse the light evenly over the room. The way io
do this is to transmit the do this is to transmit the light on divergent lines, so as to cause
if to strike the bounding walls, ceiting and floor of the apartment it to strike the bounding walls, ceiling and floor of the apartment
and be reflected from them so as to counteract and neutralize the shadows. Glass which is simply prismatic and not lenticular exaggerates the divergency of the trausmitted light in the vertical plane only and directs the light in the horizontal plane in parallel lines without diverging it. If lenses are formed on the other (outward) face of the glass running exactly the same way as the prisms the divergency in the vertical plane is increased, but no alteration is caused as regards the horizontal plane. The lenses, bowever, have an indirect advantage over the flat surface by total reflection, and they look better than the latter. By running the lenticular panols transversely to the prisms the light is transmitted divergently in both the horizontal and the vertical In nes, while additional light is gathered as explained above. In this way practically all shadows are overcome, especially if two windows can be placed iu the same apartment, as then the light from one completely overtaps that trom the other. This arrangement of lenses and prisms has the advantage also of giv. ing extra strength and allows the larger size of prisms 10 be readily made, and also the thickness is less compared with orther forms, which is an advantage, since there is a losy of light from absorptlon is every glass. The "MAXimum Light Glass" is made in larger sheets than usual, namely, 18 in . long by 60 in . high, and thus all the many usual joints are avoided. Twentyone different angles are made, so that the glass may be suited to each particular condition of site and lengih of apartment. It has truer prisms without so many flaws or roughness as are usual in thix kind of glass, and as each blemish means loss of efficiency, this is another important point. When the light cnmes from high up it reduces to a minimum the use of artificial tight. It has been used in 1,200 different windows in Loodon alone during the past month, and recent'y it has been fixed in several places in Dublin.

## STRIKES IN CANADA.

The loss of time to employes through trade disputes through ont Canada during June was approximately 62,488 working days. This is an increase of nearly 30,000 days compared with the previous month, and is largely accounted for by a strike of iron and steel workers at Sydney, Nova Scotia, in which 30,000 working days were lost. In June, 1903 , there was a loss of 122 , 612 working days, about 60,000 more than in the present year.

## CANADIAN MARBLE. <br> A letter comes from Glasgow this week

 Io the secretary of the Toronto Board of Trade. It asks for a general descripition of the marble being quarried in Canada, clear and natural, pointing out what defects, if any, exist, and asking for the names and addresses of the quarries and their agents, the size of the blocks available, with prices per cubic foot. Enquiry is also made regarding mode of delivery and cost thereof. This is a very circum. stantial and business-like encuiry, and should have a very comprehenvive answer. The Ontario Rureau of Mines can give valuable aid in flling the requisition, and the Otrawa publications of the Geological Survey. We would suggest correspon-dence with the Nova dence with the Nova S.otia Department of Mines, or with the Crown Lands Departonent of Quebec. These provinces are both nearer the source of the enquiry. At the present time, so far as known, onIy two marble quarries are being woiked in Ontario, both in the neighbourhood of Renfrew. There are, however, several unworked quarries in different sections, while in Algoma there is said to be matble of an excellent quality. According to
Prot. Carter, the reason so few of thes Prot. Carter, the reason so few of these quarries are being worked lies in the domand for Tennessee marble, which bas gramed quite a inarket in Canada, though in many respects Ontario marbles are just as good. All the interior marble used in kentrew stone. There is but little doubt that nearly all ithe marble quarities in Ont tario could be easily and cheaply worked, and there seems no good reason why a sirong demand should not be created for their prodacts.

Messrx. Arnoldi \& Eyart and Messrs. Fiand, Burritt \& Meredith, architects, of Grtawa, have entered into partnership
to carry on business in Ottawa, Tonent to carry on business in Ottawa, Toronto and Winnipeg under the name of ." The

AN ABSOLUTELY FIRE-PROOF WINDOW
(Registered Trade "IMPERVIA" Mark.)


Made of Galvanized Sheet Steel
or Cold-Rolled Sheet Copper
The Metallic Roofing Co.,
Limited
TORONTO, Wholesale manufacturers MONTREAL,

WINNIPEG

## PUBLICITY FOR MANUFACTURERS OF BUILDING MATERIAL AND SUPPLIES. By Cyrus Johisson.

The local or traveling representative has always seemed to me the real life and blood advertisement of the firm he represents, and no personal letter, printed circular, blotter, calender or souvenier can take his place.

I speak from experience as a draughtsman, architect and publisher, on personal acquaintance with many of the leading manufacturers and architects of the United States and the publishers of nearly all the architectural magazines and trade papers.

But letters, circulars and advertising literature are necessarily accompaniments to these representatives and it is in regard to this part of publicity that my statements will be confined.

An architect has ever been a different business proposition from any other man in any other profession, irade or walk in life.

He may be led to the trough, but you cannot make him drink.

He may be reasoned with, but never forced to any conclusion.

His impressions are early formed and difficult to change.

Your name once firmly engraved on his specification reminder it will remain in most cases for time to come.

What was law and gospel in the office where he traced his way to fame is good enough for his own office.

But it is needless to elaborate his distinguishing characteristics, only they must be considered in the preparation of catalogues, price lists, announcements or prioted matter of any character.

An announcement that would appeal to a banker or broker would fall very flat to the average architect.

In regard to printed matter of any kind unless attractively compiled, printed on good stock and the
illustrations carefully selected, well engraved and properly printed, your money has been wasted.

And this brings me to the importance of having your announcements in the architectural magazines attractively set. These advertisements are only circulars or announcements mailed every issue to the subscribers among the architects, but they are watched even more carefully than you even imagine.

Because the architectural magazine advertisements do not bring the statement, "I saw your ad in the -...". do not infer that your money is being thrown away. It is one of the peculiarities of the architect that he would not mention the name of the publication.

This is true also of the contractor and smaller supply houses, who even avoid the use of the key.

But it is the persistency of circulars, announcements and advertisements, backed by attractive arrangement, that counts. The draughtsman of to-day is the architect and engineer of to-morrow. You must cast your bread on the water of the present for the business of the future.
It always seemed strange to me that knowing the architect's fondness for pictures that they are not more liberally used in your announcements and that the bare cards are allowed to run month after month, year after year in the different journals without change. The publisher is anxious to improve the appearance of his paper and gladly welcomes the new life and interest evidenced by attractive advertising copy. The architectural paper by its news items and articles keeps you posted as to what the best men are doing.

The architects watch it and read it to see what the other fellow is doing.

Concentrate your efforts for new goods and materials on those who are busy.
Strengthen your statements with testimonials and tests.
The busier you get advertise the more. Then should a dull season come you will hold on where others fail. -The St. Louis Builder.

## OFFICE AND BANK <br> RAILING



# Canada Foundry Company, Limited 

## PAGES

## MISSING


[^0]:    *Abstract of a lecture recently delivered before the Interntaionai success. from The Builders' Tournal.

