## PAGES

MISSING

# The Canadian Architect and Builder 

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McGill College Students' Union, Percy E. Nobbs, M. A., and Messrs. Hutchison \& Wood, Montreal, Conjoint Architects.

ADDITIONAL ILLUSTRATIONS IN ARCHITECTS' EDITION.
House for Duncan Macdonald, Esq., Toronto, Messrs. Bond \& Smith, Architects, Toronto.
Editorial
Building for the year
Montreal Notes
Sketching Club, P. Q. A. A.
Students' Competition
Our Illustrations
Montreal Builders' Exchange
Canadian Clay Products Manufacturers
Grogs in Brick Making

## NOTICE TO SUBSCRIBERS

On the first of January, 1907, the price of the Regular Edition of the CANADIAN ARCHITECT and BUILDER (without the Weekly Contract Record) will be reduced to $\$ 1.00$ per year, and the price of the Architects' Edition (without the Weekly Contract Record) will be reduced to $\$ 2.00$ per year. This reduction in price has been decided upon for the benefit of such of our subscribers as may not be interested in or benefited by the information published in the Weekly edition, the Contract Record. Those subscribers who Wish to receive the Weekly Contract Record, as well as the monthly edition, the ARCHITECT and BUILDER, will be Charged the same prices as heretofore.
A number of changes and improvements will be introduced with the January number, such it is hoped as will meet with the approval and appreciation of our readers. An earnest effort will be made to present in the pages of each number of the ARCHITECT and BUIDER, the latest and most helpful information concerning every department of the building business. The co-operation of subscribers is invited for this object. Questions and expressions of opinion, etc., will always be welcomed, and will tend to add interest to the publication.

## Elevator Inspection.

There have been two serious elevator accidents in Toronto, recently. One, a simple case of a broken rope which let the cage drop to the botton, seems to point clearly to the necessity of periodical inspection. At present the law requires an initial inspection, which guarantees sound installation; but maintenance in good order is left to the individual. When we reflect on the continual jerking to which the rope is subjected; on its constant bending and straightening as it passes over the wheel ; there is reason to suspect such molecular changes in the structure of the steel wire of which the rope is made, that its tenacity may be much reduced without there being any change in the external appearance. On this point alone-and it is not alone in the risks to which we are subjected from the deterioration of elevator mechanism-it is reasonable to want some guarantee of permanence. And we should have it soon, for it is about now that the first Symptoms of age must be showing themselves in many elevators.

## Trade Schools

 The treatment of this question. at the banquet of the Builders' Exchange in Montreal, and in the comments upon it in our Montreal Notes, will be read with interest. The country is ready for this question, not merely, as is sometimes said, as an unavoidable substitute for apprenticeship, but as an improvement upon that system. The apprenticeship process was too indirect for our day. A boy wasted too much of his time in the manual occupations by which he paid for theBuilding for the year
Sketching Club, P. Q. A. A.

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privilege of learning to do what he saw done in his trade. The method was doubtful, and the result was not sufficient, It is not only what is done that a boy should learn in his trade, but what ought to be done. This is where the trade school will excell the old system, and suit better the perpetual tendency to new methods, which is characteristic of our time.

## Ontario Association of Architects.

It is likely that the Convention of the Ontario Asssociation of Architects, which is to be held this year at Ottawa, will for that reason be more than usually important. The dinner, to which we understand Earl Grey is invited, is intended to be especially interesting. As to the papers, Mr. W. L. Price, of Philadelphia, and Prof. Nobbs, of McGill University, are speakers sure to present valuable matter in an attractive way. Prof. Nobbs, remarks, at a meeting of the Sketching Club Club of the P. Q. A. A., indicate that his paper will deal with perhaps the most important subject that can be presented to architects-our own style. The will be also discussion upon the question of registration, (which is becoming alıve again by dint of activity in this direction in other parts of the world), and a demonstration, by a member of the Geological Survey, of available building stones in this country. There will be an exhibition of drawings by members, from which the more is hoped that there has been none for a few years past. Outside the meetings, there is much to be seen, under the guidnace of the Ottawa Chapter. There are the buildings and the city improvements, in which Ottawa is giving a lead to other plases. There is the site of the new Goverment buildings on Major's Hill. The conditions of competition are only just issued; the time for the competition is extended, and the Convention will be in time to allow intending competitors to make a thorough study of the site. More than this, (and this is one reason why we are so carefully setting forth the advantages of attending this Convention), there is still time to procure a change in the condition which puts the execution of the work in the hands of the Public Works Department instead of in that of the premiated designer-and this Convention ought to procure that change, aud should be well attended for the purpose. Clause 1.3 , of the condition, regarding questions and further information, may be made to give an opening for a new settlement of clause 12, which excludes the successful designer from taking part in carrying out his work. The 15 th, day of January, the opening day of the Convention-is the last day for sending in such questions. The Convention is just in time and the question, whether that condition should not be changed, ought to come in the form of protest from the Convention.

## BUILDING FOR THE YEAR.

A general review of the progress of building in Montreal will be found in our Montreal Notes, following this.

In Toronto the total value of building permits for the past eleven months is $\$ 12,940,614.75$. In 1905 the total value for the year was $\$ 10,347,915$. Allowing for the slackness of December in building matters by estimating the permits at $\$ 500,000$, which is less than one-half of the value of permits for November, the total increase for the year will be well over three million dollars.

It is interesting to see how the amount for the eleven months is made up. Not to make too exhaustive an analysis, we may set down the values of some of the leading classes of buildings, so as to compare them:
 These are the buildings numerous enough of one kind to form a class. There are some individual buildings of importance. The Armories Building is receiving improvement to the extent of $\$ 267,000$; the Custom House has had $\$ 40,000$ spent on it; the city has two new Fire Halls, for $\$ 43,860$; the new Process Building at the Exhibition Grounds cost $\$ 81,000$; the Art Gallery, $\$ 32,350$; there is a new Telephone Exchange costing $\$ 38,000$; a Garage worth $\$ 25,000$; the Alexandra Theatre permit is for $\$ 150,000$; McMaster College is spending $\$ 60,000$ on its new Science Building, and the new wing of Havergal Ladies' College cost $\$ 40,000$. It is rather remarkable, in view of the overcrowding in the Public Schools, of which we have heard so much, that there is no school building except a Separate School and Convent, which is to cost $\$ 12,200$.

To return to the classified list, the total cost of new dwelling houses of all classes adds up to $\$ 7,871,650$, or more than seven-twelfths of the whole building bill. This must be in excess of a normal proportion of dwelling houses to the whole amount of building. We may perhaps take the relation of house value to total value in Hamilton, which is less than one-half, to be more near the normal. Toronto has nad some leeway to make up, but with all this house building, and a total value of $\$ 5,939,089$ in houses interposed last year between us and the winter of 1905 , when there was such a dearth of houses, one would think the deficiency must be about made good.

The evidence of the figures is that there are a great number of comparatively cheap houses. There are a few expensive houses being built which will help to raise the average, but even so, on the face of the figures, the average cost of brick houses is only $\$ 3,000$. The average of other kinds of dwellings, which are more nearly of one kind in each class, will more accurately represent the usual cost of one. The averages are as follows: Rougheast, $\$ 950$; brick front, $\$ 1,656$; brick veneer, $\$ 1,764$; frame, $\$ 1,134$.

It is the small house of four or five rooms that constitutes the house problem in Toronto just now. This is not a popular class of building for loans, and, for this reason the speculative builder prefers the class above. There are builders ready to do the class
of work if the difficulty in the way of loans were smoothed, and that is apparently the direction which smoothed, and that is apparently the direction wht to
benevolent effort should take. There is thought be danger in the intervention of the municipality as a house builder, and private enterprise in this direction has met with checks; but for the unobtrisive backing of commercial builders by loans at an ordinary rate the field is apparently open, without outrage to political economy, for those who choose to enter it.

New stable accommodation has increased from $\$ 140,655$ in 1905 to $\$ 154,302$, an increase of about one-tenth, while garage accommodation has increased from $\$ 1,000$ in 1905 to $\$ 25,000$, or twenty-five times, so that any one who wants to juggle with figures in the interest of automobiles can point out, if he wishes, that the increased use of the automobile, as compared with that of the horse, is as 250 to 1 . However, the diffusion of stable value in 43 new buildings looks more like normal increase in the use of horses than does the erection of the single garage, in which is concentrated the year's expenditure in this line. There is probably in the garage building as much preparation for the future as provision for the present. developing industry must look ahead.
This is evidently what the banks are doing. Twenty-two new banks in two years (there were ten in 1905) is a striking growth; hardly necessary ${ }_{3}$ one would think, to meet the actual expansion of trade in the present time, but no doubt well calculated for the future. The actual cost of the buildings is not great, considering their general excellence and the appearance they present. The secret of their distinction lies partly in the preference for corner sites, but mainly in their unity of purpose. It is sometimes necessary, for the sake of external proportion, to harbour a dentist in the upper part of a two-storey order, but there is usually no further complication; the building is essentially devoted to the bank's own purposes. The distinction thus obtained, by the sacrifice of investment in upper storeys, is probably well obtained; for building investment does not outrank other affairs in which banks have opportunity of favorable investment. We may hope this is the case and will continue to be so, for these small banks, each a simple architectural composition, are a great addition to the beauty of the city.

There is another class of small buildings in which the figures tell an obvious story. Of the 13 permits for hotels, one is for $\$ 110,000$, one for $\$ 20,000$, and two for $\$ 26,500$. If we deduct the sum of these, $\$ 156$,500 , from the total value of permits, the remainder, $\$ 29,000$ for nine hotels, is evidently not intended to produce more accommodation than will carry a liquor license.
Toronto is interesting from its size. Its affairs must to a great extent represent the affairs of the Province of Ontario. We should not be surprised if or think it argued ill for the general prosperity if the rate of progress was greater in Toronto than elsewhere. It is therefore the more satisfactory to find that in Hamilton the rate of increase is more than double that of Toronto. The additional value of permits for this year is greater than one-half the value for the previous year, while in Toronto, for the eleven months, it is not quite a quarter.

Last year the building values in Hamilton amounted to $\$ 1,311,382$; this year they amount to $\$ 2,124,815$. There is, however, a substantial addition of unusual character in a new Armories building, which is costing $\$ 225,000$. The Hamilton building year ends on Oct. 31st, and we are able to get a comprete report. The figures are worth printing:

| DESCRIPTION OF PERMTTS. Value. |  |  |
| :---: | :---: | :---: |
| Brick dwellings | No. 425 | $\$ 862,230$ |
| Alterations to dwellings | 54 | 22,375 |
| Factories and additions to | 38 | 284, 600 |
| Stores and office buildings | 33 | 442, ${ }^{100}$ 200 |
| Frame dwellings | 110 | 100,000 |



89,200 14,100 20,000 225,000 14,875

## $697 \quad \$ 2,124,815$

The Ottawa total is $\$ 1,636,225$; the London total about $\$ 1,000,000$. The Province seems prosperous as a whole,

Of course Winnipeg's expansion is extraordinary. The actual figures, $\$ 10,840,000$ for 1905 , and $\$ 12$,500,000 for 1906 , are nearly equal to Toronto. The rate of increase is, however, not so great.
The distinguishing peculiarity of Winnipeg building is the financial institutons whch throng there, as the centre from which the money is procured for handling the wheat crop of the west, and for the other operations of an expanding part of the country.
It is evident also that manufacturing is progressing there. Thirty new factories, with values quoted at from $\$ 20,000$ to $\$ 100,000$, erected in the present year, seem to cast some doubt upon the doctrine that all the money made in the west is bound to be spent in the east.

## MONTREAL NOTES

The year just closing has been a busy one in the building trades. Yet if the volume of work done is greater than in any previous year, the advance is probably not more than represents the steady and natural growth of the wealth of the city. With so much going on to pave the way to the easier transaction of business by land and sea, there seems every reasonable probability that the past does not give any measure of the future progress.
Of actual buildings completed during the past year, some of the more important are: The Mount Royal Club, the McGill Students' Union, New Sherbrooke Apartments, Hampton Court Apartments, Durocher Street Apartments, Jenkins' Building, Lindsay Building, Molsons Bank, St. Catherine St. ; Bank of Quebee, Montreal Technical and Commercial High School, Alexandra Hospital, besides a very great number of factories and of the smaller class of dwellings-this last to an extent sufficient to affect rents in some degree. New residences of an expensive class are conspicuous by their almost entire absence, one or two in the western part of Dorchester Street being possible exceptions. The suburban class have shown most favour for Westmount and the vicinity; the "Annex" being only a fair second. The factories have settled most thickly in the west, from Guy Street outwards, and have increased to such an extent in the neighborhood of Lachine as to make that settlement into a manufacturing town.
Of buildings in progress the list is large and of an expensive class on the whole. There is the Windsor Hotel Annex, the Light, Heat \& Power Co.'s Building, Mark Fisher \& Co.'s Building, Royal Bank Head Office, the McIntyre Building, the Linton Apartments, all endeavoring to clothe their steel skeletons with sightlier substance. Other works going on are the Canadian Express Co.'s Buildings, the Notre Dame Hospital, the mother house of the Congregation de Notre Dame, Birks' Building, the Dominion Guarantee Cn., St. Catherine Street Postoffice, Bennett's Theatre, La Patrie Offices, Church of the Messiah, Emanuel Congregational Church, Cavendish Apartments, the Viau Biscuit Factory in the east, and the American Tobacco Factory in the west, besides many others.

The prospects for the future are depending, as suggested above, a cood deal on the question of transportation. There is understood to have been a good deal of thinking done on the subject of a new railroad terminal for the Delaware \& Hudson and New Tork Central lines. The scheme is probably approaching definite erystallization, though the accomplishment will probably occupy years. A new bridge
across the river is implied, and also a large hotel, the location for which, at present under consideration, is the east side of Dominion Square, including the block on which now stand the Y. M. C. A. Building and the Knox Church. The general aim of this tercation with New York. This and the other improvements, in course of construction by the Harbor Commissioners, may be expected to give a great impetus to the trade of the city.

For some years little or no extension has been made to the facilities for getting about from one part of the Island of Montreal to another. Some villages can only be reached by a four-mile drive or walk from the nearest railroad. The Street Railway Company, however, propose during the next year to run a line to the ferry opposite St. Vincent de Paul, making that town accessible by a journey of ten miles instead of seventeen, as at present. The Lachine route is to be extended to Dorval. Bordeaux and Bout de l'isle are to be brought nearer, and a new line from St. Laurent to St. Geneviève should afford a pleasant journey to that pleasant village.

Of buildings in prospect for next year may be mentioned the Eastern Township's Bank at the corner of St. James Street and Victoria Square, which is at present a hole in the ground. The Royal Bank has also purchased a site at the south-east corner of St. Catherine and Drummond Streets, presumably with a view to building. Just opposite, a new tenstorey block for Messrs. Willis \& Co. is projected, to cost about $\$ 100,000$; a considerable part of the building to be let as offices. Messrs. Ross \& Macfarlane are designing a new building for the Montreal Sailors' Institute, as an extension to the present premises. A new concert and music hall is to be built in Berthelet Street, to Mr. R. M. Rodden's designs. The main hall, with its gallery, is to seat 1,200 people. On the ground floor there are to be meeting halls, supper rooms, dressing rooms, etc. The cost is to be in the neighborhood of $\$ 50,000$. The Hervey Institute, at present in Mountain Street, is to be given up and a new building erected at the corner of Claremont Avenue and Windsor Avenue, Westmount. Another Westmount building will be the new school for the Protestant School Commissioners. This is to be on the road on the hill side, between the tops of Lansdowne and Grosvenor Avenues. In annex to the Arena is vide accommodation for autia Skating Rink is to be
shows. The present Victoria Sols converted into the New Victoria Music and Concert Hall. to seat from 2,000 to 2,500 persons, with a stage for 300 , with the intention of giving grand opera exhibitions and others. Last may be mentioned the new Jail on the Back River.

The City Improvements Committee of the P. Q. A. A. has not made any of its proceedings public for some time. One would like to see public interest in this matter sustained and kept supplied with food for reflection. The scheme at one time announced by the Credit Foncier of erecting a ten-storey building at the corner of St. James Street and St. Lambert Hill has not yet broken ground. A fine boulevard is projected as a continuation of Sherbrooke Street westwards from Claremont Avenue to beyond Notre Dame de Grace. The idea is to make this 100 feet wide, with separate alley in the centre bordered carried between the has taken place in the employA distinct increase has taken largest work in this ment of reinforcederican Tobacco Co.'s new factory kind being the American The additions now building in St. Anthony Stre's station in Osborne Street are to the C. P. R. Co.'s state and, in Lincoln Avenue, near St. Matthew Street, a row of private houses has been prected with walls, floor and roof entirely of concrete. It is not in any case claimed that the first cost of
this material is under that of more usual materials. An experiment in terra cotta is being tried at the new Linton Apartments, the lower storeys of which are faced with large blocks of yellow material, the surface of which is speckled gray, perhaps with the idea of making it a little like stone. Many of these blocks have cracked and require replacing, a circumstance which is not reassuring, but perhaps it is too early to judge of the case. The entrance hall of the McGill Students' Union Building is lined with pale buff terra cotta made in England. The colour is agreeable and the modelling of moldings and ornament is well done. Artificial stones have been used occasionally, as at the New Sherbrooke, and in a number of small houses, but they cannot be said to have established themselves in common use. For wall-linings of moderate cost chestnut wood is having some vogue.
The year has been happily free from serious labour troubles. Wages have, on the whole, made little change, with the exception of labourers' wages, which have advanced. The present wage rate is as follows: Ordinary labourers ........................ 20 c Builders' labourers
Roof labourers . ...................................... 20-221/2c $221 /{ }^{\text {c }}$
Masons ..............................................221/2c
Stonecutters ................................... . . 35 c
Bricklayers-union wage 45 c , actual rate $36-40 \mathrm{c}$
Roof metal workers ........................ 50 c
Plumbers . . . .... ..... ........................... . . . . 35 c

Painters ................................25-271/2c
Labourers working for the city are paid $\$ 1.75$ per day; carters with single team, $\$ 2.50$, with double team, \$4.00.

At the banquet of the Builders' Exchange the Hon, W. A. Weir spoke on the need of better facilities for technical education in Montreal. Anything that may be done to this end must be very welcome to all interested in good handiwork. It is to be hoped the mat ter will not be allowed to drop, but will be discussed thoroughly and by all concerned, so that it may be put on a broad basis. The ordinary routine of technical education will probably never be adequately taught in a school. Nothing can replace a thorough apprenticeship to a trade for teaching that trade thoroughly to the body of its workers. But no high standard of general excellence can be attained unless the more capable minds amongst the workmen have the opportunities for studying and practising something above the level of everyday experience. This it is that can be provided in a technical school. There should be centres where those of keener and broader mind than their fellows can resort to train themselves and to see what there is to aim at and if pos-
sible surpass.

SKETCHING CLUB, P. Q. A. A.
The members of the club met at the Beaver Hall Square rooms, on the evening of the 21st November to listen to Mr. Philip Lahee on the Business of Elee tric Installation. The lecturer had, however, been suddenly called out of town, and in his absence the lantern was brought into play and a series of slides showing Greek sculpture, lent by McGill University was exhibited and discussed by the meeting.
The annual dinner of the club was held in the "Oxford" on the evening of the 28th November The guests were: Mr. Chaussé, President of the Province of Quebec Association of Architects; Prof. Nobbs, and Mr. William Maxwell. Mr. Chaussé conveyed to the club the good wishes and assurance of Prof. Nobhs, responding to the toast of "Association, Prof. Nobbs, responding to the toast of "the gnests," York hed iust returned from a short visit to New York, where he had made a special point of encuiring into the aims and methods of the American Society of Beaux Arts Architects, with a view to ascertain-
ing whether it would be advisable that the Sketching Club should seek affiliation and co-operation with that body. He had been deeply impressed with the clearness of purpose and thoroughness of method of the Beaux Arts Society. It had accomplished a great work and bade fair to become the great training field of American architects. One point, however, he felt bound to criticize, and that was the limited view it took of architecture, a fault it had in common with the Ecole des Beaux Arts of Paris. In this view the whole labor and accomplishment, the whole glory and delight, of our mediaeval predecessors is a past phase of life which has taught us nothing. To snut our' eyes to an art which transformed its buildings into organisms full of all the charms of eraftsmanship. and throbbing with human interest, for the sake of a studied formalism, however dignified and refined, was in Prof. Nobbs' opinion a mistake so radical that he thought the Sketch Club should rather keep to its own pleasant bypath than share such an arid highway. Whilst the nations of Europe are each awakening to new life in architecture, along lines characteristic of each, and each with a distinct note of individuality, there is a tendency in the United States to harden up into rigid forms and academic rules. It would be better, Prof. Nobbs thought, to take inspiration from our own national traditions, give our individuality a chance to express itself. He was preparing to read before the Ontario Society of Architects a paper which was to deal with this subject of our national traditions, and hoped he would have an opportunity of saying something further on the subject to the Sketching Club also.
A very enjovable evening brought out much musical talent in the club.
On the 5th of December members met at the club rooms and worked on the second of the series of design subjects for the season. Seven sets of designs. were sent in in competition for the first of the series. The new subjects were, in Class A, a shelter to the a access stairs of a city subway; and in Class B, a simple mediaeval tower in the centre of a marketplace.

## STUDENTS' COMPETITION.

It is with pleasure that we are permitted to announce that Mr. M. Tsuboi, a Japenese student in the office of Messrs Gordon \& Helliwell, architects, Toronto, has been awarded the


Mr. M. Tsubor.
first prize of $\$ 100$ in the competition among the students of the International Correspondence School for a $\$ 3$,ooo country house; The prizes were donated by Mr. Comstock, of the Architects, and Builders' Magazine. There were over 100 compet United and five countries were represented, namely, Canada, States, Cuba, South Africa and New Zealand. The second pri., was won by Miss Helen B. McConnell, of Clarksburg, W. and the third prizes by Mr. Karl R. Kipp, of Dannemor N, Y., and Mr. E. Parmenter, Toronto.


McGill Students' Union, Montreal.

## OUR ILLUSTRATIONS.

THE MCGILL STUDENTS' UNION, MONTREAL. - PERCY E. NOBBS, M.A., AND MESSRS. HUTCHISON \& WOODS, CONJOINT ARCHITECTS.
The association of the architects of this building was made for carrying out the work, which was designed by Professor Nobbs. Professor Nobbs subsequently drew the furniture also, and most of the plaster


Reading Room Extending Across the Front.
decoration was made from his models. A building of definite character is to be expected from so much personal care ou the part of the designer, and certainly the building is in character with its purpose. It looks like a club, a men's club and, one may almost say, a
young men's club. It is distinctly of this generation, but, fortunately, without relation to any American fashion. We have here the English tradition; a free lassic which does not wholly cast aside the Middle Ages. The long reading room, which extends across the whole front on the principal floor, has mullioned vindows, with the internal effect shown in our illusration of one end of that room. The hall and vestibule are by the Burmantofts Co. CDONALD, ESQ., TORONTO.RESIDENCE FOR DUNCAN MACDONALD, EST, TORONTO.

MESSRS. BOND
A well planned house of type without going wrong. far from a recognized type The variations occur in possibility of internal variaarrangement. Here seems to be inexbaustible. In the tion in similar plans floor hall, on the lines of many present plan the ground fovelty, and suggestive of furthousand others, People want now-a-days to use ther development. People or place to receive visitors. their hall as a sitting room or plamfort in this respect. The stair is incompatible ff by a screen and door, as It is therefore, here shut offrations. This, with the shown in one of our illustransforms the hall into a expansion of the fireplace, the bay, with the light comusable room. ing from it sideways the tunnel effect.
The separation of the staircase by doors has already been practised as a means of making one stair serve been practised all purposes. This really seems, in view of the plan before us, to be the proper thing to do in small plan before The idea works hoth ways, reducing the tairs and adding to the living space.

## Compensation to Workmen Alien Contractors Technical Education

During the past month matters of considerable moment to Montreal contractors have come under the review of the Montreal Builders Exchange, upon which action has been taken by the Board of Directors, and as some of these matters possess more than local interest, it may not be amiss to give them more extended prominence through the medium of the Canadian Architect and Builder.
A subject of transcendant importance to all employers of labor, whether in the building or manufacturing, is the proposed act which will be reintroduced by the Attorney General, in the forthcoming session of the Quebec Legislature, respecting compensation for damages resulting from accidents to workmen. This bill proposes to change the principal of compensation from the English Common Law, which presupposes every one, "innocent until proved guilty," to that of the French Law, which will assume the employer guilty until he can prove himself innocent, it will regard each employer's trade as containing an inherent risk intstead of as hitherto requiring the injured workmanto prove "contributory negligence" on part of the employer.
This effect of this proposed volte-face cannot be too highly estimated by every employer ; and all who have to deal with labor in any shape, should carefully examine this proposed legislation without delay and and take steps for their protection before it is too late. Copies of the act in French and English can be had on application to the office of the pubishers of "Le Soleil," Quebec.
The second matter of interest that called for comment was the status of "alien" contractors in Montreal, from the view-point of equal taxation as local concerns. Some interesting correspondence took place on this subject with the City Council of Montreal, copies of which were also forwarded to the ProvincialTreasurer, in Quebec, and the Council of Architects in this city. Following is an extract regarding the matter from a civic standpoint.

30th October, 1906.
His Worship H. A. Ekers, Mayor of Montreal:
Worshipful and Dear Sir,-At the request of my Directors I beg to submit the following important matter connected with the large building interests represented by this Exchange to your early consideration.

We have been confronted for some years past with the spectacle of seeing foreign contractors coming into this city and taking contracts out of the hands of our local contractors and architects. Some five or six years ago, when the London \& Lancashire Building and the McGill Medical Building were being erected (E. W. Bishop Co.) and the Bank of Montreal reconstructed (Norcross Brothers, both American concerns), the stand was taken, as you will see by the enclosed news cuttings at that date, that "patriotism"' should be appealed to and such outside firms excluded. To-day we take a broader view, and ask the city authorities only that such non-resident
concerns should merely be put upon the same basis as permanent local firms.
The point we take issue on is this: Our local contractors are subjected to full local taxation, both for property and business taxes. These outside firms, on the other hand, are exempt from such taxes; they have, as a rule, no yards or premises; their business, which runs from tens to hundreds of thousands of dollars, is transacted either in the private boarding-house or hotel of a resident agent, who thus contributes to the city exchequer neither real estate or business tax, as the latter is collectable on the assessed rental of the premises, which in their case are non-existent. Above all, these outside contractors are exempt from the ten years' guarantee demanded in the case of local concerns, because as soon as the particular job is completed they flee to "pastures new" and any guarantee on their part vanishes into air. These im. portant exemptions constitute a decided discrimination against the local concern, and by means of these very lessened charges often lose a contract to the latter. In addition, both the above firms failed over the prices they took the contracts at, and thus let in their local sub-contractors to settle with the proprietors the best way they could.
There are large contracts going on to-day on the same lines (of which I give you enclosed one example, and can give you a number of others in confidence). My Board asks you, as President of the City Council, to make our suggestions in the proper quarters (City Treasurer and Finance Committee) to equalize the present inequalities by imposing a special tax of say one-half of one per cent. (not on rental of office or premises, neither of which are adequate in such cases, but) on the actual price of the work contracted, which would be a fair assessment. No work can be commencod without a building permit, which should give the actual and not a fictitious value; or better still, the real price could be obtained by a sworn statement from the architect in charge of the work.
We have to-day the largest structures going up by foreign "Construction Companies," possessing nothing of more valuc in this city than a larger or smaller office room, useless for assessment purposes. The city needs revenue, and we consider that right here is a perfectly legitimate item for additional revenue.
Trusting that your honorable Council will take this matter into prompt consideration, I remain,

Yours respectfully,
J. H. Lauer, Secretary-Treasurer.
The subject was also brought to the attention of the Province of Quebec Association of Architects, who in reply stated that the Council of the Association was of the opinion that the members of the Association are specially protected by charter, and regretted that the Association could not intervene in the matter.

The question of Trades Schools has become a "live subject in local, civic and Provincial circles of late, and much prominence given to it in the press. In this matter we are far behind Toronto, not to mention the large cities of the State. As it is a question of supreme importance to employers in the Building Trades in view of the complete decadence of the former apprenticeship system, the Executive of the Builders Exchange recently addressed the following
communication to the Hon. W. A. Weir, Minister of Public Works, of the Province of Quebec.
At the last meeting of the executive board of this Exchange I was requested by the Directors to convey to you their sincere appreciation of you efforts on behalf of the establishment of technical and trade schools on a practical basis in this city.
At the same time the Directors also expressed the earnest desire that when the proper time arrives for entering upon the detail of the proposed scheme, you will also call into your council a committee of Master Builders representing this Exchange, both as to suggestions for courses of instruction in practical trades, and as to a system of examination after adequate training by an examining committee of master mechanics in their respective trades.
It would be an impertinence on my part to remind one so well versed and so deeply interested in the cause of education in this province as you are known to be, of what vital importance to the Master Builders of this or any city is the establishment of trade schools on practical lines. The Building Trades cover the employment of almost every class of skilled mechanics outside of the textile industries, and owing to the mistaken action of the unions in arbitrarily limiting the number of apprentices, we are threatened with the danger of a dearth in the mechanical skill in the ranks of workmen. The old system of apprenticeship has passed away; it ceased to exist when the Master Mechanic no longer worked with his men, and when modern methods of conducting business required that labor should be subdivided. Then not only was the ${ }^{\text {ap }}$ pprentice deprived of the personal care of his master, but the workshop ceased to be a place in which a trade could thoroughly be acquired. Our lads, barred from acquiring a good mechanical trade where they are much needed, are driven to swell the already overcrowded ranks of clerks; and today there is scarcely a skilled mechanic in this city who has learned his trade in Montreal.
We have already a nucleus in the technical schools, e. g. the technical high school, Sherbrooke Street, Laval Ecole Polytechnic and the classes conducted by the Council of Arts and Manufactures. We need now something wider and more complete, not limited merely to the working man, but open also to well educated men. Master mechanics send their sons to the New York trade schools, from all parts of the United States and even from Canada. We have our "Schools of Theory" richly endowed ; may we not look for equally generously supported "Schools of Practice"?
A few words as to the financial side may not be deemed out of place, as trade schools are no longer merely experimental. It may not be advisable for more than a few trades to be taught at first. Bricklaying, plastering, carpentry, plumbing, produce the speediest results. The initial cost is the building. After shelter has been provided two or three thousand dollars will equip the school and meet the first demands. I am quoting from the New York trade schools which, started in the early 'Bos and meeting with growing success, have since become State institutions. Besides the evening classes which are largely composed of helpers who come to the school of their own accord and at their own expense, to gain the knowledge they know cannot be had in the work
shop, there is also a day class. The course covers from 5 p.m. to $7-9.30$ evenings, day classes concurrently covering similar ground for those who do not care for night work. The instruction is intended for lads not under 17 nor over 21 (unless exceptional case) as the scheme would otherwise become extremely unpopular with the regular journeymen. It would be a mistake to give instruction free of charge (unless by exception), as what costs nothing is never valued. It cannot be too strongly emphasized that the young men do not want charity but will pay gladly any reasonable charge to cover the expenses and will save for that purpose when once it is known that the trade school is the entrance gate to the building trades. The fee should meet the running expenses. At the New York Trade School the evening bricklaying class pays expenses with 75 members at $\$ 20$ each ; day plumbing class (with waste of material) 50 members at $\$ 35$ each; and evening class 100 members at $\$ 12$ each; evening stonecutter's class, with 25 members at \$12 each; carpentering and plastering with 40 at $\$ 16$ each.
A moderate increase of these fees would also meet the expense for janitor, clerk, fire, light, etc., and make the school self-supporting.

I trust I may not have trespassed too much upon your valuable time, but it is the desire of the Exchange to see these proposed Trade Schools eminently practical and widely availed of, and to this end I trust you will not hesitate to call upon us when our Association can be of further use to you.

## ANNUAL DINNER OF THE MONTREAL BUILDERS' EXCHANGE.

## technical education and other important

matters discussed.
Seldom has the splendid banquet ball of this famous hostelry, the Place Viger Hotel, held a more representative and genial gathering than this assembly, on the evening of December 3rd, of the leaders of the allied building trades, Montreal, on the occasion of the Annual Dinner of the Montreal Builders' Exchange. The President and Toastmaster, R. George Hood, was supported by Vice-President, Jos. O. Deslauriers, and the following: Vice-Chairmen, Jas. Simpson, J. H. Hutchison; N. T. Gagnon, Past President; John Gray, W. E. Ramsay, N. T. Gagnon, Chr. Sonne, Reception Committee. The guests comprised members of all the well known supply and construction firms, as well as architecture and the various branches of building. All arrangements for the dinner were made by a dinner committee, of which Mr. Jas. Simpson was chairman, with the able assistance of the general secretary, Mr.
J. Herbert Lauer.

The menu, which is reflects great credit upon its a legal agreement and Lauer and W. R. J. Hughes.

## APPETITE \& DIGESTION

ARCHitects
Montreal, Que.
THIS AGREEMENT, made the Sixth day of December in the year one thousand nine hundred and six by and between the Builder's Exchange, of Montreal, as represented by the Prirsty of the first dent, Past Presidents, Directors and, and Honorable Repredent, Past Presignated the Owners), and Honoments, of the part (herein the Federal and Provincial Governe of theneral Body Municipal Authorities, Sister Associat the second part (hereinof Members and other guests party,
after designated the Contractors), WITNESSETH that the Contractors ide by the Owners agree fulfillnent of the agreementows
with the said Owners as follows; with Article I. The Contractors under Architects, shall and will Article i. of Appetite \& Digestion, Architect and Programme perform all the work mentioned in the identified in the presence of perhich Menu and Programme are identified in the this contract) the parties hereto and are hereby made a part of this contract) for the :-
the parties
for the $:-$
Demolition and subsequent removal of the materials provided
in accordance with the menu furnished by the Place Viger Hotel, such material being now exhibited on the tables of said Holel, and on condition that all said materials be employed in the rebuilding of the Inner Man, and in the following order :I. Foundation, Malpecqne Gysters, well bedded on an undisturbed stomach; 2. Grouting, to be well flushed up with cousommé Printannier Royal ; 3. Structural Ironwork, fish plates to be furnished à la menu, Boiled Gaspé Salmon, well boited with Cucumbers and Pommes Marquise ; 4 Entrées, at any time while work is going on, Sweetbreads à la Montglas ; 5. Brickwork, Roast Stuffed Curkey, joints to be well-bonded with Cranberry Sauce, and vegetables to taste ; 6. Roman Punch, in charge of a competent foreman speaking Italian ; 7. Partitions, to be well-studded and braced with Roast Bluebill Duck (no high stakes allowed at this "game"), and to be pugged with Red Currant Jelly and Watercress ; 8. Roofing to be covered with four-ply Gateau Assortis, well-fleshed with Champagne Jelly ; 9. Decoration, all paints to be mixed with café noir, and finished in tints to match Fruit in season; Oak to be well fumigated with approved brand of Cigars ; 10. Toasts and Tunes, or it not in tune, the air to be had gratis outside.
Art. II. The Architects shall furnish to the Contractors such power and ability as without explanations may be necessary to demolish and dispose of the above Menu, and the Contractors may dispose of the same as part of this contract so far as may be consistent with their health and physical wellbeing.
It is mutually understuod and agreed that all after effects and consequences are and remain the property of whom it may concern.

Art. III. No alterations shall be made in the work shown or described by the Menu and Programme except upon a protest of the Architects, and when so made, the value of the damage done shall be computed by the Architects, and the amonnt so ascertained shall not be deducted from the contract price. In the case of dissent from such award by either party hereto, the valuation of the work added or omitted shall be referred to any competent physician or duly qualified Magistrate, and in the event of failure to agree, the parties shall go to gaol or hospital, as the case may be, at their own expense.

Art. IV. The Contractors shall provide sufficient, safe aud proper facilities at all times for the disposal of the work by the Architects or their authorized representatives. They shall, within tweuty-four hours after receiving internal notice from the Architects to that effect, proceed to remove all materials condemned by them, whether worked or unworked, and to take down such remedies as the said Architects (Messrs. Appetite \& Digestion) may deem necessary to the due fulfillment of this contract.

Art. V. Should the Contracton at 'any time refuse or neglect to supply a sufficiency of proper ability and zeal, or to prosecute the work with promptness and diligence, or fail in the performance of any of the agreement herein contained, such refusal, neglect or failure shall be subject to the pains and penalties usually imposed by the Architects, (Appetite \& Digestion).
Art. VI. The Contractors shall complete the several portions, and the whole of the work comprehended in this Agreement by and at the time or times hereinafter stated, to wit :- Commencing sharp at 8.15 p.m. with the oysters, etc., as above specified, and from that time until the work of demolition or removal be carried out or until the complete fulfillment of the contract, even if such completion require extension of time until the "wee sma' honrs o' the morn."

Art. VII. Should the Contractors be obstructed or delayed in the prosecution or completion of their work by the act, neglect, or delay or default of the Owner, or of any caterer, waiter or servant employed by the Owner upon the work, or by any damage which may happen by bones, pepper, tobacco, small talk or stale yarns through no default of the Contractor, then the time herein fixed for the completion of the work shall be extended for a period equivalent to the time lost by reason of any or all of the causes aforesaid.

Art. VIII. In order to secure completion of this work on the part of the Contractors, at the time and in the manner specified, it is hereby stipulated that the damages arising from non-fulthllment of this contract shall be the Hunger and Thirst of such defaulter.
Art. IX. It is hereby mutually agreed between the parties hereto that the sum to be paid by the Contractors to the Owners for said work and materials shall be the full price of the Ticket, reb ates strictly barred subject to additions or Extras, and that such Extras shall be paid in current fuuds by the Contractors in full on production of winecards (Perrier-Jouet, Extra Dry, or a case of Ussher's Scotch, duly signed or attested).
The final payment shall be made before the beginning of the work.
Art. X. It is further mutually agreed between the parties that no kick before, during or after the work, shall be conclusive evidence of the good faith or sanity of the kicker
Art. XI. Said Contractors further agree to protect and indemnify said Owners against accidents which may occur as an " aftermath" from Stairs, Sidewalks, Automobiles, Street Cars, Cabs, Police, Mrs. Grundy, Mrs, Caudle or La Bonne Femme.

Art XII. The said parties for themselves, their heirs, executors, administrators and assigns, do heroby agree to the
full performance of the covenants herein contained, and to comply in all respects with the law in relation to proper gentlemanly conduct, and dinner etiquette.
IN WITNESS WHEREOF, the parties to these presents have hereunto set their hands and seals, the day and year first above written.
Witness to Signature of Owners, $\left\{\begin{array}{l}\text { R. George Hood, (President) } \\ \text { J. Herbert Lauer, (Secretary) }\end{array}\right.$ Witness to Signature of Contractor,

About two hundred and fifty guests sat down to dinner. At the table of honor were : President and toastmaster, R. George Hood; past president, Mr. N. T. Gagnon; Hon. W. A. Weir, Minister of Public Works; C. H. Catelli, president Chambre de Commerce; Alcide Chaussé, president Architects' Association Province of Quebec; Jos. Haynes, professor of architecture, Laval; Geo. Wood, of Messrs. Hutchiso \& Wood; Adolphe Brassard, architect, Provincial Public Works; Jos. Perrault, architect; P. C. Ogilvie, president Master Plumbers' Association; W.T. Castle, vice-president Master Painters' Association; W. B. Shaw, representing Electrical Contractors' Association, and among the other guests present were Messrs. H Desjardins, T. Mitchey, W. McArthur, W. Livermore, John Smith, W. King, A. Bremner, G. A. Robinson, W. J. Little, J. Gray, J. W. Ross, jr., P. Murphy, Vivian H. Graham, Stanislaus Rochon, jr., Eugene Guilbault, H.A. Whitley, Jas. Morin, J.H.Hutchinson, J. W. Hughes, J. G. Pricher, C. C. Lanctot, W. C. Thomson, J. E. Goodman, James Young, Alex. Smith R. C. Benning, John Quinlan W. J. Arthur, A. M Arthur, Wm. Morrison, R. E. Jones, J, B. Giles, F. J. Truaisch, T. L. William, E. Cavanagh, James Morri son, G. Vogelsberger, S. W. Williams, J. Morrison, H. P. Bowden, W. A. Toohey, H. E. Stenson, T. W Foster, A. Binda, J.Simard, J.A. Simoneou, J. Murphy, Jos. Thibeault, J. Brunet, R. I. Clark, R, Clark, F W. Beanfield, T. T. Powell, A. F. Crosman, W. E. Potter, W. S. Hunter, Bruce Turner, J. M. McAnally, D.P. Rees, F.E. Maxell, J.J. Petit Clair, L.S. Rochon F. J. Charbonneau, E. W. Sayer, E. M. Mitchell, J.B. Benoit, G. Delfosse, C. P. Godin, E. T. Houghton, A. Wright, J. B. Bamford, J. Simpson, J. Wighton John McLean, J. Stewart, G. L. Craig, H. A. Finkle J. B. Sparrow, W. H. D. Murray, Craig Campbell, J. Duthie, Chevalier C. Mariotte, H. R. Hutchinson, H L. Paton, W. P. Baxter, W. R. J. Hughes, G. A. Robertson, Chas. Donohue, E Richardson, P. Smith J. C. Watson, C. S. J. Thomson, F. W. Cooper, G. H Langudge, E. T. Ramsay, L. Lefebvre, Martin C Waller, Chas. Waldren and H. R. Hussey.

Before ten o'ciock the tables were cleared and Mr R. George Hood, President of the Exchange, intro duced the toast list of the evening. It had bee arranged to have many of Canada's leading me present at the banquet, but owing to stress of public duties, many of them were compelled to decline the invitation.

Amongst others were letters of regret from The Right Hon. Sir Wilfred Laurier ; Hon. Rudolph Lemieux, Post Master General ; Mr. Robert B. Ames, M. P. ; Mr. F. D. Monk, M.P. and Mr. Matheson President of Board of Trade.
Hon Lomer Gouin, Premier of Quebec, had accept ed an invitation to be present, but, owing to a hurried call, was compelled to leave for Quebec. His colleag ue Hon. W. A. Weir, Minister of Public Works and Labor was present and responded to the toast of our Legislature, Province of Quebec. Mr. Weir, after congratulating his hosts on their hospitable gathering spoke chiefly along the lines of technical education He first emphasized the absolute necessity for a highe standard of elementary education, and made the sur prising statement that many pupils left the elementary schools of the province, and in a few years forgot how to read. This, he said, is nothing short of a nationa calamity. Canada would never be a really grea nation, unless each man, woman and child could read and think intelligently of what they read. The decadence of the apprentice system showed the need of
technical schools, and Mr. Weir cited the fact that one United States correspondence school had twenty thousand Canadians on its books. It was a national shame and disgrace that there was not sufficient public spirit among the wealthier class of the country to provide, within the borders of the Dominion, sufficient technical education for the young people.
In 1898 there were atttending the classes of the Council of Arts and Manufactures, in Montreal, Quebec and Sorel, 821 pupils. Last year, the numbers had grown to 2,221 or 300 per cent. increase. Parents were continually feeling the lack of opportunities for the technical education of their children. Universities like Laval and McGill might well follow the example set by the little University of Dalhousie, in Nova Scotia, which, feeling the urgent need of technical education, had established schools in five different towns of that province, a great deal of the instruction being given free by the professors and alumni of Dalhousie.
He had recently visited the classes of the Council of Arts and Manufactures at the Monument National, and had been grieved to see the number of young men and women amidst such surroundings and in an impure atmosphere seeking to obtain knowledge. Such a condition of affairs was a disgrace to the citizens of Montreal. Why was not the example, set


Mr. R. George Hood, President.
by such cities as New York, Philadelphia and Springfield, followed? In these cities institutions for the technical training of the young men had been built out of the pockets of the people. It was the exception in the United States for any sucb institutions to be subsidized by the state. Toronto also had a technical institution, built by the puplic-spirited citizens, with the aid of the corporation. Why should Montreal be behind hand in this direction? The members of the Manufacturers' Association, out of their wealth, should take a practical interest in this question. A high tribute was paid to the munificence of Sir William Macdonald in the establishing of such institutions as the one at St. Anne's.
The little country of Saxony, with a population of tour millions, head $23^{1}$ technical schools, with an attendance of 29,000 pupils, There were barely a dozen suce of 29, , throughout the length and breadth of Canada. Was Canada to be subordinate to the trained artisans of Europe?
"Don't forever be looking to the Government," was Mr. Weir's final advice. "Do something for yourselves. Poor as we are-for reason that you will not give us enough taxes-we will help liberally any steps taken towards the establishment ,of technical schools throughout this province of ours."

Mr. Hood, the chairman, in the course of his remarks, stated that the labor unions were doing good
work, but he thought it was a mistake for them to limit the number of apprentices and make it difficult to acquire a knowledge of the various trades.
The chairman's speech was along simestions of interest broadening out to to the building trades, such as accidents to workmen, builders' liabilties in construction, etc. He also advocates the formation of an employment register, and more comodious premises for the fast-growing Exchange.

Then followed a bright, interesting programme of


Mr. n t. Gagnon, Past Presidint
speeches, music etc., that lasted, with merriment and cheer, away on into the 'wee sma' hours.'
Only after repeated and urgent requests, was Mr. Lauer, the secratary, and incidentally, the musical accompanist of the evening, induced to speak to the ruests. His reception was evidence of the recognition of the worth of his services.

- Mr Lauer commented on the fact that hostile criticism had been directed at the Exchange, because of these social gatherings, but he pointed out, that, as


Mr. J. H. Lauer, Secretary.
a result of these affairs, business men met their competitors on a friendly footing, and learned to respect one another. These gatherings, as well as the casual meetings at their Exchange Rooms, give opportunities for a greater volume of and improvement in business. - It may interest our readers to learn that wheras in May, 1905, the Exchange numbered only 59 members, that it has now over 230 of an increase, due largely to the energetic administration of Mr. Lauer.
Already the Exchange needs larger quarters, and there is even now some talk of erecting a building suitable for their fast growing needs.

## THE CANADIAN CLAY PRODUCTS MANUFACTURERS

The fifth annual convention of the Canadian Clay Products Manufacturers was held at the Rossin House, Toronto, Wednesday, Thursday and Friday, December 12 th, 13 th and 14th. There were about 125 persons registered, as follows;
C. H. Bechtel, Bechtels, Waterloo ; S. J. Heafield. American Clay Machinery Co., Bucyrus, Ohio ; S. J. Fox, Lindsay, Ont.; J. B. Russell, Toronto; D. O. Lochrie, Toronto; C. E. Whyard, Bechtels, Waterloo ; Robt. Holtons, Drew, Ont.; Alex. Smith, A. Smith \& Son, Cowal, Ont.; Milton Smith, A. Smith \& Son, Cowal, Ont.; C. E. Norton, W J. Norton \& Son, Alliston, Ont.; O. Baird, H. C. Baird, Son \& Co., Parkhill, Ont.; R. J. Davenport, H. C. Baird, Son \& Co., Parkhill, Ont.; J. F. Wilson, H. C. Baird, Son \& Co, Parkhill, Ont.; A. Snyder, A. Snyder \& Co., Portage La Prairie, Man.; C. A. Snyder, A. Snyder \& Co., Portage La Prairie, Man.; J. W. Snyder, A. Snyder \& Co., Portage La Prairie, Man.; F. J. Hutchins, H. C. Baird, Son \& Co., Parkhill, Ont.; T. Henderson, Renfrew, Ont.; G. B. Drennan, J. D. Fate, Co., Plymouth, Ohio ; W. H. Wood, Brockville, Ont.; A. Neal, Seeleys Bay, Ont.; J. E. Randall, T. A. Rand 11 \& Co., Indianapolis, Ind.; J. Cornhill, J. Cornhill \& Sons, Chatham, Ont.; W. H. Elliott, Glenannan, Ont.; W Elliott, Glenannan, Ont.; T. M. Milligan, Harvard P. O., Ont.; J. Sullivan, Port Credit Brick Co., Toronto ; F. R. Miller, Port Credit Brick Co., Toronto; J. Cornell, Thedford, Ont ; W. Freek, Barrie, Ont.; C. Sawden, C. Sawden \& Son, Toronto; H. E. Reid, Barrie, Ont.; A. Berg, A. Berg \& Sons, Toronto ; J. Berg, A. Berg \& Sons, Toronto ; S. Berg, A. Berg \& Sons, Toronto; J. S. McCannell, Milton Pressed Brick Co., Milton, Ont.; G. W. Moody, Highgate, Ont.; A. M. Wickens, Toronto ; G. W. Close, Close Brick Co., Stratford, Ont.; H. de Joannis, Chicago, Ill.; C. W. Close, Close Brick Co., Stratford, Ont.; R. F. Ollman, Ollman Bros., Hamilton; A. Dowker, Fort Francis, Ont.; Wm. Adamson, Walkerton, Cnt.; E. Hooker, D. D. Hooker \& Co., Welland, Ont.; H. Cornh Il, J. Cornhill \& Son, Chatham, Ont.; F. Cornhill, J. Corthill


Mr. J. B. Millar,
President-Elect Canadian Clay Products Manufacturers,
\& Son, Chatham, Ont.; W. MeCredie, Lyons, Ont.; Ne:1 McFee, Park Hill, Ont.; C. A. Gibbs, Bechtels, Waterloo, Ont.; B. E. Bechtel, Bechtels, Wa'erloo, Ont.; H. A. Cozzens, St. Catharines, Ont. J. B. Millar, Don Valley Brick Works, Toronto; V. O. Phillips, Twin City Oil Co., Berlin, Ont ; John Watson, Watson Brick Co., Bracebridge, Ont.; Geo, Frid, Geo. Frid \& Co., Hamilton, Ont.; S. Wright, Kincardine Brick \& Tile Works, Kincardine, Ont.; S. Wright, Chesley, Ont.; J. C. Wright, Proton Brick \& Tile Works, Proton, Ont.; G. A. Norton, Norton Bros., Carleton West, Ont.; T. W. Norton, Norton Bros., Carleton West, Ont.; Geo. Angus, Toronto ; W. B. Bechtel,

Bechtels, Waterloo, Ont.; Jas. Irwin, Jas. Irwin \& Sons, Norwich, Ont. ; E. J. Neal, Seeleys Bay, Ont.; Wm. Adamson, Walkerton, Ont.; N. B. Card, Harrisburg, Ont.; C. Ott, M. Ott \& Son, Harrisburg, Ont.; R. H. Hamley, Bowmanville, Ont.; Thomas Kennedy, Dominion Sewer Pipe Co., Swansea, Ont.; F. Sch iefer, Breslan, Ont.; Geo. Schaefer, Breslan, Ont.; C. G.


Mr. S. J. Fox, M.P.P.
Retiring President Canadian Clay Products Manufacturers.
Frank, C. G. Frank \& Sons, Strathroy, Ont.; G. W. Pakenham. Weston, Ont.; E. J. Brown, Brown Bros. Brick Co., Mount Dennis, Ont.; J. W. Brown, Brown Bros. Brick Co., Mount Dennis, Ont. ; Jos. Brown, Brown Bros. Brick Co., Mount Dennis, Ont.; David Martin, Thamesville, Ont. ; A. W. Wright, Toronto Fire Brick Co., Mimico, Ont.; J. W. Ball, Toronto Fire Brick Co., Mimico, Ont.; Wm. Hancock, Hamilton, Ont. ; J. King, Fruitland Brick \& Supply Co., Fruitland, Ont.; J. M. Scott, Meaford Brick Works, Meaford, Ont.; I. Price, Toronto; D. O. McKinnon, Canadian Manufacturer, Toronto; J. Mouldey, J. Mouldey \& Co., Kingston, Ont.; Geo. Whittington, Napanee Ont. ; A. H. Meikley, Meikley Bros., Casselman, Ont.; F. S. Keith, Canadian Machinery, Toronto; M. Ryan, M. Ryan \& Son, Fredericton, N. B.; J. R. Irwin, Anderson \& Irwin, Waterford Ont; H. Cameron, H. Cameron \& Co., Toronto; A. H. Barron, Barron Dryer Co., Chicago, Ill. ; L. H. Linden, Tilsonburg, Ont. A. W. E. Hellyer, Coin Brick Co., Ottawa, Ont. ; J. A. Lamond, E. Leonard \& Sons, London, Ont.; J. M. Govenlock, Winthrop, Ont.; R. G. Way, Trenton, Ont.; A. Deller, Geo. Deller \& Sons Norwich, Ont.; J. R. Milner, J. T. Wing \& Co., Windsor, Ont. W. H. Freeborn, Brantford, Ont.; Geo. Crain, Beamsville, Ont. Edward Orton, jr., Columbus, Ohio; Wm. Baillie, Laprairic Brick Co., Montreal; Chas. Curtis, Curtis Bros., Peterboro, Ont. F. R. Ollman, Ollman Bros., Berlin, Ont.; J. F. Ollman. Berlin Brick Co., Hamilton, Ont.; W. J. Packham, Brampton Pressed Brick Co., Brampton, Ont.; H. R. Irwin, Jos. Irwin \& Sons, Norwich, Ont.; Henry James, Deleware, Ont.; Wm. Roberts, St. Catharines Brick \& Tile Co., St. Catharines, Ont.: W. M. Carter, St. Catharines Brick \& Tile Co., St. Catharines ; W. E. Spantz, Berlin Brick Co., Berlin, Ont.; Wm. Wright, Kincardine, Ont. ; J. F. Hollis, Toronto; J. H. Morrison, Toronto: John McBain, Milton Pressed Brick Co., Toronto; John Maloney Toronto; James Pears, Davisville P. O., Ont.; Wm. Pears, Ontario Paving Brick Co., Toronto Junction, Ont. ; J. H. Lainson, Lainson \& Sons, Toronto Junction, Ont.; D. Scott, Jas. Lochrie \& Co., Toronto; R. J. Kearney, J. Lochrie \& Co., Toronto; Prof. Coleman, School of Practical Science, Toronto; Prof. Baker, Ontario School of Mining, Kingston, Ont.; M. Wilson, Glad stone, Man.; H. Stephens, Portage La Prairie, Man.; E. New, Hamilton, Ont.; John Crawford, Crawford Bros., Hamilton, Ont. R. H. Rose, Dominion Belting Co., Hamilton, Ont.; Frarik Crawford, Crawford Bros., Hamilton, Ont.

## THE CANADIAN ARCHITECT AND BUILDER

The Convention was called to order on Wednesday afternoon by the President, Mr. S. J. Fox, and was welcomed on behalf of the citizens of Toronto by Alderman J. J. Graham, Chairman of the Reception Commitee of the City Council.
The President made a short address reviewing the work during the past year and also the object of their meetings and requested the members to ask


Mr. J. S. McCannell,
First Vice-President Canadian Clay Products Manufacturers.
questions on the different subjects and so create discussions. The Secretary-Treasurer's report was then read and adopted.
Professor Coleman, of the School of PracticalScience, gave a very interesting lecture on the formation of the different clay deposits throughout Canada, and a very hearty vote of thanks was tendered him.
Papers were then read by Mr. A. Berg, of A. Berg \& Sons, Toronto, and Mr. J. S. McCannel, Managing Director of the Milton Pressed Brick Co., Milton, Ont., on "Pressed Brick as a Building Material" and "Mining and Preparation of Material" respectively.
After discussion on various subjects the meeting was adjourned till Thursday afternoon.
Thursday morning the members were the guests of the Don Valley Brick Works, who provided a special train to convey the members to their plant in the picturesque Don Valley, which was then thoroughly inspected.
The main feature of the Thursday afternoon session was a lecture on "Technical Education," by Professor Orton, jr., of the Ohio State University, Columbus. The officers of the Association are to be congratulated on obtaining the services of such an authority ; needless to say, the lecture was thoroughly enjoyed. A unanimous vote of thanks was tendered the Professor tor his highly interesting discourse. At the present time when the Association are endeavoring to have a class opened in the School of Science for the training of clay workers, Prefessor Orton's lecture was very appropriate indeed.

A lecture was delivered by Professor Baker, of the Ontario School of Mining, Kingston, on "Grogs in Brick Making" which is published in this issue.

Mr. J. B. Millar, Superintendent of the Don Valley Brick Works, read a paper on "Comparative Economy of Construction and Operation of Down Draft and Continuous Kilns." This subject, in the hands of Mr.

Millar, who has had a great deal of experience in the brick making business, was treated in a very thorough manner.
Thursday evening the members were the guests of the brick manufacturers of Toronto, at a banquet held in the Rossin House. Mr. William Spears, Chairman of the Reception Commitee of the Toronto Association, acted as toastmaster, and among those present were Hon. J. W. St. John, Speaker of the Provincial Legislature; Hon. Dr. Pyne, Minister of Education; Controllers Shaw, Hubbard and Jones; Alderman J. J. Graham, and other gentlemen representing various local associations. Hon. Dr. Pyne in the course of his address intimated that a class in the School of Science for the training of clay workers was a thing of of the near future. He had interviewed Professor Galbraith, Principal of the school, who had expressed himself as being only too glad to meet a committee from the Clay Workers Association and discuss the subject.

Friday morning the members were taken for a drive around the city, and in the afternoon a very important session was held. Papers were read by Mr. A. M. Wickens, on "Uses of Exhaust Steam in a Brick Plant," and Mr. H. de Joannis, Chicago, Ill., on "The Retrospect and Prospect of the Industry." Mr. Wm. McCredie, of Lyons, Ont., gave an adaress on "Down Draft Kilns," and a very interesting paper was read by Mr. Wm. Baillie of La Prairie, Que.
A committee comprising the following members was appointed to confer with Principal Galbraith, of the School of Science, in reference to the establishment of a school of ceramics in connection with the University:


Mr. Wm. Hancock,
A Vice-President of the Canadian Clay Products Manufacturers for 1606.
S. J. Fox, M.P.P., W. McCredie, J. B. Millar, J. S. McCannell, C. H. Bechtel, William Pears, A. W. Wright, J. B. Lochrie, Joseph Russell, W:lliam Hancock and H. deJoannis.
The next convention will be held in Ottawa, Ont. The election of officers resulted as follows: President, J. B. Millar, Toronto; First Vice-President, J. S. McCannell, Milton ; Second Vice-President, Charles Curtis, Peterboro ; Third Vice-President, J. Cornhill, Curtis, Peterboro ; Secretary-Treasurer, C. H. Bechtel, Waterloo; Executive Committee, S. J. Fox, M. P.P., Lindsay, Ont. ; T. M. Milligan, Harbord, Ont.; Joseph Russell, Toronto ; W. McCredie, Lyons, Ont., and David Martin, Thamesville Ont." was then opened, but owing to the shortage of time was discussed only briefly.

## THE CANADIAN ARCHITECT AND BUILDER

## "GROGS" IN BRICK MAKING.*

## By Profrssor Bakrr, School of Mining, Kingston.

I have chosen as the subject of this paper one which 1 clay workers. By " 'grogs," is also of great importance to clay workers. By "grogs" is meant those substances which are added to strong clays to render them milder and more easily worked. As a rule only one such substance is used by brick makers in this country, and that is sand; but a few others can be used in case sand is scarce, e.g., loam, powdered brick-bats, sawdust, coal screenings, ete. of of course these several grogs have different effects upon the brieurse other product to which they have been added, and I brick or diseuss briefly a few of the effects of added, and I wish to clays in Ontario. few of the effects of these grogs on our There is a
in general concerning the adror among builders and contractors that the addition of sand or powdered brick. They believe adulteration and a detriment to its use brick to a clay is an much as we view thetriment to its use as a building material, fabric. This error the addition of cotton or shoddy to a woollen fabric. This error on the part of brick users, and many brick is just the reverse of the above. They improv of these grogs several ways, as I hope to showe. They improve the brick in
Looking at this subject first you.
brick maker, you all know well the diffice standpoint of the met in working a clay that is too difficulties that have to be melled. In the first play that is too strong or fat, as it is ofter it sticks to the plows, spades, clay is difficult to mine or dig; it sticks to the plows, spades, scrapers or whatever else may
be used to dig it. It sticks be used to dig it. It sticks togethers so that it can searcely
be picked apart. You all know may can be. If, however, there be just how tough a clay bank the clay, it digs so much more a casily The tempering so much more easily.
hing; it is almost impossible to stiff clay is a most difficult thing; it is almost impossible to do it by hand, and if it is done by a pug-mill or other machines, the tough clay will prove a great user of power. About the only way to temper and disintegrate such clay is to dig it in the fall and allow
it to lie in it to lie in a heap over winter, when with frost and wet and dry it will slowly slake and break up to a workable condi tion. But some of you have not time for this, and should add sand to such clay in your pug-mill, or tempering pit, or to the brick machine itself, if you do not temper in a sep-
arate machine. arate machine.
In the next part of brick making, viz., moulding, sand plays a very important part. It is almost impossible to shift a tightly, and it will be moulds, such clay will fit the moull so moulding sand off the so close in grain that it will rub the moulding sand off the moulds and make it almost impossible to shift the brick when made. It is astonishing what an im provement a little sand will make to such a clay in this re-
speet.
In drying either stiff mud or stock brick an addition of sand will make an enormous difference in the rate. Very keeping the interior of and slake, or a dry shell will form, keeping the interior of the brick wet, or the brick will warp and shrink out of shape by unequal drying, and the accompanying air shrinkage. When sand is added it renders the clay leaner or milder; it will not require so much water for so that the moisture can of sand keep the brick more open. will not shrink, so that the brieks will keep Again, the sand better, as only part of the material of which their shape much shrinks.
We have seen from the above remarks, certain parts of which must describe conditions which all of you have of perience in one respect or other of your industry, that the addition of sand makes clay working much easier in every respect, from the digging of the clay to the burning of the
finished product. nished product
But all that we have said is from the standpoint of the brick maker; but what of the brick user? Does the addition of This is the other stander article for builder and contractor? this question.
Two great classes of strains are put upon brick in building; the one is a tensile strength which would tend to pull bricks apart, the other is a pressure which would tend to crush the brick. The second of these is most important, as it is practically the stress to which bricks mast important, as it is ing, by the weight placed on them. In order to submit clays to some of these tests, I took teveral of our Ontario clays and subjected them to these tests, as follows: The raw clay with its own $15 \%$ of sand was formed into a briquette, then the per-

| Sam | * TABLE OF CLAY TESTS. |  |  |  |  |  |  |  | Aver. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E | 250 |  |  |  |  |  |  |  |  |
|  | 290 | 325 | 307 | 380 | 365 350 | 342 365 | 250 270 | 265 | 257 280 |
|  | 300 | 340 | 320 | 350 | 375 | 362 | 326 | 300 | O |
|  | 210 |  | 197 | 330 | 350 | 340 | 280 | 295 | 3 |
|  | 2 |  | ${ }^{252}$ | 295 | 310 | 302 | 200 | 230 | 215 |
| 261 242 |  |  |  |  |  |  |  |  |  |

centage of sand was increased to 25 and then again to $33 \%$. narrow part being onade about the shape of the figure 8 , the解

[^0]one inch thick, so that at the smallest section, that is, at the place where they will naturally break, the cross sounds would be one square inch. The weight applied was in poundes so that the results were in lbs. per square inch. The briquettee were all burned in the same muffle furnace, so that all three sets of briquettes were subjected to the same conditions in burning.

From the above tests we see that the addition of sand to these clays makes them stronger and better able to resist that pulling strains to which they are subjected. We see here thd is the best results were obtained when the per cent. of sand is 25 , whereas $33 \%$ is a little too much. This, of course, simply means that you can get too much even of a good thing, and of course there is a proper increase of sand, which seriously oversteped becomes a detriment instead of the reverse.
The crushing test, or the ability to withstand weight placed The crushing test, or the ability to withstand weigot still more important to brick users, and some upon it, is still more important to brick users, and abes were
of these are also of interest. In these tests small cube cubic made one inch to an edge, so that the blocks were one cubic nch, and any face was one square inch. Pressure was then placed on this and gradually increased till the cube crushed. Four tests were made on ordinary red face brick, as sold in or 2,460 eneral for building, and these required an average given as los. to the square inch to crush them. This figure is gon with
a standard for ordinary stock brick, and for comparison the tests given below.

TABLE OF CLAY TESTS.
Sample. No. $\begin{aligned} & 15 \% \text { Sand. } \\ & \text { No. 2. }\end{aligned}$
${ }^{25 \%}$ Sand.
$33 \%$ Sand.
Aver.
No. 2.

| A | 3150 | 2820 | 2985 |
| :--- | :--- | :--- | :--- |
| B | 2900 | 2580 | 2790 |
| C | 2620 | 2760 | 2690 |
| D | 3480 | 2844 | 3162 |
| E | 3710 | 3410 | 3560 |


| 190 | 3390 | 3290 |
| :--- | :--- | :--- |
| 2990 | 3375 | 3182 |
| 3250 | 3580 | 3415 |
| 3640 | 4370 | 4005 |
| 4360 | 4720 | 4540 |
|  |  | $\frac{3686}{}$ |


| 2640 | 3060 | 2850 |
| :--- | :--- | :--- |
| 3400 | 27600 | 3080 |
| 3615 | 2880 | 32475 |
| 2510 | 2640 | 2575 |
| 3390 | 3570 | 348 |
|  |  | 3046 |

Here again we see that the addition of sand improved these products. The small blocks were all burned in the one $\frac{\mathrm{k} \text { The }}{}$ at one time, so that the conditions were uniform for all. overtests show that $25 \%$ of sand is again best, while $33 \%$ over steps the limit and the ability to withstand pressure begsts drop again. You will notice also that the average of test made on the clays having $15 \%$ of sand in them, and this about he way is about the average of our Ontario clays, is about the same as the standard of four tests made on ordinary stock brick as sold in general for building purposes, whide. shows that these tests were about as fair as could be before We realize of course that many tests must be made outly we well established when an averace of ten tests on a clay with well established when an average of ten tests on a clay while
$15 \%$ sand in it gives $3,027 \mathrm{lbs}$. to the square inch, w $15 \%$ sand in it gives 3,027 lbs. to the square inch, gives 2,460 lbs., and that ten tests of clay with the sand coll tent increased to $25 \%$ gives an average of $3,686 \mathrm{lbs}$. per square nch, that the addition of sand to clay is a desirable thing. t sand, or one shovel of sand to three shovels of clay, is a decided sand, or one shovel of sand to three shovels of clay, is a dand should not be seriously overstepped or the values drop again.
Do not mistake me to mean that every one of your should add $25 \%$ to your clay in working; some of you have a sandy clay already, and no doubt you know it and are pleased at the way it works into brick. But others, and a majority do that have a strong clay difficult to handle and work up-dur not hesitate to use sand. It will not hurt the color of your brick unless there be limestone in it, and this is very the case.
If you suspect limestone in your sand, put a little of it into a glass tumbler or a bottle, then pour in a little acid rm any kind, and warm it slightly by placing it in a little will see water. If there is any limestone in your sand you will If a brisk effervescence or bubbling coming off the sand. hurt your clay burns to white brick or buff brick, this will not hu or them, but if your clay burns to red brick, avoid any sand the loam that shows limestone, for this will tend to spoil evell color of the brick by making them light in color, or er spotted.

The addition of combustible grogs, e.g., sawdust or coan $^{\text {al }}$ screenings, is for a different purpose entirely, and this is subject which has not been considered very much in this coule try. In Europe such grogs extent. Coal, e.g., is powdered and mixed in the raw elay; when the kilns are burned this fine coal dust burns also and helps to distribute the heat throughout the kiln and aids in the burning. The particles of clay fuse slightly and knit the burning. The particles or less porous brick results.
to each other, and a more or less porous brick results.
Considerable
Cuse e.g., coarser coal or sawdust is commonly used. This is nsee in the manufacture of porous bricks, terra cotta lumber, fire-proofing.

The aim of the architect and contractor now is to ere This a building that will be fireproof and yet not too heavy. shape is now accomplished by making the main structure or shing. with iron and filling in with terra cotta lumber or fire-proofing To make this we may use any kind of clay, as the cold light. the product does not signify, provided it is strong and blocks The clay is pugged thoroughly with coarse sawdust, the brocess, of any desired shape are made, as in the stift mud pro they by varying the die they are dried like tile, after which

## AND BUILDER <br> <br> THE CANADIAN ARCHITECT

 <br> <br> THE CANADIAN ARCHITECT}are burned in a down draft kiln. The sawdust soon catches fire, and helps to burn the blocks, and after burning out, the small pores are left making the blocks quite porous or vesicular, sores are left, makin blocks are very light and can be used for much so that the domes, roofs, partitions, etc., or for any of ceilings, arches, domes, These blocks are so porous that nails, screws, spikes, etc., can be driven into them with about as great ease as into timber. The rough porous blocks serve admirably to plaster onto, so that a building of any shape may be covered by them and plastered over and painted. For this reason most of the interior decoration now seen in large buildings is accomplished in this way.
The discussion of grogs so far has been confined to different substances that are added to the raw material. There is one
coal takes fire and helps to burn the brick, and at the same time creates an extra draft draws more of the kiln fire to those pattle of the coal trickle be repeated every hour, letting only a the drafts or cause too down each time, so as not to choke the draces your kilns can be much fire in the heads. By this procen them done, and good burned right to the scoving. I davinst the scoving. In down red face brick shipped from against be drawn to any part of號 draft kilns, of course of dampers.
the kiln by the use oll my remarks to this one division of clay
I have confined all mecause I am convinced that it is a most immanufacture, because all, and I am sure it is one that has portant matter to your consideration on your part. These not received its share they are points that are in use by sucar

hew use for grogs now which may not be well known to you all. All of you who are working with the ordinary scoved all. All of you who are working with ee the difficulty of kiln or dutch clamp kiln have experienced the kiln. This has burning the brick right to the outside of the kin. more open been aided in many ways, e.g., by leaving the heads the centre in piling, to cause more draft in that part; or again the asbestos of the , to cause more dred on top by mud, or by asbestos of the kiln may be covered on top to the outside around the sheets, thereby throwing the draft to the outsid now be used. edges. But a new and much better meth coal screenings, which This consists in placing a row of hard coal scree. The ridge are cheap, around the edge of the kiln on top, up like a of hard coal is about 18 inches wide and rounded left open as potato ridge. In setting the kiln the heads aced on the very usual and a row of skintlers are usually placed on the ver in ander kiln has burned up considerably in outside row. After the kiln has begins to get up through the usual way, and when the heat begins and by the use of the heads, the kiln man goes up on top and brick a little and a small wedge like a poker he works the brick a kiln. This
cessful clay workers, and I hope I have been able to arouse your interest in this great department of your work.

## DESCRIPTION OF DESIGN FOR A MODERATE COST HOUSE.

Frame huse of seven rooms, two alcoves and bath. Basement walls are of concrete to grade and cement blocks from grade to first floor. Bath is extra large in size being seven feet and four inches by eight feet and six inches. Main body of house 24 feet wide and 34 feet long. Plain oak to be used for finish of first story except in kitchen and pantries and finish of second story is of red birch. Plain oak floors are provided for first story except in kitchen and bath room. Maple floors are used for balance of house. Building is heated by steam. Estimate cost is \$2900.00.

## THE CANADIAN ARCHITECT AND BUILDER

## MANITOBA ASSOCIATION OF ARCHITECTS

The first annual meeting of the Manitoba Association of Architects was held on Friday evening, Nov. 16th. The President's report is printed below, in full. The Secretary's and Treasurer's reports showed everything to be in a very satisfactory condition. The following officers were elected for the ensuing year : Mr. S. F. Peters, President (re-elected) ; Mr. J. H. G. Russell, First Vice-President ; Mr. S. Hooper, Second Vice-President; Mr. L. T. Bristow, Treasurer (re-elected) : Mr. Percy Over, Hon. Secretary (re-elected). Directors ; Mr. D. Atchinson (re-elected) ; Mr. Wm. Fingland; Mr. J. Greenfield (re-elected); Mr. William Elliott (re-elected); Mr. J. Woodman.

## PRESIDENT'S ADDRESS.

It becomes the pleasant duty of the president of the Manitoba Association of Architects to welcome the members most heartily to this the initiatory annual meeting of the Association. Although not quite six months have elapsed since its formation-and although we have not as yet as large a bona fide membership as has been expected, possibly considering the fact that these six months have been the busiest portion of the year, we may congratulate ourselves on the fact that we have so respectable a number as 30 members in good standing.

A great deal of interest has been manifested by different practising arehitects from time to time in the formation of the Association, and at the initiatory meetings there were some large attendances.
The formation of the Association is all the more agreeable in view of the many futile efforts put forward in earlier days by those who were practising architects here for the accomplishment of this object. But Winnipeg was after all only a small place then, and now the growth has been-and is going to continue to be-so extensive, that development must take place, as it has already done, in architecture as in, other walks of life.
It will be doubtless considered that this is a opportune time to outline shortly the formation of the Association and the work that has been done to date, and also to commence to lay plans
for the future.

The inaugural meeting was held on May 25 th, 1906, and was the result of several provisional meetings. The first thing done was to pass the Constitution as had been formed by the Advisory Board, and provision was also made for alterations to 5 amofficers and directors were elected, and rules governing coml petitions and a schedule of fees were also arranged for.

The first regular monthly meeting was opened with a dinner and was attended by 16 members. At this meeting notice of motion was given by Mr. Jas. Chisholm that he would move in amendment to the first clause in "Rules Governing Competitions" that "The proposed cost of building should not be less than \$10,000.oo.
Mr. Fingland also "gave notice of motion that clause 9 be omitted from "Rules Governing Competitions" which provided for all designs to be submitted with a distinguishing mark or pseudonym.
It was considered by the Council that during the hot weather of July and August, and as the Association has not yet secured permanent quarters, that meetings should be adjourned, and the next meeting was held on September the 21st, 1906, which very few attended, and it was decided to try and make the meeting ${ }^{5}$ more interesting in a social way, the matter being left with the Council to arrange.

The next and last meeting on October 19th, was attended by 17 members, dinner being the first attraction, and Mr. Turner's interesting and instructive lecture on reinforced concrete follow ed. The lecture, one might say, was reinforced with very good lantern slide views of this method of construction, and it is hardly necessary to say was "most heartily appreciated, and the members dispersed after having spent a most enjoyable and profitable evening at this meeting.
Mr. Fingland's motion with regard to competitions as follows was carried. viz :-" Drawings shall not be given a distinguishing mark of any kind, but the author's name shall be sent in ${ }^{2}$ sealed envelope accompanying the drawings.'
Although Mr. Chrisholm's notice of motion has not been acted on, the matter of competitions has received the most earmest consideration of the Council, because it was felt that the objection raised at an early meeting of the Association by ane of the members-although mot favorably considered at the time

## ARCHITECTS!

SPECIFY

## LUXFER <br> WINDOW PRISMS

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SIDEWALK PRISMS

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against placing any limit at all on the cost of the buildings to be competed for, had after all a great deal to be said in its favour, and the Council have lately been unanimously of the opinion it Would be in the interests of the Associaticn to greatly simplify the rules governing competitions by straking out most of the lauses originally adopted, particularly that one as to the cost building. It has been felt that if the kind of drawings to be submitted at a competition were regulated by the Association and also the Board of Examiners, that any member of the Association might enter any such competition with the best chances for fair play and expectations that the best design Would win. It is therefore advised that the incoming Council will act on these suggestions.
The same object is desirable also with regard to the election officers and Council of the Association, provision for which in the preparation of the printed matter was omitted by the typeetter and the omission was not discovered till afterwards.
Resolutions have been passed in Council bearing on these oints and will also have to be attended to by the incoming $\mathrm{C}_{\text {ouncil. }}$
The foregoing is a short resume of the general meetings of the Association to date, and the following will give an idea of the work done by the Council :
In addition to the necessary preparations for the general onthly meetings, the great bulk of which has been most acceptbly attended to by our Hon. Secretary, Mr. Over, the Council ave had ten meetings, and considering the youth of the organation have dealt with some important cases.
In the first place they were asked by a. Citizens' Committee to assist in taking action with regard to the question of municipal Wnership of power and light, but the Council decided such matters were entirely outside our domain as an Association,
Secondly: Differences having arisen between some members of the Associotion as to the etiquette or lack thereof, in connecton with some pseudo competitions, the Committee were appealed $t_{0}$ and exerted their best efforts, and which, while possibly not satisfactory to all concerned, showed a desire at least to be suided by regulations, and evidences of praiseworthy professional action were most gratifying.

Thirdly: Application was received from the Civic Committee for the Association to appoint a representative to act on the Committee in the preparation of a new building by-law for the city of Winnipeg, and the President was appointed to attend to this matter. I may say in regard to this that although about four months have elapsed since this application was made, the Committee have only a few days ago been called together.
Fourth: The matter of preparing a model form of agreemem for building contracts has occupied considerable time, but the Council have not yet been able to fully decide on one-not really having had enough time at their disposal. It would certainly be well for the Association to have a form they could recommend their clients to use, and the new, Council should take this matter up to completion at an early date.
Fifth : The Council interviewed Col. Scott, collector of customs, regarding the collection of duty on plans from foreign countries, and in an endeavor to try and have the duty properly collected. It seems that there is a good deal of difficulty in this matter, first, as regards the question of the amount to be collected, and secondly, the plans that are brought in privately are difficult to place. However the Council discovered that if at any time when, if after a building has been erected, it can be proved that the foreign plans have been used, the duty even then can be collected. The enquiry will at least have the effect of stirring the customs up, and it might be well to ask individual members of the Association to be on the look out and inform the Council of any cases they may hear of. The Secretary has also corresponded with the Ontario Asssociation of Architects on this matter. They seem to be having the same trouble down there, and it behooves all Canadians to look out for their rights and interests.
I think I am justified in saying that we ought to be gratified from the fact that outside Associations are taking an interest in our work, having made enquiries by correspondence, particularly with regard to our evening on reinforced concrete.
The Council have also arranged that a list of the names of draughtsmen seeking positions is to be kept on fyle so that


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members requiring such help may avail themselves of the list at any time.
I may also say that the Secretary has corresponded with the Dominion Minister of Public Works relative to the Competition for new Departmental Buildings at Ottawa. There is also I believe to be a competition for the Government Buildings at Regina with whom the Secretary has also corresponded. The members of the Association will be duly notified if any information is received regarding these competitions.

The above then is a brief outline of what the Association has been able to accomplish since its formation, and although a great deal cannot be claimed to have been accomplished, still a good start has been effected, and we can look forward with confidence to the future, when great things may be done-and all will admit that there is a great deal to do.
In the first place active men must be elected to the Council and every effort made to bring in all the charter members possible, the time for whose admission will expire on the 25 th inst.
Then a room, or rooms, should be secured as a home for the Association where members could gather daily, and a commencement should also be made towards the formation of a Library. This would doubtless be another important step, which together with arranging for lectures, essays, etc., on difterent subjects at the regular monthly meetings when possible, would pave the way for still greater expansion and work in the near future, the final accomplishment of which will, without doubt, benefit, as is the intention, not only the Architects themselves, but the entire comrunity. I might say in speaking of this subject that the Secretary has received a reply from Mr. E. C. White in which he states that he will be pleased to favour the Association with a lecture on the Illumination of Buildings, illustrated with special apparatus, at the February meeting. The Secretary has also communicaied with Mr. Cambridge, City Electrician, asking him to give a talk on wiring of buildings at a future meeting.
It was suggested at the last Council meeting that the annual meeting be preceded by a formal dinner, but the prevailing feeling was opposed to this, and a 6.30 dinner followed by the business of the annual meeting was decided on, so as to finish

However, I thing it would be in the interests of the Associat ${ }^{*}$ ion if during the holidays a formal dinner should be arranged for, followed by a smoker during which we might be favoured with musical and literary selections from artists of at least local reputation, who would give us at least an extra pleasant hour or so.
It would not be right to close this address without stating that all the meetings of the Council have been held in the office of Messrs. Darling \& Pearson-who kindly placed it at our dis-posal-and that the Association is on this account gratefully indebted to that firm.
Allow me to say in closing, that although retiring from the Presidency of the Association, I shall not cease to take an active interest in its progress, and feel certain that we shall not have long to wait before the results will fully justify us for our early efforts in its formation.

CONVENTION OF THE ONTARIO ASSOCIATION OF ARCHITECTS AT OTTAWA.
If sufficient members go down from Toronto it will be possible to procure a private Pullman car. For this reason those who intend to go had better send their names to the Registrar, not later than the 12 th of January.

## TORONTO'S WATER SUPPLY.

Two or three weeks ago the conduit pipe, through which the water is brought across the Bay from Lake Ontario, was damaged; since that time the water has not been fit to drink. For a time the city was dependent on the Reservoir. One day the Reservoir suddenly became exhausted, and the residents north of Bloor Street were entirely without water for nearly a whole day. Such a condition of things is altogether discreditable to a city of the importance of Toronto or indeed to any city, and, furthermore, is a menace to the property and health of the citizens. In view of the rapid increase of population in the northern part of the city, there is urgent need for a second reservoir of ample dimensions to supply this district.

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The McGill College Students' Union, Montreal.
Percy E. Nobbs, M.A., and Messrs. Hutchison and .Wood, Montreal, Conjoint Architects.

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Bomd K.Simith. ARCHz:
160 Bar SI Tanarra


House for Duncan Macdonald, Esg., Toronto.
Messrs. Bond and Smith, Architects, Toronto.


VIEW OF NORTH END OF HALL, GROUND FLOOR.


VIEW OF HOUSE SPACE FROM SOUTH-EAST.
House for Duncan Macdonald, Esq., Toronto.
Messrs. Bond and Smith, Architects, Toronto.

Ground floor hall and staircase.
The McGill College Students' Union, Montreal.
Percy E. Nobbs, M.A., and Messrs. Hutchison and Woods, Montreal, Conjoint Architects.

## PAGES

## MISSING


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