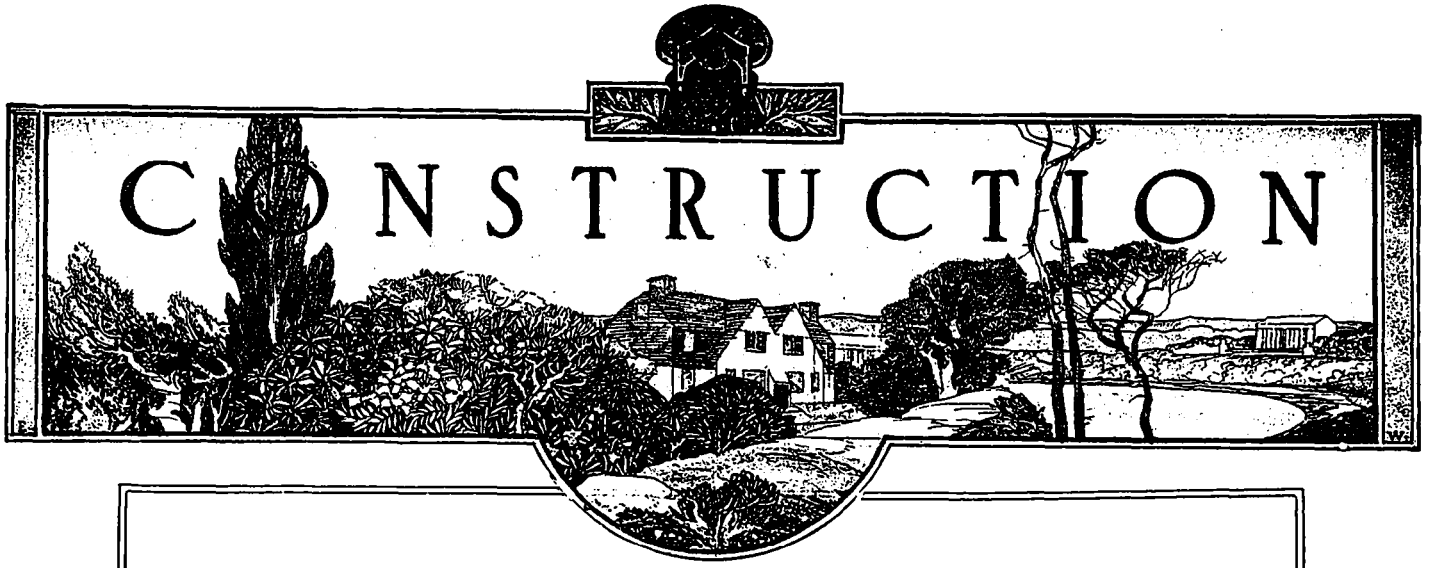
Pages Missing

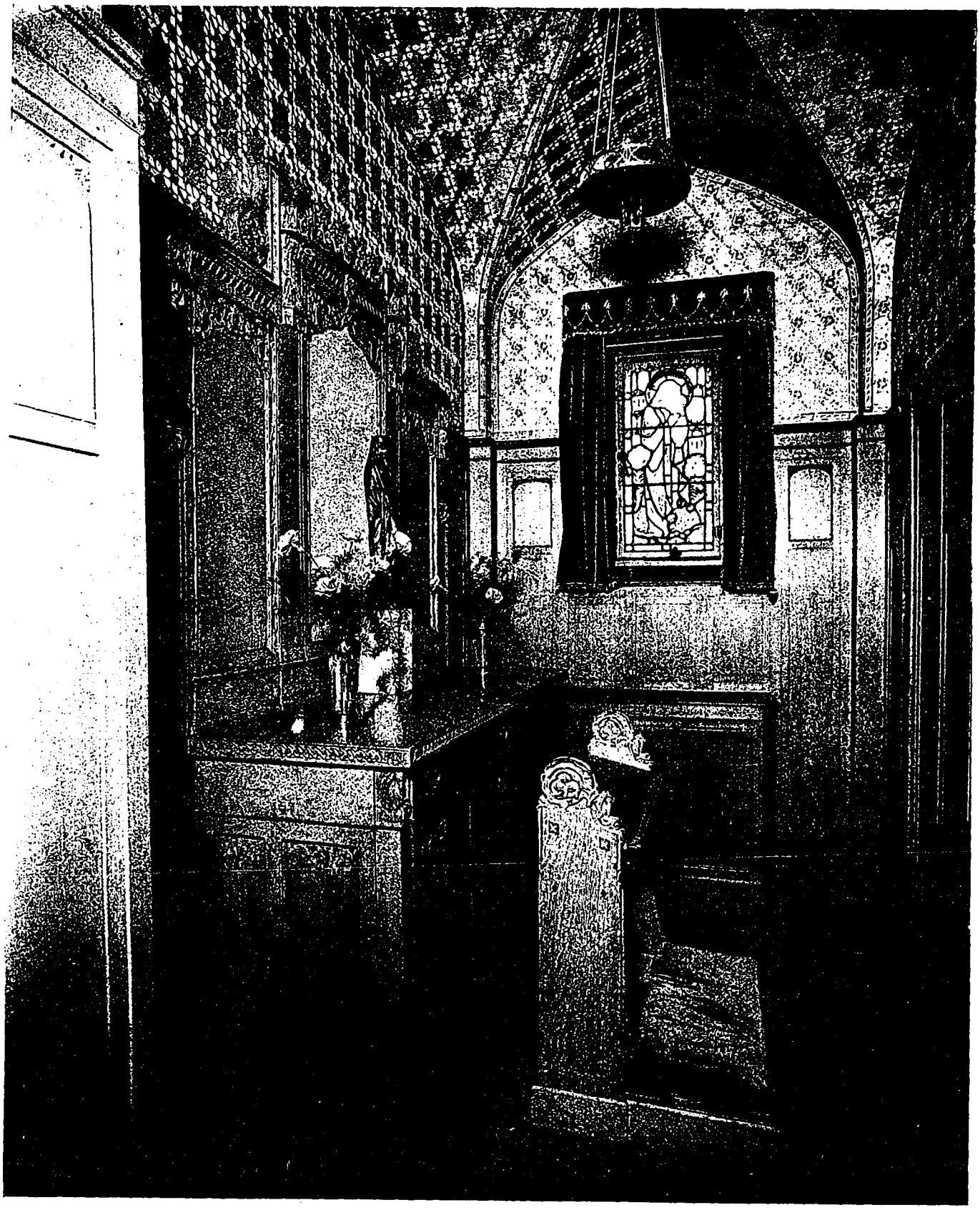


September, 1920 Volume XIII., No. 9

CONTENTS

Illustrations

H. GAGNIER, Limited, Publishers
GRAPHIC ARTS BLDG., TORONTO, CANADA
BRANCH OFFICES
MONTREAL NEW YORK



AN ORATORY IN A MONTREAL RESIDENCE.

E. & W. S. MAXWELL, ARCHITECTS.

An Oratory in a Montreal Residence

THE problem given the architects was to design an oratory to go in a small room adjoining the principal bedroom on the first floor of a residence, which they had planned.

The floor space available was six feet wide by ten feet six inches deep, lighted at the end by a small metal casement window. The problem included introducing a figure of the Virgin, three feet six inches high, and it was agreed that at some future time the figure might be replaced by a carved one of smaller size, and greater sculptural interest. It was quite obvious that refinement of detail and scale would have to be adhered to, and owing to the size of the Virgin, destined to go in the centre of the composition, no canopied niche treatment could be made use of to provide a setting for the figure.

The style adopted was Gothic, but in its development there is very little adherence to any specific period. The ceiling is of plaster, vaulted in form, and covered with a Japanese grass cloth of silvery quality. A stencil with a pattern based on the square, yet possessing a distinct diagonal motif, was used for the decoration of the material; the predominating colors being blue, a rather primrosy yellow and the silver background of the cloth which contrasts agreeably with the water color stencilling. The blue note is repeated more firmly in the velvet curtains and the woven rug with a narrow decorative border recalling in a lower key, a simplified repetition of the ceiling color scheme.

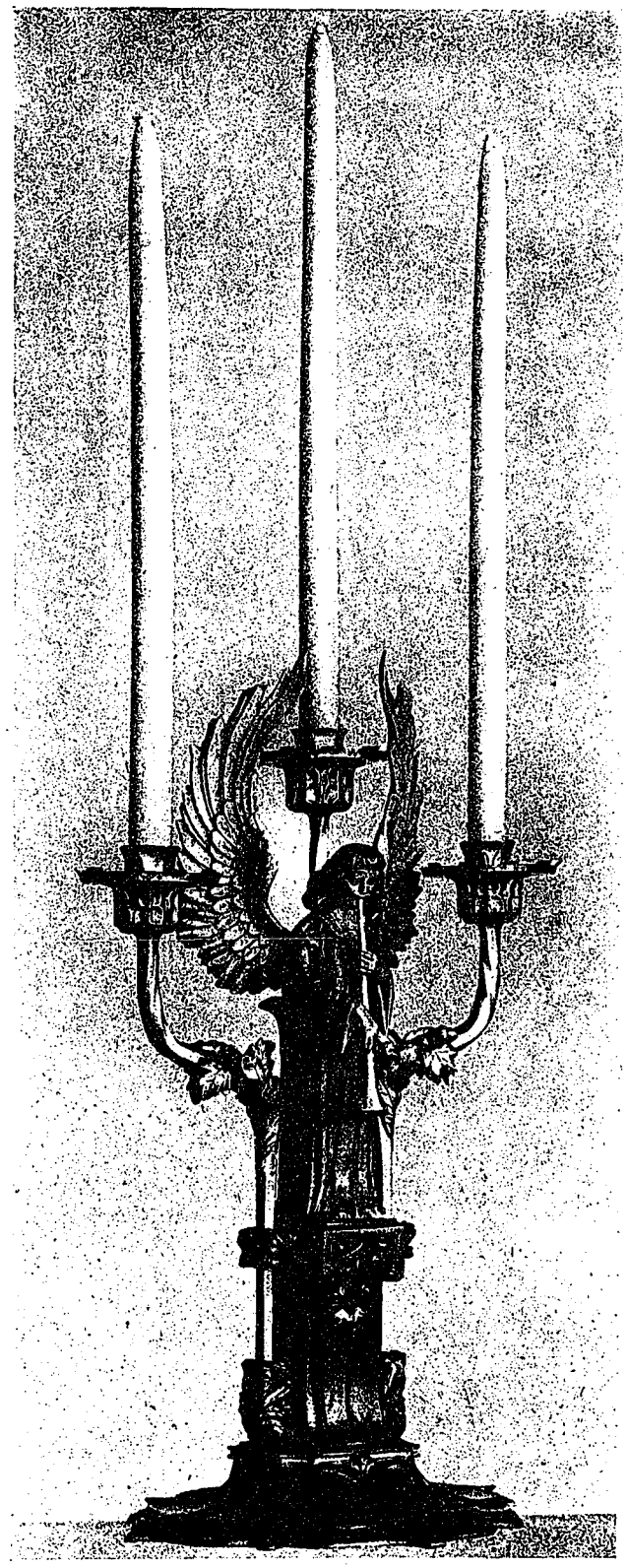
The waxed oak woodwork is finished in an unassertive silver grey, and the carved figures of pine are polychromed, closely following some sixteenth century ones in the architects' possession.

The casement window has been excellently designed and executed by Mr. Archibald Davies of the Bromsgrove Guild, the Virgin and Child being the motif.

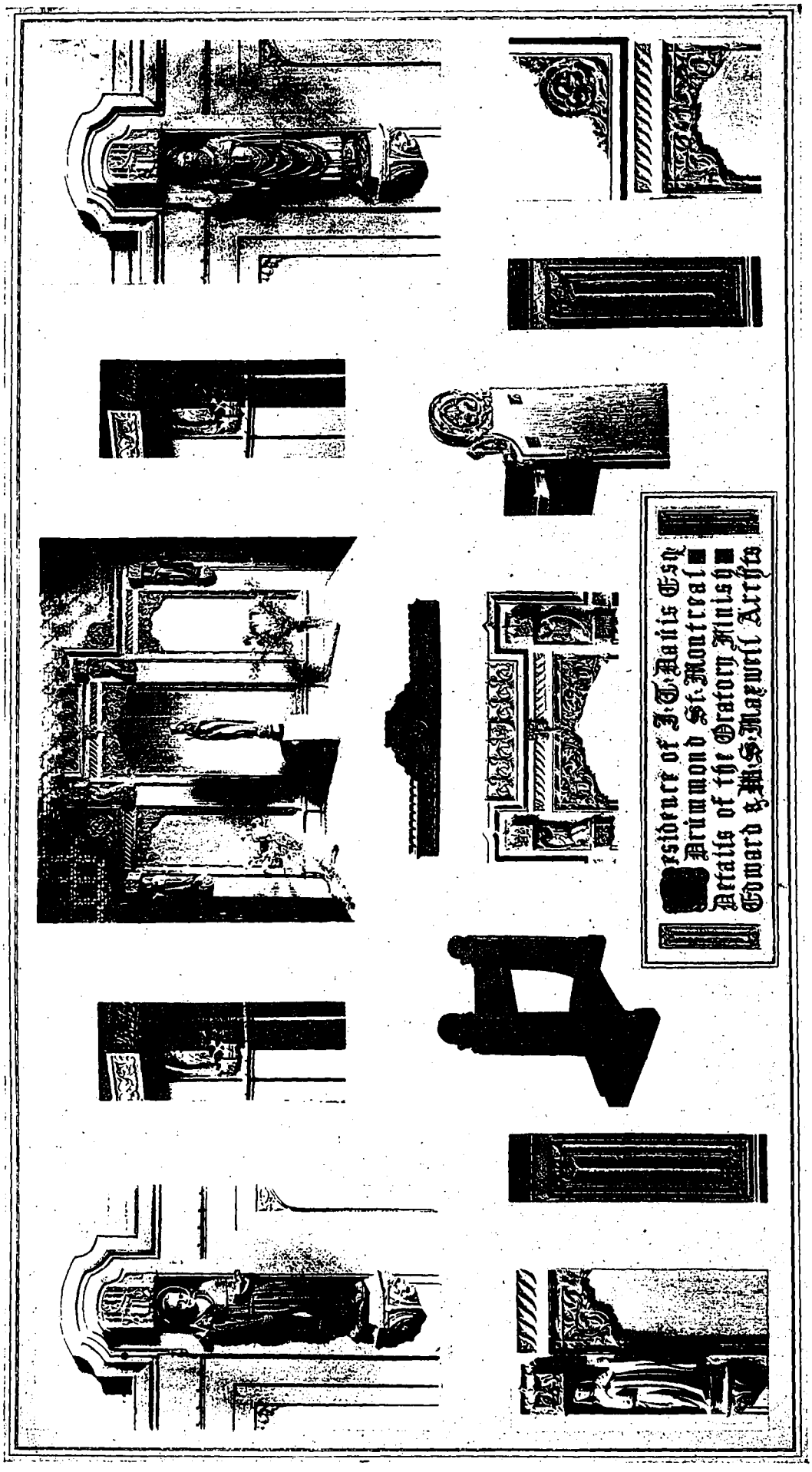
In the execution of the work a sufficient amount of money was available to permit the selection of craftsmen who were considered entirely suitable for the execution of the work. Every detail was carried out locally, with the exception of the stained glass window, and the rug was woven in Ireland from the architects' design.

The lighting scheme consists of a suspended fixture carved out of walnut, stained quite dark and with mountings of pierced and wrought silver. The interlacing band has a background of blue velvet, the same material being used as in the curtains. The indirect light furnished is very agreeable and not brilliant. The effect of light on the ceiling is agreeable and the pattern is much less strongly marked than the flashlight photograph indicates.

Two candelabra of carved walnut go on the altar table either side of the statue of the Virgin. The illustration of the interior shows a smaller Virgin than the one the architects had to accommodate, and the two vases of flowers stand where the candelabra are now placed, as



ALTAR CANDELABRA.



DETAILS OF ORATORY, MONTREAL RESIDENCE.

E. & W. S. MAXWELL, ARCHITECTS.

they were not finished when the photograph was taken. The candelabra recall certain early Gothic examples in so far as the conception is concerned, but the development of form and detail is free and rather individual. The winged angel is carved in pine and polychromed, the arms supporting the candles are of silvered metal, very well chased by Mr. Paul Beau. A reserved use of color, more particularly to obtain an agreeable patina, has been introduced in the walnut base.

The oak panelling on the walls is extremely simple and low in relief, the upper panels being enriched with rosettes.

The lower member of the cornice has a pattern of small squares of white mahogany and rosewood inset in the oak fillet. On the wall opposite the altar two pilasters terminate with niches containing carved polychromed figures of saints.

The minute scale of detail can be judged by these figures, which are less than twelve inches high.

The altar table has linen fold panels of varied design, and on each angle under the top there is a pelican sitting on its nest, the symbol of self-sacrifice.

The reredos panelling has three large panels terminated with pierced interlacing ornament; the centre one being filled with the same blue velvet as the curtains. Figures of adoring angels and two of St. Anne in a niche terminate the four pilaster panels.

The curtains of blue silk velvet with a very delicately marked Jaspe stripe, have silver fringes, and the valance is embroidered in silver thread.

Some of the architects' full size details of ornament as reproduced, they are of interest in comparison with the finished work, and because of their being the vehicle by which the designer conveyed his aspirations to the craftsmen.

The oratory conveys the impression of being larger than it really is, and although the altar and Prie-Dieu are of a suitable size, there remains sufficient space to permit of its use with comfort.

Douglas Fir or Oregon Pine

DOUGLAS fir is found in Canada only in the Provinces of British Columbia and Alberta, the amount found in the latter being very small by comparison. "It reaches its best development in the region directly tributary to salt water between the mouth of the Columbia river and Seymour Narrows. . . . With the exception of the giant sequoias and redwoods of California, it is the largest on the Pacific Coast. It ordinarily attains a height of 175 to 200 feet and a diameter of 3 to 6 feet. Not infrequently trees up to 250 feet in length and from 6 to 9 feet in diameter are seen. Owing to its intolerance of shade, the lower branches soon die and drop off, leaving one-half to two-thirds of the bole clear and a large percentage of the wood free from knots.

"In the virgin forests on the Coast, where fir predominates, the stands usually run from 20,000 b.f. to 50,000 b.f. per acre, though frequently, on the better sites, the yield exceeds 100,000 b.f. per acre; one instance being recorded where 5,000,000 b.f. was cut from ten acres. Single mature trees ordinarily contain from 2,000 to 5,000 b.f., but, sometimes, exceed 10,000 b.f. In the mountains, the fir stands usually run from 5,000 to 15,000 b.f. per acre, though in some of the more moist valleys stands are found almost equal to those on the coast. In the interior dry belt the individual fir trees usually contain from 500 to 2,000 b.f." ("Forests of British Columbia," H. N. Witford and R. D. Craig).

There is estimated to be 76,000,000 M. board feet of Douglas fir in British Columbia. In 1919 the total cut of this species for the province was 841,605 M. board feet.

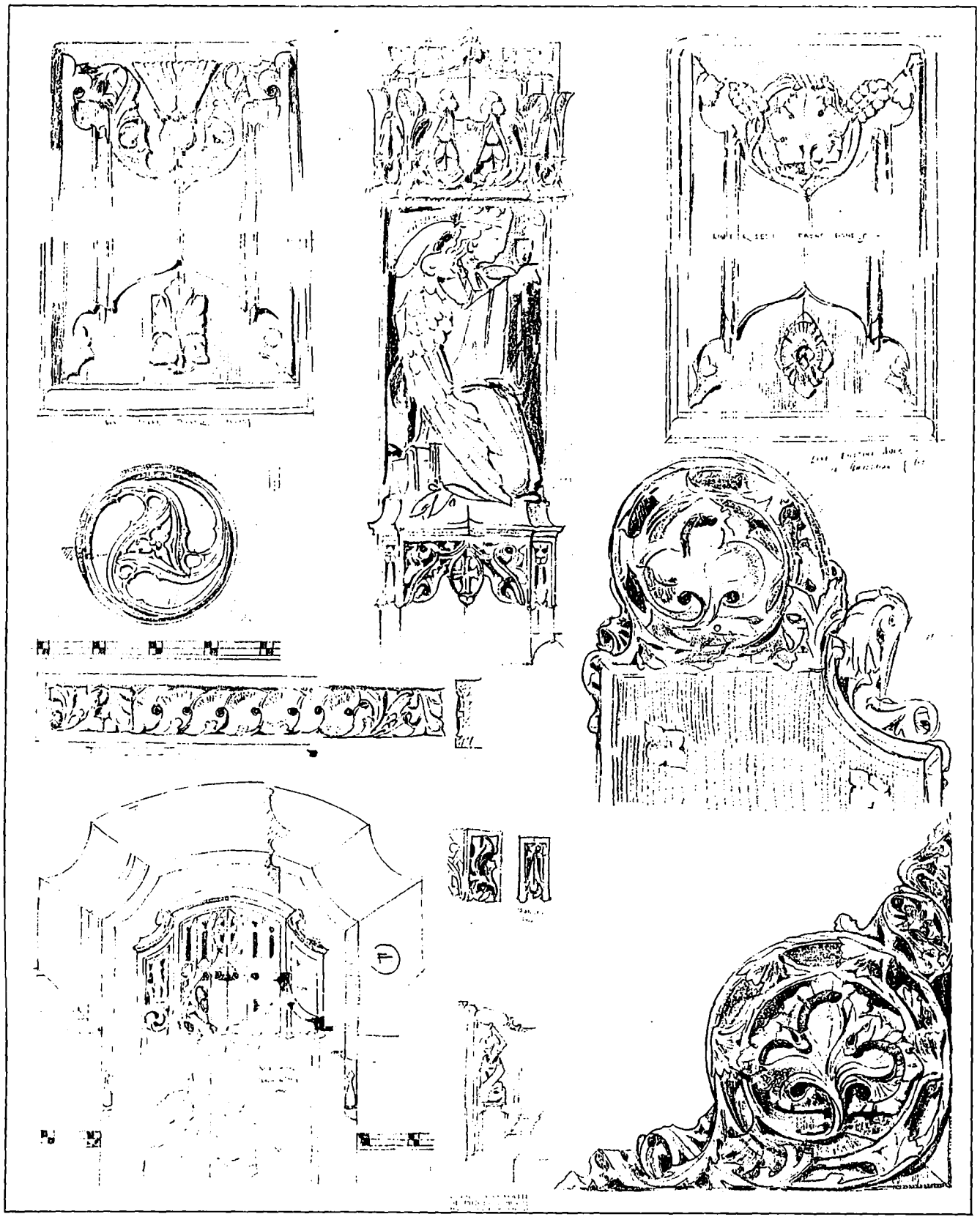
The uses to which Douglas fir is put are extremely varied, some of the main ones being included in the following list: light and heavy building construction as joists, studding, beams, posts, flooring, interior trim, doors, and casings; bridge construction; derrick sticks and dredge spuds; piles and poles; ships' decking, planking, keels and ribs; tanks, pipe and silo stock; cooperage and veneers.

The wide range of uses to which Douglas fir is put is due to its great strength, beauty of grain, durability, and the fact that it produces very clear lumber in exceptionally large sizes.

Douglas fir is widely recognized as the strongest structural soft wood in the world, with the exception of southern long leaf pine, with which it is given equal working values. For some purposes, as for example, in building poists where only a slight defection is allowable, Douglas fir is superior to white oak.

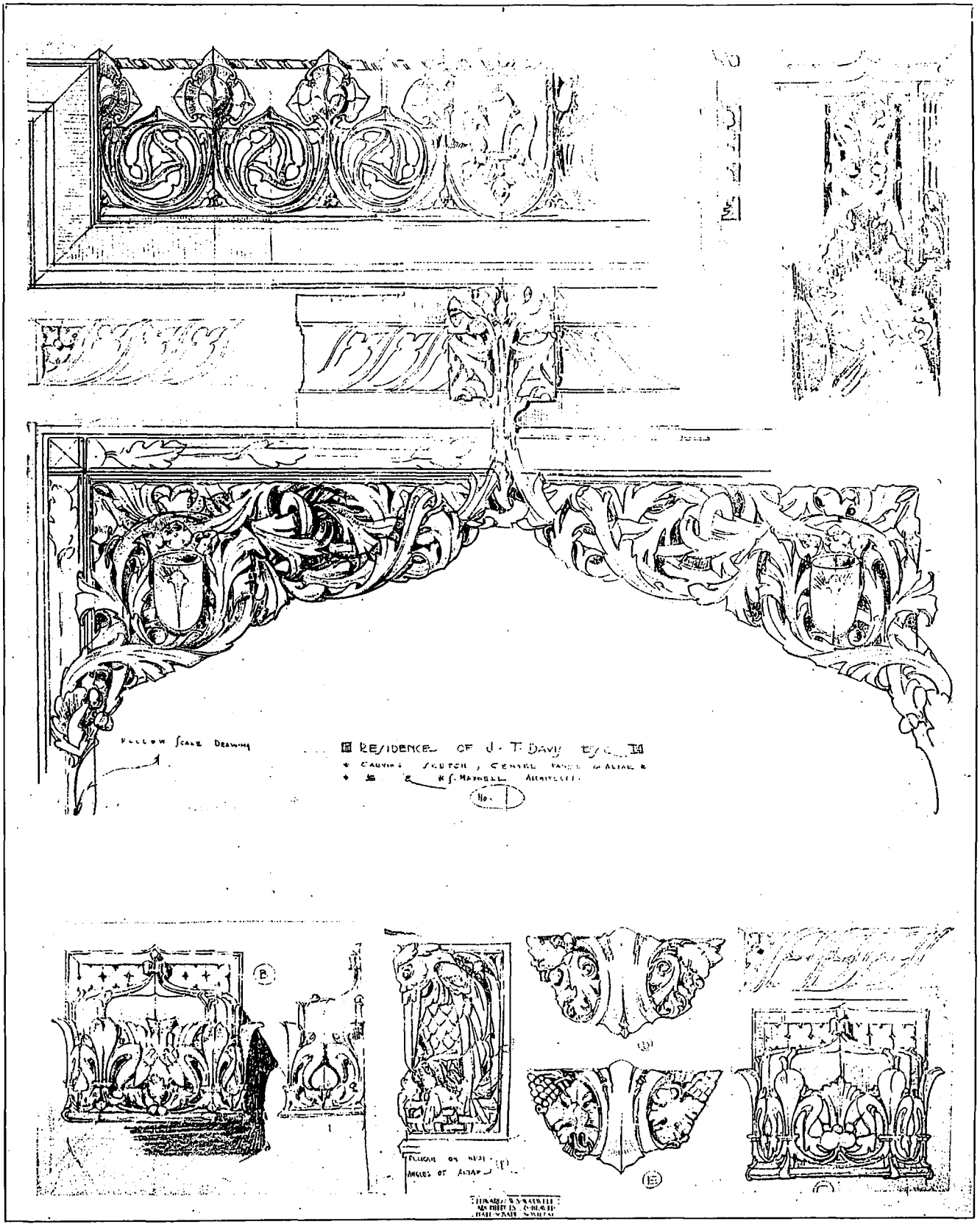
Thousands of tests have been accurately made on both small and structural sized specimens of Douglas fir to ascertain correct working values which should be allotted to it. The United States Forest Products Laboratories situated at Madison, Wisconsin, have been established for ten years, during which time they have made upward of 500,000 tests on wood. Their bulletin, No. 88, entitled "Properties and Uses of Douglas Fir," contains the most authentic information available on the strength and structural sizes of this material. The results of a very thorough series of small tests on Canadian Douglas fir were published in 1918 by the Forest Products Laboratories of Canada. These

(*Concluded on page* 292.)



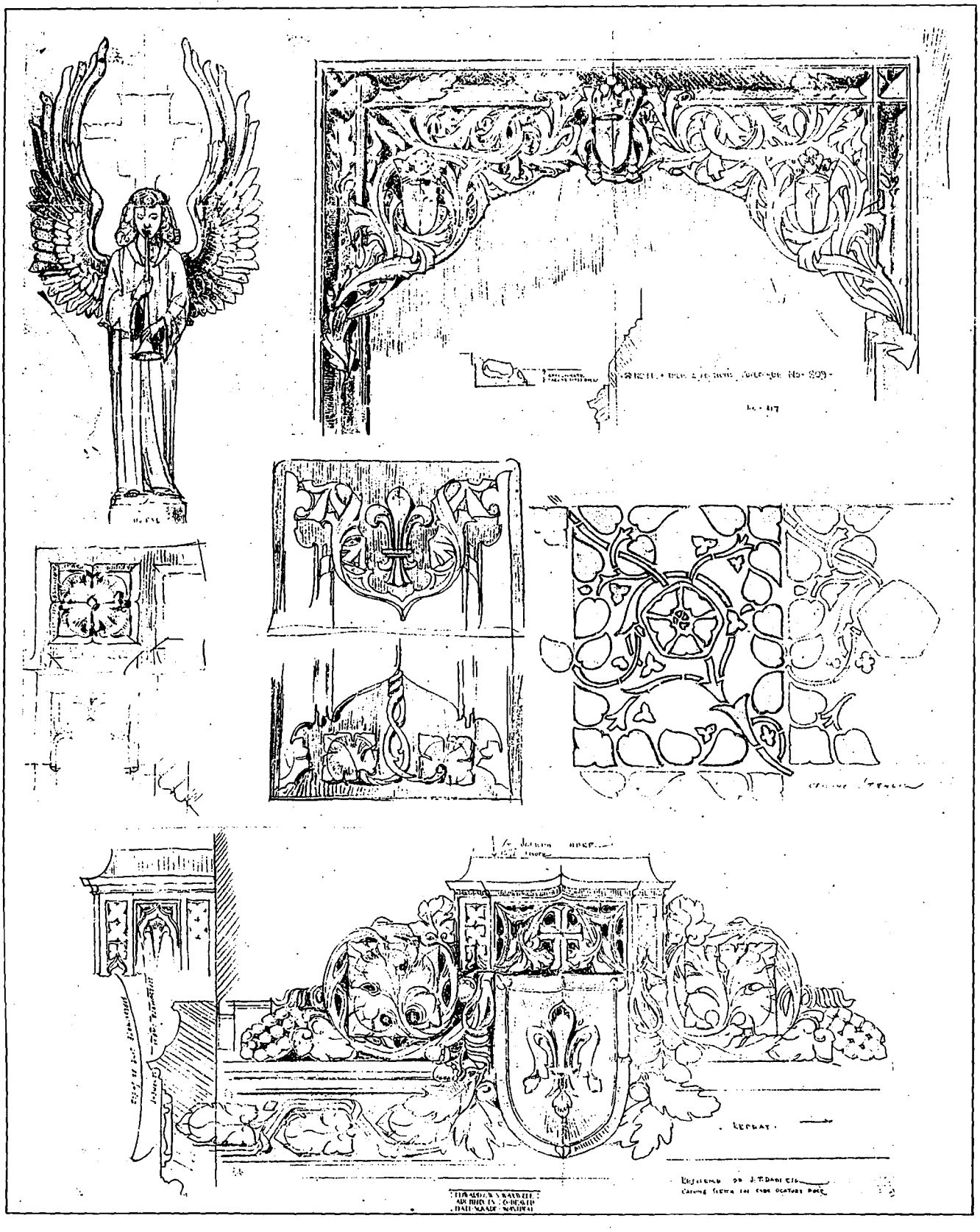
CARVING SKETCHES AND STENCIL DESIGN FOR ORATORY, MONTREAL RESIDENCE.

E. & W. S. MAXWELL, ARCHITECTS.



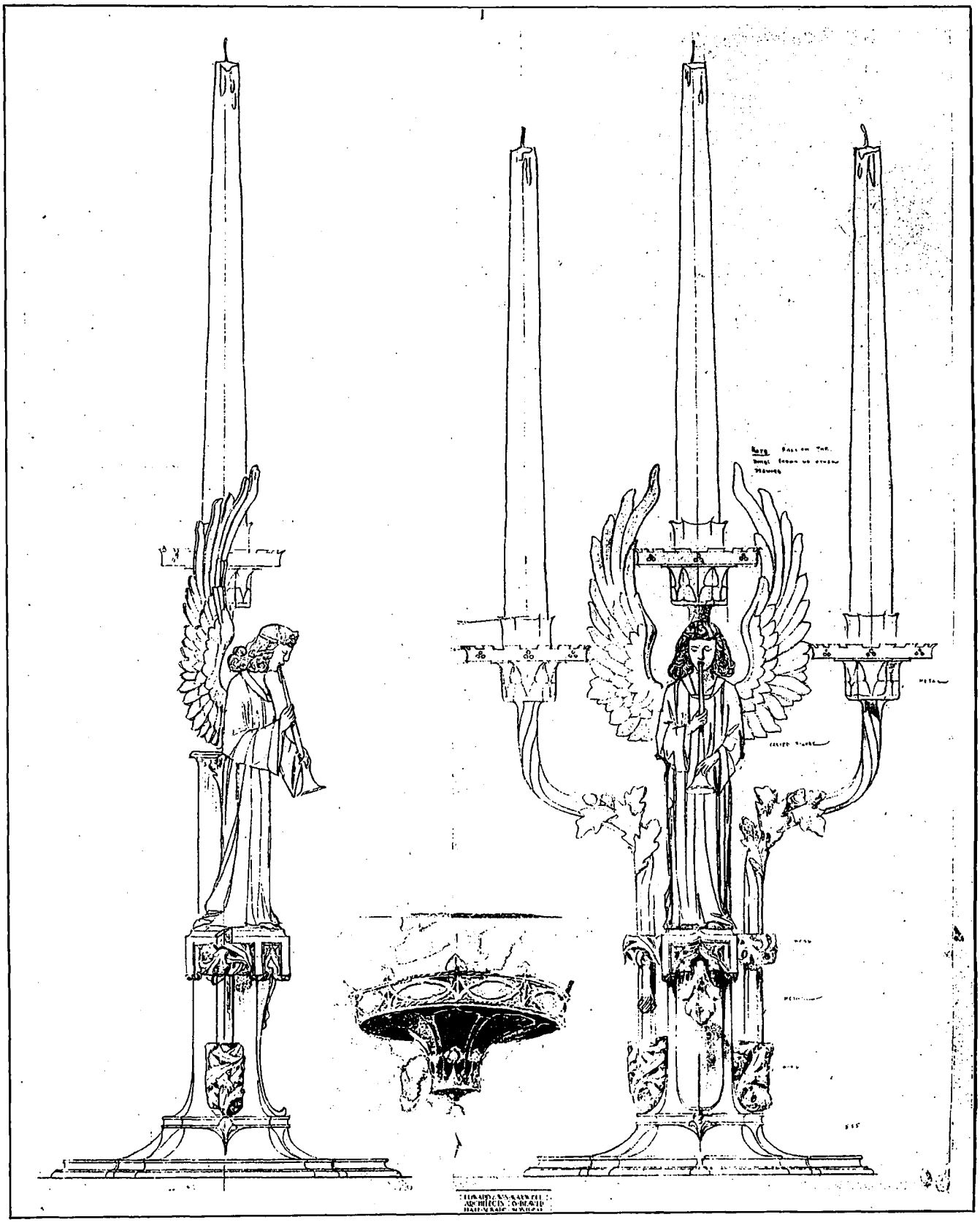
CARVING SKETCHES FOR ORATORY, MONTREAL RESIDENCE.

E. & W. S. MAXWELL, ARCHITECTS.



CARVING SKETCHES AND STENCIL DESIGNS FOR ORATORY, MONTREAL RESIDENCE

E. & W. S. MAXWELL, ARCHITECTS.



SKETCH OF CANDELABRA IN ORATORY, MONTREAL RESIDENCE.

E. & W. S. MAXWELL, ARCHITECTS.

The London O. A. A. Convention

THE London Convention of the Ontario Association of Architects on August 30-31, will go on record as one of the best and most important meetings the association has yet held. It was an open meeting and the first gathering of its kind where practationers of the province, regardless of their affiliations, met for the joint discussion of issues. Moreover, it was of a nature which should effectively consolidate the profession in Ontario and bring it closer to the accomplishments of its objects. The business sessions, which were held in the Tecumseh House, represented at the very least a busy two days' period in which many important subjects were presented for discussion. These dealt with both practical and ethical questions and involved a number of points having a direct bearing on the welfare of the profession. Two important subjects discussed were in reference to "The Service and Value of the Association to its Member and the Public" and "The Relations of General Contractor and the Architect." The meeting went emphatically on record as being opposed to any architect engaging in the contracting business, or in any deviation in conduct from that dictated by the code of ethics.

Committee Reports

At the opening session the convention devoted its time mainly to the consideration of the reports of the various committees.

Following the address of President H. E. Moore, which is published in full elsewhere in this issue, and which was a lucid presentation of the various phases of association work, stressing the changed conditions of the times and the resultant effect on the practice of the profession, both the registrar's and treasurer's reports were received and adopted.

In connection with the latter report, it was suggested that the policy adopted by the council during the year regarding the prompt payment of dues be strictly adhered to; also that an entire new set of books be opened with proper receipt forms and that a chartered accountant be employed to advise as to the best system to adopt and to make the necessary audit. It was felt further desirable that some steps should be taken to increase the revenue of the association. The financial statement for the year was as follows:

FINANCIAL STATEMENT.

Receipts:		
Balance from 1919	$481.61	
Fees collected	2,326.50	
Publicity subscriptions	835.00	
Bank Interest	18.33	
		$3,661.44
Expenditures:		
Running Expenses, Postage, petty cash	$112.15	
Printing	207.82	
Travelling expenses	15.10	
Insurance	9.27	
Rent	100.00	
Secretary	300.00	
Contributions to committees	55.00	
		799.34
Convention and Exhibition, 1919		1,058.93
R.A.I.C. Fees, 1919-20, 1918-19		492.00
Publicity Expenses to date		682.21
		$3,032.48
Cash Balance		628.96
		$3,661.44

Assets and Liabilities.

Assets:		
Uncollected Fees	$920.85	
Less for bad debts	500.00	
		$420.85
Unpaid Publicity Subscriptions		300.00
Balance in Home Bank		628.96
Furniture and Books and Lantern.	$550.00	
Less for depreciation	150.00	
		400.00
Credit due from R.A.I.C.		100.00
		$1,849.81
Liabilities:		
Outstanding accounts, printing, travelling expenses, etc.		47.00
Estimated advertising accounts unpaid		550.00
		$597.00
Surplus Balance		$1,252.81

In support of the recommendation for increased revenue, it was pointed out that the present membership of the association, approximately 150, yielded a current yearly revenue in fees, outside of arrears, of $1,885. The annual running expenses indicated in the report submitted amounted to about $800. To this must be added about $300 for R.A.I.C. fees, and the expenses in connection with the London Convention being held could be put down at, at least, $500, making a total of $1,500. This left a probable balance of $300, which was altogether inadequate for effective association work. The general desire, it was felt, was to increase the activities of the association, and to do this it was also necessary to have more funds available to accomplish better and more widespread results.

It was further stated that the last normal year before the war, the association membership revenue was something over $800, and that immediately on the outbreak of the war it was decided to remit the fees of members on active service. That covered some 30 members, and cut deeply into the revenue. After the first year of the war, it was considered a hardship to collect dues which were reduced to a nominal fee of $7.50 a year per member, out of which the association kept its members in good standing in the Institute. This, coupled with the fact that practically no new membership was added, and that the council did not resort to sharp measures to collect dues, explained the poor financial showing up to the present. In the past

year, however, the council has endeavored to live up to the by-laws, which still allow a member to be three years in arrears before his membership could be dropped. With the question of fees better regulated, the general revenue should be substantially increased, and the time, it was felt, had arrived, when it was necessary to consider a vigorous campaign reaching toward a larger membership and a greater usefulness for the association as a body.

REPORT OF BOARD OF ADMISSION.

The report of the Board of Admission showed there had been 32 applications sent in during the year. Of this number, 11 were recommended for membership and one applicant, who had previously been a member of the R.A.I.C., was admitted by the Council. Eight were recommended for associate membership; one of whom refused this award and later on withdrew his application. In addition to this, seven applications were rejected, two were withdrawn; one has been held over for further consideration; while two applications were now in the hands of the board awaiting consideration.

Attention was drawn to the fact that only about 50 per cent. of the architects practicing in the province were enrolled on the register, and that the Toronto membership was overwhelming as compared with the rest of the province. It was felt very strongly that the activities of the membership committee should be widened, and that every effort should be made to get all qualified practitioners to come into the association.

Reports of the representatives to the Toronto Art Gallery and the Ontario College of Arts were also received at the meeting. The first-named report stated that it was somewhat to be regretted that there were so few architects holding membership in the Art Gallery. The membership fee for architects was only $5, and not only were members entitled to the privileges of the opening nights, but they could by their membership materially assist the Gallery. One important act of the Gallery during the year was the donation of a site for the Ontario College of Arts, the building of which was already begun.

CANADIAN NATIONAL EXHIBITION DEVELOPMENTS.

A report in reference to the proposed developments at the Canadian National Exhibition was submitted, indicating the activities of the association in regards to a systematized plan of grounds and buildings, and read as follows:

"Your representatives attended the annual meeting, at which directors were elected and business transacted, and was successful in having a resolution passed that the city (Toronto) be requested to provide proper plans for the whole of the grounds owned by the city and looking forward to such extensions as may be probable in the future.

"The agitation for this was started by our association and was cordially backed up by the Board of Trade, the Civic Guild, and the Rotary and Kiwanis Clubs.

"A committee was appointed to carry out the scheme, and it will be referred to in the address of the President.

"It was disappointing that no further opportunities were afforded for active work in the association. Your representative was asked to act on the Educational Committee, and consented to do so, but received no notice of any meeting since appointment, and find that others are in like position. It is probable that when the Exhibition is over the committees may be called together."

President Moore stated in reference to the foregoing that the Commissioner of Parks was engaged in the preparation of the necessary survey of the work in question, which would enable a professional man to take hold and make his suggestions. It was necessary that the incoming Council should follow up the matter closely, as the necessity for a scheme such as is contemplated is altogether apparent.

REPORT OF PUBLICITY COMMITTEE.

Much interest of the meeting centred in the report of the Publicity Committee, and resulted in a general expression of opinion which gave unanimous support to the policy adopted at the Toronto Convention last year in regard to the question of advertising. This report was presented by Mr. Bannigan in the nature of a chalk talk on what had been accomplished during the past year. Mr. Bannigan stated that about $1,100 had been subscribed for this purpose, which with two notable exceptions was almost exclusively from Toronto members. The committee decided on two mediums of advertising, viz., the daily newspaper and the classified advertising section in the telephone book. The classified advertising section simply listed the names of the members who contributed and were practicing under the title of "Registered Architects." The other which was in the nature of newspaper advertising, had first to be discussed from the standpoint of what was to be said and the best way to say it. Three points were finally decided on: (1) to explain to the public the function of an architect, (2) to explain the difference between a registered and an unregistered architect, and (3) to make the public familiar with the name and purpose of the Association. The series of advertisements published cost approximately $900, including the telephone book advertisement. The results, Mr. Bannigan stated, had to some degree been remarkable. While advertising of this kind was not expected to bear tangible results, such, how-

ever, in several instances had proven to be the case.

In addition, certain benefits had accrued in the way of editorial comment in the daily and technical press, on such subjects as "The Claims of the Canadian Architect," "Made-in-Canada Goods," and "Ethics Used in Advertising," the latter appearing in *Printers' Ink* and stating that the U.S. architects might well copy the Ontario Association. A notable increase in membership and greater interest in all matters relating to the Association could also be traced to this advertising campaign. Moreover, the intangible results of this publicity—the recognition by the public of the value of an architect—could not be estimated in words or figures, but there was no question that it really exists. But to capitalize this it was necessary to continue advertising and to devise some means whereby funds for this purpose could be raised. Less than one-third of the members of the Association have so far subscribed, and it seemed fair, if the thing was to be spread out over the entire province, that the entire Association should pay for this on a per capita basis.

Another point in this connection was the advisability of engaging a paid secretary who could prepare articles of public interest, such as would be acceptable by the newspapers, criticizing various buildings and dealing with architecture in general. This was a work far too heavy for a committee of architects who were practicing, and there were in Toronto men who have had experience on architectural journals as editors or contributors, whose service might be available at a limited cost for this purpose.

There was also the suggestion that the Association make certain awards of medals to practicing architects who had completed a successful or noteworthy building. The publicity features of a medal of the Association, could not be overlooked, as well as the influence it would exert in promoting an *esprit de corps* within the Association itself. In a word, group advertising was doing three things—benefiting every member by putting the entire work of the Association on a higher plane before the public; it was benefiting most of all the weakest men in the Association, which is what the Association should do; and besides this, it was meeting all possible outside competition by using advertising as a preventative instead of using it as a last resort sometime in the future as a curative. The reference here was to the ready-made factory and house, the designing contractor and numerous other competitors who are invading the architectural field. To overcome existing evils it was necessary to resort to the public press and that requires money and sacrifice on the part of each member for the good of the Association.

A final matter which should be considered, Mr. Bannigan said, was the fact that the R.A.I.C. had received from the Manitoba Association a request that the Institute conduct an advertising campaign for the entire Dominion, and in this connection, desired to know by the 15th of September if the Ontario Association would favor the joining of a Canadian-wide campaign, and if so, how much money could they provide. It was therefore a question as to whether the Association would continue its own advertising campaign, and how much it would appropriate, or as to whether it would join in this more widespread movement, taking in the whole of Canada.

REGISTRATION.

The representatives on the Advisory Committee of the Engineering Institute of Canada on Legislation, reported that the committee was practically the successor to a similar committee of the Joint Committee of Technical Societies of Toronto.

The committee had made an exhaustive digest of the legislation now in existence controlling the practice of architecture and engineering, and it was interested to note that part of this was Acts passed at the last sessions of New Brunswick, Manitoba and Saskatchewan Legislatures. These Acts created an association of architects and engineers, which appointed two-thirds of a council, while the Provincial Government appointed one-third. The council examines and registers architects and engineers, and only those so registered are allowed to practice in the province.

The present committee has not yet reported, but it is expected to recommend similar legislation for Ontario.

The Association's members on this committee were struck with the absence of any argument of a conclusive nature that appeared in the digest before the committee, as to why such legislation should be enacted, and submitted the following for the convention's consideration:

First.—That it is not the duty or the obligation of the present practicing architects to provide the educational facilities for the rising generation of architects.

Second.—That the practice of any profession should not be controlled by the practitioners in it, but by the Government, and that evidence of a standard efficiency to practice should be exacted as a basis for registration.

Third.—That as the community requires trained men to handle its problems, it is the community's business to provide the means by which the training may be obtained.

Fourth.—That the present practice in Ontario of providing the training facilities in the university and then failing to give the men so trained any station above the untrained practitioner is economically wrong. If the province provides training in architecture and engineering, it is

because it recognizes there is a need for men in this profession to solve its problems. Recognizing this, it is logical that the opportunities for practice should be conserved for those whom the province educates; otherwise the Government defeats the purpose of the trained facilities it provides.

Fifth.—That if the men qualified by the universities were registered by the Government and the practice of province conserved for them, the community would be assured of properly trained men to handle its problems and the trained manhood of the province would be developed and conserved.

The practice of law, medicine, dentistry and pedagogy in Ontario being conserved, these professions have risen to distinction and the province is proud of their accomplishments. It is felt that Canada has better doctors than many of the older states on the other side, and the same applies to dentistry and veterinary surgery. There is equally good reason for conserving the practice of architecture and engineering as for conserving the practice of any other profession, and it is the duty of the educational administration of the province to see that this is done.

The thing was paralleled exactly by the teaching profession, the province needs teachers and requires them to be educated up to a proper standing. It gives the facilities for their training and registers them and allows no other teachers to practice in the provincial schools. Similar provision should be made with regard to all callings in which the province considers it necessary to provide facilities for training. In fact, this is in a measure now done with all but the technical professions, and the province has admittedly benefited as a result. Like benefits would also accrue if the Department of Education would establish a register for architecture and engineering and the standards on which it should be based, and be responsible for its administration. The Illinois legislation was the nearest to what was required. It places the matter of registration under the jurisdiction of the Department of Education, and was the most effective legislation enacted in any of the nineteen States having registration acts for architects.

JOINT INDUSTRIAL COUNCIL.

The Joint Industrial Council of the Toronto Building Trades reported that the Association's representative had acted as chairman of this Council since its inauguration in March, 1919. Its object was to facilitate conferences between the employers and the employees and endeavor to overcome differences before they become acute. An outstanding instance of the Council's work is the agreement between the employers and employees taking effect on the 15th of September, 1920, by which they undertake to settle their wage scale before November 15th, or allow it to then automatically go to arbitration to be settled before January 1st, that the question of wages may be settled before the new work for the ensuing year is entered upon.

Following the morning session, the architects were tendered a luncheon by the London Rotarians, which was a most delightful event in every way, with songs, speeches and an abundance of good fellowship contributing to the enjoyment of the occasion.

ASSOCIATION WORK AND ITS BENEFITS TO MEMBERS.

At the afternoon session Mr. John D. Watt of London, speaking on "The Service and Value of the Association to the Public," urged that one open council meeting be held annually in each of the four main cities outside of Toronto, namely, Ottawa, Hamilton, London and Windsor. This would help to remove the misapprehension held by some that the Association was principally an organization for Toronto architects.

Other suggestions made in this connection were (1) that members of the council be selected to more widely represent various sections of the province, (2) that a detailed report of all important subjects dealt with at each meeting of the council be sent to every member of the Association, (3) that copies of the revised schedule of fees enlarged and suitable for framing be sent to all belonging to the Association, with a request that the members display this schedule prominently in their offices, (4) that a copy of the by-laws be sent to non-members together with a membership application blank and a letter inviting all who can to fulfill the obligations set forth to join the Association.

In the general discussion which followed it was pointed out that the architectural profession had the reputation generally speaking of being solely an artistic profession, and as a penalty has greatly lost ground as well as business from those who control the building expenditures in Canada. Also that it was necessary for the profession to develop its business acumen and business organization, or to restrict itself to the mere designing of buildings and not administration. This in turn led to a question involving the permissibility of an architect engaging in the dual capacity of practitioner and contractor, which the Convention disproved as being detrimental to the best interests of architecture.

An interesting address was also delivered by President C. Blake Jackson of the Toronto Builders Exchange, on the subject of "The Relations of the General Contractor and the Architect."

Among the advantages pointed out in having construction work undertaken by a general contractor were, gain in the speed of construction,

better co-ordination in the various divisions or parts of the work performed by the different trades and the different sub-contractors. The latter knew that the general contractor had to have the work finished within a specified time limit, and worked with him to facilitate the completion of the work.

Discussing estimates and estimating costs, Mr. Jackson declared these constituted a big part of the contractor's overhead expenses. Buildings actually constructed had to pay for buildings only planned or estimated upon.

ANNUAL BANQUET.

At the conclusion of the afternoon session the members as guests of the London and Port Stanley Railway journeyed to Port Stanley, where the annual banquet was held. After an inspection of the bathing station and enjoying its advantages in a practical way, an excellent dinner was served in the large dining hall of the Pavilion, where appropriate toasts were proposed to the "Profession," "The Building Industry," and "The Press," and an altogether delightful evening spent in convivial discourse.

OFFICE ADMINISTRATION.

The morning of the second day of the Convention was taken up mainly by a discussion based on a paper read at the meeting by Mr. A. H. Gregg on "Business Conduct of an Architect's Office." This speech developed a number of valuable suggestions and was a matter of mutual interest. The general consensus of opinion was that a more frequent discussion of ideas among architects with reference to their affairs and more friendly co-operation as regards the loan of plans and similar services would greatly benefit the profession.

At luncheon on this day the architects were the guests of the City and the London Chamber of Commerce, and had the opportunity of listening to a splendid report by Mr. Naulon Cauchon on the "Railway Problem of London," involving the solution of the railway grade crossings together with the development of a Union Terminal and Civic Centre.

COMMITTEE REPORTS.

Routine business and the election of officers occupied the greater portion of the afternoon period. The Committee on Resolutions submitted the following report:

RE REGISTRATION.

This Convention having heard the report of its representatives on the Committee of Legislation of the Ontario Division of the Engineering Institute of Canada, considers that, whereas the practice of architecture should be based on the educational qualification of the practitioner, on the protection of the public, and the development of the manhood resources of the Province, and whereas the Provincial Government supports educational institutions to supply the province with men trained to handle the problems that arise in the community, and at present practically in all but the technical professions conserves the practice in the province for the men so trained.

Be it resolved that this Association take steps to have this practice extended by the Ontario Government to architecture and the other technical professions, and to this end recommends to the Government that some such form of legislation to control professional practice as is now in force in the State of Illinois, be enacted in Ontario; and further, that the representatives of this Association on the Legislation Committee of the Ontario Branch of the Engineering Institute of Canada be instructed to support only such recommendations from that Committee as harmonize with the Illinois Act.

INCREASE IN FEES.

Whereas the Convention approves of the work done during the past year by its Publicity Committee and realizes the desirability of extending the work by a more widespread campaign, and whereas the Convention approves the holding of council meetings in different towns and cities throughout the Province when deemed advisable by Council for the purposes of arousing interest in these towns and cities in its work, and whereas in order to carry out such suggestion more funds are needed, be it resolved that the fees of the members be increased to $25.00 per year, of non-practicising members to $15.00 per year, and of associates, to $10.00 per year.

REFERRED TO COUNCIL.

The following was referred to Council:

That copies of the schedule of professional charges, enlarged and suitable for framing, be sent to all members with the request that this schedule be framed and hung in their offices.

That copies of the professional charges in leaflet form be sent to all architects in Ontario who are not members of the Association.

That some short time after the schedule of charges are sent out, copies of the By-Laws and membership application forms be sent to all architects in Ontario who are not members of the Association, requesting that if they can subscribe to the conditions laid down therein, they submit their application for membership.

That the various provincial associations be communicated with in regards to the enlargement of the scope of the Royal Architectural Institute of Canada, dealing with such matters as publicity campaigns and the issuing of bulletins concerning the practice of architecture throughout the whole Dominion, and thus developing as far as possible a unanimity of effort.

A further resolution was adopted congratulating Mr. Henry Sproatt of Toronto, who recently received the honorary degree of LL.D. from the Toronto University, and extending a vote of thanks to the Council and those who had delivered addresses and contributed to make the Convention a success.

ELECTION OF OFFICERS.

The election of officers resulted as follows: President, Herbert E. Moore (re-elected); 1st vice-president, R. K. Shepard, Toronto; 2nd vice-president, John M. Watt, London; treasurer, Gordon M. West, Toronto; registrar, J. P. Hynes, Toronto. Members of Council: A. Stuart Allaster, Brockville; J. Frank Kelly, Hamilton; R. B. McGiffin, Toronto; Colborne P. Meredith, Ottawa; J. Forsey Page, Toronto; A. Frank Wickson, Toronto.

Following this session, the visitors enjoyed a motor drive around London as the guests of the City, and had an opportunity of inspecting some of the more recent schools.

The Convention closed with an open meeting at the Y.M.C.A. Auditorium, at which Mr. W. D. Cromarty of Ottawa spoke on the Inter-Allied Town Planning and Housing Conference recently held at London, England. This address

was of special interest particularly to architects and others who are interested in town planning and housing developments in Canada, and will be dealt with fully in the next issue; a feature being a number of lantern slides and moving pictures of garden suburb schemes and town planning developments carried out in England and suggesting in a practical way ideal possibilities where similar undertakings are being studied or contemplated.

President H. E. Moore's Address

Delivered at the recent London Convention of the Ontario Association of Architects.

FOR years past it has been the custom, or shall I characterize it as a habit, of this Association to hold its annual convention in Toronto and Ottawa, the one exception to the rule being the year previous to the war, when it was held in Hamilton. It is, therefore, with considerable pleasure that I accept this opportunity of addressing the members on this the first occasion of a convention assembled in London. We are indebted to our live and energetic confrere, Mr. John M. Watt, for his presentation of the claims of London as this year's convention city, and let me add that the policy advocated by Mr. Watt of a better distribution of the annual meetings, as well as the Council meetings, is in my opinion, one that will tend to make our Association more representative of the membership at large.

Last year's joint convention of the Association with the R.A.I.C. might well be termed a reorganization meeting, as it was the first held since the outbreak of war, and as a consequence there was much to be done and much still remains to be done in order to bring the Association to a point considered efficient in value to its members and to the public.

One of the principal aims of the Association is to promote good architecture and by the character of practice of its members to give the client and the public such service as will be commensurate with the highest standards to be obtained not only in Canada but in other countries. To do this, we must have the complete confidence of the building public, a confidence born of familiarity with our ability to do things as well or better than others can do them. This necessitates not only good architecture on our part, but means the better education of the public concerning the practice of architecture. It means that proper publicity be given the good work that *has* been done and that *can* be done by Canadian architects.

With this object in view, one of the policies undertaken by your Council this past year has been the publicity campaign for a better informed and more sympathetic public with regard to the practice of architecture. There is no need here to go into details of the matter, as it will be dealt with fully in the report of the Publicity Committee, but before concluding my reference to the subject of the promotion of good architecture, I wish to point out that it is so related to our national life as to call for some united effort both on the part of the architect and the public. Our part is, first, to so constitute and organize our offices as will ensure good architecture, suited to our country and national character; secondly, to secure the co-operation and sympathy of the public; and thirdly, by a more active interest in the affairs of our country in such directions as our education and professional training and experience make possible. Governments should be brought to realize that the resources of our country should be conserved for the development of the brain power of this country. Only in this way can we have national character in our architecture.

In connection with the Publicity Campaign the use of the words "registered architect" has played an important part, and in the absence of legislation such as is enjoyed by most of our sister Provincial Associations, the use of the words "registered architect" was deemed desirable as a means of protection to the properly qualified practitioner and to the building public against unqualified practice. It becomes, therefore, the duty of this Association to set and maintain a high standard of practice amongst its members and to attract to its membership the largest proportion of eligible men it is possible to obtain. Let us then so organize our activities that they will draw to us a membership that will make this Association a powerful factor in organized architecture, and one that will fittingly promote and maintain the best standards of architectural practice.

To be effective in this age of organization we must have the interest and loyal support of every member, and any man unwilling to do his share should not remain a member. We want on our register every qualified architect who is willing to work for the common good; no mere hanger on who joins for what he may secure in prestige. It is not sufficient that you elect some of your members to office, for your executive is after all an administrative body, and as such it cannot be expected to transact the business of the organization without the loyal support of a membership that is truly representative of the best in architectural practice. Whilst commenting on the quality of membership, allow me to refer to the growth of our Association. I find

on reference to the 1910-11 report of the registrar that in September, 1911, there were 104 members in good standing on our roll. To-day we have about 150 members in good standing on the roll, and a comparison of these figures warrants the question: "Is our membership increasing in a satisfactory manner, and is it sufficiently representative in numbers of the best practitioners of the province?" If not, then I would suggest that some effective means be discussed at this convention whereby the membership may be increased to a point where it might be termed satisfactory and representative, and a membership committee should endeavor to secure the application of the younger men who are eligible; for it is to these we may look with certainty as the coming men who shall take up the torch, so to speak, of those who have served but who shall ultimately be compelled to relinquish.

Referring to the changed conditions of our times, it seems evident that the result has been and will mean changed conditions of practice. For some years, and particularly those since the beginning of the war, there have been many changes affecting the practice of architecture. To quote the recent remarks of a leading practitioner, "Architecture was an Art *or* a Business, to-day it is both an Art *and* a Business," for whilst we are at all times artists we are at the same time master builders whose duties, as the result of modern commercial methods, bring us so intimately into association with every commercial detail, that to conserve the best interests of our clients we must needs be equipped with more business acumen than is necessary in any of the arts allied to ours. Any architect who fails to recognize this rapidly growing condition will find scant recognition for ability when he comes in contact with the hard-fisted client who, while perhaps willing to give a grudging assent to the introduction of certain art features in his building, is more anxious to learn its true rental return.

Architects generally are naturally conservative, and rightly so, but with that conservatism must be sprinkled flexibility, a readiness to adapt themselves to new conditions, while holding fast to those principles and traditions that form the basis of all true art.

Returning to the work undertaken by your Council during the past year, I desire to mention particularly the revision in the schedule of professional charges, and the by-laws. Referring to the schedule of charges, perhaps no profession is less adequately paid for services rendered than architects; no profession assumes a greater responsibility or renders a greater service to society or the individual client. In this connection it has been stated that the estimated net average income of the Architects of Illinois is less than the average net income of Chicago Building Trades Council, and this notwithstanding the many years of study required for the necessary education and training in order to qualify as an architect.

The financial return, even to the most successful in the profession, is not commensurate with the time spent in preparation for the profession and for the services rendered. It would seem that the same concentration of purpose and energy in commercial fields would bring fortunes to most all competent architects. Having in view the changed conditions of architectural practice due to the changed conditions of our times and with ample knowledge of the nature of the services rendered to the client, a committee appointed to deal with this matter, after making an exhaustive survey of the conditions, which included consideration of opinion solicited from a representative number of members of the Association, presented a unanimous report to Council favoring an increase in the schedule. This report was adopted with the result that a revised schedule was issued, which became effective last March.

Referring to the revised by-laws, your Council deemed it necessary to bring the by-laws of the Association up to date, and several revisions were made which in our opinion have been effective and in the best interests of the Association. One of the most important of these was the provision by which the Council has power to drop from membership all those who are in arrears of fees for over one year; the enforcement of which has resulted in the prompt payment of some hundreds of dollars in back fees and the dropping from the register of those members who did not comply with this request. Your Council has thus been enabled to redeem many accounts and to change a situation with regard to non-payment of fees that had become intolerable. Whilst commenting on this matter, I wish to direct your attention to the fact that the past year, as will be shown by the treasurer's report, has been the largest receiving and spending year in the history of the Association. It does not follow that this means a successful Association, as we must judge of success not so much by the financial statement as by the nature and extent of the Association's activities.

Another matter that engaged the attention of your Council was the proposal for the preparation of a comprehensive plan for the Canadian National Exhibition grounds at Toronto. It was felt that some action should be taken with regard to the present arrangement, and after considerable effort we were successful, with the co-operation of other public bodies, in having the Council include in the estimates for the current year a sum of $5,000 to be applied for this purpose. It is the earnest desire of the present executive that the next Council will follow up this matter to a successful conclusion.

The greater use of Canadian building materials has received a great deal of consideration during the year, and we were pleased to note that the Canadian Manufacturers' Association had taken up this matter and had recommended to their members the entrusting of building work in this country to Canadian architects and engineers. A committee of members of the Association had been in conference with the Canadian Manufacturers' Association on these matters with a view to furthering the interests mentioned, and while nothing very tangible has been accomplished, we hope that our members generally will take an active interest in following up this most important question. We as architects should consider it our duty to adopt some policy that will not only increase the use of Canadian building materials, but that will aid in raising the standard of all such materials. Our duty, to my mind, goes farther, for we should encourage and assist in establishing a high standard of workmanship and craftsmanship in all branches of the building industry, for in the days to come we shall see a development that will require the best that is ours to give. Let us see to it, then, that our universities are properly equipped and staffed to produce designers and constructionists, that our technical schools, our industrial concerns and our builders' and trades unions co-operate in training and providing the nation's builders, and let us see that our Governments give us the opportunity for such services and that they shall conserve the resources of the country, in so far as it is possible to do so, for the development by those who as citizens deserve to share in our own growth and prosperity.

We have been patriotic in war, let us be patriotic in peace, encouraging a breadth of view that will keep us on an equality with the leading nations of the world.

I trust that the coming year will be one of prosperity for all members of the profession, and that the opportunity which this convention gives for exchange of opinion will result in benefit to the organization to which we belong.

The Business Conduct of an Architect's Office

Address delivered by A. H. Gregg before recent O.A.A. London Convention.

IN starting a discussion on such an important subject as the Business Conduct of an Architect's Office, it might be well to consider first the general policy which should be established as a basis for all dealings with clients, contractors and staff, and then to consider some of the details of office administration and office system, which may assist in producing good work, and in carrying it out in the most business-like manner.

To begin with, the general policy should be based on the highest standard of ethics. While honorable dealing with all with whom we come in contact is the first essential and the honorable man should have no difficulty in determining the right course to pursue, it might be well to repeat a few basic principles.

First he must be convinced in his own mind that he is qualified to give good service and that there will be no slighting of his duties. An architect cannot be all-wise but if, for instance, his knowledge of heating engineering is deficient he should employ a heating engineer to assist him, rather than to take a chance on a system of his own devising which may or may not be effective.

Another basic principle is that the client's interests demand that the architect be entirely unbiased in any matter in which his judgment is required. It is therefore the invariable rule that no pecuniary advantage accrue to the architect through the employment of any contractor or the use of any special materials. He should not be interested as a stockholder or otherwise in any company manufacturing building materials or have any other business relations that may in any way bias his judgment where the client's interests are concerned.

Another principle that should be enunciated is that while the client's interests are the architect's first consideration, it is equally important that the contractor be given the fairest treatment.

Leaving the strict rulings required in matters of right and wrong, questions of policy often arise, particularly with the younger architects, which deserve consideration. The first of these may naturally be the matter of business getting, particularly as regards the establishment of a practice, and the methods that may be adopted in securing clients. The old idea for the beginner was to trust to one's friends for a start or to enter competitions, where budding genius may hope to be recognized by the public.

Undoubtedly, personality has much to do with the success of a business man or a professional man. A well-educated man, with ability to talk intelligently and entertaingly with any one, a good mixer, such a man has attributes worthy of emulation. At the same time, ability to do is of more importance than ability to talk, and the class of architect who rather glories in his lack of technical knowledge, and who claims the one distinction of being a business getter, usually has a short-lived career. The reason for this is that while he may have associated with him men

who can do the work, his own methods are almost inevitably misleading and opposed to the prospective client's interests, as in his efforts to secure work he may mislead him as to the class of building that will suit his requirements, its probable cost, etc., in a way that may not be discovered until too late.

Assuming, however, that the architect is a capable architect there seems no reason why he should not offer his services to any individual or corporation requiring the services of an architect, provided, of course, the field is believed to be clear and no effort is being made to take business from another. It must be remembered, however, that many an architect has hurt his reputation by approaching a man of conservative character, who is instantly antagonized by what he considers an unwarranted effort to forcibly establish business relationship.

In the same way the policy of an architect as regards advertising may be discussed. To my mind an architect has a perfect right to display his name on any building he may be erecting, or he may advertise in the daily papers or by circular or booklet, but the question still arises and must be settled by the individual, are such methods advantageous in the long run?

Group advertising, however, probably makes an appeal to the building public which cannot be obtained by individual advertising, and the campaign recently inaugurated by the Association should have beneficial results for the members generally and should therefore have general support. Such advertising should educate the public as to the services rendered by architects, and thus enlarge their clientele, and it is probably one of the most effective ways of combating the encroachment by contractors, engineers and construction companies on the legitimate field of the architect. Such a propaganda should tend to stabilizing the position of the architect and the service he renders, and with the hard-headed business man it may do much to root out the old idea of the architect as an artistic dilettante, utterly impossible as a man of affairs.

Mention has been made of competition with contractors, engineers, etc., and in this connection I only wish to say a word in passing, as this subject has been pretty fully dealt with at other conventions. From time immemorial, I believe architects have suffered in this way, and if we had the statistics, I believe it could be proved that never has there been such a large proportion of building enterprises of all classes entrusted to trained architects as there is to-day. To make present-day conditions better, I believe the real remedy lies with the architects, who with better and more efficient organizations can prove to the building public that even the most commercial and matter-of-fact buildings should be entrusted to their care. They should see that the architect, who has not interests but the client's to further, who with his all-round training can approach the subject from the artistic, structural and business standpoints, is the man in whom the greatest confidence can be placed. As I have said, I believe the remedy lies with ourselves, but even if at some future period this class of work were entirely lost to architects, trained architects will even then be required for classes of work such as public buildings, fine residences, etc., and if such a condition arise, the architect should then surely be entitled to, and be able to secure, a remuneration for this more difficult work which will enable him to live as well as other professional men.

In regard to the relationship between an architect and his draughtsmen, I should like to emphasize one matter which I believe should receive more and more the attention of architects, and that is the improvement of the status of the draughtsmen.

Under the ordinary system, the draughtsman with ambition, as soon as he believes himself qualified, is desirous of starting off for himself, often to the utter dismay of his chief. Should this be so? If a young man can get business for himself, could not arrangements be made whereby he could continue with his former employer to their mutual advantage? In all large cities do not our law firms work on such a system? It is an interesting study to note the changes that take place in the firm names of large legal organizations. Junior partners are constantly being added, some, I believe, on a salary, and some with an interest in the business. The older members of the firm rely more and more on them, and more and more clients find their way to the junior's office, until in good time, the former chief retires and a former assistant takes his place. Such a system cannot of course be made workable in all cases, but what I believe is that a good draughtsman should be given something to look forward to and that with larger and better organizations, many a draughtsman could be saved from a life of drudgery or from the often disastrous effort to start "on his own" in competition with the larger and better known firms.

While dealing with the relationship between the firm and the staff, two other matters might be mentioned, one the matter of overtime and the other that of vacations. While these are matters to be settled by each architect for himself, it seems to me that no harm can be done by general discussion, and as far as possible, having al lour offices run on the same system.

As to overtime, the less the better, and the better the office administration usually the less overtime is required. When it is absolutely necessary to have men working overtime, I believe the general custom is to pay time and a

half, this overtime only being allowed, however, when by order of the firm.

As to vacations, the allowance of two weeks' vacation is a common practice, applying to employees who have been in the office for a full year. A "vacation earned" account is sometimes written up on some fixed date, say May 30th, and a proportional vacation allowed for any period of service over six months. If less than six months no vacation is allowed during the season, although the time due may be credited either for future delivery in holidays or in cash.

The internal administration of an architect's office is a subject upon which much thought may well be expended. The many branches of service that are embraced in the practice of architecture to-day demand a carefully thought out system through which clients, contractors and the architect himself will be assured that their several interests are being taken care of in the most economical and efficient manner. It is true than an architect's work cannot be systematized like that of a factory turning out thousands of similar articles day by day and there is no need to crush artistic individuality, but it has been pretty well proven that a well organized office with carried on in a business like manner and with the minimum loss of time and energy, can produce the best artistic as well as utilitarian results. Proper subdivision of work, proper records of all building operations, proper accounting, proper records of office costs, proper filing systems are all essentials, and in the following remarks some suggestions will be made on these subjects as a basis for discussion and comparison.

In the first place, all system introduced should be of the simplest character and suited to the size of the office and to the character of work done. Some very large offices may have many departments—business, designing, draughting, engineering, building supervision, interior decoration, etc., etc.—but for the purposes of this paper we will consider the average office, with say two or three members of the firm and any number up to twenty-five or thirty employees.

As to general administration, it is usually found in such an office that the members of the firm have each developed along structural, designing or business lines, and will naturally oversee these general departments of work accordingly.

In the draughting room a head draughtsman is essential, who will have a general knowledge of all that is going on, will see that all men are kept busy and be the advisor of the other draughtsmen when necessary. Under the head draughtsman different draughtsmen may be made "job captains," a system effectually employed in many moderately sized offices. By this system one man is given general charge of some one building with one or more assistants under him. He has made or knows every drawing connected with that building, occasionally inspects the work in progress and is in a position to answer questions of his chief, the owner or the builder regarding that particular building.

The filing system in an architect's office requires much attention. In our own office, we use a standing file for ⅛" and ¼" scale plans, when desired to keep them flat, boxes 4" x 8" x 24" with flaps at end, and set in cabinet for folded details and pigeon holes for current and old plans when rolled or placed in tubes.

All boxes and pigeon holes are, of course, numbered, and the drawings in each may be instantly found by reference to the "plan file book."

The record of drawings made may conveniently be kept in a loose leaf book with ruled pages having headings giving numbers, "date," "draughtsman," "scale," "to whom delivered," etc. Card indexes are used in some offices, but it seems utterly hopeless to expect a card system to ge kept up properly when different parties have to make entries. Of course if a filing clerk is employed the card indexes may be advantageously adopted, and in this case there will be a separate card for each drawing with full record.

In keeping records of drawings made, it is most important that special entries are made when plans or details are revised, as this is a fruitful cause of trouble. Our rules are that a revised drawing is given the old number with a letter added as 120A, a new entry made and "revised" marked in red ink at the first entry.

In numbering drawings our plan is to give first a building number, then number all ⅛" or ¼" scale drawings from 1 to 100 and all large scale or detail drawings from 101 up.

As to office accounts two sets of books should be kept, one for the personal accounts, dealing with monies actually passing through the architect's hands, and the other for building accounts for which certificates are issued.

For the personal accounts a simple and complete system can be installed with general ledger, cash journal and petty cash books. All cash received should be deposited in the firm's bank account, and all disbursements represented by firm cheques and all these transactions should be recorded in the cash journal which may be classified so that disbursements may be divided by columns into such divisions as office expense, wages, drawing materials, etc., the totals at the end of the month being posted into the ledger.

If a simple double entry system of bookkeeping is adopted, the ledger can be made to show exactly at the end of the year the amount earned, etc. To do this "loss and gain" and a "assets and liabilities" balances are found. In order to determine the assets, it will be necessary to open

a special "commissions accrued" account to show amounts earned at the end of the year but not actually received.

To avoid too many cheques and too many entries in the cash journal, a cheque may be issued periodically to the keeper of the petty cash who pays all salaries and makes all petty disbursements which are duly recorded in the petty cash book.

For the building accounts probably the simplest and best method is to have a "building ledger," preferably on the loose leaf system. In such a ledger an account is opened with each contractor, one or more on each page with the building title at the head. The contractor is then credited with the amount of his contract and debited with each certificate issued; the account being duly closed when all entries of extras and deductions are made and final certificate issued.

The keeping of office costs is as necessary in an architect's office as in any other business. To do this every draughtsman should be provided with printed time cards or books, and enter therein the actual time spent on the various buildings from day to day. These cards should be handed into the office weekly or monthly for entry in the "time record" book. In order to complete this record it is necessary to record any time spent by members of the firm in the draughting room which should be noted in their office diaries and duly recorded in the "time record" book.

In addition to draughting room costs, it is of course necessary to ascertain from the office ledger the percentage of overhead expenses —rent, stenographers' salaries, office and draughtsmen's supplies, etc.—to draughtsmen's time.

I might emphasize the necessity of keeping written records of all important matters such as orders for extras, memoranda of important conversations, building reports, etc., etc.

As to building reports, we have found printed forms ruled with headings for "date," "superintendent," "time," and "report" very handy. The current reports are then kept in an alphabetical file hung in the office where any one superintending work may enter his report as soon as he returns to the office.

Another important matter which should be on record is the agreement as to fees, and at the outset of all work there should be a clear written understanding with clients as to the fees to be charged. This understanding may be a formal contract in the case of large undertakings and of necessity when dealing with corporations whose contracts have to be under seal, or in ordinary cases it may be in the form of a letter, with the Association schedule enclosed.

Architecture

By Alexander Harvey, in "Judge."

Architecture is that part of a rich man's home of which he knows the least, although it cost him the most.

A great architect is one who has been dead such a long time that he can be copied with impunity.

A writer must be able to say many offensive things before he can become an authority on architecture.

A school of architecture is a collection of men with the same unintelligible idea.

Queen Anne knew nothing at all about the architecture of her period, in which respect she was no worse off than are the people who chatter about it to-day.

Success in architecture can be achieved only through the medium of an appropriate vocabulary.

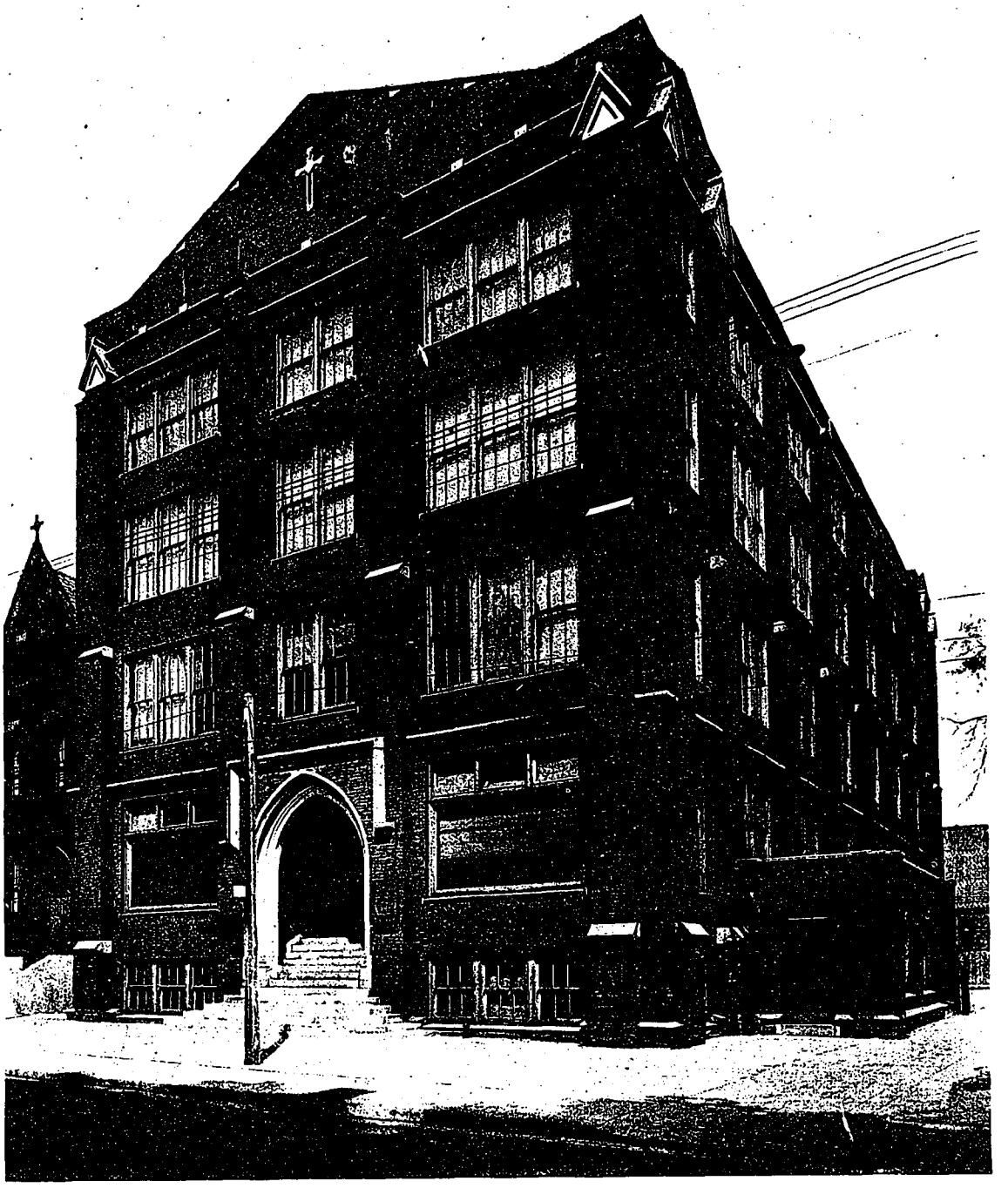
A flourishing period of architecture in the past was fostered by the church. A flourishing period of architecture nowadays is fostered by the wives of millionaires.

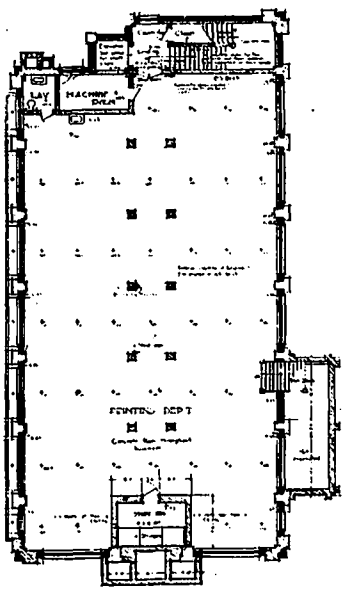
If bad architecture lasts long enough it becomes good.

The most devoted lovers of the antique in architecture are the ghosts.

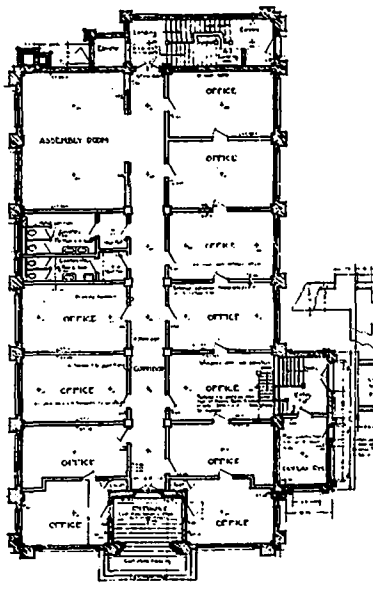
A Giant Floating Crane

The floating crane recently supplied from Great Britain to an Australian dockyard is one of the giant cranes of the world. It is capable of lifting a load of 150 tons and swinging it within a radius of 90 feet. In non-British cranes of this kind the entire weight of the load and the swinging arm is poised on the top of the steel tower which rises from the centre of the pontoon; but in this British design the whole of the dead weight is carried on a large "roller path" fixed to the deck of the pontoon. Dangerous tsresses are thus avoided; material is saved; and the life of the crane prolonged. The crane has been officially tested up to 200 tons with complete success, all the performances calculated for by the builders having been realized. No moving ballast is used in the pontoon, and at no time is the angle of tilt more than about four degrees. Two cranes of a similar type have been at work in the same dockyard for six years. A noteworthy feature of the crane is that, although designed for heavy loads, it handles light loads with ease and rapidity. All the machinery on board is electrically driven, power being obtained from a steam dynamo or from shore by means of a flexible cable.

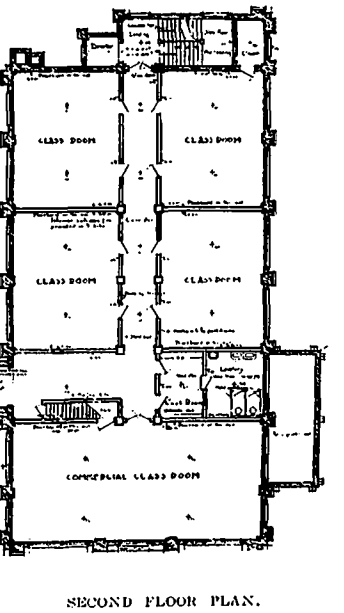




BASEMENT PLAN.



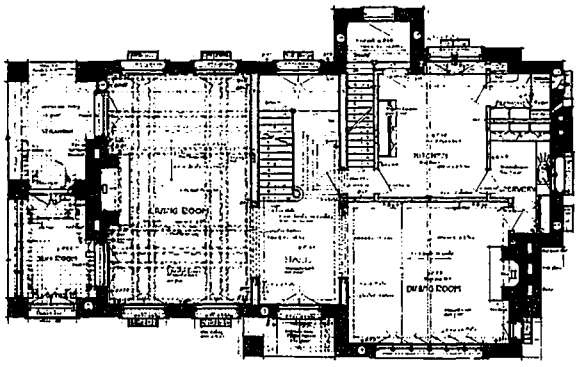
FIRST FLOOR PLAN.



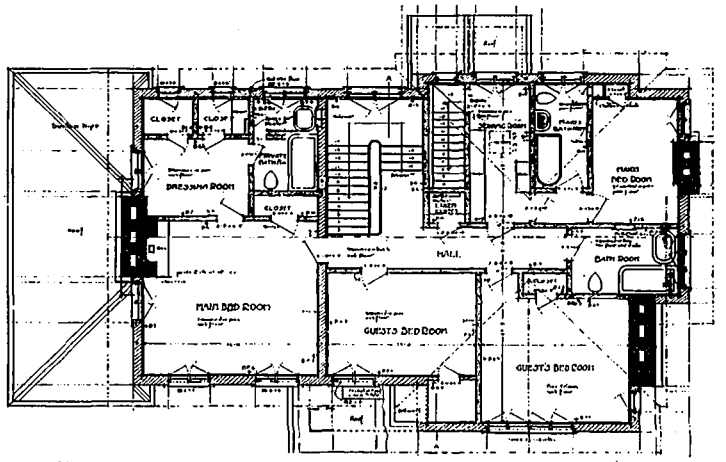
SECOND FLOOR PLAN.

CATHOLIC OFFICE BUILDING, BOND STREET, TORONTO.

PAGE & WARRINGTON, ARCHITECTS.



FIRST FLOOR PLAN.



SECOND FLOOR PLAN.

RESIDENCE OF
J. D. WOODS,
TORONTO.

PAGE & WARRINGTON,
ARCHITECTS.

ENTRANCE DRIVE.

Illustrations

IN the accompanying views are illustrated several interesting subjects representing work of Architects Page & Warrington, Toronto, including three residences, a private tennis house, and an office building for the Catholic dioceses of Toronto.

The latter is situated immediately north of St. Michael's Cathedral, and was somewhat of a problem owing to the widely differing activities for which accommodation had to be provided.

The basement, with unusually large window area, is devoted to a modern printing plant with a private stairway connecting with the printing office and showroom on the floor above.

The first floor is devoted to offices, and the second and third floors are at present used for school purposes, with an overhead bridge giving a direct connection between the second floor and the Separate School immediately north. It is the intention in the future to use these schoolrooms as offices, and they were accordingly planned with that end in view.

The fourth floor is an auditorium giving a clear space the total size of the building without columns or other obstructions, and is provided with a small kitchen and other accommodations.

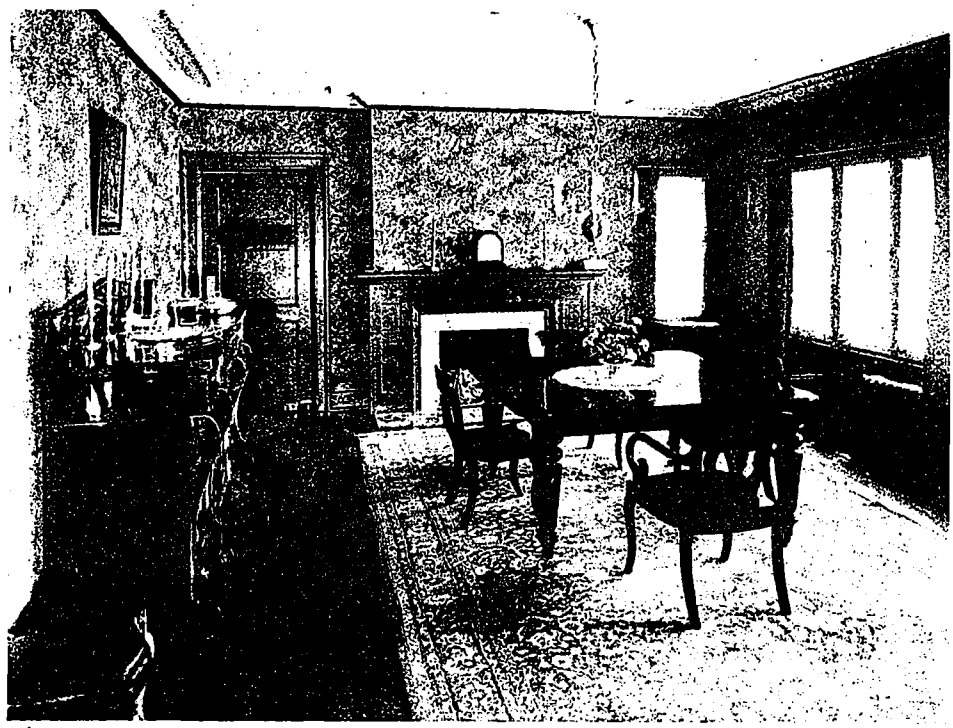
The entire building is of brick with stone trimmings and with reinforced concrete floors, hollow tile partitions and slate roof, making a practically fireproof building. A separately enclosed fireproof stairway and an elevator at the east end give access to all floors.

There is also a tunnel connecting the building with the Cathedral, through which the steam mains are carried from the Cathedral to the office building.

RESIDENCE OF J. D. WOODS, ESQ., TORONTO.

The three residences shown are of quite recent design and are noteworthy both as to character and surroundings. The residence of J. D. Woods, Esq., on Avondale Road, is sited in fairly large grounds, the screen of trees and shrubs making it difficult to obtain a good photograph of the house itself. The construction is of stone with stucco above the first floor and a shingle roof.

It was felt that the materials alone were sufficiently interesting, so that combined with good roof lines and heavy chimneys, it was unneces-



DINING ROOM.

LIVING ROOM. RESIDENCE OF J. D. WOODS, ESQ., TORONTO.

HALL: RESIDENCE OF J. D. WOODS, ESQ., TORONTO.

sary to accentuate any particular feature such as the entrance.

The first floor has a very open plan, all the main rooms connecting with large opening, giving a very spacious effect. The hall runs through the house to a carriage entrance from the drive at the north.

The living room is finished in mahogany with moulded plaster beams at the ceiling. There are no windows in this room, their place being taken by glass doors arranged in pairs. The hall finish is mahogany and white enamel, and the dining room is in walnut, the dining room fireplace having a marble face and hearth which tones with the woodwork in a very pleasing manner.

In addition to the accommodation shown on the second floor, there are three bedrooms and a bathroom in the attic space.

HOUSE FOR MRS. CHARLES CATTO, YORK MILLS.

Mrs. Catto's house is situated in the high land east of Yonge Street at York Mills on the edge of a ravine and is a sturdy appearing, colonial type which seems particularly well suited to its location.

The house is built of red face brick with stone trim, the verandah and porches are of wood with fluted wood columns and all the windows have shutters which show a pleasing detail The detail of the stone heads and sills is noteworthy.

The house inside is finished throughout in white enamel. The schoolroom and playroom at the end of the hall, opening from the garden, is a useful feature in a country house for a large family. The house has its own sewerage and water systems.

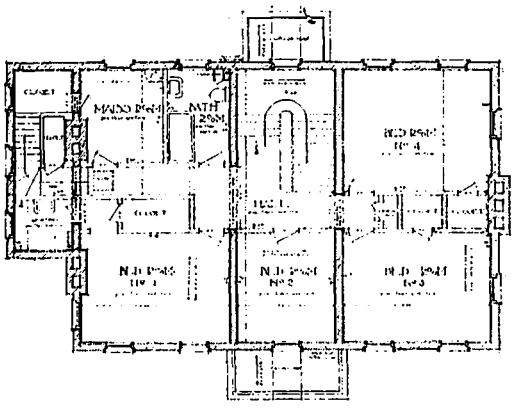
TENNIS HOUSE AT LISONALLY FARM, OAKVILLE, FOR SIR FRANK BAILLIE.

This tennis house is built of frame, with shingle covered walls stained brown and a green shingle roof. The interior walls are of pine sheathing, stained a soft brown and waxed and polished.

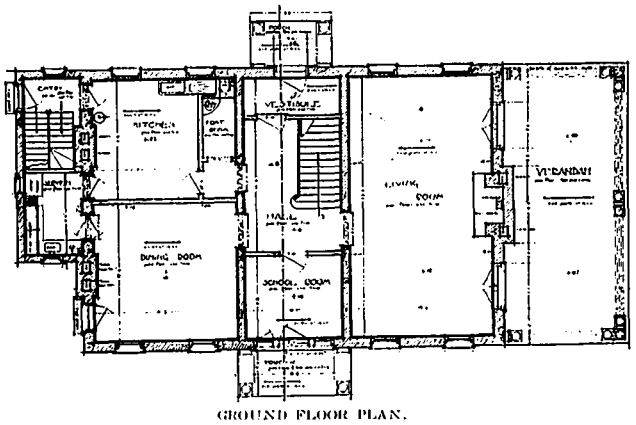
The plan shows a centre hall leading through the house and through a covered passageway to a small detached kitchen, electrically

GARDEN ENTRANCE: RESIDENCE OF MRS. CHARLES CATTO, YORK MILLS, ONTARIO.

GENERAL VIEW.



UPPER FLOOR PLAN.



GROUND FLOOR PLAN.

RESIDENCE OF MRS. CHAS. CATTO, YORK MILLS, ONT.
PAGE & WARRINGTON, ARCHITECTS.

DETAIL OF ENTRANCE.

DINING ROOM: RESIDENCE OF FORSEY PAGE, TORONTO.

equipped for the preparation of afternoon tea, etc. On one side of the hall are the men's quarters, consisting of a large dressing room, bathroom with enclosed shower bath and two bedrooms. Similar accommodation is provided for the ladies on the opposite side of the hall.

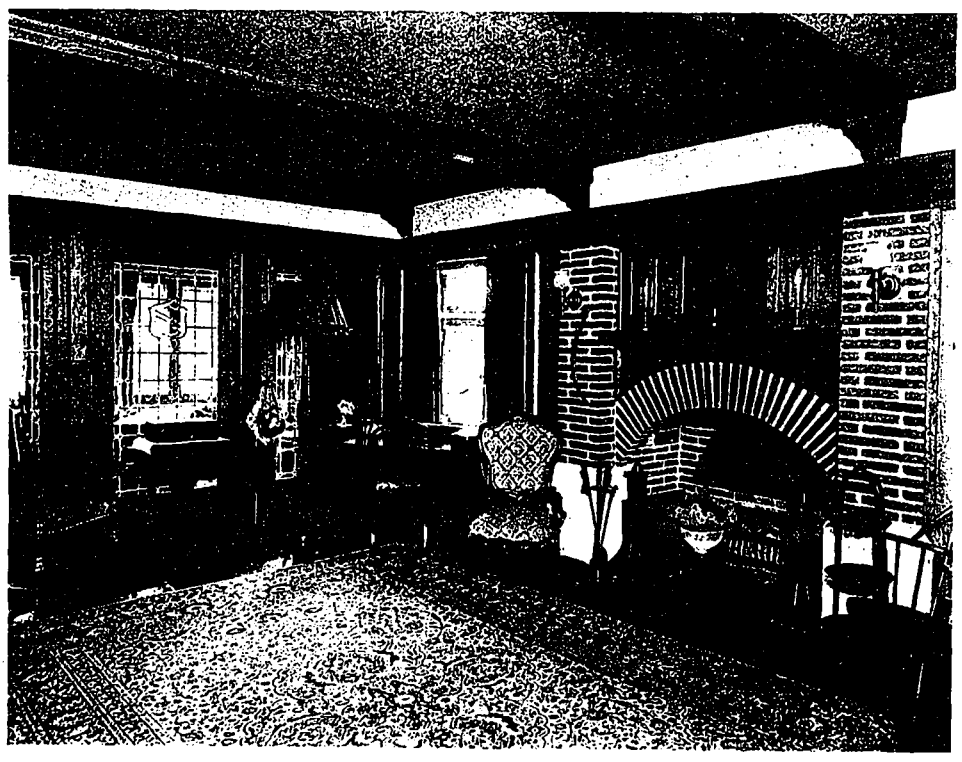
A deep covered verandah overlooks the tennis court and the swimming pool.

RESIDENCE OF FORSEY PAGE, WEBOURNE CRESCENT, LAWRENCE PARK.

The exterior photograph shows an excellent planting scheme which ties the house and the grounds together and blends the whole into a very pleasing composition.

The exterior walls are of hard burned, dark brown brick. The roof is of shingles and the casement windows show leaded glass of good design.

The interior plan is roomy and compact. The hall is finished in mahogany. The dining room is panelled in dark oak, and the living room is finished in fumed oak. A feature of the living room is the large fireplace of outstanding design, carried out in brick and stone with a carved wood panel overmantel.



LIVING ROOM FIRE-PLACE: RESIDENCE OF FORSEY PAGE, TORONTO.

Douglas Fir or Oregon Pine

(*Continued from page* 271.)

tests proved that Canadian grown and American grown Douglas fir are of practically identical properties.

Some of the examples of the great durability of Douglas fir are to be seen in the numerous large railway trestles which have been in use for long periods, and in some of the ships on the Pacific coast; one, for example, the "Lady Mine," built entirely of Douglas fir in 1879 at Port Ludlow, and still in service between Vancouver and Prince Rupert. The fact that Douglas fir is recognized by the National Board of Fire Underwriters as a proper tank material is an evidence of its durability.

During the war an immense amount of this material found its way into boat and aeroplane construction, the long clear sizes which could be obtained made Douglas fir especially desirable for aeroplane wing beams. Douglas fir is

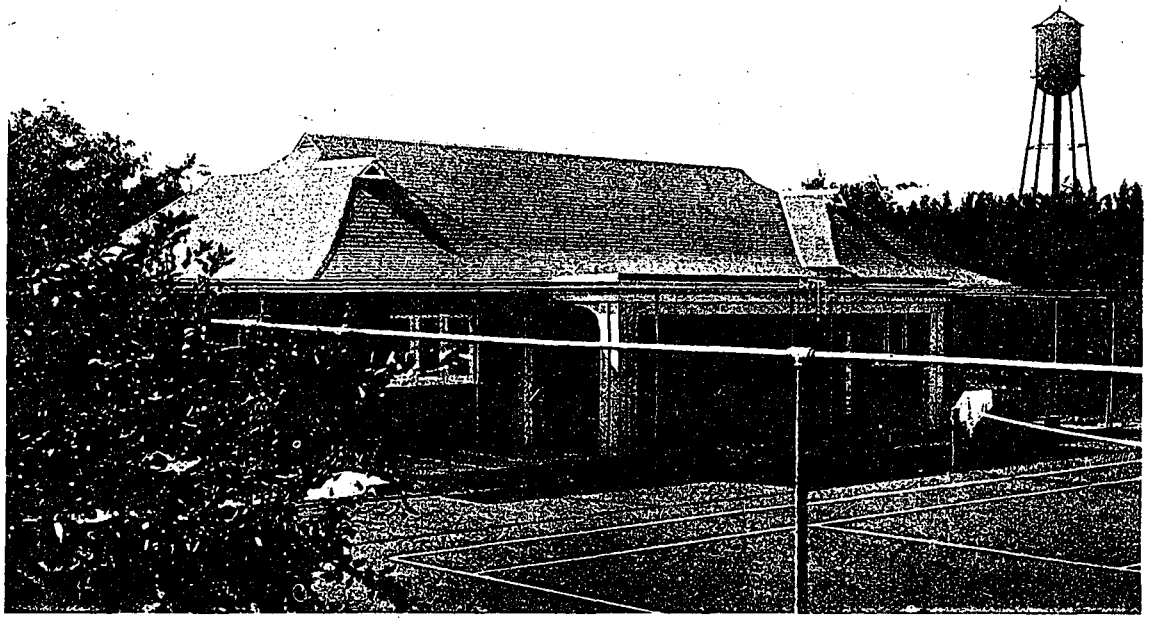
RESIDENCE OF FORSEY PAGE, TORONTO. PAGE & WARRINGTON, ARCHITECTS.

used for all wooden decking, bulkheads and derricks on the new boats of the Canadian merchant marine.

That Douglas fir is popular in the east is shown by the increasing volume of this material which is finding its way into this market. It is specially useful as heavy construction material, and is largely used in mill building construction, an outstanding example of which is the recently completed Hobberlin building on West Adelaide Street, Toronto. This building, in the construction of which 1,000,000 board feet of Douglas fir were used, is seven stories in height and contains 140,000 square feet of floor space. It is claimed in this connection that the insurance rate on a sprinkler equipped mill building is lower than the rate for a fireproof building not sprinklered, and but very little higher than on a sprinklered fireproof building. Needless to say, the timber construction is considerably cheaper.

There are two ways of cutting Douglas fir, one to give edge grained material which is best suited for flooring, decking, stepping, etc., where hard wear has to be taken care of, and the other to give slash grained material which is prized as finish for the effect, in some pieces like watered silk, which is caused by the different colors of the "spring-wood" and "summer-wood" which make up each annual ring or year's growth.

It has been proved that the strength of wood varies with its density or dry weight per unit of volume which in each tree varies with its position in the tree as to cross-section and height in the tree. A stick cut from near the centre of the tree is weaker than a stick cut from near the outside. Also, a piece cut from near the top of a tree is weaker than that cut from near the butt, therefore, the strongest timbers come from the outside of butt logs. Therefore low grade structural timbers, such as railroad ties, often come from near the centre of the log and high grade structural material, such as car sills and aeroplane wing beams, come from near the outside of the log. This latter material is generally clear because of the fact that ordinarily branches grow from the centre or pith of a tree out and as the tree increases in height and the lower branches become shaded they die off, the later wood forming over them being clear and of a high grade. As stated, the strength of a Douglas fir stick is closely related to its density or dry weight per cubic foot. Of two sticks of equal dryness or degree of moisture content the heavier will be the stronger, provided they are of the same grade as regards defects, knots, shakes, diagonal grain, etc. This density may



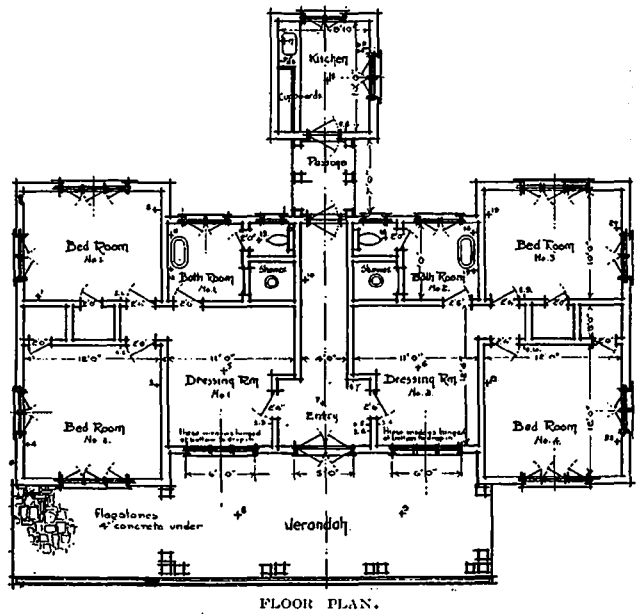
TENNIS HOUSE FOR SIR FRANK BAILLIE, OAKVILLE, ONT. PAGE & WARRINGTON, ARCHITECTS.

be estimated by a visual examination of the amount of the summer-wood in the annual or growth rings. Each year a tree adds an outside layer composed of wood formed early in the year called "spring-wood," and that formed later called "summer-wood." The early wood is composed of comparatively large open thin walled fibres which function as conduits for the passage of sap, the later wood is composed of thick walled elements which give the wood its strength. This wood is darker, more compact and harder, and appears as a dark yellow band. A tree having a large proportion of this wood is heavier and stronger than one having a narrow band of summer-wood and a large percentage of the spring-wood.

"Cross grain" may be due to two causes, diagonal grain or spiral grain. The former is caused by faulty sawing, in that the saw cuts across the layers formed by the annual rings, the latter is due to no fault of manufacture, but to the fact that the wood fibres did not grow parallel with the main axis of the tree, but around it in a spiral. If the degree of diagonal or spiral grain is great, say more than one inch in twenty, the material in which it occurs is materially weakened. The degree of diagonal grain, especially in some sticks, is rather more difficult to detect. It is, however, readily shown on the slash or tangenital face of a stick by the brown resin ducts, or in a dry stick by the season checks which follow the direction of the fibres.

The average oven-dry weight of Douglas fir is approximately thirty pounds per cubic foot; green material approximately thirty-eight pounds per cubic foot, and thoroughly air-dry material approximately thirty-tree pounds per cubic foot. Douglas fir lumber weighs per thousand board feet approximately 3,300 pounds, green, and 2,500 pounds, kiln dry.

The color of Douglas fir varies from red to light yellow. The red fir as a rule contains a high percentage of summer-wood and is slightly more difficult to work. Red and yellow material is often obtained from the same tree, the red from the centre, and the yellow and soft, fine grained material which is formed in the mature



FLOOR PLAN.

tree. Red fir is often from second growth trees. There is no appreciable difference in the strength of red and yellow Douglas fir lumber.

Building Blocks Made from Clinkers

A French firm in the Brest district is manufacturing building blocks in which the materials used are sand, lime and cement, with a base of crushed coal clinkers. The advantage claimed for them is their capacity to withstand the humidity of the climate that causes brick walls to drip water on the inside.

The General Relationship of the Contractor and the Architect

An address by President C. Blake Jackson, of the Toronto Builders' Exchange, before the recent London O.A.A. Convention.

You all recognize that contracting and methods of handling contracts have been changing rapidly in recent years. The contractor of twenty years ago was, generally speaking, comparatively a rough type of individual, whose business ability was measured by the forcefulness, fluency and luridness of his language, who was out to make all that he could, and to whom character and reputation were negligible quantities. To-day the modern, successful contractor has a reputation to maintain; a reputation for good workmanship, for integrity, for quick, efficient service; a reputation which means everything to him and to the growth of his business, just as the architect's reputation means everything to him in his profession. The change is one which, I know, the architect himself is glad to note.

When steel buildings came into use, requiring engineering ability together with the necessity of putting up a structure in a given time, it brought with it an entirely different type of contractor, a person whose qualification for success, besides having a practical knowledge of building construction, was organization ability as well as engineering training. Upon the development of reinforced concrete, this change was even more marked, until to-day I know of no large city in the United States where work of importance is not let as a general contract to organizations known as "engineers and builders," "contracting engineers" or "general contractors." In Ontario we have been considerably slower in accepting the general contractor, but there are so many points in his favor that we cannot afford to overlook him in this Province.

GENERAL CONTRACTORS' ASSOCIATION.

Speaking purely as a member of the General Contractors' Association of Toronto, with which Association I had the honor, last year, of being the first chairman, I would like to say a few words on the subject of general contracting.

In the first place, we find in most companies of this kind organizations that are fully equipped to amalgamate all units of your building into one completely finished work. They employ trained engineers as well as the best practical men available who have had special experience in the specific work to be constructed. I might mention here that in the General Contractors' Association of Toronto over seventy per cent. of the executive heads of the firms are university graduates. I might also mention that the accounting systems to-day in most contractors' offices are equal to any other class of business, and as much attention is paid to the purchasing department as is done by any manufacturing or commercial concern.

SPEEDING OF CONSTRUCTION WORK.

There is no doubt about the speed of the construction when the entire work is under the direction of one concern. You probably argue —why cannot the architect secure the same results by acting in the same capacity as the general contractor? Experience has proved that this is an impossibility, for the reason that the architect has not the organization, the facilities for purchasing, the opportunity for rearranging the men or of pushing the subtractors; the latter knowing that if he falls down, the contractor will not hesitate to engage men in that particular trade and purchase materials to complete his work. The subcontractor further knows that the contractor is responsible for the completion of the building in a specified time, and it is a more essential part of his obligation to complete his work as his contract calls for.

Then, another big consideration for your recognizing the general contractor is that he is an invaluable man to give a set of preliminary drawings to some evening about five o'clock when he is looking forward to spending a pleasant evening with his family, telling him that you want an estimate on the cost the following morning. Of course, the pleasant evening is postponed and he proceeds to get out a magnifying glass to try and find one or two dimensions on the drawings, that he may be able to give you, as closely as possible, something tangible to take up with your client.

PAYMENT FOR ESTIMATING.

Some relief to the great amount of estimating done by contractors will soon have to be introduced. In many cities in the United States, contractors are now being paid for their estimates, a small fee, which barely covers the cost. It is either necessary for something like that in this country or to establish a quantity surveying system similar to that which has been used so many years in England. If some such change in our system could be arrived at, I am sure it would materially help to reduce the cost of building. A big portion of any contractor's or sub-contractor's overhead is estimating, and

the buildings that are actually constructed are indirectly charged with a portion of that overhead for work that never goes ahead.

The ills of the building contractor are legion, and they have been suffered in silence for many years as more or less necessary evils; but the recent organization of the construction interests offers an opportunity for concerted effort to combat these afflictions, which will assuredly be immediately reflected in the industry.

INSPECTION AND SUPERVISION.

At one stage in the life of the industry—now, fortunately, in the almost forgotten past—the attitude of the general public seemed to be that the contractor was in business for the purpose of putting something over somebody. In no other business or profession is it true that there is a buyer, a seller and a watch-dog. An architect's place in the building world is to plan a building and see that the plan is executed; it should not be to watch for crooked work, to count the sacks of cement used and then accuse of intent. In many cases the builder is at the mercy of the architect's so-called clerk of the works. Usually he has no knowledge of the building construction, and spends most of his time checking the cement going into the mixer. I assure you it is a great joy to the contractor to have on the job an intelligent, practical representative of the architect, and if the owner or the architect cannot afford the services of such a man, it is better for all concerned to have none at all.

SPECIFIC SPECIFICATIONS REQUIRED.

Contractors, unless they are familiar with the practice of the architect or engineer whose plans they are figuring on, are very often under a big disadvantage, owing to the lack of specific detail in the specifications. The specification is a most important instrument, and it is impossible to intelligently interpret the plans unless they state clearly and unmistakably what is expected to complete the contract to the satisfaction of the owner and the architect. Indefinite specifications and sketchy drawings are things to be abhorred. So many specifications are even yet written containing such terms as "wood," "timber," "metal." Such terms are to be avoided.

Also, the lack of information in the specification and the different interpretations put upon that specification is in many cases responsible for the great difference in the tenders of the various contractors figuring on the same job.

This is manifestly unfair to the contractors as well as the owner, and is indeed discrimination in favor of the contractor who has previously completed work from the plans and under the supervision of the architect and is familiar with his practice and standards. Every job has its individual characteristics, and the difficulties to be contended with are seldom, if ever, twice alike. Unfortunately, with some architects it seems to have become the practice to use a stock specification, with but slight additions or variations for every job. The opinion of inspectors as to what constitutes a workmanlike piece of work varies with their experience, and unless the class of work expected is clearly defined, the contractor is very often at the mercy of an impracticable inspector; or where the supervision is limited to the occasional visits of the architect, the owner is at the mercy of an unscrupulous contractor.

Any reputable contractor welcomes an intelligent inspection of the work in progress; it is of great assistance to his building superintendent and avoids costly errors. A clearly defined specification with sufficient details is of the greatest value in avoiding mistakes, and enables the contractor to turn over to a satisfied owner a piece of work that will enhance his reputation and result in increased business.

STANDARD FORM OF CONTRACT.

It is to be regretted that we still have with us forms of contract which are obsolete, as far as the observance is concerned, but which many contractors are still asked to sign. Clauses which read, "that the architect's decision is final and binding on both parties, without appeal," that "all work shown on the plans and specifications is to be carried out by the contractor, as well as everything else not shown on the plans and specifications, but which the architect may deem advisable to go into the work." Such clauses are all nonsense; they are never lived up to and should be deleted entirely to give us a modern working form of contract.

RECOMMENDATIONS FOR BETTERMENT.

The construction business is one full of risks, financially and otherwise, and in days gone by the architect's sole endeavor seemed to have been to throw every risk, without exception, on the shoulders of the contractor. The Associated General Contractors of America have been working steadily on this phase of the situation, and a few months ago brought in a report which makes very interesting reading. The main suggestions put forward by them are as follows:—

1. ACTIONS ON BIDS:—Bids should be submitted with the provision that they must be acted upon within a reasonable time.

2. FREIGHT RATE CHANGES:—Bids should be submitted on the basis of existing freight rates, with the provision that in case a change in rates should occur between the time bids are received and the date fixed for the completion of the contract, the contract price shall be increased accordingly.

3. WAGE SCALE CHANGES:—Bids should be

based and submitted on existing wage rates, with the provision that the contract price shall be increased or decreased in accordance with any change in such rates before the date fixed for the completion of the contract.

4. MATERIAL PRICE CHANGES:—Bids should be submitted on the basis of existing prices for materials f.o.b. the producer's plant or distributor's yard, with the provision that the contract price shall be increased or decreased in accordance with any change in such prices that takes place within the time allowed the contractor to purchase and fabricate his materials.

5. MONTHLY ESTIMATES:—Monthly estimates should include materials delivered and suitably stored as well as materials incorporated in the work.

6. PARTIAL PAYMENTS:—Certificates should be prepared and delivered to the contractor between the first and tenth day of each month, showing the proportionate part of the contract price earned during the preceding month. These certificates should be paid by the owner by the tenth day of the month. Interest on deferred payments should be paid the contractor at the prevailing rate.

7. CONTRACTOR'S RIGHT TO STOP WORK:—Under the following conditions the contractor should have the right to stop work or terminate the contract upon three days written notice to the owner and the architect, and recover from the owner payment for all work executed and any loss sustained upon any plant or material and reasonable profit and damages.

(a) If the work should be stopped under an order of any court, or other public authority, for a period of three months, through no act or fault of the contractor or anyone employed by him.

(b) If the architect or engineer should fail to issue the monthly certificate for payment in accordance with the terms of contract.

(c) If the owner should fail to pay the contractor, within seven days of its maturity and presentation, any sum certified by the architect or engineer or awarded by arbitration.

(d) If the owner does not permit the contractor to proceed with construction within a reasonable time after signing the contract.

8. RETAINED PERCENTAGE:—The retained percentage should be based on 100 per cent. of the work performed and should never exceed 10 per cent. When the amount retained reaches a total sum, which shall be mutually agreed upon by the owner and the contractor, no further reduction from payments should be made.

9. SURETY BOND:—Where a surety bond is given it should be reduced at agreed intervals so as to cover thereafter only that portion of work then incompleted.

10. PENALTY CLAUSES:—Wherever any provision is incorporated in the contract for a penalty against the contractor (including liquidated damages) there shall also be inserted a provision for a bonus of like amount.

11. ACTS OF GOD OR PUBLIC ENEMY:—The contractor should not be held liable for results arising from the acts of God or public enemy.

12. TIME ALLOWED FOR COMPLETION OF WORK:—The time allowed for the completion of the work should be based on "weather working days," instead of on elapsed time, and if necessary, allowance should be made for time spent in performance of unproductive work made necessary by floods or other natural causes beyond the control of the contractor.

13. INSPECTION.—Where practicable, materials should be inspected at the source, so that costly delay may not result from the rejection, at the site of the work, of materials furnished in good faith by the contractor.

14. FORCE ACCOUNT WORK:—Payment for force account work should be made on the basis of the total actual costs of the work, including the actual labor and material costs, rental on equipment, liability insurance, etc., plus a reasonable percentage to cover overhead and profit, total to be not less than 15 per cent.

15. CHANGE IN QUANTITIES:—In case the actual quantities for any item in a unit price contract are less than the estimated quantities by more than a certain fixed per cent., the unit price paid the contractor for that item should be increased by an amount to be agreed upon. Similarly, a decrease in the unit prices should be made in case the quantities are increased over the estimate by more than a certain fixed per cent.

16. ARBITRATION:—In no case should the engineer or architect be made the final judge as to the interpretation of the drawings and specifications, or the performance of the contract. All decisions and interpretations should be subject to prompt arbitration at the choice of either party to the dispute.

ELEMENT OF RISK.

At their meeting it was pointed out that contracting was more or less a gamble, but many have not realized how much of a gamble until someone analyzed the income tax returns and made the following discoveries:—The amount of loss for every dollar of profit made by construction corporations (and this includes building construction) is eight times as great as it is in manufacturing, agriculture or personal service corporations, five times as great as in transportation and public utility corporations, more than three times as great as in mining and quarrying, and nearly twice as great as in banking.

If the contractor could carry out a contract where his financial risk was reduced to a minimum, it would go a long way to reduce the high cost of building.

In Canada the Canadian Construction Industries have been working along the same lines, and a committee is at present in operation which will eventually submit a standard form of contract to cover the whole of Canada; a contract which will be satisfactory to the Association of Canadian Construction Industries, to the Royal Architectural Institute and the Engineering Institute of Canada. It is hoped that this standard form of contract will eliminate in great measure the risks above mentioned, and will give us something which is fair to both.

EXTRAS AND HOLD-BACK.

In talking of the high cost of building, I would like to say a word about that very misunderstood item, "the extras." It may be very hard to convince some architects of the fact, but it is a fact nevertheless, that the "extras" is the bane of the contractor's existence, the rock on which many reputations are ruined and many friendships wrecked, and the element which keeps the lawyers busy and the contractors poor.

Another item which requires careful consideration is the question of the "hold-back"

on a straight contract. This matter is still treated very unfairly under a great many contracts, tying up the contractor's capital quite unnecessarily and adding an item of expense to the construction of the building which could very well be avoided.

ACTIVITIES OF CANADIAN ASSOCIATION.

You will doubtless remember when the Minister of Reconstruction started in on his big programme immediately after the armistice, he summoned to Ottawa a conference of manufacturers and builders in the hope that a permanent body would be organized, principally to advise the Government on labor questions and to present the other side of the argument in the same competent way that labor was presenting its side. The outcome of this conference was the birth of the Association of Canadian Construction Industries, and since that date branches of the parent body in Ottawa have been formed all over the Dominion, from St. John, N.B., right out to Calgary. A very successful conference was held in Ottawa last year, and another conference will be held this winter in Winnipeg. A great deal of good work is being done by this Association without much advertising; the executives are in constant session with the Labor Department at Ottawa. Only about ten weeks ago they appeared before the Railway Board on the question of fuel shortage in the cement mills, which has tied up millions of dollars worth of work throughout Western Canada. A few days later they were in conference with the Railway Board again on the question of freight rates, which has a very serious financial relationship to the construction industry. The association and its branches have time and again settled labor disputes, and if you will look back on previous years, and consider the number of strikes that have taken place this year, you will get an idea of the good work that is being done. This association in the past few months straightened out the sales tax tangle for the building industry; they were successful in keeping down the price and at the same time releasing B.C. lumber for the Ontario market. It was also at their suggestion that joint industrial boards have been formed in the larger centres, and which culminated in a National Joint Industrial Board being formed only last month, the chairman of which board to be appointed by the Dominion Government, and toward which an appropriation has been set aside for the work to be carried on.

A standing committee on labor has also been working steadily in an effort to place some real responsibility on labor unions, to further the apprenticeship system, technical education, classification of workmen and standardization of wages. They are also conferring with the Government on the question of immigration of labor.

All of this work helps the building industry, and thereby helps the architect, and we would ask the moral and active support of the Ontario Association of Architects.

TORONTO BUILDERS' EXCHANGE.

The Builders' Exchange of Toronto is deserving of a word in passing, just to give some idea of what our organization is aiming at. At the present time we are going through a state of re-organization. It is our intention to go so far as to change the name of our organization, so as to increase its scope and prestige. About two months ago a business manager was engaged and a new constitution and by-laws are now being drafted with a view to consolidating the entire building industry of the city of Toronto. In this connection, I would just like to read a few paragraphs from the proposed constitution and code of practice so as to give you some idea of what this organization means to the building industry of the city.

CODE OF PRACTICE.

1. In order to avoid misunderstandings all agreements should be in writing.

2. Proposals should be made subject to the conditions and terms as outlined in a standard contract form, no modifications of changes should be made in the contract which would interfere with the rights of contracting parties.

3. Members should be given the preference in competing for, and in the award of business.

4. Members should regard and respect the interests of the architectural and engineering professions.

5. Any attempt to discredit the integrity or injure the business reputation of fellow members, either directly or indirectly should be discouraged; divulging information in such a manner as to result in endangering the prospects or supplanting a member is considered an unfair practice.

6. When the proposal of a solicited bidder is used in compiling the cost, or to serve as a basis for general figures, or revision, said bidder should be awarded the work.

7. A bidder being offered a contract in accordance with his proposal and the provisions of the code of practice should accept it and do the work. Members should execute their work in strict accordance with the agreement and the plans and specifications. Any attempt to evade responsibility, or substitute material for that called for in the agreement without the consent of the other party to the agreement, is considered bad practice and should be discouraged.

8. Naming of unit prices in original bids to serve the purpose of computing cost of additions or allowances for deduction should be discontinued. Where additions or deductions are contemplated they should constitute separate transactions.

9. In no instance should payment be made for the use of plans in erecting work, or any changes be made under the contract, either specific or pro-rated, unless they are particularly mentioned in the specifications or in the tender form.

10. Members should recognize the necessity of short credit terms and the elimination of credit risks. Pay-

(*Concluded on page* 300.)

CONSTRUCTION

A · JOURNAL · FOR · THE ARCHITECTURAL ENGINEERING · AND · CONTRACTING INTERESTS · OF · CANADA

H. GAGNIER, LIMITED, PUBLISHERS
Corner Richmond and Sheppard Streets.
TORONTO - - - - CANADA

M. B. TOUTLOFF, Editor
W. H. HEWITT, Advertising Manager.

BRANCH OFFICES:
MONTREAL—171 St. James Street.
E. R. Milling, Representative.
WINNIPEG—336 Qu'Appelle Street.
F. C. Pickwell, Representative.
NEW YORK—505 Fifth Avenue.
H. M. Bradley, Representative.

CORRESPONDENCE.—All correspondence should be addressed to "CONSTRUCTION," Corner Richmond and Sheppard Streets, Toronto, Canada.

SUBSCRIPTIONS.—Canada and Great Britain, $3.00 per annum. United States, the Continent and all Postal Union countries, $4.00 per annum, in advance. Single copies, 50c.

ADVERTISEMENTS.—Changes of, or new advertisements must reach the Head Office not later than the twentieth of the month preceding publication to ensure insertion. Mailing date is on the tenth of each month. Advertising rates on application.

CONTRIBUTIONS.—The Editor will be glad to consider contributions dealing with matters of general interest to the readers of this Journal. When payment is desired, this fact should be stated. We are always glad to receive the loan of photographs and plans of interesting Canadian work. The originals will be carefully preserved and returned.
Entered as Second Class Matter in the Post Office at Toronto, Canada.

Vol. XIII. Toronto, Sept, 1920 No. 9

The R. A. I. C. Call

The official announcement of the General Annual Assembly of the Royal Architectural Institute of Canada to be held at Ottawa, October 1 and 2, stresses the point that "every Canadian architect is expected to be present." It is at least to be hoped that the attendance will in every way be representative of the importance of the Institute and the very worthy objects it is endeavoring to further. Following almost immediately on the heels of the successful meeting at London of the Ontario Association, the assembly will undoubtedly enlarge on a number of questions discussed at the time, and take steps tending to greatly broaden the scope of association activities in the various provinces.

Supplemental to the programme which has been sent out, it is announced Mr. Charles Harris Whitaker of the American Institute of Architects, Washington, D.C., will speak on "Development affecting the Practice of Architecture in the United States," "The Congress of the Building Industry of Chicago," "The Post-War Committee of the A. I. A.," and "The General Tendencies which have paralyzed the Building Industry."

Mr. Eric Brown of Ottawa, Director of the National Art Gallery of Canada, will also deliver a talk, his subject being "Canadian Art and the Canadian Art Gallery." Other speakers will be Mr. Percy E. Nobbs, who will discuss "War Memorials," and President J. P. Anglin, of the Canadian Building and Construction Industries, who will speak on "Labor and the Building Industries."

Not only is the programme in general an attractive one, but the issues to be discussed lie very close to the interests of all architects today.

Besides this the Ottawa architects have organized an architectural exhibition in connection with the Assembly. Among the exhibits there will be some interesting subjects from the Department of Public Works, as well as a number of drawings of the new Parliament Buildings. An interesting collection of drawings and photographs on housing will also be shown.

Housing Progress in Ontario

According to information made available by the Railway and Municipal Board, the end of the year will have seen about 2,200 houses erected in Ontario under the Ontario Housing Act, 1919. During last year 1,184 houses were erected and 1,000 have been erected or are in course of erection in 1920. The total costs of these houses and the land on which they were built is approximately $8,800,000. The persons who have received loans have contributed toward the cost of the houses over one million dollars. About two-thirds of the houses have been erected on lots already owned by the persons building. Ontario leads the Dominion in the matter of municipally and Provincially assisted housing.

The foregoing, however, does not apply to Toronto where little progress has been made in housing despite the fact that accommodations are badly needed, and as this issue goes to press the Board of Control is again proposing a home building programme and have sent on for confirmation by the Council the names of E. L. Cousins of the Toronto Board, John T. Russell, shipbuilder; W. H. Smith, Chairman Social Service Commission; Geo. Barron, merchant, and Lt.-Col. Boyd Magee to constitute a new Commission.

The proposal is to erect 500 houses of a cheaper class than was formerly erected by the Housing Commission to be sold or rented to those who have been residents of the city for two years and to loan bona fide builders (not speculators) an advance of $1,000.

General Relationship of Contractor and Architect

(*Continued from page* 298.)

ments should be made in strict accordance with the terms of the agreement. In case circumstance make inevitable the deferring of a payment when due, the other party to the agreement should be notified before due date. Prompt payment of accounts should not be dependent upon the completion of the project as a whole.

11. The rights of contracting parties should be fully recognized in the matter of disputed accounts and unsettled claims. To avoid confliction no other members should knowingly engage in the work under dispute until such dispute or claim has been satisfactorily adjusted.

12. Any violation of the provisions of this code should be reported in writing to the business manager of the Builders' Exchange, who will report such violation to the Arbitration or Grievance Committee, who will proceed to investigate the report. Every opportunity should be given the accused party to refute the charges. The finding of the committee shall be given full publication by bulletin to the members.

13. Members should regard the making of a profit as being necessary to their remaining in business. Every effort should be exercised in fully covering the quantities and the cost of labor, materials and overhead that enter into the work. It is recommended that all members adopt a practical system of estimating and cost accounting.

AIMS AND OBJECTS

1. To protect and encourage the building and construction industry of the City of Toronto and the County of York.

2. To foster the growth and progress of the city by promoting the erection of well planned, properly constructed and equipped public and private buildings.

3. To inculcate just and equitable principles of dealing with contractors, sub-contractors, architects, engineers and manufacturers and dealers in building and construction materials, to the end that membership in this association shall be a reasonable assurance of skill, honorable reputation and reliability.

4. To acquire, preserve and disseminate business information.

5. To avoid and adjust, as far as practicable, the controversies, misunderstandings and difficulties liable to occur among persons engaged in the building and construction trades.

6. To establish and maintain a central office and headquarters with facilities for ease and convenience in the transaction of business as well as for conferences between memebrs of the trade and kindred organizations.

7. To establish trade schools and promote technical education, manual training and general welfare of the artizans of the community, as well as the recognition of good workmanship, fidelity and the rights of labor.

8. To provide a means of acquaintance, both personal and business, among the members, and to promote good feeling and harmony among those engaged in the building and construction industry.

9. To endeavor to enlarge the business views of those who may become members.

10. To promote mechanical and industrial industries, and to establish and maintain uniformity in commercial usages.

11. To reform abuses in trade or business. To secure freedom from unjust or unlawful exactions. To diffuse accurate and reliable information among the members as to the standing of merchants and builders, and other matters. To produce uniformity and certainty in the customs and usages of trade and commerce, and of those engaged in the building or construction industry, or the furnishing materials thereto.

You will see at once that this organization is far from being a price fixing affair. There are many problems to be solved in the building industry that means much to the architectural profession, and it would be only fitting that the Toronto branch of your association take out a membership card in our new organization.

ORGANIZATION NECESSARY.

Co-operation is necessary in any industry. I think it was Benjamin Franklin who said, "We must all hang together, or assuredly shall we all hang separately." I am of the firm belief that closer co-operation and understanding with the contractor and more appreciation of his position would save money for your client, give him better work, be more satisfactory to you, and certainly make life smoother for the contractor.

The advantages of organization are entirely obvious, the weakness of any professional or trade association is in the outsiders; when there is thorough co-operation wonders can be effected in the solution of legal, political and commercial difficulties which exist at the present time. There is the question of high cost of labor and materials, transportation, foreign competition, unfair home competition, and a host of other problems of vital interest to the architect, engineer and building contractor, which can only be solved by united action, and thus raise the standard of construction work in Canada. Mutual assistance has been used with such beneficial results by manufacturers, doctors, business men, etc., that the results of organization are apparent beyond all question.

CO-OPERATION NECESSARY.

The art of the architect and the craft of the builder are combined in the development of the colossal building industry of to-day. When we realize how necessary the one profession is to the other, does it not seem remarkable that it is only of comparatively recent years that any attempt has been made to establish a close bond of union and spirit of co-operation in these professions?

There is a question that I have asked architects at various times and have never received a satisfactory answer. "Why have we no compulsory registration of architects in the Province of Ontario?" I do not know whether or not you realize that a movement of this kind would receive the hearty co-operation of practically all contractors and exchanges throughout the province. The paragraphs I have just read to you of our proposed new constitution, as well as my general remarks, show you that we are eager to back any movement for the betterment of building conditions in both the province and Dominion. We suffer more than you