# JOURNAL

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# R.A.I.C JOURNAL

N the two month's interval in which this page has, in keeping with tradition, been given up to the great, we have observed a certain electrification in the architectural air. We use the word "architectural" in its broadest sense to include the activities of one's friends who have been flying south, south-east and southwest in surprising numbers. With what ideas, these harbingers of spring return, we do not know for certain, but from a few hints dropped we gather they range from solar heating to city planning. On that later point, we take issue with a friend who thinks that post-war planning has not yet seized the imagination of the Canadian citizen. We have been astonished, in the last month, be to called in to advise no fewer than four Canadian towns on the procedure of planning and the appointment of a consultant. We have every confidence that our advice to those towns was sound, and the advisers we recommended will do a good job; but what of the future? The requests we received are but a sign of something, that, within a year, will be a tidal wave that neither the architectural nor the engineering professions are equipped to deal with. If the government agrees, as it surely must, to the request of the Mayors, before the House of Commons Committee on Reconstruction, that no Federal funds will be given for post-war projects to any municipality that has not prepared a plan of redevelopment and future growth, we shall be inundated with requests we cannot fill. The projects are post-war projects, but the planning, to be effective, must be pre-peace. The issues involved seem to us so serious that we respectfully suggest a joint meeting of the R.A.I.C. and E.I.C. councils to study the problem. The best hope seems to lie in the Schools of Architecture and the departments of Civil Engineering in the universities. To handle night or summer courses of a serious practical nature, they are at present understaffed — but staffs could be found. Those taking the course should pay no fees; in fact a sufficient grant should be found to give each one an adequate maintenance fund for the period of training. We understand something of the kind is done for medicine and this is no less important. A by-product of such joint action by the two professions would be an understanding of each other's problems and aspirations. We would like to think of that as a goal to be achieved before our architects and engineers in uniform return to civilian life, but if, in the pursuit of something even greater, we can achieve it as a by-product, let us not lose the opportunity.

N Ontario, two significant events have occurred that should be of interest to all architects. Premier Drew has set up a Planning Commission under the Minister of Labour. We hope to write a good deal more about that in the near future. We take it that it will deal with conservation, and broad problems of planning as well as with the smaller field of community planning for municipalities where there would be neither the funds nor the personnel for the task. A Provincial Planning Commission that could act as a consultant in that field would do an immense service. Toronto has appointed an Advisory Housing Board. It has just started its work, and can have little, as yet, to report. We congratulate the city on its appointment of Mr. W. L. Somerville to membership on the Board. As long as we have known Mr. Somerville, he has been interested in housing for the lower income groups. So long ago in fact that we, then, were entirely pre-occupied with the housing of the upper income groups, and connected his kind of housing with the Karl Marx Hof and machine guns. A lot of water has flowed under the bridge since then, and Mr. Somerville is in his proper place.

# TRENDS IN PROTESTANT CHURCH BUILDING

By F. BRUCE BROWN

Even a casual reader of the daily press or of church papers must be aware that a new spirit of tolerance and co-operation is abroad. The church at large is realizing that to be an effective influence in the world, it must act as one, rather than as a number of isolated groups. This spirit is underlined by the Ecumenical movement, which stresses co-operative unity (though not organic union); and the tendency to stress the importance of doctrinal beliefs held in common, in contrast to the former emphasis on differences in belief and interpretation.

Church Architecture has been reflecting and assisting this trend for at least twenty years. Though not an ideological component, it has been, and will continue to be, a powerful catalyst. In the early days of the Free Church movement all forms used by the established church were discarded, the good along with the bad. Now that time has somewhat healed the wound, it is increasingly recognized that many of the forms of building and of worship developed through the years are, in fact, good; and those that are considered to be of value are being adopted today by most denominations. For example, witness the revived interest in the value of ecclesiastical symbolism, and the almost universal adoption of the centre aisle and chancel plan. The semi-circular plan, and the square plan with the corner pulpit, referred to south of the border as the baseball plan with the minister to bat, are rapidly disappearing.

When the chairman of a building committee instructs the Architect that "It must look like a church", what exactly does he mean? It is doubtful whether he can be more specific. It is doubtful whether he has a particular style in mind. In general terms he means that the exterior should reveal its religious character at a glance, and that the interior should induce quiet and reverence as an environment helpful for worship. Some churches make little or no impression upon the visitor, others, the type desired by our friend, cause one on entering to remove one's hat and to speak in subdued tones. There is a vast difference. Many elements contribute to its achievement.

As one enters a church, the narthex or vestibule creates the first impression. It should be ample with a suggestion of welcome, and at the same time be of a character calculated to set the mood for worship within the nave beyond.

The success of the nave depends on many factors, proportion, lighting, furnishings, colour, texture, all of which affect the atmosphere. Perhaps it depends most upon the way in which the interior focuses the attention upon the chancel, and the manner in which the chancel is developed. As it is desirable that the interior should focus, length is preferable to width. The most common fault is excessive width. Westminster Abbey is only 35'-0" between the nave piers. While this may not impress some of the non-liturgical groups, a reference to Holy Writ, which advocates a proportion of length to breadth of three to one, will perhaps be more convincing. "Now these are the things wherein Soloman was instructed for the building of the house

of God. The length by cubits after the first measure was three-score cubits, and the breadth twenty cubits." (2 Chron. 3-3). The desired reaction from the contemplation of the symbolism of the focal point, or from the act of worship, is one of uplift, therefore accent, particularly in the chancel, should be upon the ascending line or height. A centre aisle is essential. It is not only the most practical for ceremonies, but is aesthetically satisfying in assisting the interior to focus. Another important factor is lighting, whether natural or artificial. While it is obvious that adequate lighting is necessary, it is not so obvious that over lighting destroys the desired effect. Colour, choice of materials, choice of furnishings may also help to make or mar the sense of quiet. Strong contrasts should be avoided as distracting. Nothing should be allowed to compete with the centre of interest.

The chancel according to Bond is "the choir and presbytery of any church." The non-liturgical churches quite generally use the term chancel to refer to a choir in which a communion table is placed, though the presbytery, as such, does not exist. To look well, a chancel should be at least as deep as it is wide. As the heart of the church building, it should receive special consideration and treatment in both design and furnishings. It usually has a triangular interest, the lectern and pulpit forming the base, and the altar or communion table forming the apex. The choristers face each other behind the lectern and pulpit, and thus do not obtrude themselves upon the consciousness of the worshippers.

A hint of the re-orientation of ideas with regard to religious education may be discerned in the gradual displacement of the term "Sunday School" by the term "Church School". It is the aim of the present graduated worship and teaching programmes, that the nursery tot shall in due course become the adult worshipper. What has been said of the importance of the church being designed to reveal its religious character at a glance, may also be said of the church school. Its function is different from the day school and other secular institutions, and it should be so designed, decorated, and furnished as to impress upon one its distinctive character.

Hand in hand with the development of the church school has come a forceful realization that, a child's first impression of church is the impression received from the surroundings of the nursery or primary department. No longer is a kitchen, or any part of it, considered to be a possible meeting place for the youngest age group. Bright rooms with light coloured decorations, supply cupboards, project tables, play tables, black boards, tack boards, and supervised cloak and toilet accommodation are now accepted requirements.

A new emphasis has been placed upon worship as a most important part of the church school session. A children's chapel is ideal for this purpose with separate rooms for classes and project work. Where a church seats 400 or more, the adult

chapel, used for senior assembly, for small weddings, or for other meetings of a religious nature, is also accepted as essential in a good plan.

The present insistence on chapels, project rooms, individual class rooms, and recreational facilities, makes great demands upon the church's financial resources. Efforts to meet this situation are being made in several ways. Planning must concentrate upon maximum flexibility. Rooms and groups of rooms must serve several purposes. Staggered sessions for different age groups are becoming quite common. Worship centres have been developed, and are proving to be of considerable value. Such a centre usually consists of an alcove at one end of the room. It contains a carefully selected picture or stained glass window as a centre. Below it a narrow table or altar, which may be furnished with flowers or candlesticks, is used to receive the offering. Such a centre inspires quiet and respect, and is an

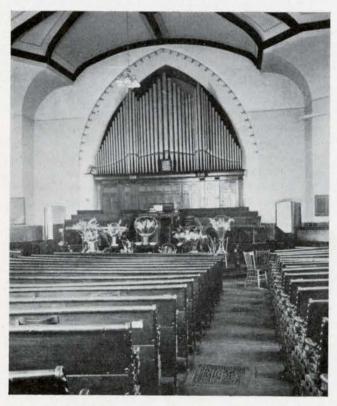
aid to discipline. When the room is to be used for other activities, the alcove is closed off by drawing a curtain.

What may be said of the church buildings of tomorrow? As surely as one believes in progress, one believes in change. The architectural character of church buildings is bound to change. As surely as one is aware of the strong traditionalism within the church, one is aware that the change will be gradual. One is also convinced that, as long as public worship is conducted from a focal centre, the fundamental proportions of length and height are likely to prevail. There is encouraging evidence on all sides of a growing demand for a higher standard of design. In the seventeenth century Sir Henry Wotton wrote: "Well building hath three conditions, firmness, commodity, and delight." Insistence on "well building" means, more than ever, insistence upon a full measure of "delight".

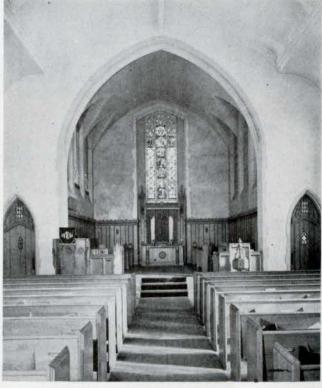
#### CENTRAL UNITED CHURCH, WESTON, ONTARIO

BEFORE AND AFTER ALTERATIONS

J. FRANCIS BROWN AND SON, ARCHITECTS



The original interior emphasizes the organ and choir. Though the pulpit is prominent the communion table is almost lost.



The revised interior with the communion table as focal centre and the pulpit still prominent. The organ and choir are less conspicuous in keeping with their relative importance.

# SYMBOLISM IN CHURCH ARCHITECTURE

By ARCHDEACON J. B. FOTHERINGHAM

A Christian Church is a symbol of the Christian Faith. As such the expression must correspond to the reality. The mission of the architect is therefore so to build, so to place, so to furnish the church building that it may be the embodiment of belief: that is the determining factor. And it must be a communication of the faith not only to the devout believer within but to the casual passer-by without. The Mayor of Coventry in outlining a plan for the rebuilding of his destroyed city sets, at its centre, the cathedral and on the radiating arteries, shrines. Once, he says, the dominating feature of the city was the castle—the symbol of feudalism, more recently the factory—the symbol of industrialism, to-day the citizen must be lifted above himself and be brought into the presence of the divine. Can the designer and the builder construct what T. S. Eliot calls "A moment not out of time but in time, transcending, bisecting the world of time"? That is the high calling of the church architect and to that end must be the aim of the designer, the architect and the building committee must be directed.

Within the Christian Faith there are diversities of interpretation and here, the subject will be discussed as it applies to non-Roman churches. What then are the realities for which according to the faith the building must stand?

The church building is primarily a house of God. We may auibble about the niceties of doctrine: we cannot quibble about the idea that the material thing is to stand for the confrontation of the divine. Whatever reality is, be it a mystery that defies definition, a beauty that transcends expression or a truth that eludes demonstration at least there are basic ideas of the divine that must dominate. Allegiance to these ideas is a sine qua non of him who builds for two hundred or two thousand worshippers. The technique of such a confrontation of the divine descends a ladder let down from heaven. It becomes a matter of bricks and stones, lumber and plastics, lengths and breadths, lines and curves. Is it too much to ask of the practical man that he order the length in its relation to breadth that the eternity set in the heart of man may find itself a home in space and time? If the building lot be limited or set in a crowded city street at least it can be occupied by that which will lead the individual upward. If the funds are scarce let what is built stand, not for tawdry imitations but for substance and honesty of reality. The church building must have a soul and that soul must leap at the beholder whether within or without and suggest by its make and proportion a possible union of the individual and his maker; itself a creation, it becomes a creator. It is the nature of the divine to communicate itself but the channels by which that communication comes may be choked with the garbage of human accumulations. Give Me, says the Creator, utterance for what I am, the sublimity of the eternities, the beauty of holiness, the truth of absolute; give me, says man, the way home wherein I may stand not in self-assertion nor lounge in self-indulgence but bow in selftranscendence: It is a meeting house with God.

But the Christian Faith goes further and insists that union with God comes through Christ, His life, death, and resurrection. It is here that failure is often seen and felt, the failure to centralize the plan whether of the outside or of the inside on the verity of christian as distinct from truth in general. The church building is not simply a place of worship; it is the expression of the divine in action; it is a sermon; it proclaims. The "good news" may be a cruciform plan that challenges: God speaks, man hears; it may be by a centre aisle that leads

and directs to the cross of Calvary, the altar of sacrifice, the ministry of the word, the rising again from the death of sin to the life of righteousness. But what, it is asked, about the human element? The choir must be accommodated, the organ must be housed, the congregation must see and hear. It is once more to the technique of the designer and builder that the purpose must be submitted for execution. The execution depends upon the resources that are available, but whatever the resources, simplicity rather than over-elaboration must be the guide. Centralization may be achieved in different ways; it may be by a window on the wall facing the congregation but the purpose must govern the choice of subject and the manner of treatment; it can become a symbol that attracts attention to itself rather than to the reality behind it; it can be overlaid with ornament or with garish colour so as to suggest a theatre or a "movie"; it may be suffused with so much human emotion by its realism that it forgets the mystery of a love that is divine and transcendent. Subordination of organ cases, of choirseating, even of the pulpit itself, must be the rule. Incarnation is the method of God; the mission of a symbol is to suggest or affirm the truth, the beauty, the goodness of a crucified living Christ, presented in an organism that expresses a vibrant love that is sacrifice.

The church building must express the spirit of man; the church is a meeting house of humanity. An old writer has said that man has eyes in front and ears at the side: God should be first and his neighbours second but in the present day emphasis has been laid upon the church as the church with ears rather than eyes. The demands made upon the architect here are of the most definite and of the most difficult kind; he must combine majesty and awe with utility and light. Who can envisage a modern church without a graded Sunday school, parlours, gymnasium, kitchen and who would want to? How can the people believe a Christian Faith which is all-embracing without an opportunity to express that faith in action? Structure follows need; it reflects the lives, the faith of the people: it is assembly for community within the divine. But as such it is not an escape mechanism wherein the spirit of man takes refuge from the sorrows and tragedies of life: it is the expression of the spirit of man in all the migrations of the spirit and as such is a homogeneous whole. It is not a mausoleum for the dead nor a morgue for the living: it is life in response to light and love and beauty in activity. So called Gothic was an epithet if not of contempt at least of contrast with the classical which had predominated before; to-day the church must express the new age in the stuff of the age. Experiments are being made in this direction but are meeting with a prejudiced reception. A building committee looks for the pointed arch even if there are no stones wherewith to build it, for lights that recall the ancient candles that serve but to reveal the darkness, for a narthex suited to a mediaevalist rather than an ante-chamber in a society that is human as well as divine. Modern facilities can flood the building with an atmosphere of eternity or direct the worshipper to the heart of his soul's desire. The creative skill of the architect can make worship abound in activity. Suppose for example the long aspiring line to suggest infinity is preserved, with transepts either actual or indicated by windows to symbolize the centrality of the faith, is it not possible to begin walls going out horizontally on each side of the main walls at the point where the transepts end and then run walls parallel with the main walls back far enough to make room for modern requirements? Canada is rich in cement and lumber; possi-(Continued on page 60)

# CHURCH EMBROIDERY IN CANADA

By SISTER RUTH, S.S.J.D.

The fine art of embroidery for distinctly church purposes has been practised in Canada since the earliest days of the French settlement at Quebec. The Ursulines, already skilled in the art when they reached our shores in the early seventeenth century, found themselves able to continue their embroidery even in the difficult and precarious circumstances under which they lived their lives. Not only did they themselves make vestments and hangings to beautify and enrich the worship in the rough chapels of the New World, but they also taught the art to their pupils at their convent schools. This was a direct transfer of the developed culture and art of the European continent to the backwoods of the New Continent.

It was considerably later—in the nineteenth century—that the church embroidery, which had for so many hundred years dignified and beautified the worship of the sanctuary and great ceremonial occasions in England, was actually done in Canada. Up to that time, much of the embroidery in use in the Anglican and other churches had been imported from the Motherland.

We may, with some justification, perhaps, call our church embroidery a Canadian art, since those who are now responsible for it are largely Canadian. Its materials and its designs, however, are still to a considerable extent English and Continental, rather than indigenous. Until the beginning of the war, lovely damasks, brocades, and silks were largely imported from English and from Continental looms. Linens, employed for many purposes in the church, were brought in from Ireland and from England. Japanese gold, used in embellishing and decorating embroideries, and made by twisting burnished gilt paper on silk, was also widely employed in this art. Embroidresses are now much at a loss as to where to turn to obtain supplies of these materials.

In the matter of design, some progress is being made in the use of things Canadian for the creation of motifs, e.g., the wild rose, ears of wheat, clusters of grapes, etc., are being employed. There is still, however, a very persistent adherence to the more traditional forms—the Passion flower, Tudor rose, lily and fleur-de-lis, as well as Celtic and Gothic and other symbolic designs. These traditional units of design of church embroidery are often similar to architectural units. This explains their persistence from another point of view, since unity of design is of such importance and should be carefully guarded in a given edifice.

There is a growing tendency to employ secular emblems and forms in both church architecture and embroidery, to the possible enrichment of the designs in use, though here wisdom and discretion must ever accompany spiritual-mindedness.

Colour has always been considered of very great importance in church embroidery. Warm or vivid or harmonious colours are able to add so very much to the beauty and suggestibility of the work. The liturgical colours—red, violet, green, white, (blue), black—are often used as the background for lovely combinations of widely varied and pleasing colours, worked out in embroidery silks, in metal threads or in materials. Satisfying colour combinations and contrasts are also obtained by the use of appliqué. Designs in damask or other materials, of approximately the same quality as that of the vestment upon which they are to be employed, are sometimes secured in position or finished by the use of the curiously-named "ecclesiastical lace" —a braid of bright or of contrasting colour, and often of pleasing design.

The effect produced by appliqué of this kind is often as completely satisfactory as that produced by very good embroidery. There is an increasing tendency to employ appliqué in this way. The expense of the vestments so designed is lessened to a very appreciable extent, without sacrificing too greatly the principles of design or much of the essential loveliness of effect of such work. It would be an unhappy thing to have this appliqué work replace real embroidery to any considerable extent, however, and yet there is a growing demand for inexpensive vestments which this method of treatment makes more possible. The newer mosaic appliqué, although scarcely embroidery, may be adapted—and indeed, has been adapted and used to a limited extent — for church purposes. Banners for processions in the church and altar frontals may be suitably and artistically made after this fashion.

Petit point, though but infrequently used today, might also be developed and employed with quite satisfactory results for frontals and possibly for the hoods of ceremonial capes.

It is gratifying to see the continued use, even though to a very limited extent, of Indian bead work, porcupine quill work and Eskimo work on skins, for vestments in the chapels and churches which serve these original dwellers in our land.

The shapes of vestments influence to some extent the satisfaction we derive from them as artistic creations. The chasuble, an outer vestment worn by the priest when celebrating Holy Communion, may be cut in either the so-called "fiddle-back", or the Gothic pattern. The latter shape is the far more pleasing of the two and is more favoured today in most churches. Surplices are perhaps the most varied of all vestments as to shape. Here it is very important that artistry be given some consideration, since this vestment is the one that is most widely and frequently worn.

In the matter of stitchery, choice is limited in this particular kind of embroidery. On coloured church embroidery, satin stitch, French stemming, couching, seeding and the long and short stitches of shading are more commonly employed. Stitchery on white materials is of even greater importance than this more striking colour embroidery. Numbers of vestments and other articles in use in the churches are fashioned of white linens or cotton materials. Indeed, linens are essential for the proper vesting of the altar and sacred vessels for Holy Communion. Both linens and cottons are employed for surplices and cottas for clergy and choir. Skill in stitchery on "white work" is an essential in church needlecraft. Simple but very perfect hemming, smocking, gathering and shirring-indeed, plain sewing - are necessary for the least pretentious place of worship. Where time and means are available, many of the stitches used on silk embroidery may also be used on linens.

As in architecture, so also in church embroidery, there is scope for the use of widely varying artistic and technical gifts and training. In both there is also the opportunity—indeed, the necessity—for that spiritual creative quality which is the outcome of a life of devotion and prayer in its fullest conception.

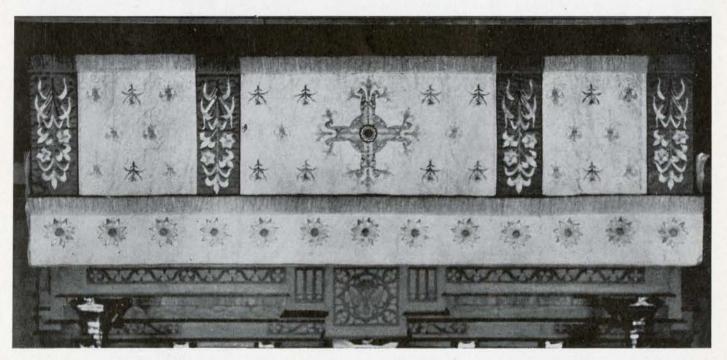
Can we look for a modern and Canadian School of Church Embroidery? Up to the present, there are some few indications of a tendency in that direction. This art is, however, one of the most conservative. It is practised to a large extent in the work rooms of religious orders, which safeguard its traditions. Nevertheless, there is a feeling even here towards simplicity and boldness and there is some effort to employ Canadian and local material for design. There is wide scope for creative and imaginative genius to conceive a modern Canadian church embroidery which will still employ the cunning skills of perfect stitchery. There is scope as well for the development of a School or College of Church Needlecraft, similar to a certain extent to the schools in England and on the Continent.



FRONT VIEW OF THE CEREMONIAL WHITE COPE WITH HOOD MADE BY THE SISTERS OF ST. JOHN THE DIVINE, TORONTO



BACK VIEW OF THE CEREMONIAL WHITE COPE AND HOOD MADE BY THE SISTERS OF ST. JOHN THE DIVINE, TORONTO



ALTAR FRONTAL, EMBROIDERY ON SILK. CHURCH OF ST. JOHN THE EVANGELIST, MONTREAL. MADE BY THE SISTERS OF ST. MARGARET, MONTREAL

## STAINED GLASS AS DECORATIVE ART

#### By ESTHER JOHNSON

The successful practice of stained glass as one of the arts subsidiary to architecture depends on a knowledge of the principles of design and an unerring artistic sense, combined with a thorough understanding of the material, execution and craftsmanship necessary to carry out an original idea.

Glass painting is no "lost art" in the sense that the secrets of processes and colours died with their Gothic masters. Materials and facilities are at the disposal of the contemporary glassworker that medieval man never had; and whatever is found wanting in modern work is due on the one hand to a lack of feeling for decoration, and on the other, a mistaken attitude towards stained glass windows on the part of a public which demands windows with no other qualifications but sentimental drawing and colour.

Few things can do more harm to the interior of a church than windows that are without the important and intangible qualities that are found in good glass of all periods, whatever the style may be. Glass is a sensitive and beautiful medium. It must be remembered that it functions only with light falling through it. In a sense the glass designer's problem is solely the one of using that light, as a musician uses sound to create a symphony; so the worker in glass makes a composition in light and colour.

To control that light by both bold and subtle arrangements of colour that play against each other; to modify and stress this by painting with a black pigment on the glass so that the window glows and smoulders, flares up suddenly here, dies there, and comes alive again with changing lights and weathers —is to use glass to the enrichment of its subject, its setting, and in accordance with its own nature as a decorative medium.

Expression of subject matter should measure up to the exacting demands imposed on any art. Nowhere is weak sentimental interpretation and bad drawing more out of place than in stained glass, and nowhere is it more often found and accepted. It is so easy to appeal to people with a blend of religious feeling and patches of bright colour, because the nature of the subject exerts an influence on the mind which does not always analyse the portrayal of religious themes with objective clarity. To allow a window to do only this, is to let it fall very short of the function of glass in church art.

Treatment of subject matter is most important. There should be an absence of naturalism in the drawing. It cannot be said too often that the realistic picture window is a mistake and should be completely discouraged. It cannot embody the characteristics of true glass work. Apart from any other considerations, a law of optics requires a style and breadth of drawing that will not wash out at a distance under the strength of the transmitted light that always "eats away" and reduces the thickness of black lines.

Evocative suggestion with no vagueness of intention, is far more to be desired than an easily observed naturalism that has no further implications and becomes empty and banal on a short acquaintance. The meaning of the concept should be set forth with the clarity and intensity that is integral to poetic expression. This, clothed in an arrangement of design and colour satisfying in itself, should have the strength to present itself continually as a fresh and living stimulus.

The close relationship between a window and its setting must be recognized. A window good in itself can be injured by its position and lighting. Strong cross light pouring on it from opposing nave or clere-story windows filled with raw unpainted glass, can drain all colour from a window. It is safe to state that if the leading shows up not as a black silhouette, but can easily be seen as silver-grey metal bands, then the window is not having a fair chance and is losing out under the influence of the glass-worker's bogey, "surface light".

The church should if possible be so oriented that the dominating window be given the best possible chance, receiving the most helpful light during the morning service. The glass designer can overcome many difficulties that arise, but to find well placed windows of fine proportions is an incentive to a good designer, who is not a mere purveyor of stained glass, to work into the feeling of the building and to complete the glazing as a decoration that is an intrinsic part of the architecture.

When it is not possible to install stained glass windows for some time, and the question of so-called "temporary glazing" comes up, the glass designer can give help in planning windows, and in avoiding the crude effect often seen when circumstances make the use of inexpensive glass necessary. Good patterns in lead and textured glasses that suit the style of the windows can be very pleasing. Ordinary machine made glass with no variety of texture and surface should not be used in any church, where of all places, good taste and sincerity of purpose in all aspects should be evident. A window does not have to be elaborate to qualify as good glass. Many churches would be better off without many of the gaudy futilities that fill them, and a Colonial church should be left with its original squarepaned windows which become it far better than even the most successful stained glass window. Not all churches call for coloured windows, but they all need decorative and suitable glazing in keeping with the architecture.

Since the windows in a church exert a great influence on the interior, it is to the interest of both architect and congregation to regulate what shall go in. A plan drawn up under professional guidance that controls future memorial giving, is of immense help in keeping, and adding, to the mood of the building. In the absence of a plan, well meaning donors present windows unrelated in design, colour, proportion, treatment and subject matter, and all quite un-co-ordinated with the mood and style of the church. The windows instead of integrating themselves with the building have become a patchwork; a muddle of ideas, and an exhibition of differing styles of painting and design. With a good scheme drawn up and adhered to by the custodians, the windows would then function as they should; as a compliment and a complement to their setting. In an ordered scheme the stronger windows support the weaker and a less successful window becomes only a quiet note in a general harmony.

There are encouraging signs of an improvement in the attitude of both the professional and lay public towards the problem of the stained glass window as a decorative art that can give much to the beauty of a church, and if educated taste will demand good glass, and learn to recognize it and enjoy it, it will stimulate the study and practise of glass work as a vital force in church art.

ESTHER JOHNSON was born in Belgium and educated in England, Canada, and the United States. She worked for some time at the Royal Ontario Museum. Travel in England, France and Mexico gave opportunities for study of church art and architecture.

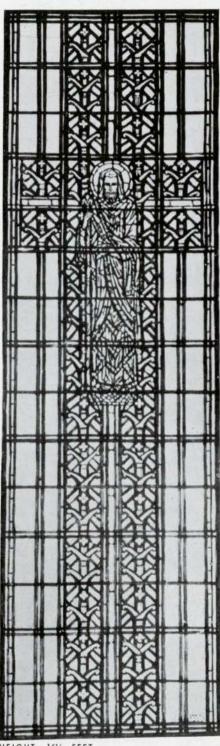
In 1934 she joined Miss Yvonne Williams, a stained glass designer and painter who had opened a studio-workshop in Toronto.



KING DAVID

VERNON PREPARATORY SCHOOL

VERNON, B.C.



HEIGHT: 161/2 FEET

CHAPEL, MERCY HOSPITAL TORONTO, ONT.



HEIGHT: 51/2 FEET

THE ANNUNCIATION

CHRIST CHURCH, WINDERMERE, ONT.

YVONNE WILLIAMS

ESTHER JOHNSON

## PLANNING FOR THE CHURCH ORGAN

By STEPHEN STOOT

With regard to the proper position for an organ it may safely be said that where the singers are there the organ must be also. All musical authorities will agree on this subject. The ideal location is the one usually found in Roman Churches where the instrument stands in the open in a west gallery. As a rule an organ to be well heard must be well seen, every obstruction to sight will likewise be an obstruction to sound. From a tonal standpoint this gallery location is 100 per cent. perfect. Chancel locations are seldom if ever so perfect as the gallery arrangement but the rule regarding singers and organ must be followed. The following apt remarks by an English writer sixty-five years ago apply to-day in all cases. "What is a Church built for? This I will try to answer, hoping that others will agree with me. It is built as a place in which divine worship is to be celebrated, and worship it must be remembered is not the same as prayer. A magnificent musical service, in a magnificent place, is the highest exemplification we can give of divine worship, and not only the clergy, but the people are interested in it, and assist in some way or other. In arranging a Church the ability to render magnificent worship should not therefore be impeded".

As the plans of churches vary considerably both in disposition of parts and in dimensions, it is, of course, impossible to give hard and fast rules or instructions respecting the location or accommodation for the organ in or adjoining the choir or chancel. In churches already built the provisions made by their architects practically settle the question of location in almost every case, and all too often they are very inadequate and unsuitable for the reception of an organ in keeping with the church.

Owing to the thoughtlessness or the lack of knowledge of church architects in matters pertaining to the organ the very name organ chamber has become an abomination to organ builders and all interested in church music. Mistakes have been made without number where there were no difficulties to encounter, and where properly proportioned and constructed organ chambers could have been erected just as easily as insufficient ones. If the following conditions are observed in the planning and construction of an organ chamber no serious objections can be advanced against its introduction; provided, however, the mistake of having an organ of too large dimensions is not made.

Firstly, sufficient floor space must be provided to allow the organ to stand without the slightest overcrowding of its parts and with sufficient space to give easy access to all parts.

Secondly, ample height must be given for the organ to stand at the most favourable elevation, and yet leave considerable space above everything for the free emission of the sound from all the divisions of its pipe work.

Thirdly, arches or openings of the largest possible dimensions should be provided, the chancel opening being carried up to the full height of the ceiling of the chamber so that no sound may be locked in (or pocketed) above the organ. Whatever shape the arch or upper part of the main opening may be, it is desirable that the ceiling of the chamber follow it closely, and, if possible, at the same level. When the organ chamber floor is considerably higher than the chancel floor, a second opening may be made toward the body of the Church and this also should be made as wide and lofty as circumstances will permit.

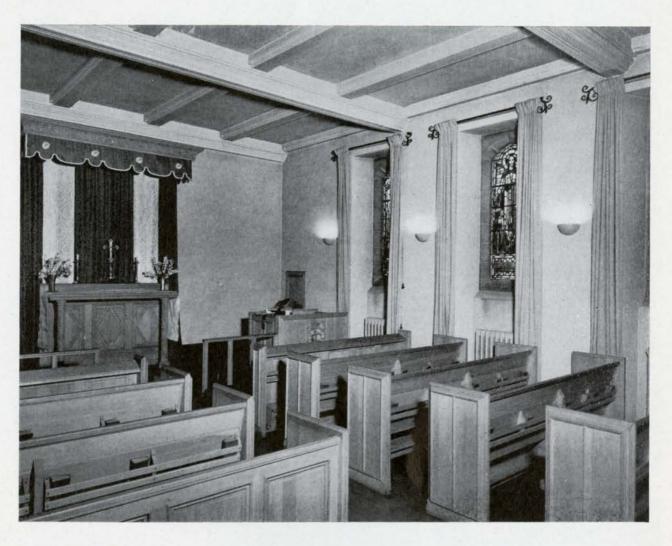
Fourthly, every precaution should be taken to prevent damp and to secure an equable temperature within the chamber. The best organ chambers are those which have their external walls built double with an air cavity between. All the inclosing walls and ceiling should be either lined with narrow pine boards, securely nailed and varnished, or metal lathed and well plastered and subsequently oil painted and varnished. Windows in the walls are to be avoided because they create local currents of cold air in winter and warm air in summer which throw the pipe-work out of tune. Should the architect, for external appearance, have inserted windows in undesirable positions, they should either be boarded over on the inside or furnished with an inner screen of glass. It is advisable to construct organ chambers when small, without windows. Radiators in an organ chamber which is crowded with organ work are also a source of great trouble. Adjacent pipe-work is thrown out of tune and woodwork and mechanism become checked and dried out, in fact a number of organs have had portions of their interior work ruined through radiators being too close to important chests and mechanisms. In cases, however, where the chamber is very roomy, radiators can be located successfully, but even then they should be under some form of thermostatic control. A good rule to follow in the planning of area and height of an organ chamber is as follows:—An organ occupies approximately ten square feet per stop (or register) in area with an average height of fifteen to sixteen feet. The area however, should always be greater in width than in depth, and the depth should not be less than eight feet six inches.

Example:—An organ of 20 speaking stops will occupy a floor area of 200 square feet. The chamber should therefore be approximately 20 feet wide x 10 feet deep x 16 feet high. Somewhat larger dimensions for the same number of stops would render it possible to include a radiator if absolutely necessary, and a foot or two more in height would enhance the tonal results as before explained.

When a height of 22 feet or more is available the organ parts can be doubled-decked and approximately twice the number of stops can be accommodated in the same area as that outlined in the example. That is to say, that with a floor area of 20 feet x 10 feet, and a height of 22 feet, an instrument of 40 speaking stops could be accommodated.

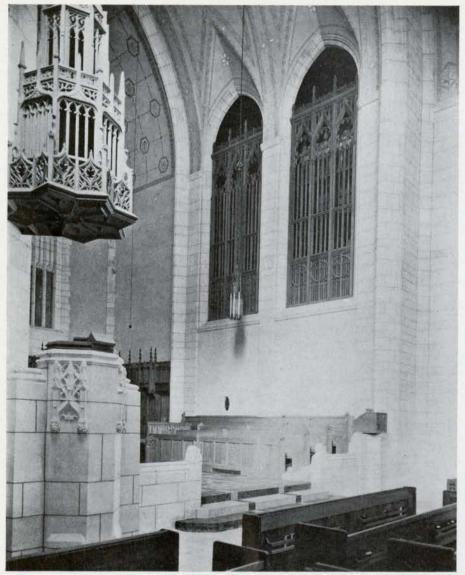
The position of the console should be decided having full regard for the following considerations. The organist should be in a position to hear well, both his choir, and his organ. He should be able to see his choir, and in liturgical churches, his clergy who may be serving at the Altar. He should be able to hear the congregation at least fairly well, and should have a tolerably good view of the nave to enable him to keep his eye on processions or other functions taking place therein.

STEPHEN STOOT was born in the West of England in 1881 and received his education and served his apprenticeship as an organ builder in the city of Truro, Cornwall. He left England for the United States when twenty-five years of age. He became connected with the firm of Casavant, first in their branch factory in Michigan, and after it was closed, towards the end of the First World War, he crossed into Canada and has been connected with the main St. Hyacinthe firm ever since. At the present moment, he is Technical Director with that firm.



CHAPEL, GRACE CHURCH ON-THE-HILL, TORONTO, ONTARIO

ALLWARD AND GOUINLOCK, ARCHITECTS



INTERIOR OF CHURCH OF ST. ANDREW AND ST. PAUL, MONTREAL, QUEBEC

FETHERSTONHAUGH AND DURNFORD, ARCHITECTS

DETAIL OF CHANCE



Photos: Associated Screen News Ltd.

DETAIL OF CHANCEL RAI

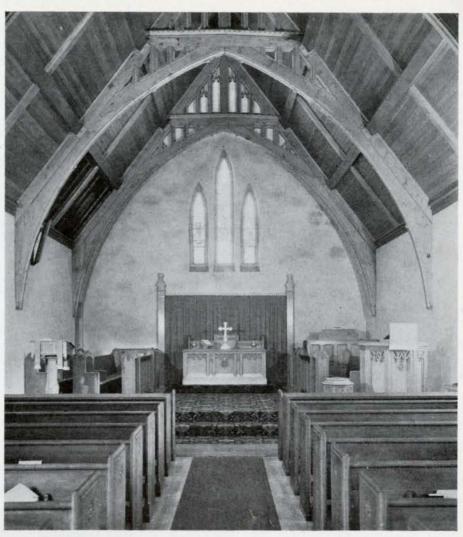


FLOWER VASE, CHURCH OF ST. ANDREW AND ST. PAUL, MONTREAL, QUEBEC DESIGNED BY FETHERSTONHAUGH AND DURNFORD, ARCHITECTS

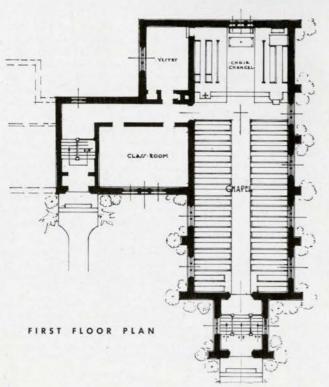


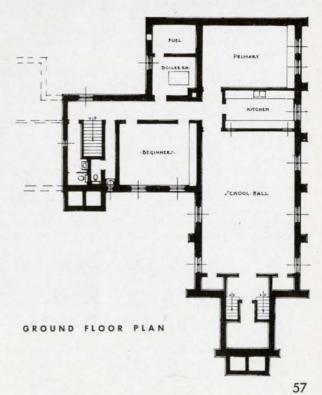
CHAPEL, FOREST HILL UNITED CHURCH, TORONTO, ONTARIO

J. FRANCIS BROWN AND SON, ARCHITECTS



INTERIOR





# THE HEATING OF CHURCHES

By R. P. ALLSOP

The heating of a church, because of the intermittent occupancy and high ceilings, presents problems peculiar to this type of building. It is desirable, therefore, to provide some system which will raise the inside temperature probably 30°F. within a few hours. For economical reasons as well as to decrease the "heating up" period every endeavour must be made to keep the heat near the floor instead of rising to the ceiling.

The following types of systems have been used in church heating, and we propose to discuss each one in turn—

- (a) Gravity hot air,
- (b) Forced warm air,
- (c) Cast iron radiation,
- (d) Fin type Convectors,
- (e) Radiant heating,
- (f) Combinations of the foregoing.
- (a) Gravity hot air installations provide little, if any, control of the air flow, air delivery temperatures are high, tending toward high ceiling temperatures and discomfort to those seated near the outlets. Headroom is liable to suffer in the basement due to the runs of gravity ductwork.
- (b) Forced warm air eliminates most of the disadvantages associated with the gravity system, and has many features to commend it for church heating, especially when combined with cast iron radiators or convectors for heating the smaller rooms. We have the option of using a direct fired furnace with filters and fan, etc., or a steam boiler with blast coils, fan, filters, etc. The direct fired unit has certain advantages which should not be overlooked. A steam boiler can be used to heat domestic water by means of a convertor, and also for the radiators or convectors. Furthermore, using steam as a heating medium makes it possible to zone the system by the use of booster coils. By locating the air supply grilles or registers in window sills or in walls, about 7'-0" above the floor, and with the return openings in the pew ends on the centre aisle, good air circulation is maintained with comparatively low ceiling temperatures, and most important of all, the "heating up" period is reduced to a minimum.

One point to be borne in mind—and this applies to all types of church heating—is that the capacity of the plant must be greater than that which would normally be used to offset the heat loss of the building. This, of course, is to take care of the heat absorbed by the building fabric and furnishings, etc., during the period when the building is being raised in temperature prior to use. Recent tests carried out by the A.S.H.V.E. show that to heat a church from 32°F. to 70°F. in three hours requires a heating plant 1.73 times that normally used. This type of system can be readily modified to provide summer cooling, provided that the duct work and fans are sized accordingly, and space provided for cooling coils. This has been done in several churches on this Continent, two of the better known installations being the Fourth Church of Christ Scientist, Indianapolis, and Our Lady of Sorrows, Chicago.

- (c) Cast iron radiation has been used extensively without any trouble but invariably causes high ceiling temperatures and has the inherent disadvantage of being much more sluggish in heating up the building than the fan blast system. It occupies floor space and is often difficult to place without causing obstruction.
- (d) Fin type Convectors are more readily recessed in walls and below windows, and do not give off the radiant heat

associated with cast iron radiators, which can become very uncomfortable to the persons seated nearby.

It is reasonable to suppose that convector units, due to the accelerated air flow through them, will heat the air in the rooms faster with possibly slightly lower ceiling temperatures than standing radiators, although the standing radiators will heat up surrounding objects faster due to the radiant heat.

(e) Radiant Heating—in this country at least—is not used very extensively, although a great deal of research work on this subject is being carried out at the present time.

Liverpool Cathedral is heated by this method, using warm air as the medium. The air is blown under the floor through channels formed by building concrete walls  $12^{\prime\prime}$  high,  $10^{\prime\prime}$  apart, and  $2^{\prime\prime}$  thick. These small walls support the floor proper which consists of  $1\frac{1}{4}^{\prime\prime}$  slate slabs with  $\frac{3}{4}^{\prime\prime}$  marble for the finish. This forced air system is entirely sealed and does not escape into the building.

Some interesting facts in connection with this building are worthy of notice.

The Cathedral is about 110 feet high and the Triforium walkway about 97 feet high. When the temperature at the breathing line is 60°F. the temperature at the triforium level is  $58\frac{1}{2}$ °F. It is also noticed that during cold weather it takes 36 hours for the temperature in the church to fall 1°F. due to the thermal storage capacity of the structure. Due to the even temperature of the floor, no flickering of candles takes place due to down draught, etc. As a matter of interest, the ideal temperature for an organ is supposed to be  $58^\circ$  to  $60^\circ$ F.—a good excuse if the organist complains of being cold.

The new Community Church in Kansas City is heated by floor panels of welded  $2^{\prime\prime}$  pipe through which water is pumped at a design temperature of  $170^{\circ}$ . The hot supply pipes are located beneath the seats and the somewhat cooler return pipes are placed beneath the feet. In this case the piping is placed in a  $5^{\circ}$  layer of crushed stone, covered with  $1^{\prime\prime}$  of sand and a  $1^{\prime\prime}$  layer of re-inforced gunite. As in the case of the Liverpool Cathedral, it has been found that the floor to ceiling differential is extremely low. This piping was so arranged that chilled water can be circulated during the summer for cooling purposes. The quantity of pipe coil is just about sufficient to take care of the sensible heat load, and additional fan blower units have been provided to handle the latent load.

(f) Combination of any of the foregoing systems can be made to advantage, depending upon the local conditions and requirements. Unit blowers and heaters are much more satisfactory for vestibules of churches having fairly large congregations than radiators or convectors, due to their quick "pick up".

We believe that some type of humidification system is desirable in a church even if only for the preservation of the furnishings, woodwork, etc. This, of course, is easily accomplished in any of the fan systems.

We would suggest, that, bearing in mind our extreme climate and the limitations of single glazing, 30% relative humidity with a dry bulb temperature of 68°F. should be satisfactory.

R. P. ALLSOP, Registered Professional Engineer. Born 1910, Rotherham, England, and educated at Hunters Bar, King Edward VII Grammar School, and Central Technical College, Sheffield. Worked one year with Davy Bros., General Engineers and Boilermakers. Arrived in Canada, 1930. Worked for Darling and Pearson, and Mathers and Haldenby, Toronto, as Mechanical Draughtsman and Engineer, respectively. Started Consulting Practice, 1939. Hobby—Sailing.

## CHURCH LIGHTING

#### By PETER THOMPSON

The lighting of a church interior is directly affected by more varied factors than may be found in most other types of buildings, the first requisite being that the lighting must be of a solemn and restful nature. Further variations are influenced to a degree by denomination and requirements for specific purposes, such as altars, pulpits, choirs, etc. Other important factors are that fixture design is influenced by the architectural characteristics of the building, the efficiency and utilization of the light emitted by the fixture together with the number of fixtures required to light the interior.

While it is both desirable and important that all lighting fixtures for the complete church building be of appropriate and harmonious design, the nave is most important. It is in this part of the interior that all emphasis in design will be concentrated. A well designed lighting installation will further enhance the beauty by blending, and accentuating features embodied in the nave. So much of these qualities can be completely lost by poor or improper lighting.

Lanterns and fixtures of small lamp clusters have, for the most part, made up nearly all nave lighting. The small lamp cluster may be considered obsolete and rather inefficient. There is very little, if any, light control to this type of fixture and maintenance and relamping is very difficult. The lantern type fixture can be made up having aesthetic qualities conforming to Gothic or most designs as may be selected by the architect. Furthermore, by incorporating light control equipment within the lantern, high levels of efficiency are attained. Generally speaking, the lanterns may be of cylindrical, hexagonal, octagonal shapes, having vertical side panels of coloured glass and equipped with some high wattage lamp. By incorporating an inner reflector of prismatic glass the light is redirected in a controlled pattern down on the pews, but still emitting sufficient light to illuminate the side glass panels in the fixture. A further feature may be added by having not only the large lamp in the lantern but also two or more smaller types mounted directly above the reflector. This will permit changing the light intensity within the nave as may be desired during the church service. Electrical circuits and switches will, of course, be provided to obtain such control of the different light intensities.

Many church designs will permit indirect methods of lighting with or without visible light sources. In fact, this method may be used to do the entire lighting or supplement any direct forms of lighting, such as outlined in the lanterns. Furthermore, ceiling configurations, domes or paintings on the upper walls or ceiling can be given more prominence with indirect lighting. Many church designs provide a natural cove or ledge around the upper side wall of the nave, behind which the lighting equipment may be concealed. Indirect wall type urns are also successfully applied by mounting at a predetermined height on the side walls or partially recessed in the wall. However, the indirect and cove lighting, to be efficient and successful, requires the most careful engineering and the selection of proper light control equipment. The intensity of light in cove installations can be controlled simply by staggering the lamp circuits and switches as desired. Resistance dimmers of sufficient wattage capacity are extremely good for gradual changes in light intensity.

A recessed form of lighting may also be applied to the nave where a relatively plain effect is desired in the architect's planning. Flush type fixtures, having prismatic glass lens or louvres behind which another reflector is recessed in the ceiling, are very effective. These fixtures are inconspicuous as all that is seen on the ceiling surface is either the flush lens or the louvre. The actual light reflector equipment is recessed above the ceiling. Recessed lighting may be used in naves where deep beams form a valance, and no visible fixtures are required that would detract from the planned architecture. Very important is the fact that recessed fixtures may be arranged in groups to form a ceiling pattern and the light controlled to provide uniform distribution over the desired floor area. Consideration should be given to the maintenance and relamping of recessed lighting by making the space above the false ceiling accessible for such service.

Some old style fixtures, particularly lanterns, can be modified to include an efficient inner reflector with a suitably sized lamp, thereby obtaining the desired results without offence or injury. It may be equally as practical, in some cases, to equip the lantern with lamps having silvered necks which act as a self contained reflector. Such a change does not require anything more than a new lamp but it is not always quite so simple. Where changes cannot be made in the old fixtures, and it is required to retain the fixtures, supplementary methods of lighting would necessarily be applied. Either some forms of concealed direct light or indirect light, as previously outlined, would provide adequate lighting, and the old fixtures relamped in low wattages to retain the desired effect.

Supplementary light sources have many applications, such as high lighting of the chancel or altar, pulpits, choir lofts and music stands. However, their uses are so varied that each case requires almost individual treatment. Ordinary window lighting reflectors of silvered mirror glass, having asymmetric pattern of light distribution, are very good fixtures for lighting of the chancel or altar. The equipment is generally concealed behind the valance formed in the arch. Portable or fixed indirect lighting urns are but another method which may be employed for lighting of the chancel. Pulpit lighting can be very poor as small lamps have excessive flicker and particularly so on 25-cycle electrical circuits. Controlled spotlights concealed in the ceiling or behind a valance can be focused on the pulpit and produce excellent lighting results.

During evening services, the stained glass windows in the church lose all their beauty. Splendid results have been achieved by using floodlights mounted externally. Careful arrangements of such floodlighting is necessary to provide uniform brightness over the entire window area and to avoid high spots caused from incorrectly placed floodlights. Too much light on the windows will create perceptible light beams and possibly distorted shadows within the nave.

During the planning or designing of a new church building, provision can be readily made for most of these lighting features, which contribute to a well lighted church. However, there have been actual cases where, because the lighting fixtures were the last things to be installed, a compromise is made for the desired type as the budget or appropriation was exceeded during construction. The actual cost of good lighting equipment represents but a minute fraction of the overall cost, therefore, it is vitally important to the finished job that all initial planning is rigidly maintained.

PETER THOMPSON, Manager Illumination Division, Northern Electric Co. Ltd., Toronto, has been associated with the Northern Electric Co. Ltd. for over ten years and has had extensive experience in the field as an illumination specialist. The field experience brought him into direct contact with architects and builders of churches, as well as with committees and officers of the church.

## PERIODICALS SHELF

#### By ANTHONY ADAMSON

Our periodicals arrive on the 4th, 5th and 6th. The publisher wants this column by the 6th or 7th. Naturally this leads to bad humour and sometimes, like last month, nothing is written. This is quite satisfactory to us and no doubt to you, dear thumber, but we regret that the publisher and editor insist—it impresses the advertisers perhaps into thinking we all really read their magazines.

Architectural Review, January. We strongly recommend an article in the December issue on ornament, a modern architecture for those who use it. There is an interesting follow-up in January called "Exterior Furnishing or the art of making urban landscape". There is also a very pleasant school near Stockholm and a small Polish house both well illustrated, besides a section making a plea for the preservation of the new English ruins. The Review for February has rather foreign material for us who usually look for something for our stock in trade in these architectural magazines, and we don't know what to say. If you like The Review you will like this one on Romantic 19th century cottages, wartime utility fabrics, an essay on the Picturesque, and a Czech filling station. If not, you will think the editor crazy.

The Architectural Record, January, has a fairly comprehensive study on Hotels, "Revitalizing for V-Day Revenue", the name so repelled us that we did not read it, but it is probably all right. There is a section on a prefabricated housing development at Sacremento of some interest, and an article "The Road Back to Normal Building" by Abner Ferguson of the FHA, which we found faintly irritating. The Record for February has, as its chief sectional study, filling stations and roadside restaurants, which we suppose is interesting to those interested in filling up helicopters with what we believe is called gasoline. Our own chief interest was in the articles on economics, by Dorothy Thompson, and an architect, A. C. Holden. Both are charming essays quite out of step with the dangerous orthodoxy of most economists. Dorothy wants to have a Peacetime Consumption Board take over from the WPB because she says the only time that the United States has been fully prosperous is when 60% of its products are being thrown into the incinerator of war. She points out that "organized production cannot survive an unorganized market", and the wants to get organized consumption going chiefly of the big things architects make. Holden's whimsical credit theory in "Long Term Credit for Urban Redevelopment" is stimulating. Who is who to say it won't work? Joseph Hudnut has come across again with an amusing article called "Pressure Planning", encouraging planners to take up the skulldudgels of politics.

The Architectural Forum, January, was quite interesting; South Sea Island Barracks, Washington Housing, an excellent Swiss Primary School were all worth looking at, but we liked most "Planning the Post-War House", which we recommend for reading. It shows the evolution since 1911 and gives some seven selected examples for "operative" builders' education. "Horse Sense, Planning. III" is an elaborately worked out lesson in apartment planning economics. There is also a thorough tabulated survey of prefabricators' opinions on the future of their product, which is of some interest. The Forum for February came in just too late for us to read, sorry.

Pencil Points, January, has two housing projects of very different types, and a very thorough, well-illustrated lesson in "Planning Against Noise" by a British architect, made for The Building Research Station, which we recommend reading. The Town Plan of Detroit, which began to be examined in detail last month, continues this and for five more months to come. Pencil Points for February is not here.

There are a number of interesting advertisements about, especially those to do with insulated windows, a Monsanto outside venetian type screen and uses for Formica.

#### SYMBOLISM IN CHURCH ARCHITECTURE

(Continued from page 47)

bilities in plastics invite adventure and in other lands the genius of architects has already discovered ways and means whereby modern materials combined with modern methods can create the divine in time and space. "Know what you have to do and do it" is the rule for the architect of church building; his is the art so to dispose and adorn the edifice raised by man that humanity may reach the divine. "Heaven doth with us as we with torches do. Not light them for ourselves."

"Spirits are not finely touched but to fine issues".

ARCHDEACON J. B. FOTHERINGHAM is on the staff of Trinity College, Toronto. His subjects are Systematic Theology and Homiletics. Born in Scotland, his Universities are Glasgow and Toronto. As Archdeacon in Huron Diocese he was convener of a committee on Church building. He was Rector of Grace Church, Brantford, for sixteen years. Grace Church in Gothic style, with massive stone tower and twelve bells, its interior furnishing and modern parish house, is a sample of what is being done to-day.

#### UNUSUAL PROBLEMS IN PRACTICE

#### "THE MYSTERY OF THE DRIP"

This mystery required a great deal of expert sleuthing to discover the cause, as no moisture showed anywhere. The client mentioned that when having a bath he sometimes heard water dripping, and we suggested it might be condensation caused by heat travelling up the local vent during the cold weather, but on making further enquiry it was revealed that the drip occurred only when it happened to be raining. On investigation, it was found that the local vent pipe inserted in the chimney had been left projecting a little inside the lining of the flue, so that the rain hit the projection and telegraphed the sound to the bathroom.

This little matter would hardly have disturbed most clients as they usually have something more important to worry about—such as paying the "piper"—but he insisted upon opening up the chimney and having the pipe withdrawn the half-inch or so.

#### "BRAZIL BUILDS"

An Exhibition of Brazilian Architecture opens at the Fine Art Galleries, Eaton's—College Street, on Monday, March 20th.

The Brazilian Government leads all other National governments in its discriminating and active encouragement of modern architecture. This is the conclusion reached by Philip L. Goodwin, F.A.I.A., noted New York Architect who spent several months in Brazil last summer making a survey of its architecture for the exhibition on Brazil Builds, which he assembled for the Museum of Modern Art in New York.

Although the emphasis is on modern building in Brazil, most of it erected in the last decade, the older architecture has not been neglected, for the exhibition embraces a period of almost three centuries, from 1652 to 1942.

The Exhibition consists of enlarged photographs, architectural renderings, drawings, plans, maps, and some models. Admission Free.

# THE PROVINCIAL PAGE

#### ALBERTA

The development of self-contained neighbourhood communities has been much advocated in discussions regarding the future improvement of cities. At the present time in Edmonton two lines of approach to this subject are being pursued.

The Town Planning Commission has sent to the City Council a recommendation for the reservation of more than thirty additional neighbourhood parks. Definite locations have been suggested. These have been determined solely by opportunities offered by blocks which are entirely city owned, with the result that in a number of cases they are not in close neighbourhood to the schools. It has therefore been pointed out that by means of some trading of privately owned but vacant properties for city owned properties elsewhere the parks and schools may be brought close together in several of these cases. This city has the peculiar advantage that there are already twentyfour community leagues in various parts of the city fairly covering the residential areas. The school boards and the Federation of Community Leagues have been invited to co-operate with the Town Planning Commission in fixing the final location of the proposed parks. It is hoped in this way to stimulate local interest and to receive useful local suggestions.

The other line along which the consolidation of communities is being attempted is the inauguration of an Adult Education Association. This is at present in a purely experimental stage. It proposes to start on February 21st. Its programme calls for the night use of the public schools. This has been granted in the one case where the experimental start will be made. This phase of its work is popularly referred to as the "Lighted Schoolhouse" idea and is proposed as an answer to the common question "Why do our school buildings stand unused half the time?" The promoters in this case have a supply of documented films including a new one on Town Planning. The hope is that eventually every public school will be used in the evenings for a great variety of matters of value to the adult public.

A proposal has been made by the School Board to the City Council for the combination on one site of the principal High, Technical and Commercial Schools which at present are somewhat scattered. Supporting and extending this proposal the Town Planning Commission has recommended the reservation of a very considerable area around the proposed site so that it would eventually include military training, since the Prince of Wales Armouries and a number of temporary military hutments are immediately adjoining. Extensive playgrounds and a swimming pool would also be well placed here. There is little privately owned property in this large area fairly central in the city and easily accessible from all quarters. It clearly offers exceptional opportunities.

Cecil S. Burgess.

#### MANITOBA

At the Annual Meeting of The Manitoba Association of Architects held at the Fort Garry Hotel, Winnipeg, in January, E. Fitz Munn was elected President and George Teeter, vice-president. The other members of the Council being C. W. U. Chivers; Wm. Fingland; L. Green, R. E. Moore; M. S. Osborne; Ed. Parkinson; D. A. Ross and J. A. Russell.

The matter of housing came in for much discussion, as to whether the Architect could be of any material assistance, considering the number of stock plans and specifications the public have to draw on. However, the matter was passed on to the Council for attention.

Post-war construction was also considered but it was difficult to find any definite line of procedure. Only guesses could be made at conditions even a year from now. Everybody seemed to think that building would be good after the war and even now some projects would go ahead if the Controller of Construction would ease up on permits, but whether these same projects would stand to wait is another matter.

At the dinner which followed the meeting, the guests were Mr. H. S. Rimmington, President of Professional Engineers; Mr. W. McPhillips, President of the Association of Manitoba Land Surveyors; and Mr. H. M. White, President Winnipeg Builders' Exchange. Also fourth year students from the Architectural Department, University of Manitoba.

The speaker of the evening was Professor Wayne who gave a detailed and interesting address on the economics of the present day as affected by the war. Another interesting item was some fine coloured moving pictures shown by Professor J. A. Russell.

E. Fitz Munn.

#### ONTARIO

Some reference to an unfortunate newspaper report about architects and their abilities in planning hospitals was made in the Ontario letter last month. We are happy to say that this matter has been straightened away to the satisfaction of all, we hope. At any rate, a letter from the author of the remarks has been sent to the papers and to such distinguished persons as the Prime Minister and the Minister of Public Works. The O.A.A. is to be congratulated in handling this matter in such a diplomatic way.

Last Thursday some thirty members of the Toronto Chapter met for lunch at the University Club and heard Mr. Creston Doner, Director of Design for the Libby-Owens-Ford Glass Co., tell of the new developments in glass manufacture and what to expect in the post-war period from this building material. In thanking the speaker, Mr. Adamson remarked that the future of window glass seemed promising enough to sell stock in Venetian blinds short. We might add that glass will have to blossom forth in many new forms and colours to keep pace with the sartorial splendour of this representative. He is barred from all golf tournament competitions for the best dressed man.

The Toronto Chapter Executive is beginning to think of a suitable speaker and an available place for the Annual Meeting which is to be held in May. In these days of labour shortages and independence, the place seems to be more difficult to find than the speaker but we would welcome suggestions on both from any interested members.

A point of interest to all architects in the province is the question of control of design for buildings in Toronto. A few months ago the Toronto Chapter Executive met with Alderman Bogart who had suggested such a scheme to the City Council. We were in favour and made our recommendations to the City Building Commissioner who, in turn, prepared it for presentation to the Provincial Government for Enabling Legislation. The Home Builders' Association immediately attacked it on the ground that architects would pass on the design of all buildings to be erected in Toronto. Such is not the case or the intention of either the Building Commissioner or the Toronto Chapter Executive. The intention is made clear by quoting from the

Chapter letter to the Commissioner—"establishment of a Board of Architects to which would be submitted plans of all buildings on the suitability of which the City Architect might desire the advice and assistance of his private practice colleagues" and further—"that the Chapter's approval would be contingent upon the Board of Architects' appointment being approved by the Toronto Chapter." This would mean that the City Commissioner would have the right to pass on the architectural appearance of buildings as well as the structural design and in doubtful cases could call for the assistance of a board of architects. We feel it is a step in the right direction and hope it becomes a city by-law.

Prospects of post-war jobs are increasing weekly in Toronto and quite a few architects are busy now on post-war planning. The difficulty will soon be in obtaining draughtsmen for this work but that should seem easy in comparison with the construction control and labour shortage trouble that we have been through. Altogether, architecture is beginning to show signs of restored health.

Earle C. Morgan.

#### **SASKATCHEWAN**

Perhaps the apparent glow of a dawn heralding in the coming day for the Architect is not a false one. Definite indications are appearing to justify the rising optimism on his part. The "Writing on the Wall" is seen in the well-planned activity of Federal, Provincial and civic authorities to prepare for what is termed the Post-War Re-construction Period.

Much has been written and said on the many angles of this subject, but of chief interest to the Architect is the one in which he should immediately and efficiently function—the preparatory work, the orderly planning of such proposed work as lies within his sphere of activity. Thorough preliminary study will add greatly to the measure of architectural achievement.

The Engineer, in most instances, has his problems clearly defined—the location, the obstacles to be overcome, the most economical means to adopt—all exist ready for the Engineer's ability to bring the project to a successful completion. With the Architect's problems, this is seldom the case with large buildings. There is the site of a proposed building to be decided upon, questions of grouping and mass to solve, the type of plan to adopt—whether it shall extend horizontally or run to height—and the accommodation to be provided both for the present and for future requirements. Finally, throughout is the responsibility of balancing the probable cost with the available funds. All of which suggests the wisdom of allowing the architect ample time to thoroughly explore all possible angles of his work.

Now is the opportunity to crystallize our dreams of Town Planning, for herein lie our hopes of doing an orderly, well-planned, efficient job, with some degree, perhaps, of dignity and beauty added for good measure. Town planning, must be ready to guide and control the mass of private work which we all expect will follow the end of the war.

While authorities naturally feel it imperative to prepare for the coming Post-War period, it is also essential to awaken the public interest in Town Planning. Let all those, then, who appreciate the value of Town Planning advocate and strive for its recognition, see that the public has a real understanding of its advantages, and, most important of all, endeavour to have it become a practical reality.

Many cities have attempted to solve some of the more pressing problems of Town Planning and in some cases local Town Planning Commissions have been set up. Much valuable work has been done by these enthusiasts but this should be followed by the appointment of a recognized expert to co-ordinate and complete the work. If this step is taken, the

necessary "hallmark" is given so that its final adoption by the local authorities is reasonably assured.

It is not an easy decision for a city council to take this final step and become involved in an expenditure of some thousands of dollars for something which can only be slowly realized in future years. Where preliminary study has been done and the final touch of the expert is needed, perhaps a real service could be rendered if the Federal Government were to appoint a Town Planning Commission. A mobile unit of experts.

Now is the time to act. Blighted areas in our cities could then give place to low income group apartment blocks or much needed public buildings and generally the confusion and mistakes of the past could be transformed into something nearer to the orderly, well-planned city that forethought and skill can achieve.

F. H. Portnall.

#### LETTER TO THE EDITOR

#### From Brigadier E. W. Haldenby

We are living amidst a lot of rural Italian architecture and some of it is very good. I have managed to gather together some material with which to make some sketches in my spare time. I had some fine materials but lost it all when we had to jump into the sea. What I regretted more than anything was the loss of all the drawings I made in England. However, I was lucky to save my skin, thanks to a long-standing fondness for the water.

The most amazing thing about the Eye-Ties is the fact that every man is a mason. They cut this soft limestone out of the ground and set it up and it hardens and dries out white. They do the most perfect arches and cornices with nothing but these blocks of mud. I am at present doing quite a lot of building repairs to bombed-out structures of all kinds. Glass is, of course, at a premium but we brick up most of the openings and leave small apertures for light. I am also building a couple of bridges and cleaning up the roads, all with a view to making a decent place for troops. We are running a fine recreation centre, which we call "Maple Leaf Gardens". We have renamed all the streets with such titles as "King Street", "Ontario Avenue", "Dominion Square", and so on. Of course, this is all a side line to my main job.

The weather has been mild but in the last few days a great deal of snow has formed on the mountains and the temperature has dropped considerably.

I am hoping to visit Amalfi, Pompei, and Capri some day soon. I have been to the Opera in Naples and it is a sight to behold.

I saw a bit of Hank (Group Capt. Burden), and a lot of Mac (Col. Mackenzie Waters) before leaving England. I really grew very fond of the English countryside and got to know Sussex very well. I spent some of my leaves in the Cotswolds and in the Lake District. Sussex, north of the Downs, is still very rural, and the people take a pride in sticking to the proper building materials. I found that the farmers would go to great trouble to get the right brick and tile.

In some ways the food here is better than in England. We have lots of fruit and vegetables but only ration meat from Army issue. We did manage some turkeys on Christmas Day, and some pork.

All the best,

Yours,

Eric.

#### BROADCASTS ON HOUSING

Member interested should listen to a series of broadcasts each Friday at 10.15 p.m. E.D.T. The series is on Housing and has been arranged by CBL. The first was on Friday, March 10th.