

JOURNAL

ROYAL ARCHITECTURAL
INSTITUTE OF CANADA



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NO. 8

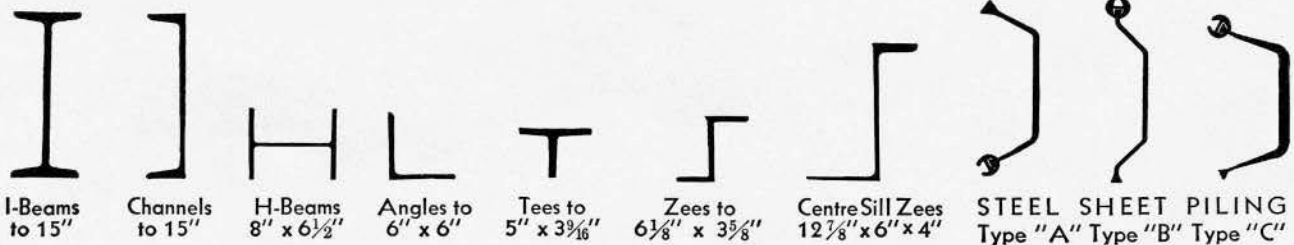
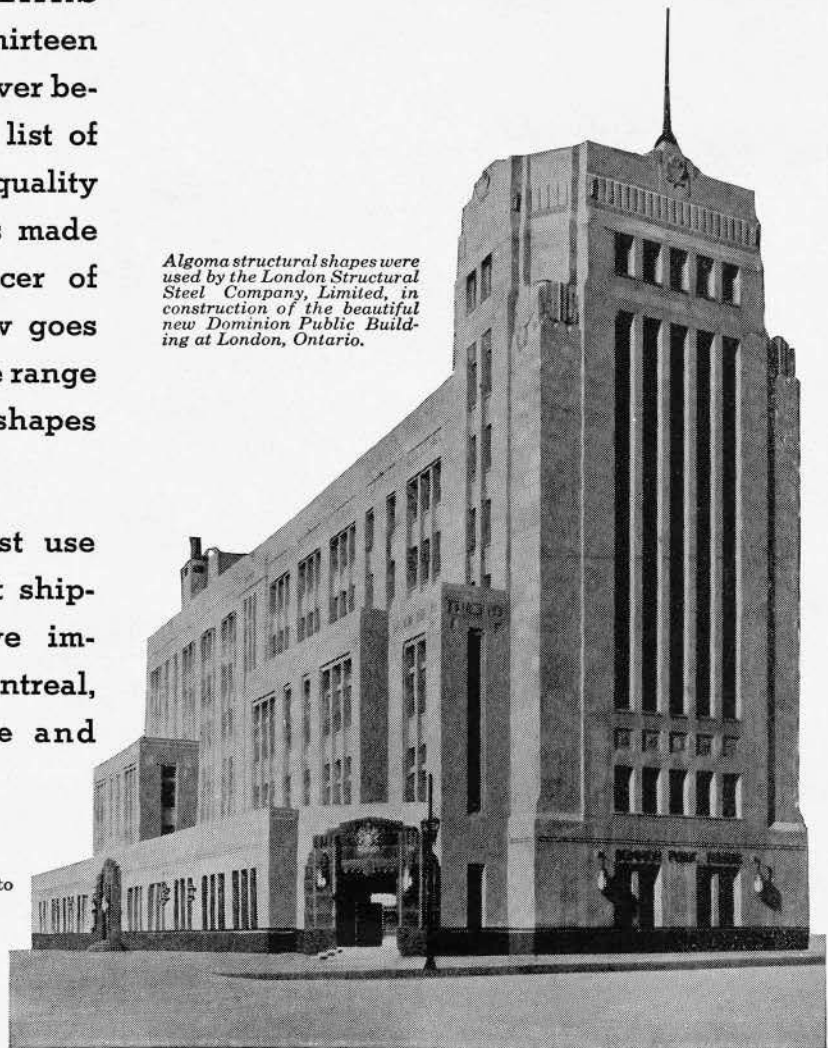
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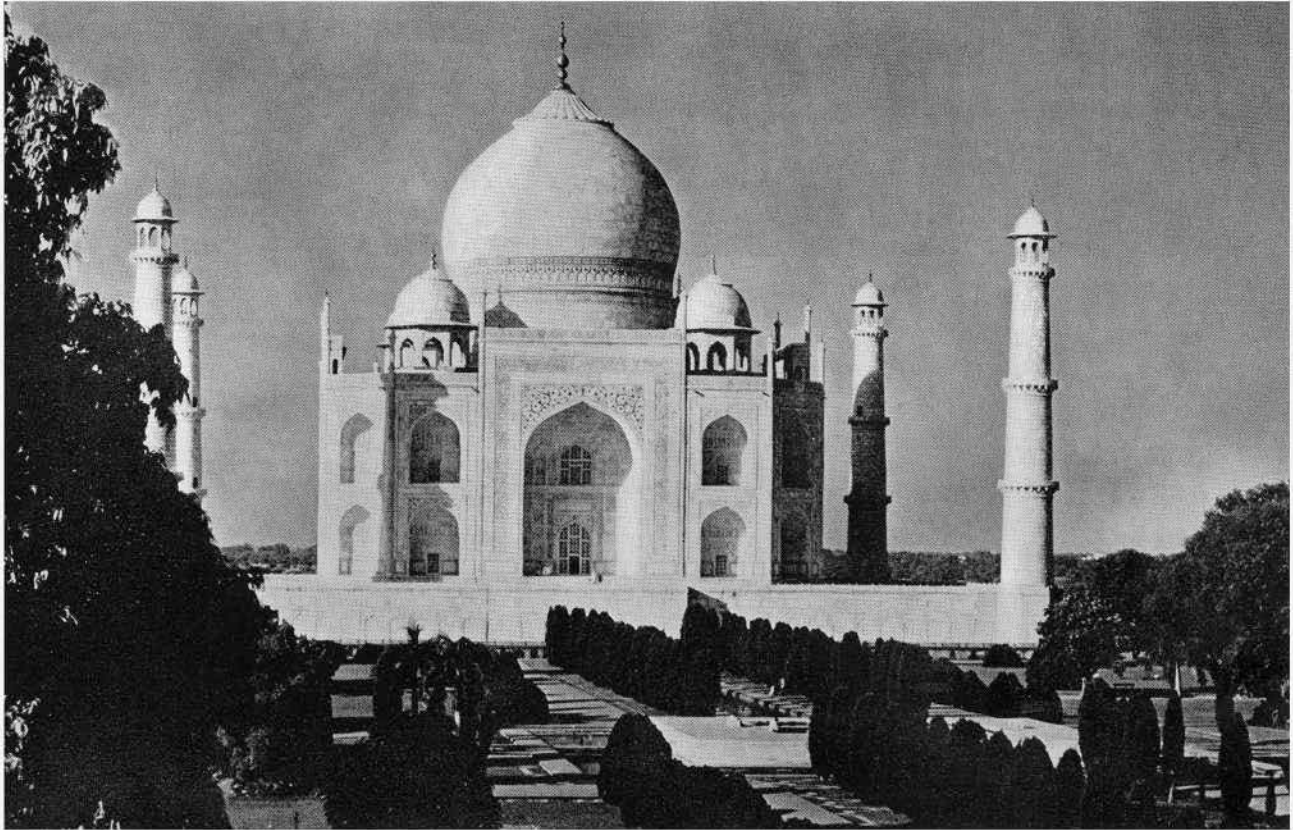
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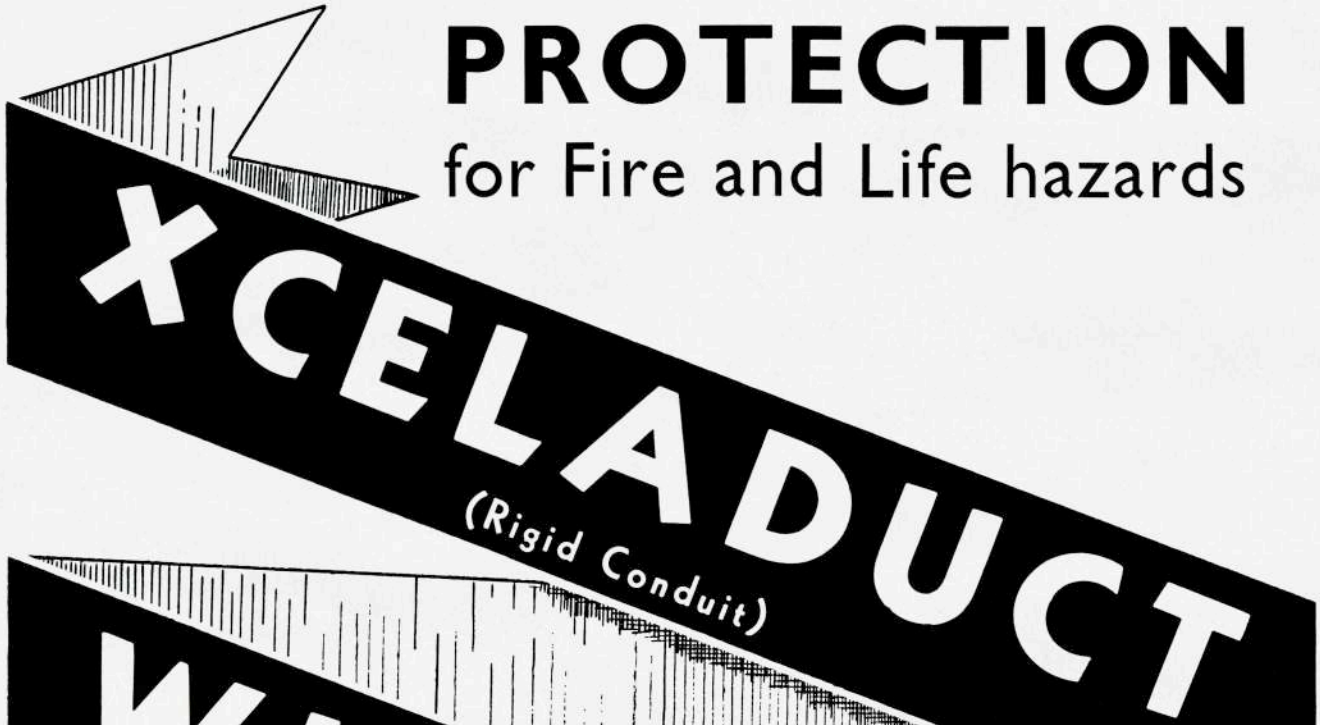
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UPPER LEFT: Arena, Granby, Que.

UPPER RIGHT: Arena, Arnprior, Ont.

CENTRE: St. Jacques le Mineur Church, Montreal, Que.

LOWER LEFT: Maple Leaf Gardens, Toronto, Ont.

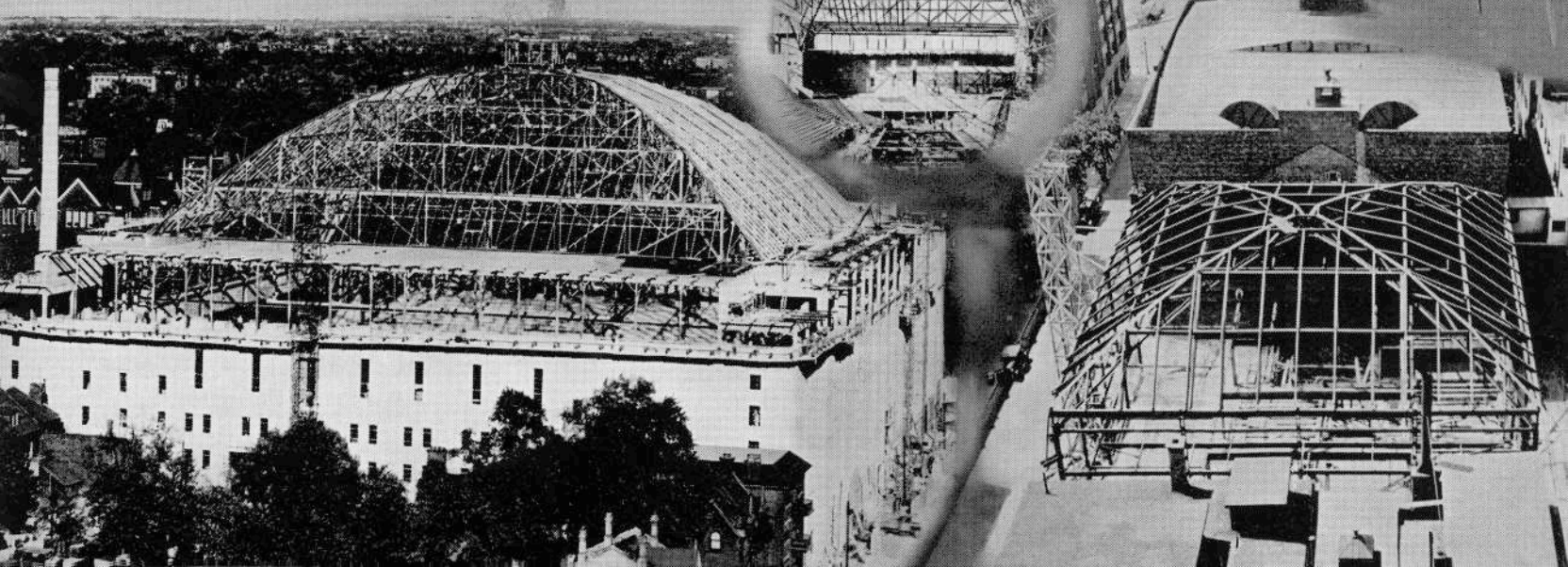
INSERT: Roof Construction, Maple Leaf Gardens.

LOWER RIGHT: Victoria Rifles of Canada, Armoury, Montreal, Que.

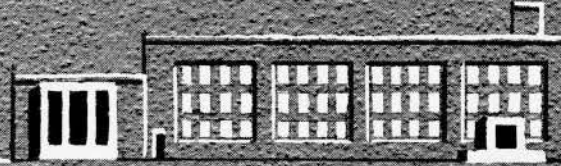
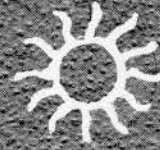
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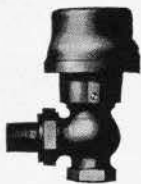
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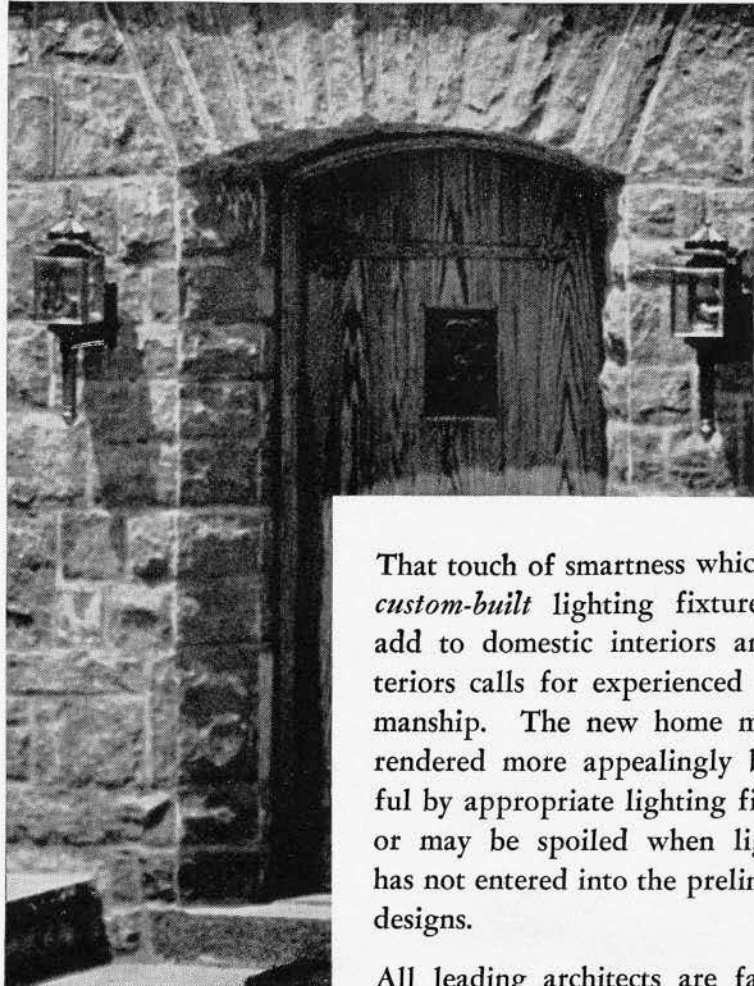
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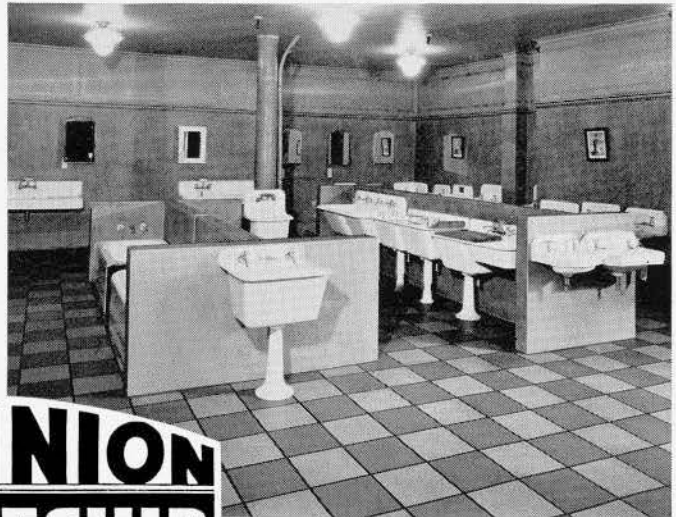
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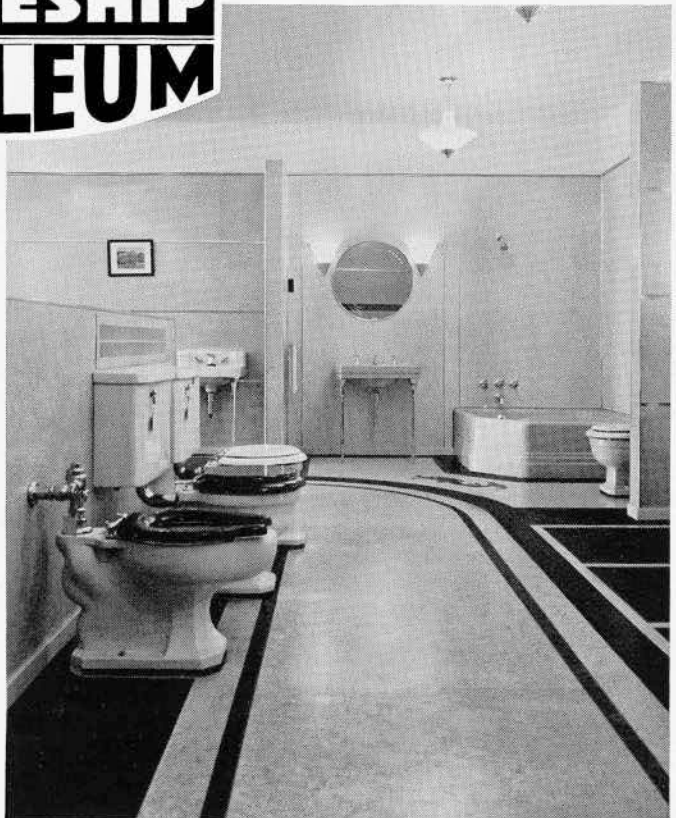
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begins with the

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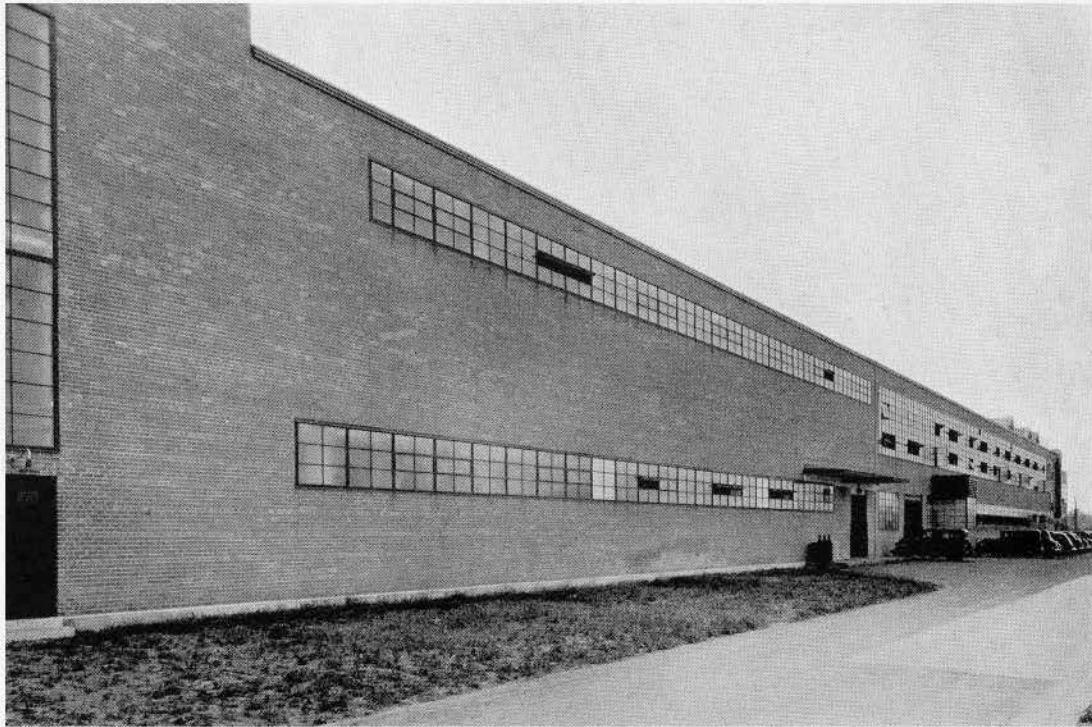
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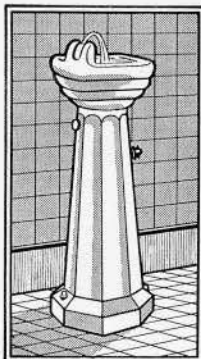
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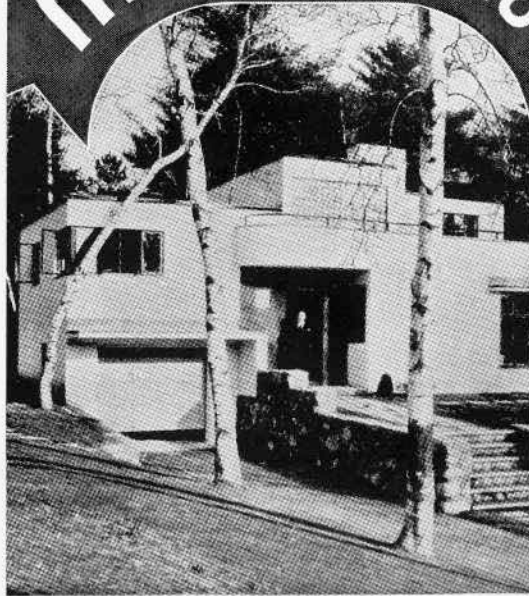
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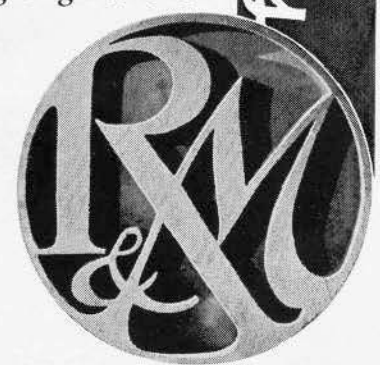
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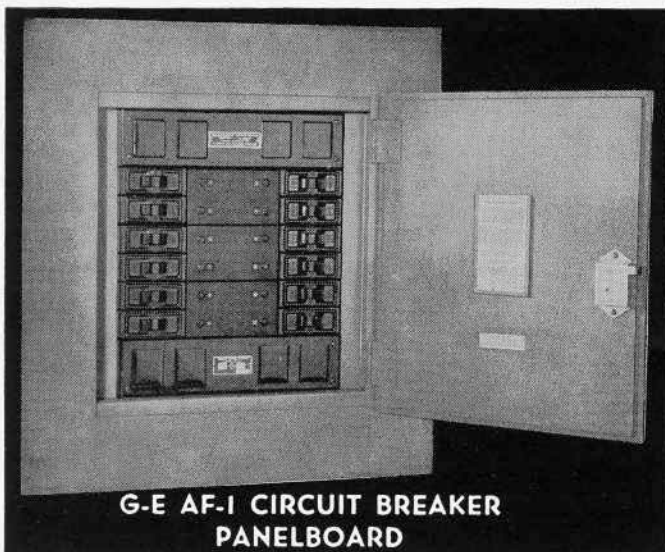
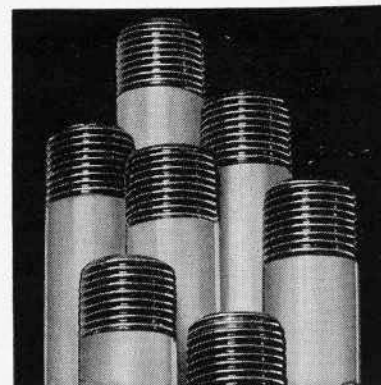
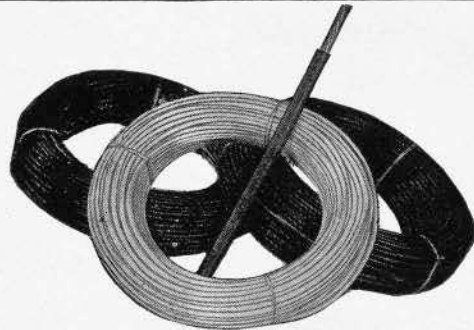
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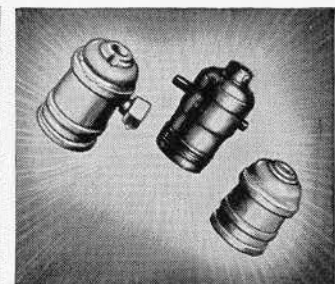
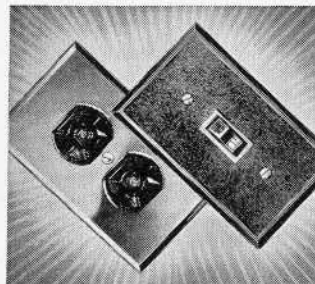
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JOURNAL

ROYAL ARCHITECTURAL
INSTITUTE OF CANADA

Serial No. 144

TORONTO, AUGUST, 1937

Vol. 14, No. 8



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EDITORIAL NOTES

A FIRST child or a first issue of anything is a crisis in human life, and we are pleased to report that we have survived the July issue. Even if we have not doubled our weight in the first month, we have gained experience. We have several letters from members in northern lakes who enjoyed the cool blue of the cover, the restful type and quiet suburban gardens in the interior. We cannot hope in an architectural journal to suit the cover and the contents to the month indefinitely and August was arranged some time ago as an industrial and brick number.

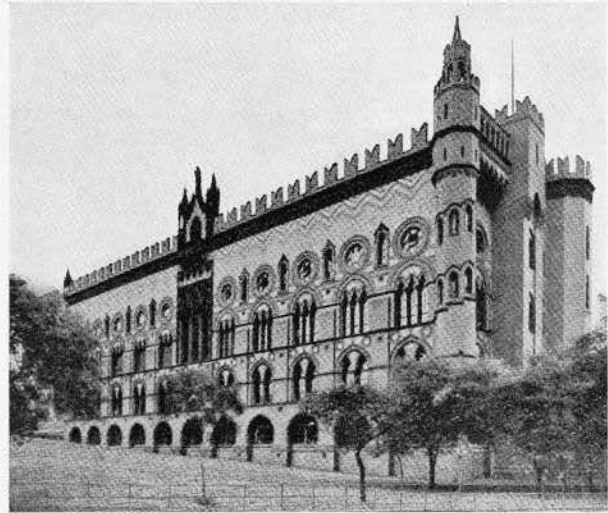
We are pleased to show for the first time Staunton's Limited Plant at Leaside, Ontario, by Mathers & Haldenby; Canada Packers Plant at Edmonton, by Eric R. Arthur; Creed's Storage Vaults Limited, Toronto, by H. G. Duerr, and Meagher Brothers Company Limited Distillery, Montreal, by Barott & Blackader.

It is, we hope, a sign of the times that great industrial concerns are appreciating the services of architects, and buildings which were formerly mere shells enclosing machinery, without comprehensive planning at all, may now be objects of beauty. Without minimizing the value of planning especially for future growth, architects have proved that the building itself, if well designed, has an advertising value far greater than any other form of advertising.

Nervousness still exists in this country where modern domestic architecture is considered, but in the industrial plant you have surely an obvious opportunity for the expression of plan in elevation, and functionalism is not an idle word. The architect brings design to functional planning. The engineer's contribution to the industrial plant is great, but he has no training in planning or design. As Mr. Gropius said recently the human face is the perfect example of function, but, though the functioning parts are the same in each, not every face is beautiful.

Modern architecture has marked the end of the Saracenic carpet factory and the collegiate Gothic abattoir, for which owners, architects and little pigs should be profoundly grateful.

If one were to choose the best buildings throughout the world of the post-war era, it is likely that 90 per cent. of them would be in brick. Such a list would include the Stockholm Town Hall, the Shakespeare Memorial Theatre, the Empire State Building, the admirable churches of Bohm and



Courtesy of The Architectural Review.

1889—A CARPET FACTORY IN GLASGOW
BY WILLIAM LEIPER

others in Germany, Hilversum Town Hall, several churches in the Scandinavian countries, and a great number of industrial buildings and houses.

It occurred to us that an article on brick might be of interest to members. The English *Architectural Review* devoted an issue to the "oblong morsel" not long ago and one was reminded of the beauty of texture and variety of colour obtainable in the English brick.

In Canada we have not that variety nor, on account of distance, are all Canadian bricks available to us. Each province has its own bricks and its own problem and so far as we know there is no commerce in bricks between one province and another. In that respect we differ greatly from England, where rivalry may exist between counties but trade goes on freely between them. We have just had the misfortune to like and use a brick made in one province for a building in another, and were astonished and mortified to find heads of corporations and lesser fry likening their sister province to a Balkan State, and our innocent act to a breach of faith that might easily provoke a war. In fact, had we bought our bricks in Montenegro, they could not have been more shocked. Fortunately for the uneasy shades of the Fathers of Confederation this attitude was not held by all the people interested in bricks, some of whom still hold kindly feelings toward us.

We have three articles on bricks in this issue—one by an architect, one by an engineer who is a professor of ceramics, and one by a manufacturer. Both Prof. Montgomery and Mr. Torrance dis-

approve of painted bricks. We do not think any architect would agree with them. Whitewashing must have been done in Europe and the United States for at least 200 years, especially under verandahs where reflected light was necessary or desirable.

It is a relic of Mr. Ruskin's day, when to paint masonry or clip a tree was considered a blasphemy. We presume that no architect worthy of the name would paint brickwork any colour but white.

We think there may be something for the provincial associations in Prof. Montgomery's suggestion that a meeting be called between architects, manufacturers and engineers like himself to survey the brick-making business. We cannot help feeling that we are too prone to take the clay as nature presents it to us and be grateful for the heaven-sent results of firing. One gathers from the English *Architectural Review* that very few English bricks are so made and that research has gone on through the centuries for the present product. Only by so doing can the manufacturer of bricks hope to compete with the hundred substitutes now on the market. The manufacturers might take a hint from the stone and marble people. There, indeed, one would think was a substance that would brook no interference, but only last year the marble manufacturers produced a real marble that you could see light through. It does not matter that no one wants to see light through marble. The interesting thing is the unceasing search on the part of manufacturers for a product that will hold its own in an ever-changing market. Who knows but what this very summer some mute, inglorious brick manufacturer, watching the apples falling in his orchard, will seize upon some basic fact that will astonish the world!

The schools of architecture no longer design financial institutions on beautifully-wooded flat lots nor do they attempt "ideal" problems such as the vast array of buildings to commemorate the universal adoption of the Greenwich Meridian which we did in our youth. We draw your attention to Mr. Hazelgrove's letter on the provincial page, from Ottawa, where such a comedy is actually taking place. There you have the spectacle of a Canadian National Memorial "done" in England arriving in packing cases: address in Ottawa unknown. An additional Gilbert and Sullivan touch is given the affair by the suggestion that it be tried out here and there under the direction of the March Brothers. (The March Brothers are sculptors who won the competition for the memorial and have, we are informed, been working on it for several years in a retreat in England.)

We once saw the Black Watch Memorial being tried out in canvas and wood on the ramparts of

Edinburgh Castle. To our astonishment and huge delight a gust of wind lifted it high in the air and deposited it in the park hundreds of feet below.

We make no criticism of the design till we see it, but our recollection is of a triumphal arch out of which people are pouring pell mell. It is unfortunate for the authors that public opinion has changed in the last ten years and the glories of victory, as shown by the triumphal arch, have changed to a very proper humility. The Cenotaph in London expresses grief and reverence, and dignity, rather than victory. It is also Allward's greatest achievement that he expressed a decade ago a feeling that was shared then only by a few and now by the million. Furthermore, few of us, with standards of taste and design toppling around us, would care to design a house or a memorial in 1937 and present it to a waiting world in 1947. That Allward was successful in that has not been stressed sufficiently by the critics.

The period of gestation in the elephant is, I believe, three years. After laboring twice that time the March Brothers have delivered their monumental child on the government's doorstep. There must be some scurrying around to find it a suitable home.

From the *Winnipeg Free Press* we read of a free-for-all competition for low cost housing. Anyone can compete—no one knows who will judge. The *Free Press* has shown its leadership in larger matters than this—it may in a few words show the people of Winnipeg toward what a fiasco they are heading. Such a procedure might have been necessary when Winnipeg was a pioneer town. Is it necessary to inform the City of Winnipeg that they now have architects in their midst respected throughout Canada—that there is a Manitoba Association of Architects and one of the best schools of architecture in the country is in their own university? Is it likely that a member of the profession in Winnipeg will compete when he knows that the inconsequential scribblings of his own furnaceman may take the eye of a jury composed of politicians with a leaven of ladies from the local women's organizations? The Irish Sweep would be much more attractive. Our city fathers think housing such fun and so simple. Toronto led the way with a housing committee on which there were a number of talented ladies and gentlemen, but no architects (in spite, we feel sure, of His Honour the Lieutenant-Governor's and the committee's wishes) because architects were experts in housing and consequently prejudiced (the logic is not ours).

When the Federal Government and the Province of Ontario appealed to the Royal Architectural Institution for assistance in judging their housing competition and writing the programmes,

Continued on page 145

HOUSING

By HUMPHREY CARVER

PROGRESS towards Housing in Toronto depends upon the sensitiveness of the City Hall's reaction to public demand, and more particularly upon the pace of the Advisory Housing Committee and its slowest man. It is of importance to discover whether the lack of action is due to the advice of this committee or to events beyond its control. The following are the activities of the committee as far as they have been revealed to the public.

OCTOBER 19th, 1936. On recommendation of its "Special Committee re Housing" (associated with the name of Mrs. Plumtre) the City Council requested Board of Control to name an "Advisory Housing Committee". The following were appointed to serve: the Commissioners of Buildings, City Planning, Public Welfare and Property, together with Mrs. J. W. Bundy, Mr. F. D. Tolchard, Lt.-Col. F. H. Marani, Mr. L. M. Wood and Mr. E. W. Sinfield.

DECEMBER 15th, 1936. An appropriation of \$3,000 was made by council for the expenses of the committee.

JANUARY 9th, 1937. The Advisory Committee presented a report to the National Employment Commission, stating that it had been unable to identify the existence of a shortage or overcrowding in low-rental dwellings, but that "there MAY BE at least 4,000 dwellings that have practically reached the limit of their usefulness." Re-housing on slum-clearance areas is recommended, in the form of four-family houses.

MARCH 15th, 1937. The Minister of Labour informed the committee that delay in Federal action was due to doubts as to the constitutionality of Federal social legislation.

JUNE 7th, 1937. City Council requested Advisory Committee to present an interim report. This was submitted on June 21st, and contained a synopsis of the report to the National Employment Commission together with a general admonition to await further action from Ottawa.

In analysing the need for low-rental housing the Advisory Committee appears to have submitted to some fallacious reasoning. It is argued that since the dwellings in the city assessed at less than \$2,000 (which could presumably be rented for \$22 a month and less) are two per cent. vacant, therefore there is no shortage of low-rental dwellings; and since typical blocks containing such dwellings are not overcrowded, therefore there is sufficient accommodation for low-income families. The logical conclusion from such an argument should be that the more dwellings deteriorate and their values fall, the more adequate becomes the provision of low-rental dwellings. The essential facts, of course, do

not concern the number of low-value rooms available but the quality of what can be obtained for the rent; the suitability of the accommodation and its environment for the life of Canadian families. Although the widespread existence of overcrowded dwellings is well known to Toronto social workers, yet it is not that which is the characteristic of the urban, suburban or rural slum in Canada. A housing survey cannot be made in the assessment rolls but only by an exhaustive house-to-house inspection of accommodation and equipment. The technique is well established.

In its reports the Advisory Committee has expressed a preference for the "four-family house". This is not a housing type that has been used at all in Europe, nor has it yet appeared in America. It would be interesting to know the reason for its particular use in Toronto.

The Advisory Housing Committee may be regarded as a kind of buffer to protect the civic government from the assaults of the housing offensive. The five citizens and four municipal officers of which it is composed cannot escape responsibility for the progress (and abuse for the lack of progress) that is made towards re-housing Toronto's unhappy slum dwellers. The committee members must have our sympathy, particularly since by the terms of their appointment they are apparently to sit "until death do them part"; the committee is a permanent one, but without provision for the periodic retirement and replacement of its members. At the same time it is an "ad hoc" committee instructed to report on specific points. If the committee had been assiduous in carrying out the specific part of its instructions it might have been granted a premature release from its embarrassing situation. It has apparently preferred, however, to meet death at its post, for it has not yet made any report on the specific points and has even suggested that it would be "inadvisable to develop definite proposals for low-cost housing construction . . . which, if not acted upon, would perhaps prejudice the city in any future undertakings of this kind". This is defeatism of a depressing kind; a committee which assumes that any proposals it may make would be likely to hinder rather than promote the interests it has at heart, is in a sad way.

The committee, however, need not despair; it was not, in fact, asked to develop any definite proposals for construction. It was, however, instructed to report "on any legislation that may be required to provide for adequate zoning and city planning and the setting up of a local housing authority".

✓ ✓ ✓ ✓

The Planning and Development Act, 1927 (Province of Ontario) might serve as a starting point for zoning legislation. The committee could explore the relative advantages of amending this statute or initiating new legislation.

✓ ✓ ✓ ✓

Recommendations with regard to the appointment of a Housing Authority require the greatest good taste on the part of the committee. This is also its most crucial task, for until such an organization exists there is no means of formulating the specific proposals which must sooner or later be submitted for the obtaining of federal and provincial aid. Housing cannot enter upon a constructive phase until such an authority exists; its existence waits upon the recommendation of the Advisory Committee.

In setting up such an authority a study of English experience should be of value; certain cities have expanded existing departments to supervise housing (in London, the Architect to the Council; in Birmingham, the City Surveyor). Other cities have appointed Housing Directors (Liverpool and Manchester. With these must be compared the work of architects in private practice who have been retained by municipalities and the Housing Trusts and who have made the most progressive and significant contributions to housing design.

Possessed of privileged opportunities to observe the political atmosphere, the Advisory Housing Committee is entitled to judge the appropriate moment to recommend the appointment of a Housing Authority. It appears to be the opinion of the committee that no such positive action should be taken until the Federal Government has expressed its readiness to meet the losses on housing. But is this not a reversal of the proper routine? Is it not for the city to survey its requirements, set up a programme of work, formulate a budget and submit its application to the money-voting body? That is the usual procedure in the case of a department applying to its central body for funds. Although we are entirely in favour of the Federal Government accepting responsibility for the welfare of its citizens, it is the municipalities that have personal contact with these citizens and it is therefore the municipalities that must express the needs of those citizens in specific terms. This cannot be done until a department exists to express those needs in the form of surveys for slum-clearance and blue-prints for construction work.

✓ ✓ ✓ ✓

Readers of this *Journal* await with deep interest the further report of the Toronto Advisory Housing Committee which will lead to:—

- (1) The preparation of a condition, land utilization and density survey to assist in the selection of slum-clearance areas and re-housing sites.
- (2) The framing of zoning laws to protect the environment of housing areas.
- (3) The appointment of a Housing Authority.

It is in the specific terms of the Advisory Committee's appointment to make recommendations on these matters.

EDITORIAL NOTES

Continued from page 143

assistance was freely and gladly given and without charge to the public.

We would like to end on a town planning note. We hear from so reliable a source as Mr. Gladstone Evans that the British Government is adding (for fear of panic) a number of gateways to the camps for Spanish children. They see the danger of having all their Basques in one exit.

We have had two issues of the *Journal* under the new rules and regulations, and the Board would

proceed with its job with more enthusiasm if there were some means of gauging members' "reaction" to the changed *Journal*. We have had flattering notices in the press and equally flattering remarks from our friends who may, or may not, be honest in what they say. We are trying to please Mr. X in Vancouver and Mr. Y in New Brunswick and several members in between. We do not know, personally, one quarter of these people and it would be an expensive business to write to each one of them. We, therefore, appeal to every member of the Institute to write us and give us his frank opinion.

HOUSING EXPERTS' BIBLE

HOUSING: A European Survey by the
Building Centre Committee.

London. Rolls House Publishing Co.
Thirty shillings

A FEW itinerant architects, journalists and leftist uplifters who have stopped off for two or three hours in Vienna, Villeurbanne, Welwyn, Wythenshawe or elsewhere, have hitherto been able to pass themselves off as housing experts. (In much the same way as certain literary Englishmen who have had their legs pulled from Hollywood to Manhattan Island have returned home as experts on life in America). Since the publication of this well-organized and delightfully-designed analysis of European housing even the most modest need not be afraid of posing as experts, for here is all the authentic information clearly documented and available.

The characteristic defect of previous books on housing (with the notable exception of Catherine Bauer's still classic treatise "Modern Housing" fully exempted from this charge) has been that the unbounded enthusiasm of the authors has led them into raptures over schemes of exceptional merit, thus giving an entirely false impression of typical housing standards. The group of architectural research workers who are compiling the survey, of which this is the first volume, have wisely preferred to document, not the exceptional, but the typical good housing. In setting out the comparative or corresponding facts of each scheme the true amenities of each may be correctly judged. A scheme, for instance, which has become world-famous for its

smartly-styled elevation may be found to possess most inferior cooking and ventilation equipment or be inadequately served with park and recreation space. The dainty architecture of Scandinavia is here placed in impartial comparison with the brutal but effective buildings of the Birmingham City Surveyor. It is clear from even a cursory study of the examples shown that housing design has sometimes been allowed to develop from an aesthetic interest in materials and form rather than from a social interest in family life; structural functionalism has too often been preferred to family functionalism. There is a happy mean.

Each group of housing schemes is subjected to the same analytical method. We are first shown a distant but comprehensive picture of the whole urban environment, its topographical and climatic characteristics, its industries, open space and population. Then, as if descending from the sky, we concentrate on each housing area, obtaining a bird's-eye view of the buildings in their relation to one another, to open spaces and to surrounding land uses. Descending still further, a single block or group of dwellings is analysed until finally each type of dwelling in the scheme is detailed in plan form.

This volume, excellently illustrated with photographs and a standardized type of plan, should be in every architectural library, both public and private.
—*Humphrey Carver.*

BUILDING FIGURES REVEAL INCREASE

Construction in the month of June showed a registration of contract awards of the highest value in six years, highest for any month since September, 1931.

Contracts awarded for all Canada for the month of June totalled \$30,369,600, as compared with 24,170,500 for May and \$20,803,400 for June, 1936, increases of 25.6 per cent. and 45.9 per cent. respectively.

Ontario contributed more than 50 per cent. of the Dominion total, with 1,433 projects amounting to \$17,140,400. Quebec came next with \$8,092,800; British Columbia, \$1,345,900; Nova Scotia, \$1,184,800; Saskatchewan, \$1,125,500; Manitoba, \$636,700; New Brunswick, \$442,800; Alberta, \$351,900, and Prince Edward Island, \$48,800.

Contracts awarded for the first six months of the year amounting to \$110,375,800 are 42 per cent. in advance

of the 1936 total of \$77,708,500. Contemplated work for the year to date has reached the large sum of \$239,329,400, a 61.2 per cent. increase over the 1936 total of \$148,425,600.

Projects started in Toronto and suburbs since the first of the year total 1,857 with a value of \$13,958,200 and, in the Montreal metropolitan area, 1,315 jobs valued at \$9,942,200.

A sharp increase in building in Canada for the first six months of the year 1937 shows contracts awarded to a total of \$110,000,000, as compared with \$78,000,000 in the corresponding period of 1936, an increase of 41 per cent. Toronto's portion of the latest figure is \$14,000,000 and Montreal's \$10,000,000. Residential and engineering construction were the leading features.

BRICKWORK AS THE ARCHITECT SEES IT

A. S. MATHERS

WHAT this country needs is not a good five-cent cigar but a good \$25.00 brick. And twenty-five dollars is quite a nice price for a thousand bricks.

The kind of brick that we need is one that will, when set in mortar, provide a good-looking wall. Not the kind of good-looking wall that we in Canada are accustomed to, but rather what a Dutchman, an Englishman or a gentleman in Williamsburg, Virginia, would consider a good-looking wall. I remember well my first glimpse of Hampton Court Palace, and how I groaned as I realized that it took nearly three centuries of English rain and sun to bring about that miracle of colour and texture. But did it? Since seeing the restorations at Williamsburg two years ago, I have a suspicion that Hampton Court looked just as lovely to William and Mary as it does to us today.

Williamsburg is brand new and so are its bricks, and they were laid by modern masons under the direction of modern American architects. Neither the art of brick-making, nor the art of brick-laying, has been lost. Even good gauged work and carved brick has been done at Williamsburg. The brick manufacturers of Canada ought to hold a convention in that town.

The Williamsburg brick has everything; good clear colours, headers are cobalt blue, stretchers range from salmon, through light and dark cherry to deep plum shades. Their edges are soft, and they are all the same size or sufficiently uniform to make Flemish bond something better than a headache.

Cannot something of the sort be done in Canada? In Toronto one can get good grey stock and red stock bricks, and well-made pressed brick if one's fancy turns to pressed. Colours are dull and getting duller year by year. Except for the pressed, sizes are unreliable. Variations in length of as much as one-quarter inch are common in a single shade, from one burning to another. Under such handicaps, bonds other than common are almost impossible, except with pressed brick, where the full texture value is killed by the mechanical perfection of the individual brick. In my opinion what is wanted badly is a brick that has a clear colour; is constantly uniform in size in any given shade or colour and at the same time is not mechanical in shape. Such a brick would bring brickwork back to its proper place on a par with stone as walling material for important buildings.

A great deal of prejudice exists in the minds of many laymen against brick. They think it is cheap and there is some justification for that feeling in Canada. The great majority of brick buildings in Canada do look cheap. They look cheap largely because of the deadly effect of common bond, plus poor colour. Various attempts have been made to introduce texture to individual bricks. These, consisting of mechanical scoring, scrapings and modelling, are on the face only. The shape of the brick which controls the mortar line is still mechanical and, as far as I am concerned, the "scarifying" might just as well have been left undone.

So much for criticism, for in spite of the handicaps it is possible to get reasonably good results with Canadian bricks and architects will be well repaid for a little trouble in studying their peculiar qualities and adapting their design to them. As an example, the red stock brick made in Toronto comes in, roughly, four colours, and of course, in four corresponding sizes. An interesting pattern can be developed in Flemish Bond by using the two intermediate shades for stretches in the general field, the darkest shade for headers if you like, and reserving the lightest colour, which is too large to bond with the others, for belt courses, cut arches, quoins and other features where the bond can be broken and thinner jointing used.

Jointing, by the way, is worthy of more attention than it sometimes receives, both as to width and colour. Bricks laid dry in a pile are seldom interesting and never look like a wall. A clear and definite outline around each brick brings out the colour and pattern. If it is too wide and too white, too much separation of the units will be evident and the wall will lack unity. Generally speaking the narrower the joint, the whiter it should be; the converse being true except that a very dark joint, no matter what its width, kills a wall of dark brick, and gives a negative tone to one of light bricks.

A study of brick walls over a number of years has convinced me that, for ordinary-sized bricks, the joint should be approximately three-eighths of an inch in width and, except for very dark bricks, should be as white as possible. Very dark bricks need a greyer joint to prevent the joint pattern from dominating the texture of the wall. What should be the objective is a beautiful and interesting wall pattern which neither accentuates nor overpowers the individual brick.

Perhaps the most serious problem confronting architects today with respect to brickwork is the decline in weatherproof qualities which has taken place during the past twenty years.

It is my firm conviction that the root trouble is in the mortar. Walls leak through the joints and never through the bricks themselves, and water, plus frost, is the arch-enemy of all brickwork. It can enter the wall either through defective copings at the top, poor flashings at roof intersection, open joints in the exposed falls, or by capillary action from the ground, the last being the only one where the water is absorbed in dangerous quantities by the brick itself. The methods for correcting defective copings and flashings are, I think, quite obvious, except perhaps the problem of the coping. To my knowledge there is no permanent method of coping a parapet wall except with metal. The metal should, if cost is not prohibitive, be carried down on the inside of the parapet walls, which should also be waterproofed. For some reason, which I confess I do not understand, parapet walls are more vulnerable to moisture than are free standing garden walls and cannot be left without protection.

Regarding infiltration through the joints, it is well to realize that neither the mortar itself nor the bricks will absorb enough moisture during the hardest rainstorms to penetrate more than an inch or so back from the surface. This readily dries out under normal conditions without damage. But the water can and does get in, in large quantities through small cracks where the mortar has not adhered to, or has pulled away from the brick. Such cracks are extremely common in modern brickwork, and by some architects and masons are accepted as "just one of those things". They can, however, be largely eliminated if one thoroughly understands what causes them. A casual examination of good old brick buildings built 30 years ago or more reveals the astonishing fact that no such cracks are present. Further examination will almost invariably show that the mortar used was lime mortar and that the face joints were tuck-pointed. The use of similar mortar today may or may not be as successful.

The vicious little crack may show up a few weeks after the wall is finished unless the face joint is properly tuck-pointed.

A further examination of the old wall will invariably reveal that the wall is a solid brick wall or is built with an air space between the face brick and the inside work and also that the brick used for insiders is substantially of the same constituents as the face in spite of its rougher finish.

An examination of a new wall that shows dangerous surface cracks in the mortar joint will in most cases reveal the fact that the face work is backed up with a different kind of material than is used for the

face. The face may be any brick whatsoever, while the backing is either a different kind of brick, or hollow tile, or cinder concrete block or other similar backing block. In the most severe cases it will most likely be found that the mortar is cement mortar.

It is, I think, common knowledge that the cracks which appear between the joint and the brick are caused by the mortar shrinking away from the brick during and after setting.

These cracks are commonly called shrinkage cracks. It is also well known that lime mortar does not shrink as much as cement mortar. But under most municipal building codes the use of cement mortar is obligatory for a large percentage of all brick work. Lime mortar is, therefore, ruled out as a remedy if indeed it could always be relied upon as such, which it cannot.

It may be superfluous to state here that mortar shrinkage is intimately connected with the amount of water used in mixing mortar, and that a soupy mortar mix will shrink vastly more than a stiff mortar. Stiff mortars, however, are not in favour with bricklayers, who insist upon a fairly easy flowing consistency to obtain proper bedding of the brick.

Lime mortar properly made and aged is said to have a large water carrying capacity.

It has the quality of retaining a great amount of water necessary for the crystallizing process, in spite of the tendency to evaporate and in spite of the forces tending to absorb the water into the masonry. In order that mortar will adhere to masonry, the masonry unit must have the ability to absorb moisture; the quality which masons call "suction", and which is described technically as a factor of absorption usually expressed in percentage. After all, you cannot bond mortar to a polished glass surface.

Ordinary bricks have an absorption factor of from about 4½ per cent. for fireclay pressed brick to over 22 per cent. for soft grey stock. Ordinary pressed bricks and red stocks have absorption factors ranging from 10 to 15 per cent. Hollow tile, sand lime bricks, concrete blocks, etc., have also varying absorption factors.

Consider a brick such as a grey stock with a high absorption factor. If it is laid dry in mortar, it will exert a tremendous suction on the mortar, and if the mortar cannot resist that suction, or if the mortar is not carrying a great excess of water over its setting needs, the mortar will be robbed of its essential water and it will either fail to set hard, or it will shrink excessively, and will probably do both.

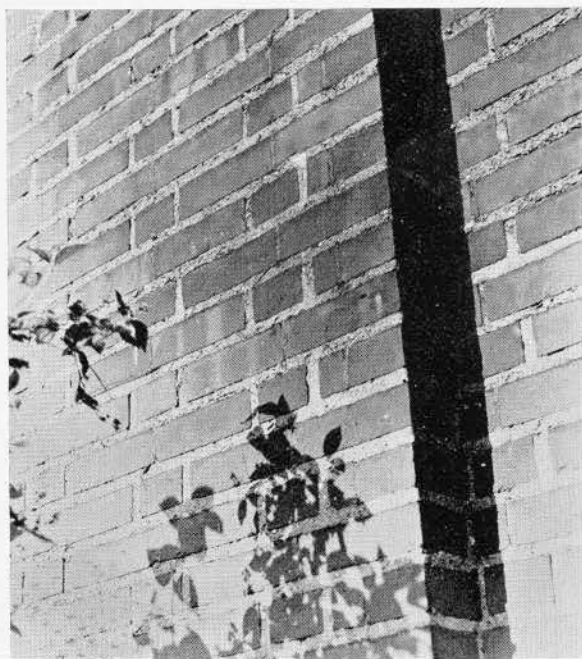
The remedy is to drench the brick before laying it to a point where its absorption factor is only sufficient to insure proper adhesion of the mortar. If the backing material is of a different nature it must be brought to approximately the same absorption

factor as the facing or it will act as a sponge and have the same disastrous effect upon the mortar.

Where lime mortar is used, shrinkage can be largely controlled by controlling the absorption factor of the face brick and backing.

With cement mortar, however, we have an entirely different problem. Both lime and cement when first mixed with water have a definite chemical and physical reaction. With lime, the reaction is so violent and obvious that we allow about ten days for it to cease before attempting to use it in the wall. During that time it heats and cools and swells and shrinks, and when we finally use it, the initial disturbance has largely subsided.

Cement when first mixed with water does not heat and boil up as does lime, and as a result, most of us have ignored the possibility of a chemical reaction taking place unknown to us. That a stealthy action does take place is now generally recognized. The mixture during the first two hours after the water is added greatly increases in volume and then decreases. As practically all specifications and by-laws covering the use of cement mortars demand that it be used within 30 minutes after mixing, this swelling and shrinking takes place in the wall, and with the added effect of absorption by the masonry units, the shrinkage is more severe in the wall than if the mortar had not been used at all. When this situation was finally understood, certain research workers and architects undertook to ascertain what effect on the mortar would result if this initial disturbance was allowed to run its course before the mortar was used. It has been found that the so-called initial set which took place after the first half hour



Mr. Ernest Rolphe's own house in which two stretchers are brought together without mortar.

was merely part of the reaction to mixing, and that two hours after mixing, the mortar could be re-mixed to a much better working consistency, and that its ultimate strength was only slightly reduced. This discovery is, to my mind, one of the most important things that has happened in the field of masonry for a long time.

This two-hour cement mortar having passed the period of initial expansion and contraction shows very little tendency to shrink after use in the wall. If face pointing is delayed for 15 or 20 minutes after laying, shrinkage cracks can be practically eliminated, provided the absorption factor of the masonry units is also kept under control.

The prehydrating process applies to stainless as well as grey portland cements. It will be found also that the necessity for introducing lubricants such as hydrated lime is eliminated. Lime and cement mortars are made from lime mortar and from prehydrated cement mortar. The use of lime mortar in small quantities with the cement mortar may be advantageous when absorption factors of masonry units are high, and cannot be readily controlled as in extremely hot weather when evaporation is great, and in cold weather when drenching is impractical.

In addition to the precautions with the mortar mix, and the control of absorption factors, too much stress cannot be laid on the necessity of tooling the exposed face of the mortar. This should *not be done as the brick is laid, but after the mortar is appreciably stiffened*. It can then be pressed tight against the masonry, and will stay tight unless loosened by actual movement of the brick. Movement of the bricks after the mortar has made its first contact will invariably break the bond and, lacking the adhesive pull, the mortar may settle away from the bricks by gravity. The habit that masons have of bedding a brick and some time later tapping it into line or level cannot be too strongly condemned. It invariably breaks the bond.

As new brickwork tends to settle as weight is added by courses above it, the amount of increment in wall height per day should be kept in mind, particularly if units larger than the face brick are used for backing. Hollow tile, concrete, etc., will stay up while the face brick settles and if the mortar is too fat or soft, the face joints at the level of the tops of backing blocks will open. Backing tile can now be obtained two brick courses in height. Their use, I believe, greatly lessens the difficulty of keeping the face work tight.

BRICKWORK AS THE MANUFACTURER SEES IT

R. D. TORRANCE

IT is a matter of great satisfaction to a brick manufacturer to know that the *Journal* is producing an issue devoted especially to brick and a privilege to be permitted to submit an article for that issue dealing with the subject from the manufacturer's point of view. Brick manufacturers generally have been very apt to consider that the inherent and traditional excellence of brick as a building material is taken for granted by everyone in the building business—"That a good wine needs no bush"—and have seen substitutes, vigorously marketed, replace brick, to some extent, in popular favour for that reason.

From the architect's point of view there are three things to be considered in selecting a brick—its colour, its texture and its durability. Its size and price are, of course, practical factors that might be of interest, too. As far as size is concerned, this has altered very little through the ages—it has always been determined by the size of the human hand. As regards price, the manufacturer feels that the consumer gets a lot for his money. The architect will have definite opinions about colour and texture, but about durability he may be inclined to consider the opinion of the reputable manufacturer. And the manufacturer, jealous of his reputation, does not like to take chances in that respect. He cannot regulate where and how his brick shall be used. He knows that probably 90 per cent. of his brick will stand up in 95 per cent. of the places in which it may be laid, but our climate is a difficult one and, if his bricks disintegrate in vulnerable places, parapet walls at the grade line, chimneys, etc., he hears about it. Consequently he is inclined to produce a product which in some cases might induce an architect to remark, as the late Earl Balfour is reputed to have done, when he was told that a formidable looking building in New York was built to last a thousand years, "What a pity!"

The two requirements most commonly met with in specifications covering brick are with respect to their compressive strength and absorption. But it is a very poor brick indeed that does not provide in its compressive strength a tremendous factor of safety in most situations; and low absorption, or too low absorption, is a doubtful asset. As long ago as 1928 an A. S. T. M. Committee reported:—

"There appears to be a widespread belief that the percentage of absorption of individual bricks is a governing factor in the ability of brick masonry to

resist moisture penetration. It has been conclusively shown that such a belief is erroneous; on the contrary, a certain amount of absorption in the brick assists in obtaining a better bond between brick and mortar, and therefore a more water-tight joint."

As a matter of fact, in Canada, some requirements regarding the ability of a brick to withstand "freezings and thawings" (it is this action which is responsible for most of the failures of brick in our climate) might well be introduced into specifications.

The three principal methods of making brick are:

1. Putting the prepared clay into moulds—the soft mud process—to produce what are called stock bricks.
2. Forcing the clay or shale from the orifice of an auger in a continuous column and then cutting bricks off the column—the stiff-mud process, to make what are commonly called wire-cut bricks; and
3. Moulding relatively dry clay or shale under high pressure—the dry-press process—the result called pressed bricks.

Stock bricks are available in red and grey and are the oldest type made in this area. Pressed bricks were next produced and were referred to as face bricks, reducing the stock brick to the unfortunate position of being known as a "common" brick. The pressed brick, while available in a variety of colours, lacked texture, and consequently was supplanted to a great extent by the wire-cut brick, the surface of which can be disturbed while in the column issuing from the auger machine, in a variety of ways. This method permitted such a number of textures that manufacturers have difficulty in finding suitable names.

Pressed and wire-cut bricks can, by the methods they are produced, be made much more even and exact than the stock bricks, which are dumped out of moulds, and for a long time the stock brick manufacturers tried to make their product resemble the pressed brick in perfection of shape—a futile sort of thing to do; for if they had succeeded there is a good deal of reason to believe that this type of brick would have lost a good deal of the charm it possesses. They were terrified by the occasional remark of a bricklayer, who had become used to the uniformity of pressed brick, that stock bricks "weren't

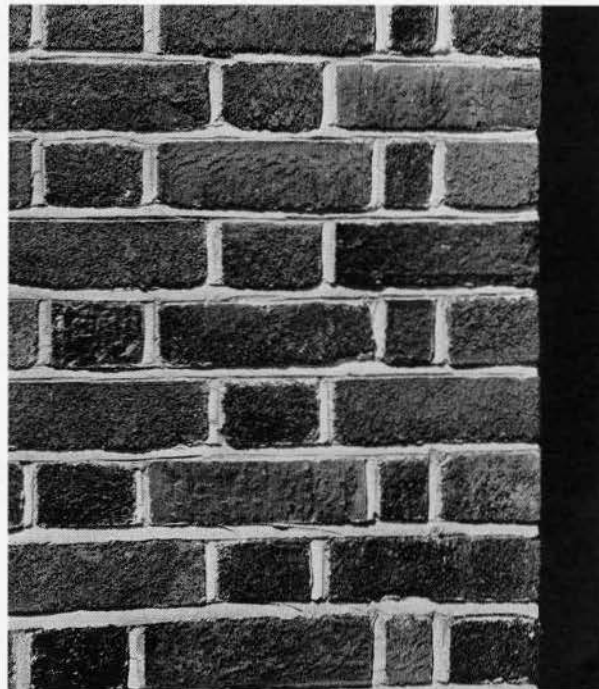
what they used to be". The writer was sufficiently unnerved to make a survey of old buildings of stock brick, as compared with recent work, in order to prove this an unreliable, if very human, observation.

Fortunately for the writer's peace of mind, a Toronto architect suggested that there should be an effort made to produce a stock brick which was uneven in shape, with an irregular soft arris; something, in other words, more like the old-fashioned hand-made brick of a hundred years ago. The accompanying illustration shows what has been accomplished in this respect. It is suggested that a comparison should be made between this and cuts which you have all seen of the brick made to reproduce the beautiful effects in the architectural rehabilitation of Williamsburg, Virginia. We, who have produced it, feel that we have developed a brick which is equal to anything that has been done of this character. It may be said that there are colours in the southern product which are lacking in our bricks, but we would remind you of what was said earlier in this article about the rigours of our climate and our dislike of producing soft burned bricks which, while often having brilliant light colours, will not stand up under our conditions.

A justifiable criticism might be, "Yes, you have produced an imitation of brick 100 years old, but what have you to offer the architect for the modern work he is growing fond of?" To which the brick manufacturer replies, "Well, what does the architect want?" The question of how the tendency toward modern architecture will affect the brick industry is of great interest to him. He doesn't appreciate the increasing popularity of painted brick, as the archi-

tect is inclined to say, "Oh any brick will do for painting on", and second-hand brick may be utilized. At the risk of giving this article a "Homes and Gardens" simplicity it might be permitted to sound a word of warning regarding this practice. Second-hand bricks come out of old buildings and almost invariably the backing bricks in these buildings were underburned—the practice being to buy "the run of kiln" and use the hard brick outside. In the process of becoming "second hand" these bricks are so mixed up that a brick which was a backing brick originally may easily be promoted to an outside position. How long the coat of paint it receives will protect it from the elements is a question that remains to be decided in a number of cases.

The point that the brick manufacturer does appreciate the interest and advice of the architect cannot be over-emphasized. Architects, while directly responsible for only a portion of all construction, give the lead in their work which is ultimately followed, not without a good deal of stumbling, it is true, by the laymen who build without their assistance. For example, some architects feel that monumental buildings should be built of stone (a view that some of us venture to disagree with and quote St. James Palace and the new Roman Catholic Cathedral at Liverpool as two of many examples of brick buildings of this type). An owner has an expensive house to build and bitten by the "monumental" virus is insistent that it must be of stone. A humbler citizen, erecting for himself a more modest habitation, sees the example set him and builds his house with a stone front and stucco sides and back; unfortunate but true.



Example of modern brick in Toronto made to imitate Old Colonial work.

BRICKWORK AS A PROFESSOR OF CERAMICS SEES IT

ROBERT J. MONTGOMERY

RECENTLY I read that an eastern architect selected second-hand brick from an old building to be used in a small country house. This selection was made because the architect could not find the colour desired in new brick. In this year's March issue of *Brick and Clay Record* I read that in a studio apartment in Chicago "common brick, painted white, was used in connection with an artistic application of glass brick". A striking picture of this apartment is used as a cover design for this magazine. Painting new brick is a rather surprising idea.

Apparently many of the modern brick colours do not appeal to the architect and it would be worth while to consider the subject. The writer is a ceramic engineer and finds it difficult to grasp adequately the artistic viewpoint of the architect, and I know it is equally difficult for the average brick plant owner.

On the one side we find the architect considering brick as a medium of colour and texture, a unit used to work out a completed structure as the artist uses a brush stroke of colour to work out a completed picture. Some feel that the soft mud stock brick is better suited to modern architecture than the dry press or the auger machine brick of varied surface treatment such as rug, bark, etc. This idea is widespread in America as indicated by the more general use of the soft mud brick machine as well as from publications on architectural design. Soft mud stock bricks were used in a recent building at the Annapolis Naval Academy. In Alabama a company has increased the size of its department making hand-made bricks. Such bricks have a soft, mellow appearance with little or no suggestion of mass production by mechanical means. It may be illustrated by the difference between a vase cast in a mould and one thrown on the potter's wheel. The increased interest in this type of brick is emphasized by the manufacture of special hand-made bricks in the restoration, in colonial style, of Williamsburg, Virginia. The colonial atmosphere of the restored architecture was obtained by using new bricks which were actual duplicates of the old. This work has been entirely successful.

On the other side the manufacturer thinks of production, quality and costs. He has an average artistic sense and produces a wide range of colours and textures from the clays and shales available. The colours, for the most part, are the natural ones

obtained from using the materials at hand. Any colour addition or treatment increases cost. The auger machine will produce more than twice as many bricks per day as the stock brick machine, with no more labour. Hand-made bricks are out of the question. Seventy-five per cent. or more of his customers are satisfied and it is difficult for him to see the need for research to develop special colours and textures for a small demand which is hard to satisfy as each job may call for a different shade, colour or texture. The manufacturer feels that the quality of brick, resistance to weather, etc., are of utmost importance and that he provides a reasonable variety of brick. He suggests that even the architects do not agree among themselves as to what they want.

While I may have exaggerated the difference of opinion somewhat, I would suggest that a co-operative study of the subject would clarify the matter in our minds. Is it colour or texture or both, which is important? What is good and what is bad, and why? The "why" is what the manufacturer will ask and is the difficult point for the architect to answer. Any product may be improved by a systematic study. In many cases we find the builder turning to other materials, such as glass, metal, and enamelled iron, to obtain desirable colours and textures or physical properties. Most of the desirable features may be obtained with clay products and the people as a whole are reluctant to turn away from brick as the basic building material.

Let us consider the present status of colour and texture as applied to clay building units. Texture is due to the material used and the method of manufacture. The hand-made stock brick has a sanded surface which prevents the soft clay mix from sticking to the mould. The soft clay causes all lines to be slightly distorted and rounded. The corners are not always full and square. The surface is a mixture of clay and sand, each burning to its own colour and structure. In the case of the auger machine brick, the texture is due to the clay alone. Being produced from stiff mud its shape is more rigid and mechanical with full square corners and straight lines. The surface may be altered by rugging or other treatment to break up to some extent the rigid mechanical appearance. Addition of other materials to the face by mechanical means has been done with some success. Coloured grains have been forced into the clay and glazes have been sprayed on. There is no

distinct line any more between brick, hollow building block of brick size or of larger dimension, and terra cotta. Attention is being given to quality of body to withstand freezing and quality of glaze which will not craze or spall when exposed to weather for long periods. Textures range from the rather porous structure of the clay itself, through vitrified surfaces to glazes of mat, semi-mat and glossy texture. Such surface additions, other than the sanding of stock brick, look rather artificial and the simplicity of the brick unit is lost.

With most bricks, colours are natural, obtained by burning the brick, either stock or auger machine, without any additions. Oxide of iron in the clay is the cause of red colours, the intensity of which is reduced if much lime is present and a large amount of lime will give a cream buff with no red showing. The stock brick colours are modified by the colour of the sand on the surface after burning and careful selection of the sand does much to give pleasing shades. The sand may be treated with chemicals to alter somewhat the colour. Sand also is often added to the clay to reduce its plasticity as a highly plastic clay cannot be worked in the stock brick machine. Colours may be darkened by flashing with a smoky fire during the burning. The red becomes the "Autumn Tints" of light and dark brown to almost black. The cream buff takes on a green shade in a flashed burn. Any further colour change means higher cost. Materials such as salt, manganese, dioxide, or zinc, may be put into the fire-box to obtain gas reactions with the clay. Coloured grains or synthetic sand may be pressed into the surface or coloured sprays or glazes applied. The architect has a wide variety of material from which to choose.

Often it is suggested that English brick are more artistic and attractive than those of Canada. It might be well to obtain samples so direct comparison could be made as the basis for future improvement.

Speaking first of texture, Special Report No. 20 (1933) on Building Research by the Department of Scientific and Industrial Research, England, states that "brick are still made by hand in England and continental countries, though not in the United States except for most exceptional purposes". Canadian bricks are machine made, mostly by the stiff mud auger machine method. The May, 1936, issue

of the *Architectural Review*, London, contains much information on the history and present use of brick. Considerable emphasis is placed upon the importance of *hand making* to obtain a satisfactory product. The hand-made brick is preferred to stock and the auger machine brick for face use is hardly mentioned. A high percentage of sand is necessary to the manufacture of hand-made brick and make them easy to cut and rub into decorative shapes. Hand-made sand-faced brick appear in at least nine advertisements in this one issue. I believe these facts account for the preference some architects have for stock brick as being the nearest Canadian approach to the hand-made type.

As for colour, the range of colours and shades as shown in the issue of *Architectural Review* already referred to gives the impression that English brick makers obtain stronger and more varied colours from the natural clay than is possible with Canadian clays without additions of such materials as iron oxides, red and yellow ochre, etc. Such additions would increase the cost. Additions common in England are chalk in amounts as high as 40 per cent., to produce "Malm" brick and breeze or coal residue, such as is used in London stock brick, which darkens the colour.

This rather wandering analysis of the factors involved in a consideration of colour in brickwork suggests a research committee composed of users and manufacturers. The idea of developing a series of colours in soft mud brick has never been tried in Canada. The use of a series of sands which burn to different colours, blended with clay, and shale in the body and sanded on the surface, will give a number of variables for trial. Other additions to brighten the colours are possible. I think it is safe to assume that this is the proper approach to the problem of colour improvement until such a time as the idea is proven to be wrong. There is no doubt that the newer architectural designs will make a control of colour and texture desirable. The architect, with his artistic training, can be of utmost help to the manufacturer who hopes to maintain his position by producing satisfactory brick which will successfully compete with the other materials now on the market.

DE NOTRE CORRESPONDANT À L'ÉTRANGER, PARIS

Le visiteur à l'Exposition Internationale qui se tient actuellement ici est frappé du nouvel emploi que l'on y a fait de l'architecture. Le Corbusier était, inconsciemment, d'accord avec Ruskin lorsqu'il déclarait que l'architecture doit être un "mode de vie" plutôt qu'une profession. Ce que l'un et l'autre ont voulu exprimer par là est difficile à définir, mais s'il est aujourd'hui un nouveau mode de vie, c'est bien la propagande, et l'architecture a été employée ici avec mission de répandre tous les idéals possibles.



EN AVANT, TORONTO. "NONE BUT THE BRAVE DESERVES THE FAIR."

Cette idée de propagande s'est infiltrée dans les expositions européennes depuis une dizaine d'années surtout parce que l'Art et la Science, qui leur avaient presque invariablement servi de thème, ont perdu l'attrait qu'ils exerçaient autrefois. Le public ne s'extasie plus devant un édifice couvert de neige en juillet, et c'est pourtant ce qu'on semble trouver de mieux ici. Pourquoi de la neige plutôt que des diamants? Pour l'homme moderne qui considère l'avènement de la télévision, de l'avion-fusée et des voyages interplanétaires comme de beaucoup en retard dans la marche du progrès, la Science ne possède plus guère de merveilles. Quelle évolution depuis la grande Exposition de 1851, alors que des pages entières commentèrent en éditorial sur les

chaussures de satin jaune (contribution de l'Art) munies de rossignols en tissu élastique (contribution de la Science) que portait la reine Victoria à l'ouverture du Crystal Palace. On y voyait une heureuse alliance de l'Art et de la Science sous les auspices de l'Industrie, car les produits élastiques étaient la merveille moderne du temps. Nous aussi sommes, pour la plupart, saturés d'Art, si l'on peut dire, et comment nous le reprocher quand nous rencontrons Monsieur Dali à chaque page de nos illustrés. Voilà pourquoi les Expositions doivent présenter du nouveau et de l'inédit qui puisse éveiller en nous un enthousiasme latent.

A la faveur du développement inouï de la propagande, l'architecture a trouvé ici la place qui lui revenait et elle constitue l'attraction principale pour le visiteur de l'Exposition. Elle a, à n'en pas douter, fait ses preuves dans son nouveau rôle. Nous avons même cru d'abord qu'elle s'en accommodait mieux qu'au temps où il lui fallait s'incliner devant Castor et Pollux, c'est-à-dire devant l'Art et la Science. Les formes tortueuses et artificielles des pavillons de la "White City", à Londres; l'insipidité du toit suspendu de l'édifice Ford à l'Exposition de Chicago, n'ont pas eu le succès espéré. Mais à Paris, le visiteur ne peut pas ne pas reconnaître le sentiment de la nouvelle Italie au pavillon italien; ou sentir s'élever en lui la force dynamique du prolétariat devant l'édifice soviétique; il ne peut passer sous l'aigle portant la croix gammée du III^e Reich sans se redresser et souhaiter être aryen. La visite du pavillon de la Solidarité, de celui des problèmes sociaux et de celui des Vétérans de la Guerre soulèvent également en lui des réactions analogues. Nous aussi avons ressenti ces diverses influences pendant la visite de l'Exposition, et à un tel degré qu'au retour au centre international, il semble que notre faculté émotive s'était complètement émoussée.

L'architecte nord-américain n'emploie que très rarement la propagande, l'annonce commerciale n'étant pas considérée comme telle, puisque c'est un produit bien matériel qu'elle présente, non pas un idéal, une abstraction. Aux Etats-Unis, l'Art et la Science sont encore la clé des Expositions mondiales, mais ils tendent à céder la place à la bière et au nudisme. Mais au Canada, que fait-on? La majorité de nos expositions en sont encore à se contenter au bétail en guise d'attraction. Les vaches ne sont-elles pas des animaux très susceptibles de nous instruire, n'offrent-elles pas beaucoup plus d'intérêt que ces mannequins transparents aux organes

éclairés ou que ces décharges atmosphériques artificielles? Il est cependant une de nos expositions qui ne peut se limiter au bétail, et elle appartient à une ville qui ne consentira jamais à partager sa bière ou ses nudités avec le touriste. Je veux évidemment parler de la plus grande Exposition Nationale Annuelle du monde, la C.N.E. de Toronto.

A la lumière de nos observations sur l'Exposition de Paris, nous nous permettons de suggérer aux directeurs de notre Exposition de Toronto quelques moyens d'animer la C.N.E. et d'apporter quelques solutions sensées à diverses questions qui touchent notre pays. Si nous encourageons les organisations vivantes du Canada à se construire des pavillons à notre Exposition Nationale, le peuple canadien réagirait certainement à la manière de la nation française actuelle à la vue des édifices érigés ici par les pays militants de l'Europe. Il en résulterait un retour au sens commun dans l'étude de nos problèmes sociaux, ethnographiques et économiques.

Nous espérons que l'Institut Royal des Architectes, le R.A.I.C., excusera notre offre d'"esquisses gratuites" pour les pavillons que nous suggérons d'ériger. (Annonce C. Spice, architecte agréée, a/s *The Journal*, Londres, Paris ou Toronto.—Dessins expédiés sur demande.) D'abord, un édifice Doukhobor construit en colombages et accompagné d'un théâtre en plein air, avec exposition tous les jours. Deuxièmement, un pavillon pour le Gouvernement de l'Alberta, bâti de la même façon, puisqu'il sera sûrement construit à crédit, avec salle de réunions pour classes bibliques, chants en chœur (des hymnes, seulement), et conférences sur l'économie

politique avancée. Troisièmement, le pavillon du C.I.O., fait de toile écarlate, endroit idéal où les visiteurs fatigués pourraient se "croiser les bras" et se reposer. Le meilleur site pour ce locataire, dit on, serait en face de l'édifice du Gouvernement de l'Ontario. Pourquoi pas? Quatrièmement et cinquièmement, deux pavillons complémentaires, l'un coiffé d'un toit à la Mansard et l'autre de style "local" tapisserie de brique et charpente apparente, et destinés respectivement aux Nationalistes du Québec et aux "Fils Natifs" de l'Ontario. Il est entendu que, d'un commun accord, ces deux pavillons devront faire face à l'édifice du Gouvernement Britannique. Et pourquoi pas? Sixièmement, un beau pavillon de plâtre bleu découpé d'orangé, flanqué d'une statue de Guillaume IV en rouge et bleu et monté sur un cheval blanc, le tout dédié aux Orangistes. Septièmement, la maison modèle d'Ontario érigée sous les auspices du Son Honneur le Lieutenant Gouverneur de l'Ontario. Et il nous serait alors donné d'entendre simultanément les trois hymnes nationaux: "O Canada!" chanté par les Nationaux de langue française, "The Maple Leaf Forever", par les "Fils Natifs", et "God Save the King", par les Orangistes, avec, en sourdine, l'hymne "I Know That My Redeemer Liveth", exécuté par les chœurs réunis du pavillon de l'Alberta.

Il est difficile de se représenter le Canada attaquant ses problèmes avec courage, mais les architectes devraient maintenant réaliser qu'ils ont une mission à remplir, à Toronto, du moins.

En avant, Toronto. "None but the brave deserves the Fair."

Charles D. Maginnis of Boston has been elected president for 1937-1938 of the American Institute of Architects, 386 Fourth Avenue. Mr. Maginnis succeeds Stephen F. Voorhees of New York.

Other officers elected were Frederick H. Meyer of San Francisco, vice-president; Richmond H. Shreve, director

of the New York district; Albert Harkness, director of the New England division; John R. Fugard of Chicago, director of the Illinois-Wisconsin district; Charles T. Ingham of Pittsburgh, secretary, and Edwin Bergstrom of Los Angeles, treasurer.

NOTES

“ORCHIDS to the Profession” by Mr. Humphrey Carver in the first issue of the reborn *Journal* is not only stimulating, but an actual challenge to the architectural profession throughout Canada, and a type of article quite worthy of the new standard and modern trend of the Institute monthly. Mr. Carver defines architecture as “a trade by which some people earn a living, sometimes,” but states that because “architecture has been allowed to become the exclusive privilege of the well-to-do, it has even become doubtful whether architects are entitled to the style of ‘profession.’”

Here is the challenge, and we as architects must look to our laurels.

Mr. Carver reviews the services rendered all classes in the community by the medical and legal professions, and contrasts with these comprehensive services those rendered by the architect. He states that “not more than two per cent. of any Canadian community inhabit dwellings that could by any stretch of the imagination, be described as architecture,” and “at least 15 per cent. live under conditions that have been universally condemned as below a standard of decency.” Lack of interest in homes costing less than \$5000 “because no money can be made out of that business,” is a direct indictment which Mr. Carver flings at our claims to status as a profession. He further denies that architects are victims of circumstances against which they have struggled militantly, although unsuccessfully, on behalf of the community and for this reason claims that the reputation of the profession is the more open to doubt. His direct point of attack is the alleged failure of the profession to form the spear head of the fight against the slums.

This charge, we submit, cannot be entirely justified. The battle against slum conditions was commenced in the city of Toronto in 1933, and in January, 1934, the writer and the chairman of your editorial board, who was then chairman of the Toronto Chapter of the O.A.A., led a deputation to the City Hall to ask the Mayor and Board of Control to institute a \$2,500,000 housing programme on city-owned vacant land. The deputation was a large and representative body comprising labour, construction, women’s associations and social welfare groups. A large percentage of those in attendance were architects, and the proposal was referred to in the press as the Architects’ Plan. The good people of Toronto were slightly discomforted to hear that slums existed in the Queen City, and one of the city fathers stated emphatically: “There are no slums in Toronto.” When the city commissioners reported on the project, however, nothing was done.

Architects were the instigators and organizers of the National Construction Council, which asked the Dominion Government for a national slum-clearance and housing programme. Four Toronto architects were on the committee which appeared on two occasions before the Parliamentary Committee on Housing at Ottawa, and on one occasion an architect from Vancouver augmented their numbers. The National Construction Council represented the organized construction industry throughout Canada on these occasions, and expressed the views of regional groups in every province.

Prof. Percy Nobbs, an architect of Montreal, presided over the Montreal Housing Committee which prepared

such a splendid report of conditions in that city, and on His Honour’s Housing Committee in Toronto, many architects contributed in various capacities. The Housing Centre in Toronto, boasts a few architects on its various committees, but if they as a class have not been as active in Housing Centre activities, as some others, it is perhaps because they are tired or in a measure are glad to see others carrying the torch.

I disagree that our associations or unions as Mr. Carver playfully terms them are a hindrance rather than an assistance. The Dominion Housing Act, such as it is, is largely the result of our united efforts at Ottawa, and I have not despaired of seeing this measure altered to cover the field which its name would imply, and after all, this very excellent *Journal* to which Mr. Carver and I are jointly indebted for space, is dependant for its very existence on the one big union of architects in this Dominion, the Royal Architectural Institute of Canada.

Nevertheless, I consider Mr. Carver’s article a genuine contribution, and am glad to learn from the editor’s note at its conclusion, that we are to be favoured with further articles from his pen.—*J. H. Craig.*

REBIRTH OF ARCHITECTURE

THE *Journal* of the Royal Architectural Institute of Canada has been re-incarnated. We should have known that from its appearance, even if the July issue had not contained “An Humble Address Delivered by Humphrey Carver at the Christening of the Re-incarnated *Journal*, in a Spirit of Enthusiasm Rather than Impertinence.” (Mr. Carver, incidentally, is not only a landscape architect in Toronto and a recognized authority on housing, but he is also a valued contributor to *Saturday Night*.) The re-incarnation is very noticeable in many ways. The *Journal* has gone distinctly modernistic in typography, being full of page layouts in which the blocking of type and engravings is arranged with the utmost dexterity. It is also, we suspect, a little inclined to modernism in both its architectural and its literary tastes. Several of its pages are devoted to very striking examples of the most geometrical designs in recent structure. On the literary side there is a disposition to unbend, such as we have not associated with Canadian architects in the past years of our acquaintance with them. The most delightful article in the issue is that in which “Our Foreign Correspondent” discovers that the one truly British feature in London architecture is “External Waste Pipes”. The by-law for overflow pipes in London declares that these “shall pass through an outside wall and discharge in a prominent position.” And they do so, not only in London, but also in Durban, Auckland, Hong Kong, Poona and Ethelfeichen, “belching out near the roof, wriggling past windows, boring through cornices, bellying over string courses and leering open-mouthed at gratings in the ground.” It is probably the climate and not any superior common or artistic sense that has saved Canadian architecture from any such affliction. The whole issue of the *Journal* is of exceptional interest, and we congratulate the Institute and Mr. Eric R. Arthur, the editor, upon the inauguration of a new era of service to the greatest of public arts.—*Front page, Saturday Night, July 17th.*



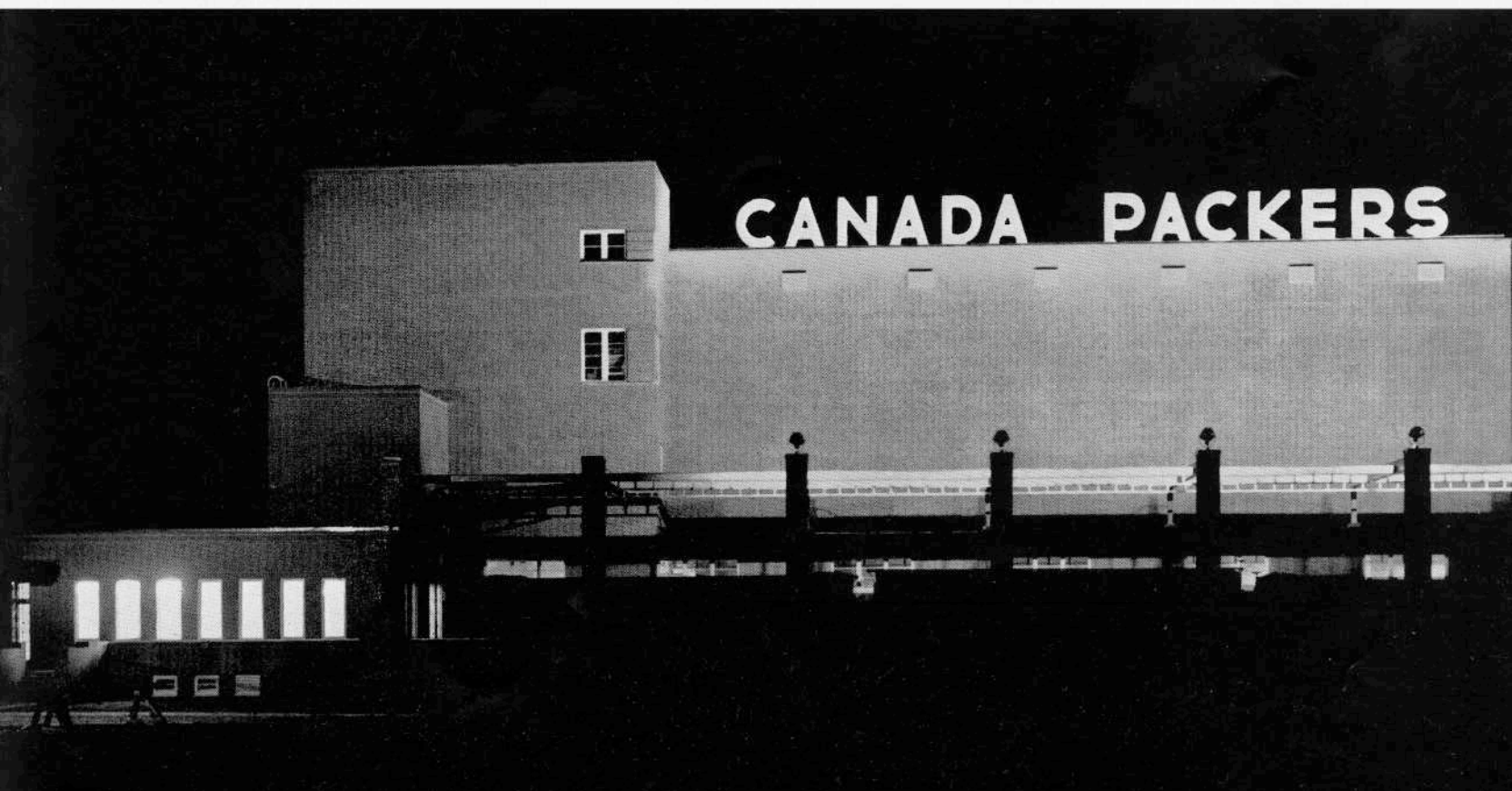
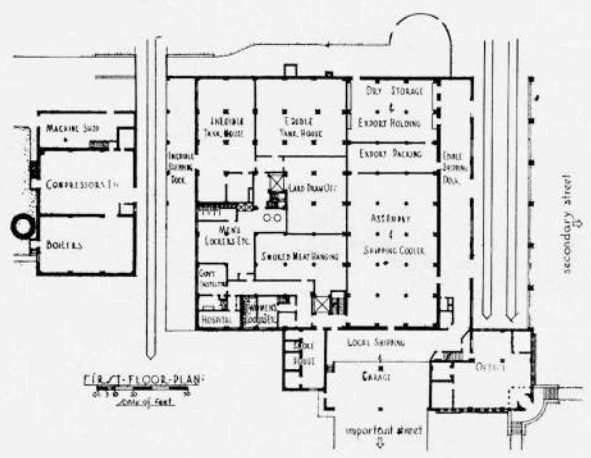
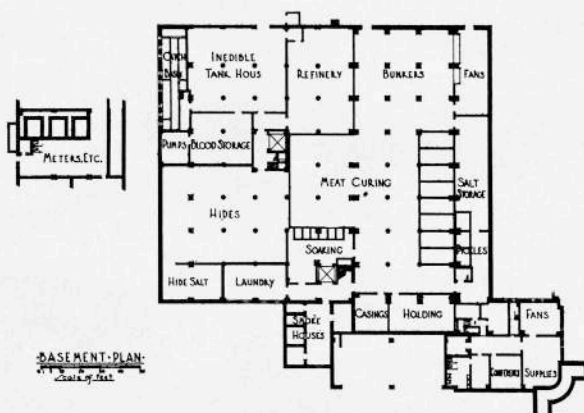
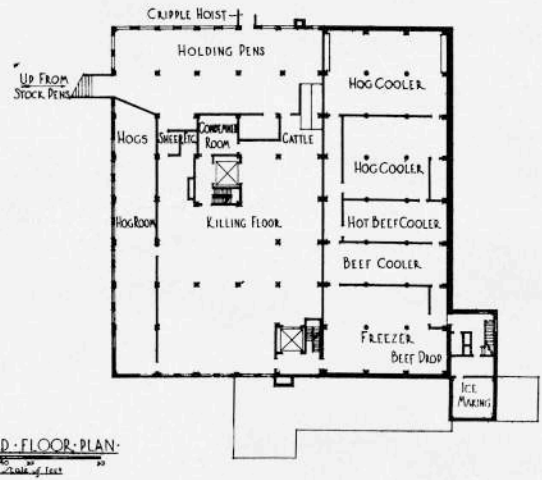
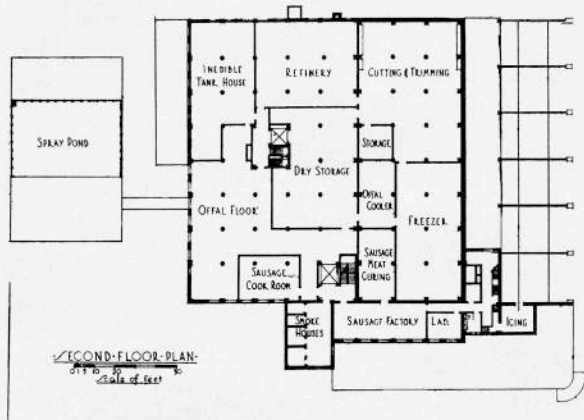
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BAROTT & BLACKADER, ARCHITECTS



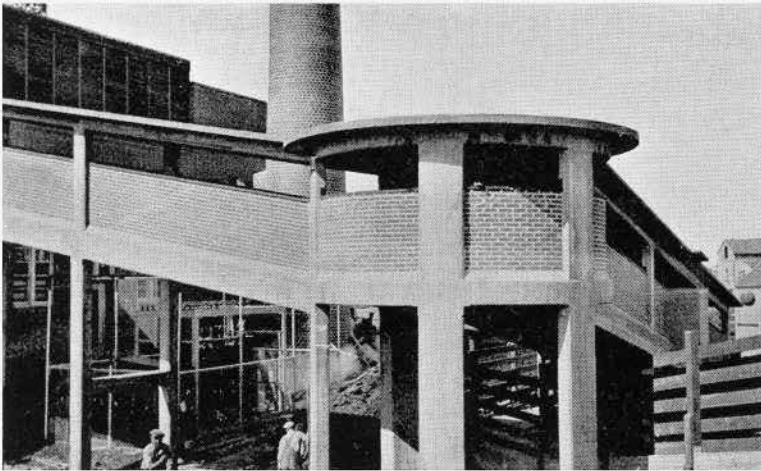
CANADA PACKERS PLANT AT EDMONTON

ERIC R. ARTHUR, ARCHITECT

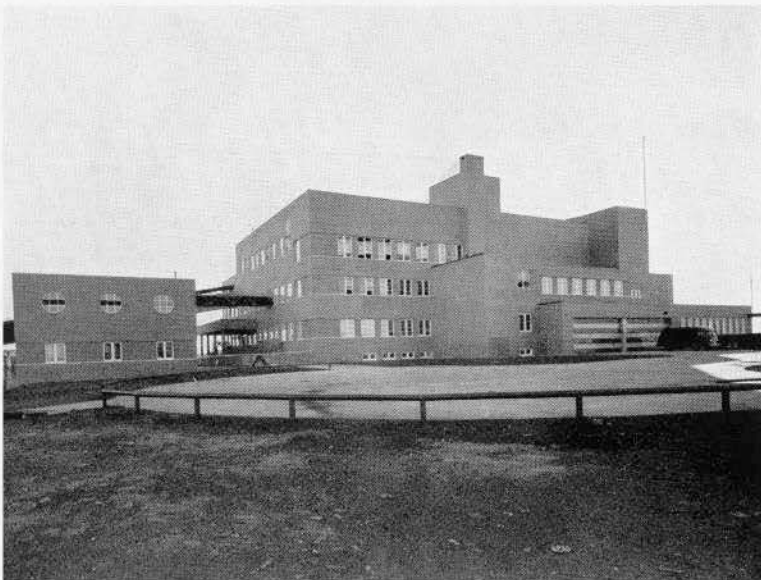




OFFICE ENTRANCE



CONCRETE RAMP TO THIRD FLOOR



VIEW TO FORT SASKATCHEWAN ROAD

Canada Packers Plant at Edmonton was designed to slaughter cattle, hogs, sheep and calves and to process by-products. Weekly capacity is 3,000 hogs, 1,000 cattle, 500 sheep, and 500 calves. Facilities are provided for a volume of 75,000 pounds of smoked meats and 50,000 pounds of sausage and cooked meats per week. A battery of eight curing vats, 8' x 16' x 7'-0" deep takes care of export business in Wiltshire Sides. The Lard Department contains equipment for the manufacture of vegetable oil shortening. Butter, eggs, cheese and poultry are also handled.

Three railroad spurs enter the building; one for edible products, one for inedible products and one for livestock. Livestock is held in a pens building which is connected to the third floor of the packing house by a stepped concrete ramp with brick sides. This ramp is the only one of its kind in Canada and takes the place of the old wooden ramp with cleated floor which was difficult to clean and always in a state of disrepair. From the third floor the product falls to other floors by gravity and as little as possible is moved mechanically and horizontally. It can be seen from the plans that the building is divided roughly into two parts:

- (1) The manufacturing section,
- (2) The cooler section.

Two docks serve both these sections: (1) the shipping dock for export purposes to both coasts; (2) the local delivery dock for delivery to Edmonton and surrounding towns by motor trucks. The office is a small part of the building, overlooking and adjacent to both docks.

The building is of reinforced concrete with brick curtain walls (German garden wall bond). Wood sash has been used throughout and sills are of cast iron. Wood sash is, in packing house practice, a more lasting material than steel sash. An interesting feature in the external design is the sign "Canada Packers" in reinforced concrete with letters 6'-6" high carried into the wall and not braced from behind.

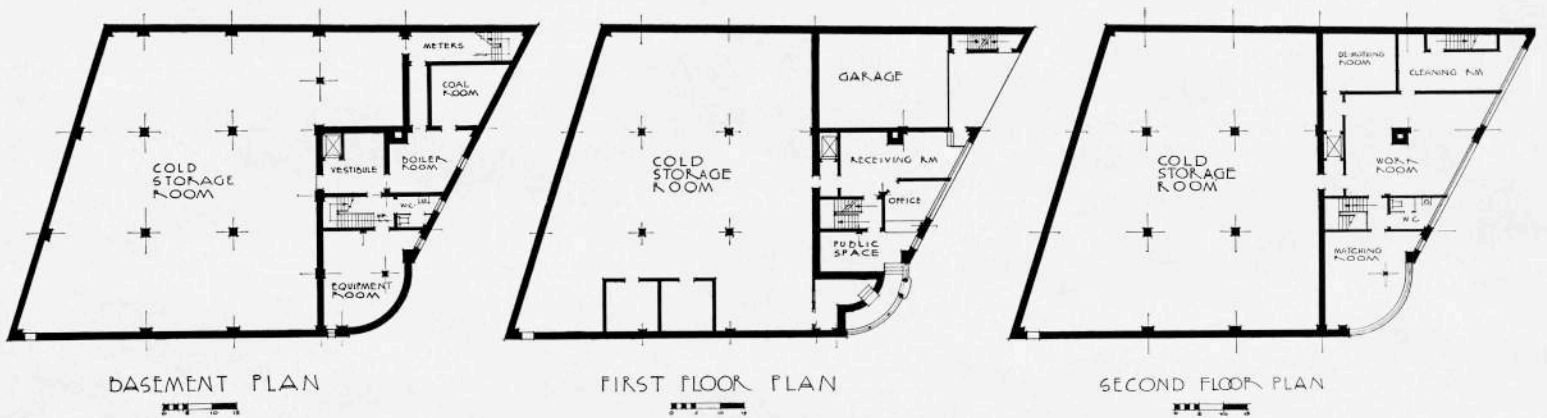
Facilities for the employees are numerous with ample wash rooms and ventilated lockers. Floors and dados are of white terrazzo. The main locker rooms are on the first floor with government inspectors' rooms and hospital with attendant nurse. Women employees have their own dining room on this floor while the men's dining room overlooks the roof on the north section of the building. Every effort has been made to add to the comfort of the workmen both in lavatory facilities, the reduction of temperature in rooms usually extremely hot and the ventilation of every section of the plant.

E. R. Arthur, Architect. Gordon Wallace, Structural Engineer. Bird Construction Company Limited, General Contractors, Moose Jaw, Alberta.



CREED'S STORAGE VAULTS LIMITED, TORONTO

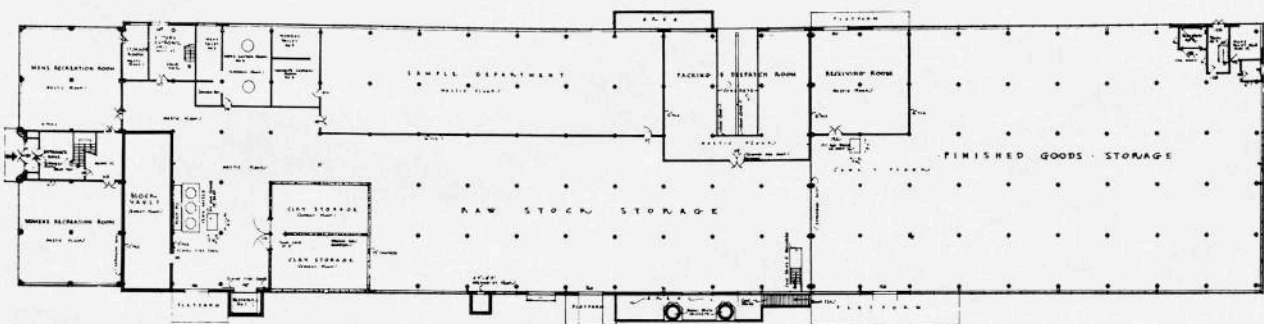
H. G. DUERR, ARCHITECT





STAUNTON'S PLANT AT LEASIDE, ONTARIO

MATHERS AND HALDENBY, ARCHITECTS



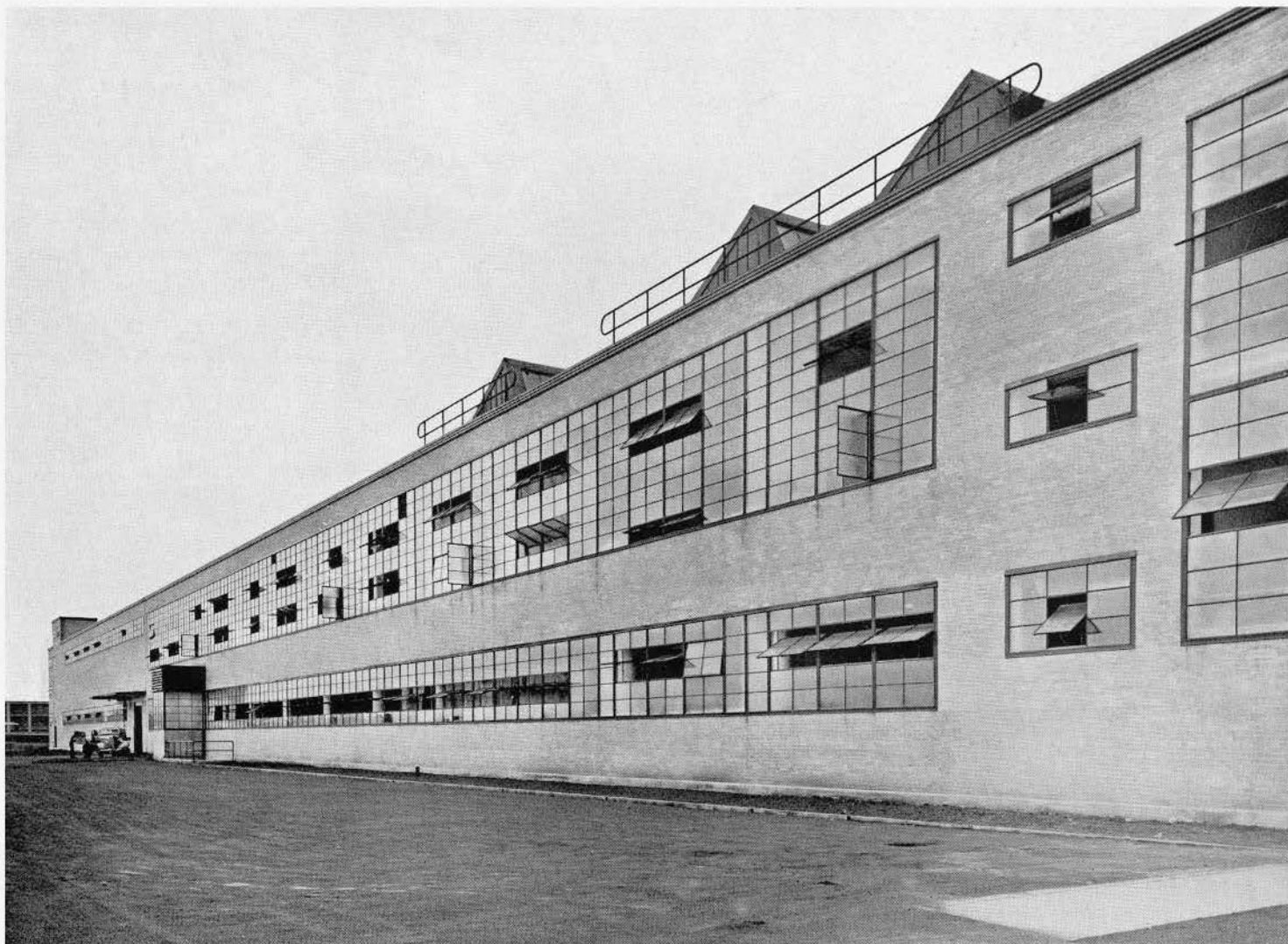
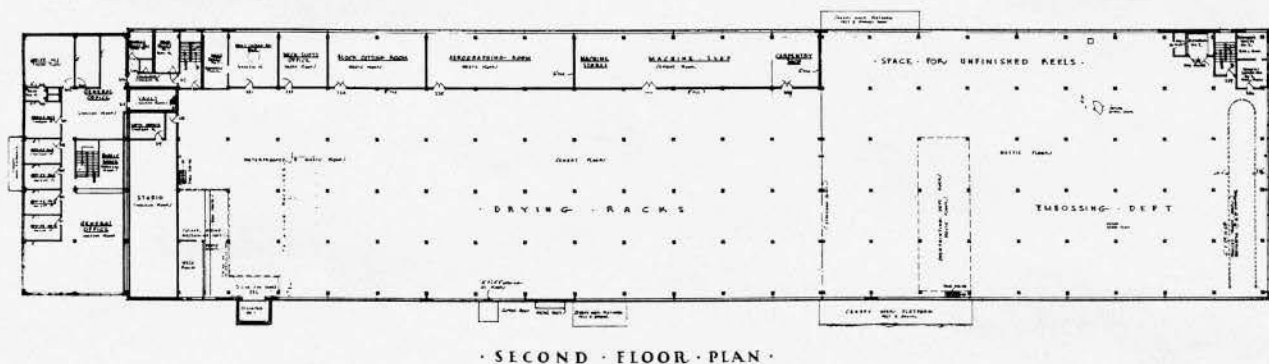
GROUND FLOOR PLAN

The Staunton Wallpaper plant at Leaside has been built to replace a group of buildings of substantial construction in the centre of the City of Toronto. These buildings had become overcrowded and it became necessary to build a new plant with room for expansion.

The new building is framed in reinforced concrete with floor construction of the flat slab type. The exterior walls are of buff colored pressed brick. The interior walls of the factory portion generally are finished in the small backing tile with courses six inches high. Floors are generally of concrete.

The fenestration is important because in certain portions of the building such as the studio, the office and the colour mixing room, it is essential to have a great deal of light whereas in the raw stock storage and the drying room there should be comparatively little light. The steel sash is interesting because it is set on the exterior face of the walls, which gives a neat appearance and obviates the use of stone or concrete window sills. Where wall fenestration did not supply sufficient light, saw-tooth roofs are built with north windows.

The basement contains the heating plant, the paper drying units and the mechanical equipment, which is quite extensive. It was necessary to instal a direct current generator set for certain electric motors, and an air compressor for the aerographing process.





THE ENTRANCE VESTIBULE

The ground floor is mainly utilized for the storage of raw and finished stock and for the cafeteria and recreation rooms on each side of the main entrance vestibule and hall. There are also the clay storage bins on this floor. This china clay is shipped from England two or three times every year and is a very important part of the manufacturing process.

The second floor contains the general offices, the studio, the colour mixing department and the row of printing machines. There is also the block cutting room and the aerographing room where a special finish is done by spraying through stencils.

The process of manufacture is as follows:

The paper is designed in the studio and the block is fabricated from the design in the block cutting room. The outline of the design for each colour is formed in strip brass and driven edgewise into a wooden roll. Solids are filled with special material and the block is placed in a machine and ground to an even printing surface.

The rolls of raw paper stock are moved on hand trucks to the freight elevator and carried to the printing machines.

The paper is first put through a machine which applies a ground coat. It is in this coat that the clay is used. The printing machine is capable of applying as many as twelve colours and can handle a

thousand rolls per hour. The drying is accomplished by blowing warm air on the paper as it is conveyed in festoons down the factory, a distance of 160 feet. There is nearly a mile of paper on each machine at one time undergoing this process. At the end of the drying section the paper is reeled and bundled.

There are also machines for overprinting and embossing where the particular style of paper requires this additional treatment.

There is a special roadway built into the plant, as well as a railway siding, to handle the shipping of raw and finished stock. The property is completely enclosed by a heavy-gauge steel mesh fence.

The heating is accomplished by duplicate welded steel low-pressure heating boilers, which deliver steam at boiler pressure to the production departments for the automatically controlled unit heaters. A separate system of piping supplies steam at reduced pressure to the offices. A ventilating and humidifying unit has been installed for the offices and studio.

The design of the building is almost severe in its simplicity, but it was the desire of the architects to give the owners an efficient structure that would require a minimum of maintenance and would be pleasing in appearance. Mathers and Haldenby, Architects; Gordon Wallace, Structural Engineer; Carter-Halls-Aldinger Co. Limited, Contractors.



THE PRINCIPAL STAIRCASE

UNITED STATES



THE NEW AMERICAN EDUCATION PRESS BUILDING, COLUMBUS, OHIO

RICHARDS, McCARTY AND BULFORD, ARCHITECTS

The structural frame of the building, occupying 148' x 188' ground area, is reinforced concrete with outside curtain walls of glass block having spandrels of Bedford limestone and Kitanning brick at the floors. In order to obtain uninterrupted glass walls, the exterior columns were set back from the face of the exterior wall, which is carried on a cantilevered section of the floor slab.



EXECUTIVE OFFICES

Interior partitions of the third floor executive offices are of glass block for the same reasons that influenced its use as exterior walls.



GENERAL OFFICE

Floods of daylight, through the use of Insulux glass block, assist every type of work in every department of the new American Education Press Building in Columbus, Ohio. Long panels of translucent curtain walls provide a flow of natural but diffused light for pressman, type machine operator, executive, stenographer, clerk and visitor alike, from the first-floor reception room to the saw-tooth skylights of glass block.

FROM "OUR FOREIGN CORRESPONDENT", PARIS

ANYONE who has seen the present International Exhibition here must be impressed with the new use to which architecture has been put. Both Corbusier and Ruskin have said, though they would both hate to know it no doubt, that architecture should be "a way of life" not a profession. What either of them meant it is difficult to say, but if there is a modern "way of life" it is the propaganda way and architecture has been used here for the propaganda of every conceivable ideal.

Propaganda has been creeping into European exhibitions in the last decade mainly due to the fact that art and science, to which all great exhibitions have always been dedicated, have lost the appeal they once had. The public no longer goggles with enthusiasm at a building covered with snow in July, which is the best they can do here. Why snow? Why not diamonds? When a public considers television, rocket aviation and even interplanetary communication long overdue, science has little to interest it. It is a long cry from the first Great Exhibition of 1851, when whole editorials were written about the yellow satin (art), elastic-sided (science) boots in which Queen Victoria opened the Crystal Palace, as a happy combination of art and science in the arms of industry, for elastic was an awe-inspiring modernism then. Most of us too, we are afraid, are a little fatigued with art, today, and nobody can really blame us with M. Dali occupying most of the illustrated magazines. So exhibitions have to have something new and spicy to titillate our jaded palates.

With propaganda in the ascendant, architecture has here come into its rightful place as the chief attraction of exhibition visitors. It has undoubtedly proved itself in its new role, and we thought at first it was happier in it than when it bowed to the Castor and Pollux of art and science. The arty intestinal shapes of the buildings at London's "White City", and the flummery of the Ford Building's hanging roof at the last Chicago World's Fair were not successful. But as a visitor at Paris we could not help but feel the romance of the new Italy at the Italian Building, or surge with proletarian vigour at the Russian, or square our shoulders and hope we were Aryan beneath the impressive beswastica-ed eagle of the Third Reich. Our emotions were appropriate, too, at the Solidarity Building, the Social Problems Building, the Labour Building and the War Veterans'. In fact, our emotions were quite worn out, and by the time we got around again into the international section we hadn't any at all.

Architects have seldom used propaganda in North America; commercial advertising is not propaganda for it stresses a product and not an ideal. Art and science still control World's fairs in the U.S.A., but they are beginning to lose ground to beer and nudity. But what of Canada? Most of our fairs have cows as the chief attraction, and they are very nice educational things, cows, far

nicer than transparent glass men with illuminated colons, or artificial lightning, but there is one of our fairs that cannot rely entirely on its cows, and it is situated in a town which refuses to share either its beer or its nudity with visitors. I refer, of course, to the largest National Annual Exhibition in the World, the Canadian National Exhibition in Toronto.

From the lessons we have learnt at this Paris Exhibition we would like to suggest to the directors of our Exhibition in Toronto a few ways of enlivening the C.N.E., and also of bringing to the problems of our country a little common sense. If we allowed the militant societies of Canada concessions to build pavilions at our National Exhibition, the effect on the Canadian people would surely be the same as that on the sane French nation caused by the buildings here of the militant nations of Europe—an outbreak of common sense in our social, racial and economic problems.

We hope the R.A.I.C. will forgive us if we offer to supply "free sketches" for our proposed exhibition buildings. (Advertisement, C. Spice, Reg. Architect, c/o *The Journal*, London, Paris or Toronto. Designs promptly forwarded to interested parties.) First a Doukhobor Building of stud construction with open air theatre, displays daily. Second, an Alberta Government Building of stud construction, too, as it will undoubtedly be built on credit, with a meeting hall for bible classes, community singing (hymns), and lectures on advanced economics. Third, a C.I.O. Pavilion of brilliant red awning material where tired visitors may rest, and, appropriately, sit down—no doubt this concessionaire would prefer a position opposite the Ontario Government Building, and why not? Fourth and fifth, two complementary buildings, one turreted with a mansard roof; the other of typically "native" construction in tapestry brick and half timber, to house the Nationalists of Quebec and the "Native Sons" of Ontario—both these concessionaires would prefer a position opposite the British Government Building, and why not? Sixth, a fine colourful building of blue plaster picked out in Orange with a statue of William IV in red and blue on a white horse, for the Orange Order. We could hear our three national anthems all going together with O Canada! from the French Nationals, The Maple Leaf Forever from the Native Sons and God Save the King from the Orange Order, not to mention "I know that my Redeemer liveth" from the massed choirs in the Alberta Building. Seventh, a typical Toronto home erected under the auspices of His Honour the Lieutenant-Governor of Ontario.

It is difficult to conceive of Canada meeting its problems bravely but architects should now consider they have a mission, at least in Toronto.

En avant, Toronto. "None but the brave deserves the Fair."

PROVINCIAL PAGE

A representative of the Editorial Board has been asked to write a letter each month to the Journal in order that members may know something of the activities of Provincial Organizations throughout the Dominion. The monthly letter may come from any member, but the representative of the Board is responsible. It is hoped that this page will become of increasing interest to members.

MANITOBA

There has been an improvement in building activity in Winnipeg over last year, which, while not great, definitely points to better times to come in the building industry for the West.

Some of the larger work that is under way by Winnipeg architects this summer as is follows:

A new office building for James Richardson and Sons Limited in Calgary, by Moody and Moore, with Fordyce and Stevenson of Calgary, supervising.

A Film Exchange Building, by Green, Blankstein, Russell and Ham.

A new showroom and garage building for International Harvester Company, by A. E. Cubbidge.

A large addition to The Manitoba Cold Storage warehouse, by Northwood and Chivers.

A new Gymnasium and Dormitory Building for Ravenscourt School by Moody and Moore.

An advisory committee of architects under the chairmanship of G. W. Northwood, F.R.A.I.C., recently reported to the Winnipeg City Council in regard to improvements to the Civic buildings.

A committee of architects and engineers are now at work preparing a comprehensive report on Foundation Conditions in the Winnipeg district. When complete, this report will be reviewed by the Board of Trade and it is hoped that they will assist in financing certain tests and research work. The work of this committee will probably be the most interesting step forward taken on behalf of the building interests in Winnipeg for many years.

The Manitoba Association has suspended meetings for the three summer months.

ONTARIO

This is a command performance, thanks to the perspicacity of YE ED in recognizing that the rural districts also have their architectural moments. Our venue is Ottawa, one of our best-known natural resources, where, architecturally, the mathematics of Greece and Rome rub shoulders with the Virginian and Turkish blends, and the imaginative fantasies of the middle ages flirt coyly with the austerities of the moderne and the pioneer simplicity of la mode Canadienne.

Perhaps the Editor will accept a few local comments on his Opus No. 1. Commencing with the cover, it is typical for the efficiency of the age that some use has at last been found for the upper half of one of the broken "columes" which so freely adorn our "last resting places" (quotation). Worked up on canvas, the cover design would merit admission to any traditionalist gallery under the title, "The last stand of the Classicists." The blue background is highly symbolical.

We pass the numerous advertising pages with a word of congratulation to the treasury department. In so far as "reader interest" is concerned, the *Journal* appears to be greatly improved, and the brand or gland used in the rejuvenation process therefore merits commendation. The perfect balance between the meat and the meringue will doubtless be achieved in due course, the underdone will be stimulated and the overdone suppressed. Probably there will be criticism of even a modicum of humour in a professional journal, but after all, we still retain the fun-loving instincts of *genus homo* even after our transmutation into fraics and mraics.

The article from "our foreign correspondent" leaves us visibly depressed; not, we hasten to add by reason of the article itself. The consistency of our climate, however, inhibits us from experimenting with the decorative possibilities of overflow pipes "passing through an outside wall and discharging in a prominent position". Many a time and oft have we wondered at the apparent incompleteness of our efforts, even after the issuance of the final certificate. Now, we know.

The illustration accompanying the aforesaid article (we apologize for the "aforesaid" which is entirely the pernicious result of attempting to revise the Standard Form of Agreement) well, as we were ruminating, the aforesaid illustration brings to mind a matter of both local and Dominion-wide interest. Properly speaking, this should be dealt with under the title of "Sites for the Site-less", or "Where does it go from here". We refer, of course, to our peregrinating National War Memorial which has now "arrived", after a veritable though sirenless odyssey; but, alas, not to its L.R.P. (q.v.ante).

The local press gave prominence to the arrival of this distinguished visitor, mentioning the sculptors, the number of crates, the tonnage, and the cartage firm which hauled the crates from the dee-poh. Justice having been done to the principals, the party of the second part, the public, evinced interest in the L.R.P. of this colossal affair.

Official huddles resulted in the revelation that now we have it, we seem to have reserved no place for it; at the time of going to press, the situation may be summarized as, "no light on the site". Erection on a temporary site was decided upon, we understand, giving hope that the third post war generation might reasonably anticipate a fleeting glimpse of this, our national memorial. But, and again, also, some further though unannounced difficulties have arisen even with the temporary site. Our own suggestion is that, being a national war memorial, thoroughly inured to the rigour of travel, the most fitting solution of the problem would be to equip it with caterpillar treads, instal some driving mechanism in the portions of the horses where, in nature, the concealed plumbing would

be located, and start the whole thing on a coast-to-coast tour, so that every man, woman and child in this great Dominion could study the horrors of war at first hand.

The future planning of Ottawa awaits the report of a distinguished French town planner, whose services were retained by the Premier on his recent visit to Europe. Possibly a site for the war memorial and a City Hall may still be found practicable within the city limits; if we appear to be slightly cynical and pessimistic, remember that we have seen a succession of town planners come and go during the past thirty years, but of town planning, in a major sense, there has been none. We recall the dictum of Mawson in 1910.—"You still have the finest site in the world for a capital city, in spite of everything you have tried to do to destroy it."

To resume our comments on life and art in the Capital, our non-resident confreres will be interested to learn that the Government is planning another six million dollars worth of office building on the Cliff. The Bank of Canada Building is at the moment, an impressive hole in the ground containing some impressive looking vault construction. As a social note, may we remark that we observed one of the Toronto architects for the building also engaged in observing the said hole. He was hatless. Apparently the young lady of Wellington Street does not demand the sartorial perfection of her progenitor of Threadneedle Street. We have vivid recollections of the boss in the old country struggling into a top hat, wing collar and starched dicky in order to more impressively castigate an erring bricklayer.

We could carry on in this strain for quite a while, but unfortunately another Toronto architect designed another bank in close proximity to our professional sanctum, and due to some oversight omitted to specify rubber tips on the rivetting hammers. Therefore, and in spite of ourselves, we are compelled to admit that brawn is superior to brain, with which conclusion, you, Mr. Editor, and any others who may be misguided enough to have reached this peroration, will no doubt heartily agree.

—A. J. Hazelgrove.

QUEBEC

Mr. Marrotte is the indefatigable convenor of the Quebec members of the Board. We have had numerous notes from him and photographs of members' work but no letter for this page. We are sure it was an oversight and cheerfully forgive him.

Owing to careless proof reading on the Editor's part, Ontario and Quebec were accused of sending minutes to the Provincial Page in the July issue. We should have said Nova Scotia and New Brunswick. We were delighted with the letters from Ontario and Quebec.

SASKATCHEWAN

I have just received the July issue of the *Journal* and looked it over with more than usual interest. The "EDITORIAL NOTES" seemed particularly pleasing, especially the last paragraph asking for co-operation and criticism. Because of this request, well, here goes.

1.—You devote space to a "For Sale and Wanted" column. I am sure many architects have material, books, and so forth which they would like to sell at a reasonable price, and likewise, vice-versa is the case. A nominal charge could be made for each insertion, which I suggest, should have names and addresses only; no box numbers. It might, perhaps, not be a bad idea to stage a "Positions Wanted and Vacant" column.

2.—I somehow feel it is a mistake not to put the R.A.I.C. seal on the cover; true, your comments about Moses and the little angel are not without foundation, on the other hand as the Institute has a seal, it should be used to make the cover distinctive. If the present seal is not suitable, design a new one. The present cover is "just another cover". It conveys nothing.

Your comments regarding vulgarizing the *Journal* by putting it alongside *Homes and Gardens* is all wet. In the majority of cases clients get their first impression of a home they want from such publications as you do not think worthy to fraternize. Also, business executives must, alas, turn to their trade papers for new ideas rather than look to architects. This, I feel, is one of the points, in fact the whole gist of Mr. Humphrey Carver's able and caustic comments in his "Orchids to the Profession". To my mind, if the public is to become architecturally conscious, it is up to the architects to produce that consciousness, and not leave it for the building trades, producers of material, and *The Ladies' Home Journal* to sponsor the cry "Employ an Architect". The astute business man "smells too much of the ocean" in such boasting.

It seems to me that the more you can make the *Journal* an attractive publication for those who build, the more prestige architects will obtain in the eyes of the public, and, if done in a proper manner, it will add respect for the whole profession. Do not forget, that the average person is quite ignorant of what an architect's service constitutes. If the public would naturally turn to the *Journal* for ideas on building, rather than pretty pictures in some other publication—which invariably will not work out on the job—it would be all-to-the-good. Let us get down to brass tacks and realize that, save for a favoured few with silver spoons in their mouths, the practice of architecture is a means of livelihood for the large majority of architects, and that an attitude of smug complacency will never get us anywhere, talk and groan as we may.

I would like to suggest that some portion of the *Journal* be devoted to technical matters. In these days when new materials and synthetic this-and-that are daily offered us for use, it is highly essential that an architect should have some unbiased information concerning new products. To this end, could not, say a, Bureau of Materials be set up? Manufacturers could apply to the Bureau for endorsement and architects would soon get the habit of asking whether or not such and such material has been approved by the Bureau. A charge would be made for testing and if satisfactory, the manufacturer could, if he wished, state the fact of the Bureau's approval in his advertising. I have in mind certain drug companies' products which are advertised "sponsored by the Medical Profession". Many a good architect has been ruined by a poor job, for which he was not responsible.

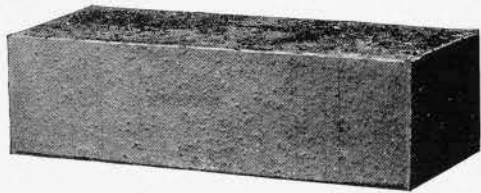
Frankly, your first issue seemed to me to be more of interest to landscape architects and plumbers than to architects. "The Passing of the Backhouse" is more appropriate to Canada than British drain pipes.

In conclusion, please do not think me captious, all I look for is the early dawn of the day when the architect will not have to look at buildings which have been erected without his services for owners who are satisfied with the second best.—H. Bryan Gilbert.

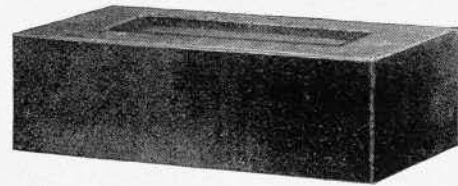
We are glad to hear from Mr. Gilbert and hope he will write us each month.—Ed.

BRICKS

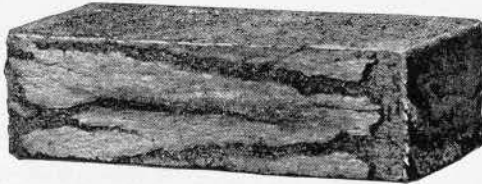
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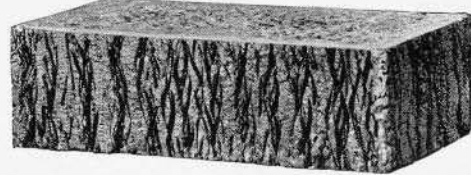
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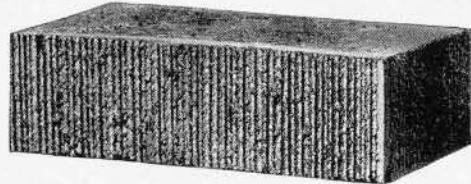
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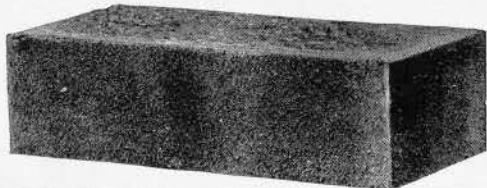
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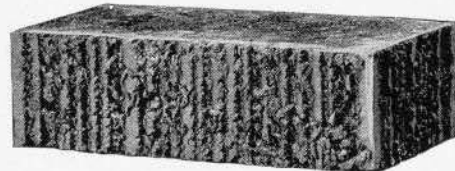
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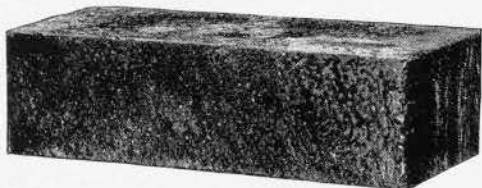
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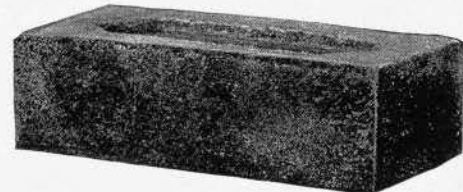
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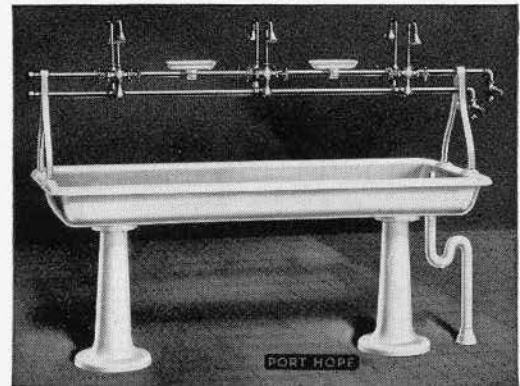
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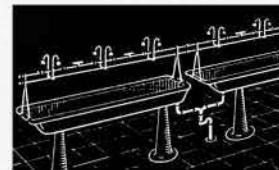


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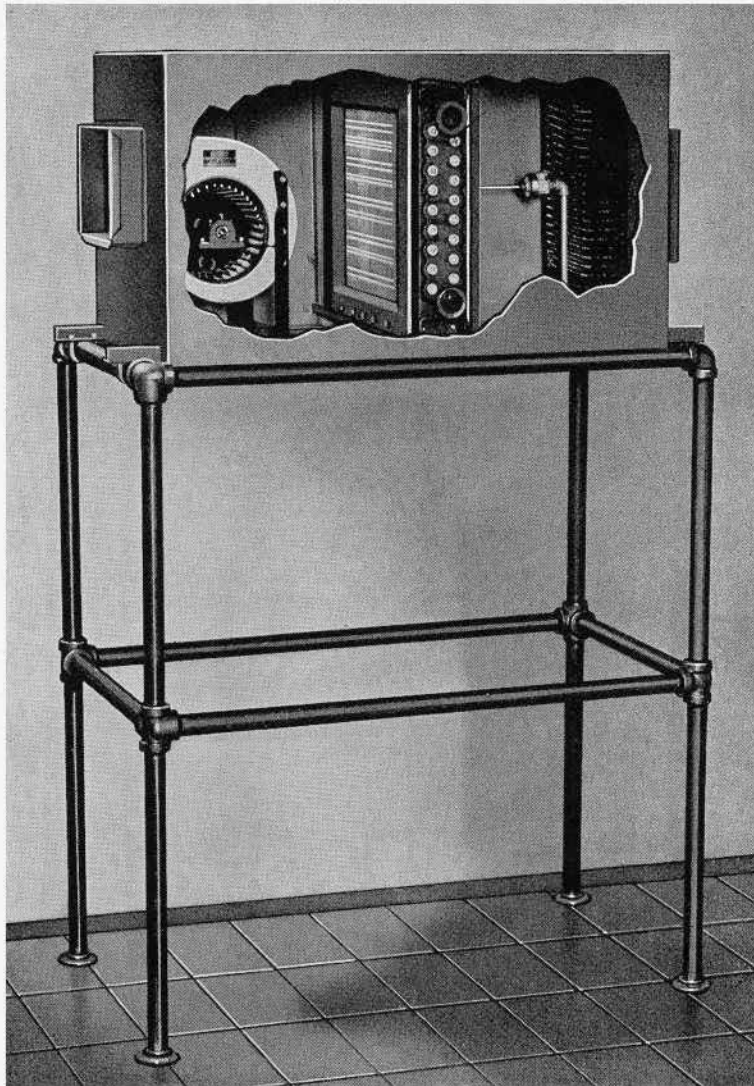


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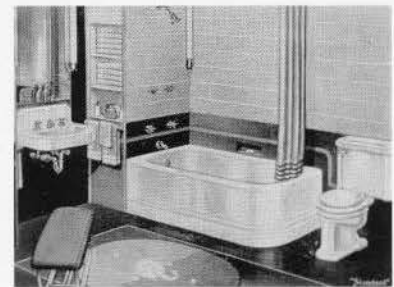
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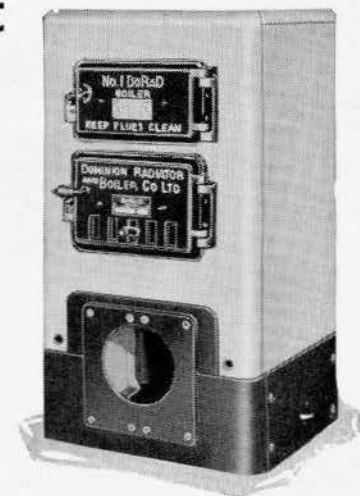
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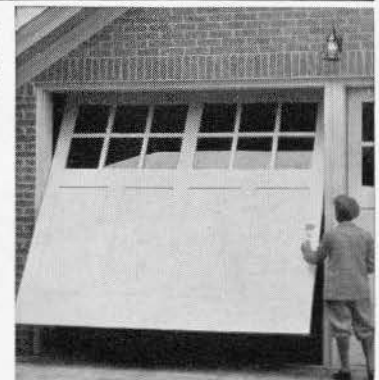
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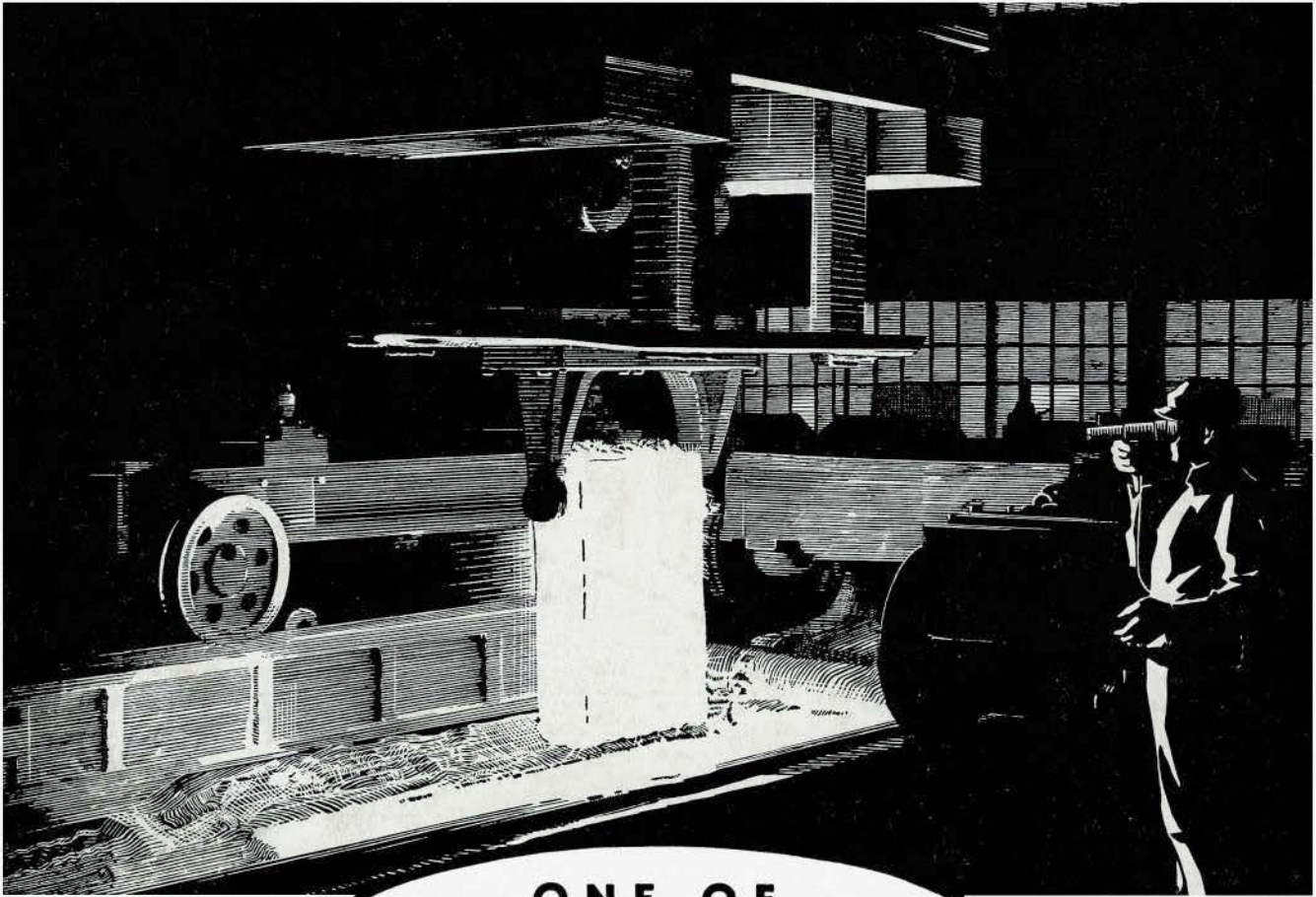


Stelco is a major employer of Canadian labor. As a dependable source of raw material for a wide range of general manufacturers it furthers the spread of Canadian employment. All Stelco products are made in Canada—a fact that reflects in their outstanding quality.

THE STEEL COMPANY OF CANADA, LIMITED

HAMILTON - EXECUTIVE OFFICES - MONTREAL

SALES OFFICES: HALIFAX, ST. JOHN, MONTREAL, TORONTO, HAMILTON, WINNIPEG VANCOUVER
WORKS: HAMILTON, MONTREAL, TORONTO, BRANTFORD, LONDON, GANANOQUE



ONE OF
Canada's Basic Industries...
STEEL!

With the present world shortage of steel, where would Canada obtain the steel required for normal development without its Canadian Steel industry, built up over the past twenty-five years or more?

Twenty-four hours a day, six days a week, DFS Steel Plate and Tin Plate

are going out all over Canada to help supply the demand. In doing this, over 1600 Canadians are employed at this plant alone. In good times or hard times, the Canadian Steel industry needs the support of every Canadian. That is one of the best ways to promote the development of a vigorous nation.



DOMINION FOUNDRIES & STEEL LIMITED

HAMILTON CANADA

STEEL PLATE



TIN PLATE



STEEL CASTINGS