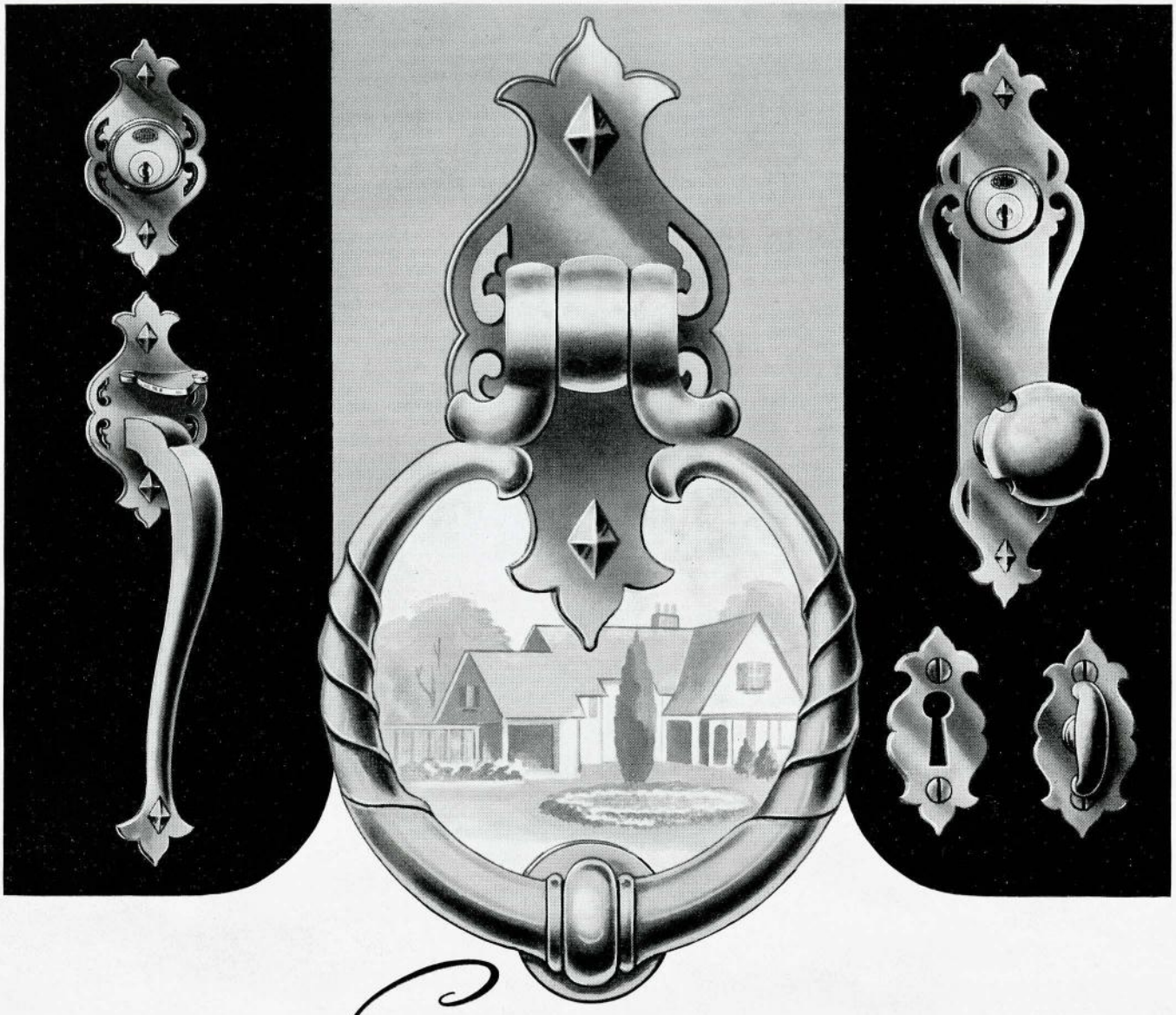
JOURNAL

ROYAL ARCHITECTURAL INSTITUTE OF CANADA

VOL. 18 TORONTO, MAY, 1941 NO. 5



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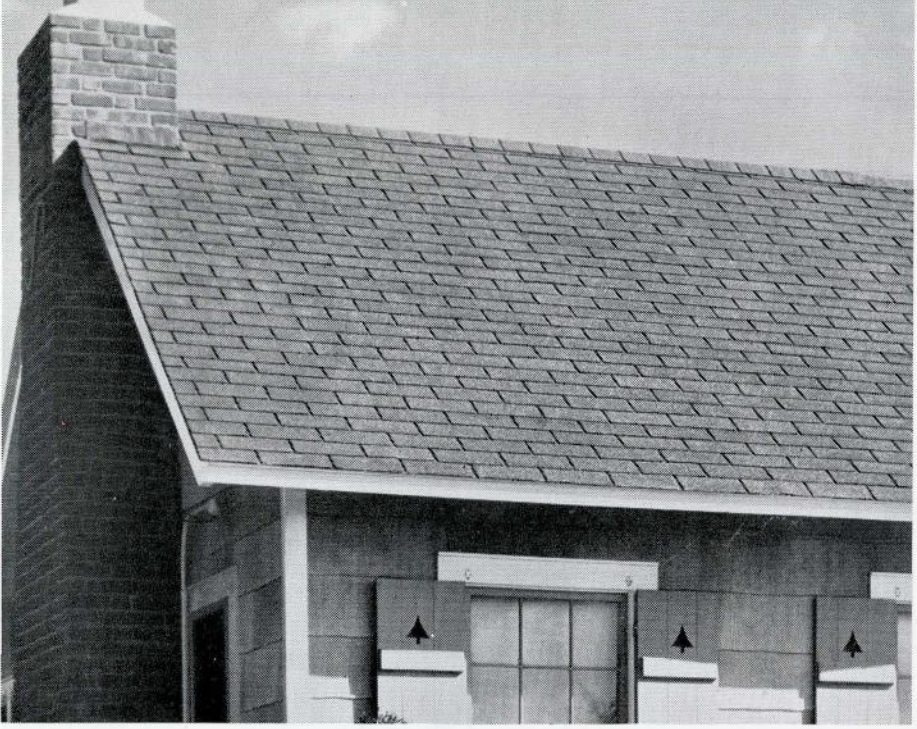
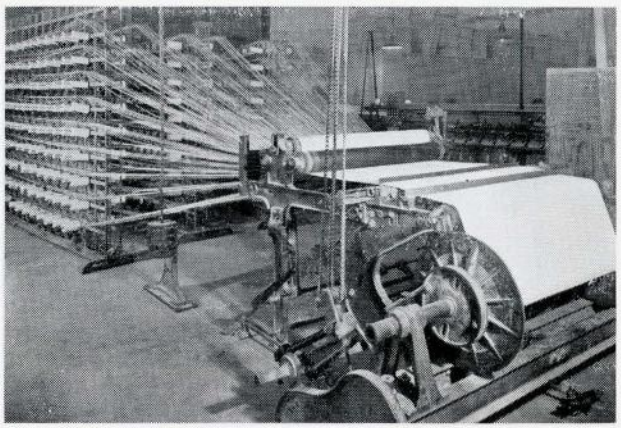


In and Around the WORLD'S LARGEST ASBESTOS MINE



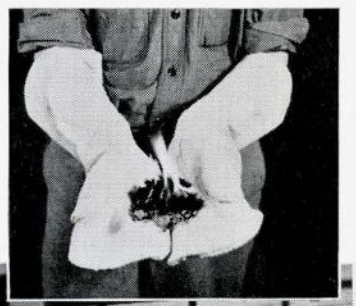
WEAVING ASBESTOS CLOTH is another of the many interesting operations conducted at the J-M factory at Asbestos, P.Q. Not so well known as J-M's wide range of building materials, this fireproof fabric is, nevertheless, vital to the Empire's war effort.

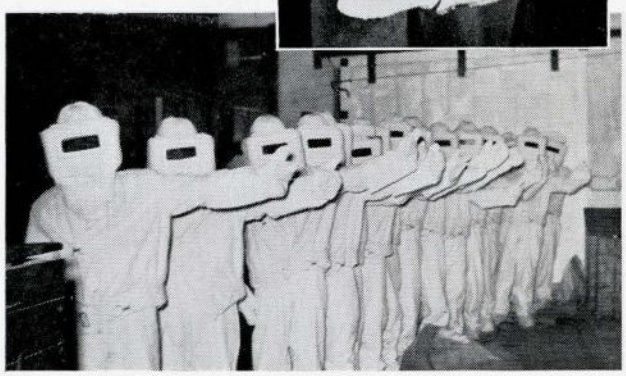
JOHNS-MANVILLE ASPHALT ROOFING SHINGLES

● Much of the charm and beauty of any house depends upon the harmonious blending of the roof with the general architectural design. In selecting a roofing material the architect must consider a wide variety of factors. The taste may be for something quiet or colourful, formal or informal —above all the final result must combine beauty, utility, economy and protection. Whatever the need, Johns-Manville Asphalt Shingles—with their many styles, textures, patterns —with their wide selection of attractive new "'Drift Blends" and distinctive solid colours—with their variety of weights and their fire-resisting mineral surface—provide the architect with a roofing material to fit the character and individuality of every type of Canadian home.

SPINNING ASBESTOS YARN by hand is a craft that dates back to the early days of the J-M mine. This art has been handed down from mother to daughter for generations. The old method offers a striking contrast to the modern loom shown above.

INCENDIARY BOMBS can be dealt with in quick order when the fireman wears a pair of asbestos mitts. The illustration shows how burning material can be handled without fear of scorched fingers. Recently J-M employees launched a fund to donate 10,000 pairs of these mitts to firemen of bomb-blasted London.





DRESSED UP in asbestos suits, a group of J-M workers give the "thumbs up" gesture. Made in the J-M factory, these fireproof suits offer the latest thing in protection for the fire-fighter — helmet, suit, gloves and shoes are woven from the "magic mineral".

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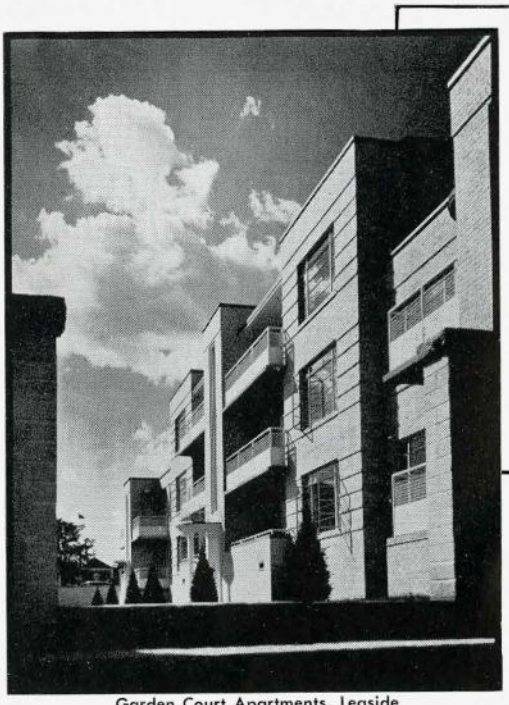
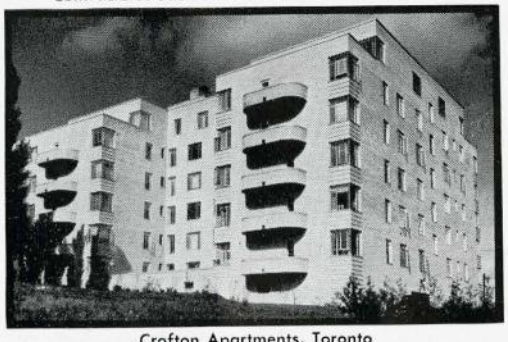
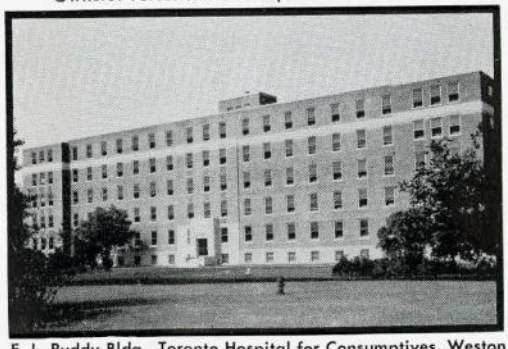


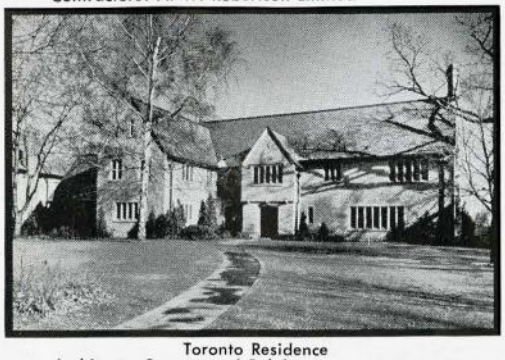
Garden Court Apartments, Leaside
Architects: Forsey Page and Steele
Contractors: Jackson Lewis Co. Limited



Crofton Apartments, Toronto
Architect: J. E. Hoare Jr.
Owners: Forest Hill Developments Limited



E. L. Ruddy Bldg., Toronto Hospital for Consumptives, Weston
Architects: Chapman and Oxley
Contractors: A. W. Robertson Limited



Toronto Residence
Architects: Sproatt and Rolph
Contractors: Thomson Brothers Limited

Architects: Sproatt and Rolph Contractors: Anglin-Norcross Ontario Limited
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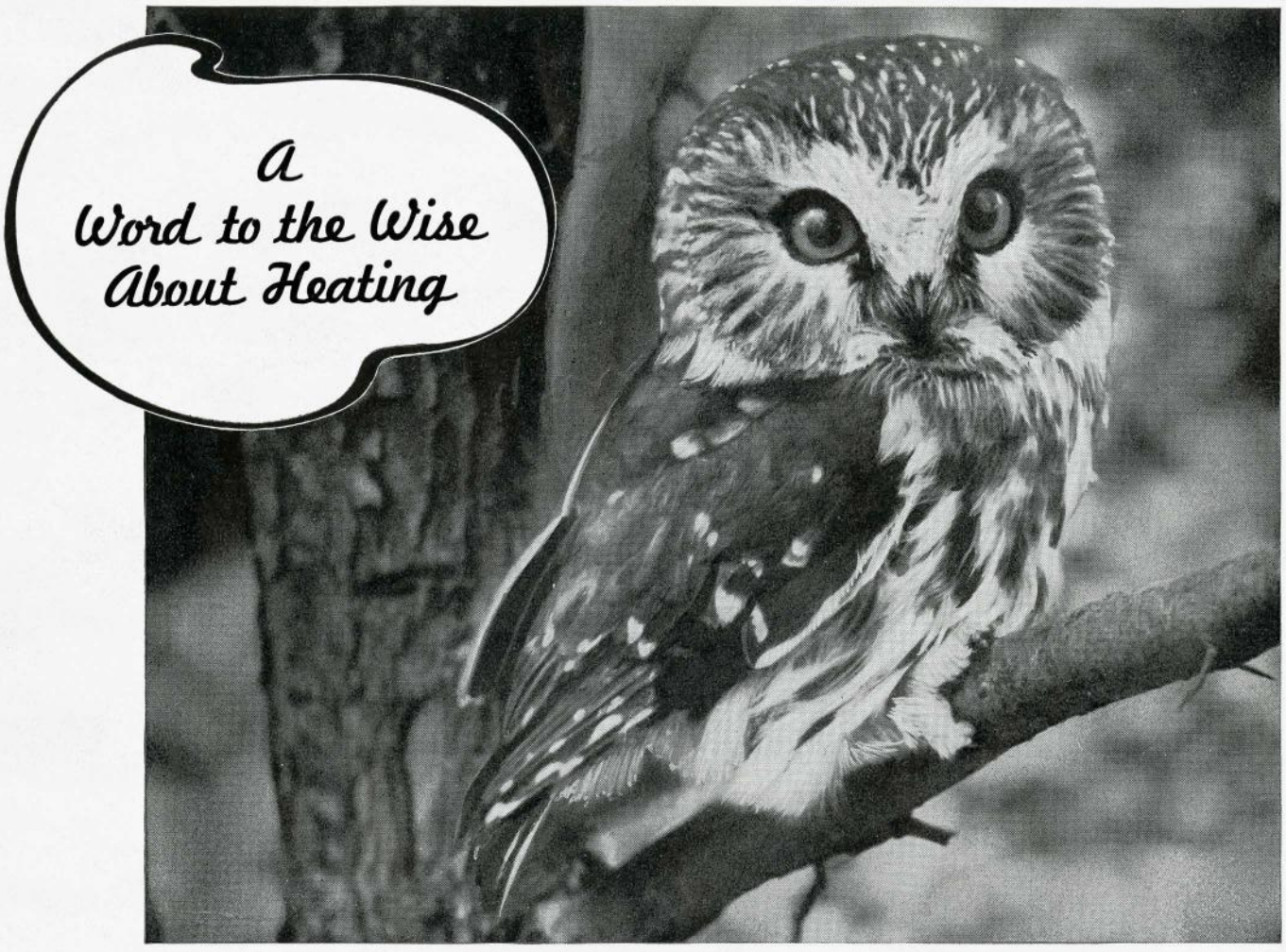

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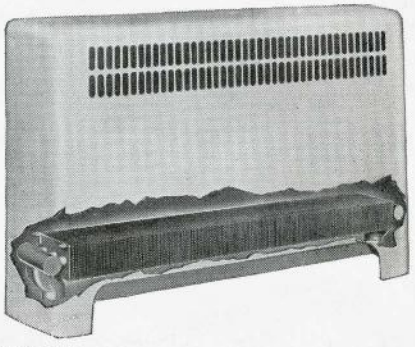

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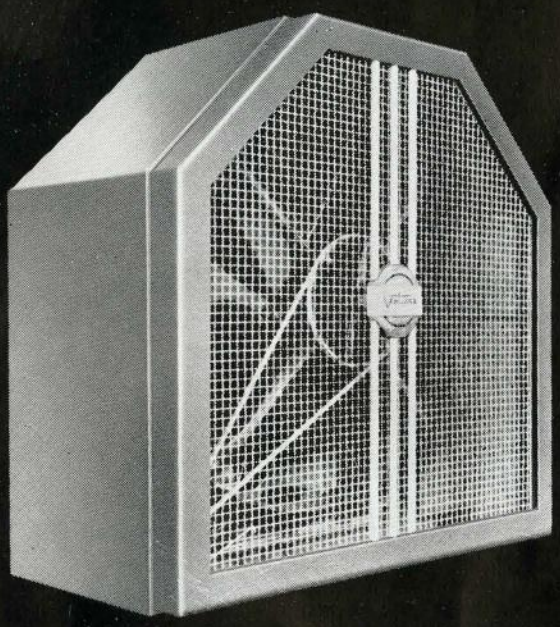

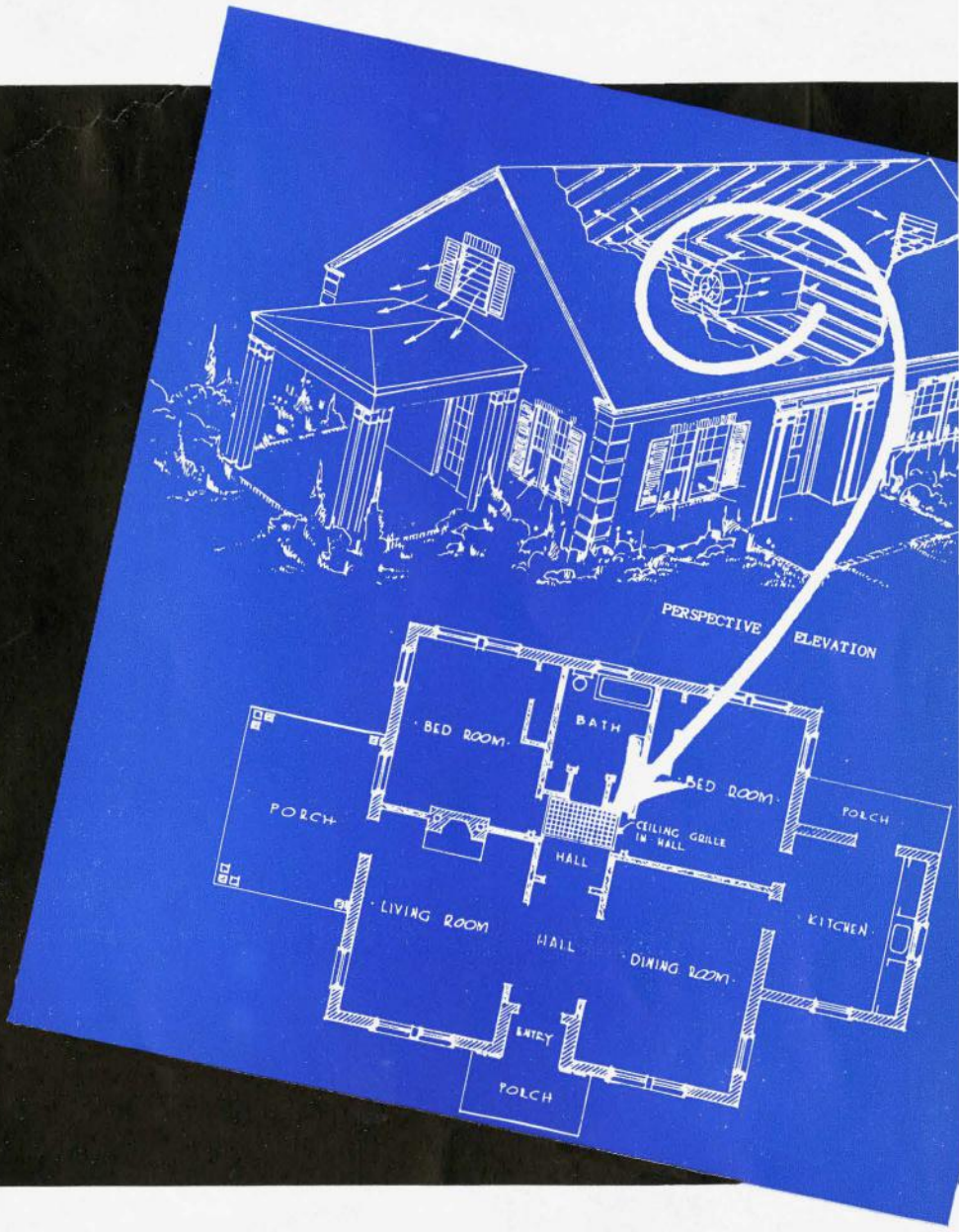

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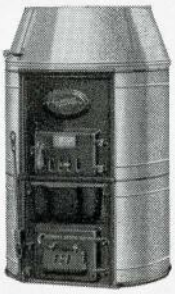
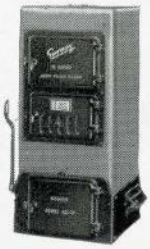


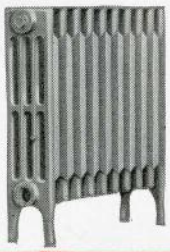
WARM AIR FURNACES
(All Types)



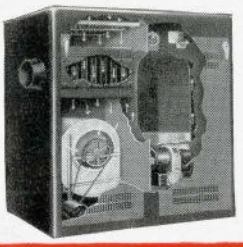
HOT WATER HEATING SYSTEM
SQUARE BOILER with Jacket

HOT WATER HEATING SYSTEM
Round Boiler Style

DOMESTIC HOT WATER HEATERS



Panel Convection Type Radiators



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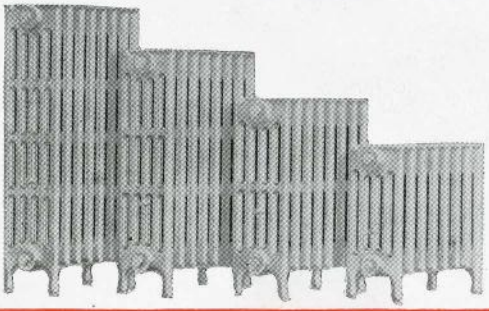

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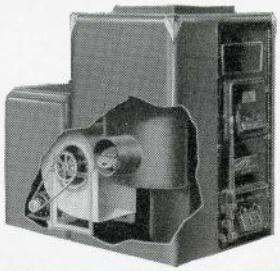
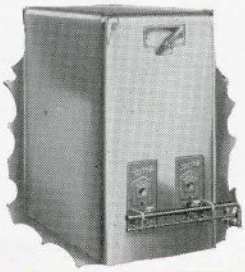
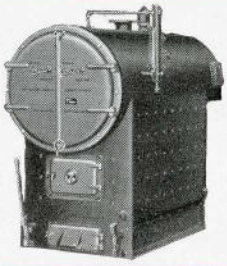


COAL FIRED
Air Conditioning System



GAS FIRED
Air Conditioning System



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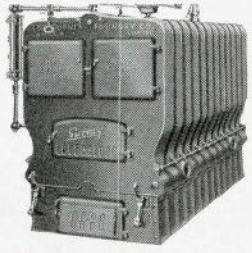

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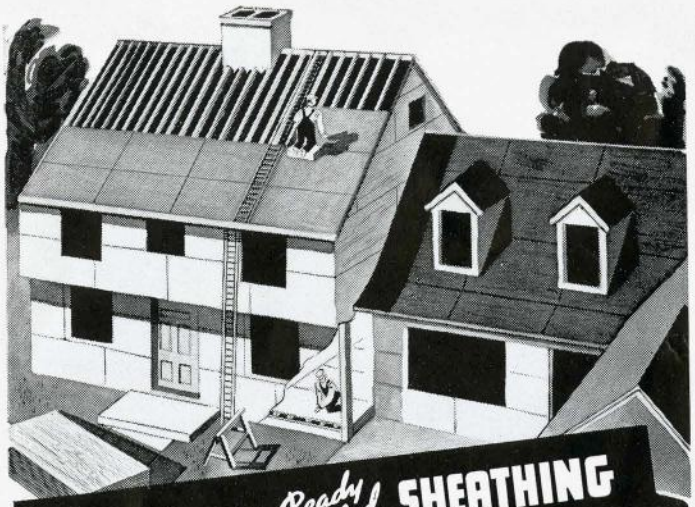
Concealed or Cabinet Type Radiators



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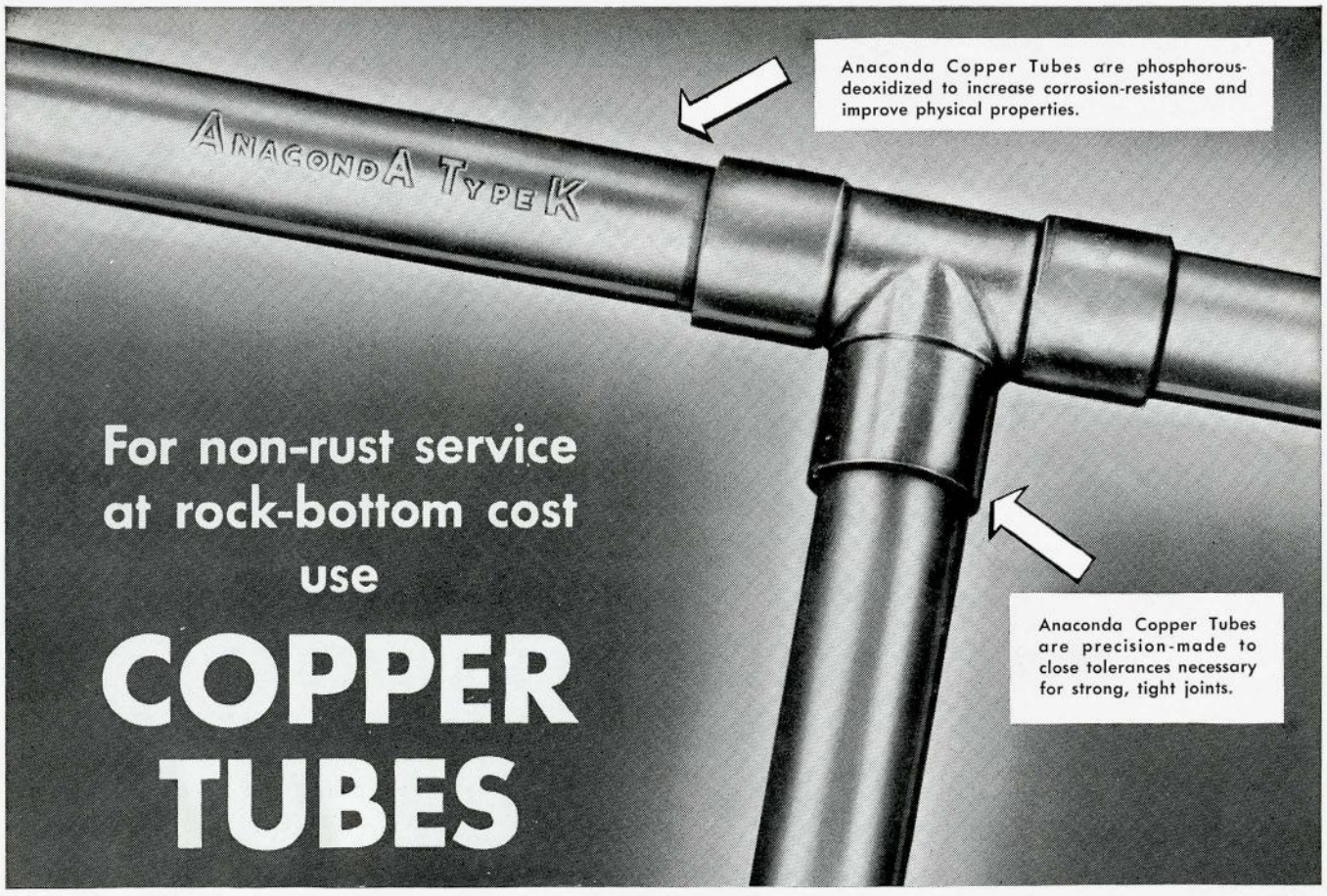

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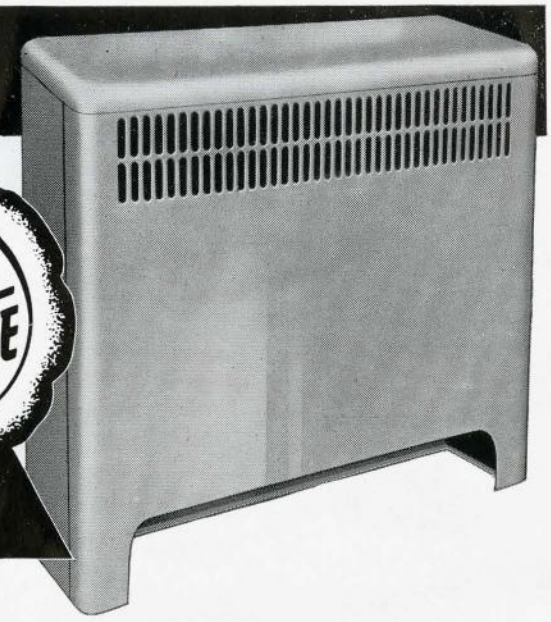

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JOURNAL

ROYAL ARCHITECTURAL INSTITUTE OF CANADA

Serial No. 189 TORONTO, MAY, 1941 Vol. 18, No. 5

CONTENTS

PLATES

Editorial and Advertising Offices - - - - - - 57 Queen Street West, Toronto

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SUBSCRIPTION RATES

Canada and Newfoundland—Three Dollars per year. Great Britain, British Possessions, United States and Mexico—Five Dollars per year. All Other Countries—Six Dollars per year. Single Copies—Canada 50 Cents; Other Countries 75 Cents.

WE HAVE just heard that London architects are acting as Fire Wardens on St. Paul's. Wren's epitaph "Si Monumentum Requiris, Circumspice" — if you would seek his monument, look around you—has become, 200 years later, Hitler's epitaph. Wren's monument was and is a thing of beauty and of joy. Hitler's is one of waste and utter desolation. Can the London architects save St. Paul's, even if London is a flaming ruin, as a beacon and symbol not only of Christianity but of culture, kindliness and a refined way of living — indeed of all those things that we think worth fighting for and for which Sir Christopher Wren stood? We think of him as a boy at Westminster school; as the Savilian professor of astronomy at Oxford; of his busy life as an architect always in pursuit of truth, always ready to give a word of encouragement to the less fortunate. We see him attending the first meetings of the Royal Society of which he was a founder, and reading his paper on the circulation of the blood. We see him at the height of his career rebuilding London after the fire and sitting up late in the night repairing a delicate watch that he had given his granddaughter. It is little wonder that the London architects are risking their lives to save his greatest building because in doing so they are helping to preserve a landmark of civilization. Unfortunately every young German architect knows that the dome is wood. In fact it is with a sinking feeling that we remember discussing it with a German student who has since altered a house for Goering. We even investigated the forts of Upper Canada with him and published together a brochure on Jesuit forts of 1632 and block houses of 1812. What devilment he is now planning for our further embarrassment, we have no idea. He seemed such a nice boy that we find it hard to believe we were nursing a viper in our bosom.

We are delighted to welcome Our Foreign Correspondent back to these pages. There is no reason to keep it longer a secret that he is Mr. Anthony Adamson whose cheerful and erudite articles on Bali, the Will Rogers Shrine, and London in the early days of the war were written on a sick bed in Colorado. We always considered him one of the best and most facile writers of our acquaintance, and one who should command a much greater audience than the architects in Canada. That he is one of our oldest friends, and that we are the godfather of his son, and that that son is called Inigo (a name which will endear him to all architects) does not influence us in our judgment. We are more than glad that he is in better, if not robust, health, and hope that he will continue writing to the Journal.

The problems of the war and the post-war period have been brought home to us forcibly this last week. A friend of ours lives in a village of 400 population, which is to be presented with a plant employing from 5000 to 7000 men. The plant is already in course of construction, but the houses for the workers are not. Nor is the site for them determined. What worries our friend is the responsibility for the education of 1000 children, possible speculation in real estate and, since it is a five year plan, what fearsome problems in relief, what unknown taxation will have to be faced when this pleasant rural village returns to its own affairs when the war is over. Will it ever again be a pleasant rural community, or will it be the shabby ghost of a boom town in which only those of our generation will recall the peace and quiet and simple beauty that once reigned? These are problems which the architects should be asked to solve, if solved they can be, and we are glad to say that in this case their services have been sought and their proposals will not be ignored.

We are filled with misgivings as to the fate of the people of Morrisburg and other towns that are to be flooded by the St. Lawrence Waterway. Few greater sacrifices could be asked of a British subject than giving up the home of his forefathers (and many houses are over a hundred years old), for a new home in a new town. We think with genuine sorrow of people in such circumstances in other countries. Are our own people on the St. Lawrence to trade an early Ontario house of treasured memories for a builderish house in a village laid out by Hydro engineers whose calculations are more likely to be based on the slide rule than on taste and human relationships. The opportunity to build a town on a virgin site is rare in our time, and we should see that it is not mishandled. It is to be sure that such rights and fundamental decencies are preserved that some of our architects are now fighting.

Our next editorial will be written, D. V., in the crypt of St. Paul's in June when we hope to pay our respects to Sir Christopher.

DESIGN FOR ACTING

By JOHN A. RUSSELL, M.Arch.
Associate Professor of Architecture, University of Manitoba

"All the world's a stage,
And all the men and women merely players:
They have their exits and their entrances . . ."

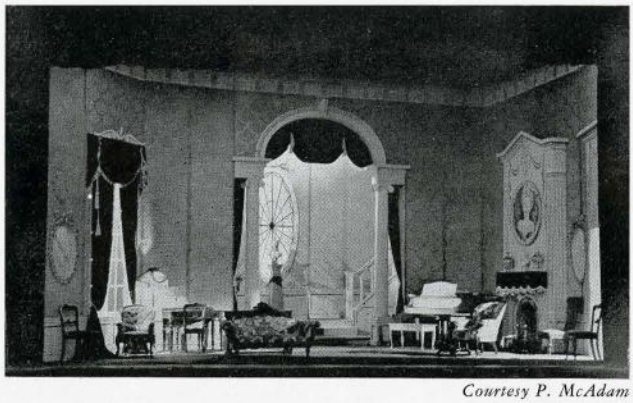
SHAKESPEARE might well have gone further and suggested that these players must be provided with spaces for living, working and playing. Who, better than the architect, with his training in the principles of design to set this world stage? Who, better than the architecturally trained designer, to set the stage of the theatre,—to create spaces and environments within which actors may live and move? Just as Architecture, man's environment, reflects the social and religious aspects of society, so the Stage Set, the actor's environment, aids in bringing to life the words and characters of the dramatist's play.

Today most architectural designers recognize that the acceptance and studied application of the doctrine of functional design,—that much abused and misunderstood formula,—do not involve the exclusion of those principles of sensual beauty which long have been associated with classic design, and which will always be required to make a design a complete, beautiful expression of function and form. The visible elements of design,—the repetition, rhythm, contrast and balance of line, form, tone and color,—combine to produce a harmonious unity of parts whose proportion and scale link them closely to the function of design, that of providing shelter for some activity of man.

"Theatre" implies controlled artistry. The artist must coordinate the arts of stage design, painting, and lighting with those of speech, movement, music and the dance. "Theatre" has been defined by Roy Mitchell as "art of form on one hand, art of time sequence on the other." It therefore forms a link between three-dimensional space elements and the literary and musical time elements. Obviously, its real function is not to copy life, but to interpret plays. Realizing the dual significance of a production,—psychological and pictorial,—the designer will organize his lines, forms and colors into designs which will evoke suggestions of time, place and mood, as well as create beautiful compositions. This business of stimulating the imagination of the audience through color, form and line, as applied to the three-dimensional world in which the actor lives and moves, tests, and frequently taxes, the designer's ability to relate his stage pictures to the needs of the play. Herein lies the measure of his success.

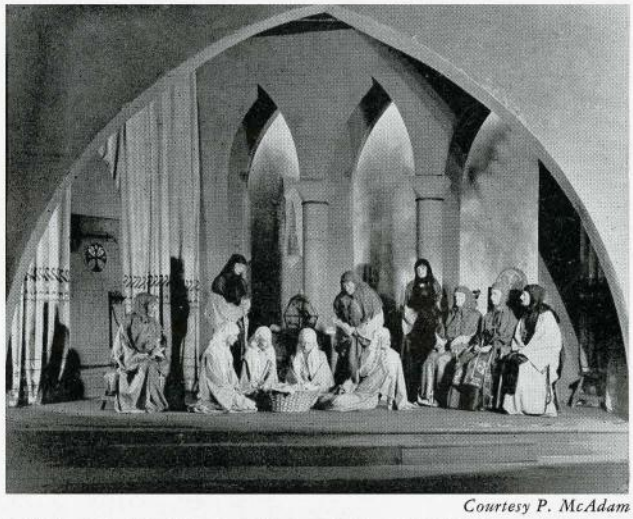
Trained to understand and apply the fundamental principles of design, the architect is perhaps better equipped to create three-dimensional space through his knowledge of three-dimensional form than the painter, who merely represents three dimensions on two-dimensional planes. Many of the greatest of the twentieth century theatrical designers have been architects in their own right. Such names as Geddes, Simonson, Jones, Oenslager, Gorelik, Mielziner, Bernstein, Bragdon, and Urban appear on the roster of American stage designers. Each approaches the problem of creating the actor's environment, not as an opportunity to realize in wood, canvas, paint and light his most cherished dreams, but as an opportunity to design, as a three-dimensional space for action, a stage picture which shall reflect and support the mood of the play.

The designer, like the conductor of an orchestra, creates symphonies of harmonious color, atmosphere, tones and overtones. Just as the orchestra director molds the musical setting and accompaniment for a great choir and soloists, working in close collaboration with their directors, the stage designer co-ordinates his ideas with those of the producer,



Courtesy P. McAdam

STAGE DOOR, BY FERBER AND KAUFMAN
University Dramatic Society, 1940
Director, Mercer McLeod
Settings by J. A. Russell and the Guild of Stage Craftsmen



Courtesy P. McAdam

THE CRADLE SONG, BY SIERRA. ACT 1
Winnipeg Little Theatre, 1929
Director, Edith Sinclair
Settings designed and executed by J. A. Russell and J. E. Dudley

Courtesy P. McAdam

THE MIKADO, BY GILBERT AND SULLIVAN. ACT 1
University of Manitoba Glee Club, 1934
Director, Edith Sinclair
Settings by J. A. Russell and the Guild of Stage Craftsmen

planning action-spaces and levels, and enclosing them with forms and colors to suggest time, place or mood.

Most of our contemporary designers follow in some degree the fundamental principles taught by Appia, the Swiss philosopher and designer who, in the early years of this century, demonstrated convincingly that "the designer's task is a plastic problem of relating static and mobile forms in space." His plastic elements of design are the moving actor, the horizontal floor supplemented by various levels, the vertical painted scenery, and the lighted space thus enclosed. Scenery, then, not only locates action, but also reinforces it and dresses it. Its significant form, revealed by directional lighting, enhances the pattern of the actor's movements, and heightens the emotional intensity of the play.

The scenic designer then, in contrast to the scenic painter, works not only with paint, but with space, with form, and, most important of all, with light. Discarding elaborate painted effects, he uses simple, plastic, structural backgrounds in his interpretation of the mood of the play. Often he chooses unit sets on a curtained stage and atmospheric lighting to create a sense of depth on the actual stage, as well as in the imagination of the audience. His stage, as space, will provide acting areas for the moving actor, as well as structural forms whose dimensions contrast with or complement the actor.

In creating this functional stage décor, the designer, like the architect, works from the ground up. In close collaboration with the director, he devises a plan for adequate playing space that shall have areas, levels, entrances and furniture so placed as to be used efficiently and effectively by the actors. Having established the form of the play by such a floor plan, the designer then considers the character of the play, its atmosphere, its succession of moods and the necessity of suggesting place or time through scenic details. This attention to the elements which reinforce the action will indicate the style of setting which might be used to best advantage. On the stage today we have style parallels for most of the "isms" in the art world, based either on realism or anti-realism.

Realism on the stage implies the use of photographically accurate detail which often is costly, and more often results in a confusion on the stage that interferes with the acting and thwarts the aim of scenic design by distracting the audience's attention. How often the amateur production is ruined by the inexperienced designer who believes that a host of unrelated articles will suggest a locale more definitely than a few carefully chosen and carefully placed details.

Simplification of such intricate completeness results in *Simplified Realism* with its suggestions of time, place and mood by the preservation of some allusion to reality. Highly selective scenery of this kind is found to be most effective in Shakespearean productions, where a Gothic chest and great candelabra in front of a tapestry will suggest a baronial castle hall, or a few simple tree trunks standing out of heavy shadows will hint at a forest. Each suggestive form calls to mind a whole group of related objects, at the same time maintaining reality as opposed to fantasy; thus the spectator feels the presence of that which is not actually there.

As one eliminates more and more realism, the detail of the setting becomes purely symbolic. First among the anti-realistic styles, and the most commonly accepted by the public, is *Symbolism,* the plus-sign of suggestiveness. Concrete forms serve as symbols to direct thought and mood: screens, steps, arches, flags or an altar placed against a curtained, or nonrepresentational, background. Here, simplicity reaches its zenith in stage design, eliminating all noncontributive elements from the setting.

Stylization, on the other hand, eliminates natural forms. Like the poster, it seeks to express ideas through exaggeration of line, form, color or proportion. This style requires an artificial mode of presentation which applies to speech, action, setting and lighting alike, all woven into a pattern entirely designed to characterize the author and his theme.

Stylization of setting follows frequently the teachings of the expressionist school of painting in which the expression of an emotion is the paramount aim. *Expressionism* in setting seeks to establish in the actor's environment the emotional reactions of the characters in the play. This type of stylized scenic interpretation seems most appropriate for psychological studies like "Hamlet" and "Macbeth", where scenes follow one another in rapid succession, "each one complete, climatic, independent, connected only by the thread of life itself, the life of the human being whose individual and typical experience is being unfolded." Expressionism thus becomes the theatre of the mind's eye, "the theatre under your hat," as Barrett Clark so cleverly expressed it.

So-called *Formalism* does not attempt to represent or suggest any given locality, character or emotional mood. Completely detached from such considerations, it emphasizes wholly its purpose as a space for acting, by using a more or less permanent setting of curtains, openings, platforms, steps and walls. Such a formal arrangement of acting areas reminds one of the formal stages of Greek and Elizabethan times with their fore-stage, upper and inner stages. Such permanent settings have proved very successful in many recent productions, using architectural compositions with changeable units and backings for the openings. This formal stage, sometimes called the *Architectural Stage,* emphasizes mass silhouette, surface treatment, and other elements of architectural three-dimensionalism.

The two "isms" in stage design which have found least favor on this continent are *Cubism* and *Constructivism.* The one distorts naturalistic elements completely, destroying all representational qualities and resulting in a state of incongruity between the actor and his environment. The other is completely revolutionary, being both anti-pictorial and anti-decorative. The Russian theatre has been particularly fond of this constructivist type of setting which provides a skeleton structure of platforms, stairs and ramps built up on unconcealed and unadorned scaffolding. Completely eliminating suggestions of time or place, it displays the actor on a stark framework whose intricate construction is baffling and usually distracting. Any atmosphere that may exist is wholly the result of color, light and shadow.

Such avoidance of conventional scenic forms has found expression, in a modified way, in the *Space Stage,* one of the most important contributions of the western hemisphere to the modern theatre. It resembles constructivism in its provision of several different playing levels. This unit set is, however, clothed in plane surfaces emphasizing its structural solidity, and is usually placed against a neutral or simple architectural background. It is conceived wholly from the point of view of the action of the play and the consequent relationships of the actors to each other in space. No suggestion of time or place is included; instead, the actor-positions and actor-movements determine the levels, the ramps and stairs, and thus create spacial relationships.

To determine the style best suited to the play, one must consider its mood and character. Is the play a tragedy with its necessarily grave, dignified movement, or is it a comedy with its gaiety and consequent dash? Is the mood to be the sharp, brittle movement of satire, the blare, clash and hurry of farce, or the elegant artificiality of the comedy of manners? The determination of style will indicate the simplicity or complexity of forms to be used in the actor-groupings. It will determine the actors' plastic relationships to each other and to the audience, and will suggest areas and levels to make these relationships possible. The stage should be a three-dimensional space, and not simply an artificial two-

dimensional frame within which the actors will pose for an audience. In other words, the designer must provide areas and enclosing forms for the moving actor; he must create a stylistic background in form, color and light which will enhance the moods created by the actors. Herein lies the problem of scenic design and its solution.

No matter what "ism" or style the designer in the contemporary theatre chooses to follow, he analyzes and solves the problem logically, basing his organic design on three fundamentals: the actor moving about in space; the design, or space composition, enhancing the total pattern of movement and heightening its emotional intensity; the light, or the plastic element, binding the whole into a unity of mood. How like the achievement of a functional organic design in architecture,—form based on purpose and use, form determined by method and materials of construction, unified pattern achieved through balance, rhythm, contrast, proportion and scale. Lee Simonson tells us that "freedom of design in setting a play is inseparable from the method of acting it." Norman Bel Geddes adds, "Every detail of the stage design is the organic outgrowth of the action of the play and has been determined from the standpoint of practical necessity."

In addition to expressing a theatric locality, either actual or imaginative (through realism, suggestion, stylization, or formality), and thereby reinforcing the action and creating the atmosphere, the stage setting must be attractive, following the requirements of unified composition. Eliminating all fussy details and possessing a quality of bigness in all its parts, the stage picture must create a unity of impression and project this across the footlights to the audience.

To create this sense of spaciousness within the limitations of the actual stage, the designer must use both color and light: color, not only in its ordinary sense of blue for the sky, green for the grass, red for bricks, but color as an emotional medium which shall indicate the feeling, quality, mood and intention of the play; light not only as illumination to give visibility but light as an emotional language with power to induce and maintain moods through its direction, intensity, quality and color. Light and color, delicately blended and merged, will then have an emotional appeal and beauty which could never be approached by paint alone. The designer must therefore be acquainted thoroughly with the properties of color and light, and the theories and practice of their harmonious and complementary use on the stage.

Having designed the scenic form, the artist must utilize color and light to explain, enhance, and emphasize its mass and mood. The use of color involves not only a knowledge of its physical properties and the general principles of mixing and combining pigments, but also its psychological properties. Everyone reacts to colors, associating with them, mentally and unconsciously, certain qualities and conditions,—warmth or coolness, gaiety or melancholy, courage or cowardice, luxury or poverty, violence or peace. Again, certain colors possess solidity and weight, asserting themselves as definite realities; others suggest vaporous space, removing all sense of solidity. A knowledge of these properties, as well as a good sense of color harmony and balance, is therefore requisite in achieving the right emphasis in the visual picture and in creating the right atmosphere and mood in the mind of the audience.

Frequently, color on the stage is more dependent upon light than upon pigment. It was Appia who introduced this conception of light as a plastic color medium. "For him, paint was nothing more than pigment to receive and reflect light. The color of the setting was the color of the light that filled it and was reflected from its surfaces, light that fluctuated subtly in endless gradations keyed to the emotional pitch of the scene. A setting became a composition of forms related in space by the quality of the light that bound them together; its fluctuations, caused by the dramatic opposition of vast shadows and concentrated highlights, created monumental masses and then blotted them out until they were towering silhouettes or hung like mirages in the heavens . . . The total effect was an illusion, for any form of stage setting, like every effort in the theatre, is an illusion; but aesthetically it was a more perfect illusion, recreating so subtly and yet so monumentally in its pervading forms the world we live in." (Simonson.)

Controlling the quantity, color, and distribution of light on the stage, the designer paints with light that reveals form through chiaroscuro; that focuses attention on the actors and their movements; that suggests the time of day, the locale, or the season; that creates the mood. Thus, light becomes an element of spatial design. As in architectural rendering, shadows are employed primarily to emphasize the brilliance of lights, to reveal form, its planes and silhouette. In themselves, shadows are also useful as decorative elements in a design; further, their character is peculiarly suggestive of emotional and symbolic effects.

The achieved effects in the contemporary theatre are due largely to the color and texture of the surfaces used and to the richness and intensity of the lights. To the creators of these scenes, "light is an emotional experience instead of just a convenience to see things by, an emotional language with power to induce and maintain moods of the soul; and color a possession more precious than gold." Without the effect produced by the clearness, vibration, delicate blending and merging of color and light, the unusual beauty and emotional appeal of these productions would be impossible of achievement.

Thus far I have dealt with the "ideal" in the design of stage décor. In Canada, most opportunities of contributing to the drama are limited to the field of amateur production. Here, restrictions of stage dimensions and equipment, lack of financial backing, and scarcity of trained craftsmen seem to present almost insurmountable difficulties. Yet, it is the solution of just these problems that adds the thrill of accomplishment to the resulting achievements. My first scenic venture in Winnipeg, "The Cradle Song," was presented on a diminutive stage twenty feet wide, fifteen feet deep and twelve feet high. The achievement of some sense of spaciousness in the vista of Gothic arches was most gratifying, and, at the same time, rather thrilling.

Like "The Cradle Song," most plays demand for their setting definite places of action and definite times and periods: cottages in Cornwall, shanties in the wilds, inns, clearings in the woods, plays in India or Egypt, plays in palaces and plays in kitchens. How can the amateur playing group hope to accumulate scenery for such wide fields of action, for such diverse phases of existence? They cannot. I believe the best and only solution for the amateur group is to simplify such realistic requirements to an absolute minimum, perhaps even resorting to symbolism. Through the use of a permanent set of curtains for the stage, their designer can utilize isolated elements,—like a window or a door in period style, a Buddha, a sphinx, a pair of columns, a fireplace,—to suggest in turn the hundred and one localities called for in as many plays. Frequently it is necessary to establish the flavor of the play through the suggestion of a definite period; but that suggestion should always be a broad, generalized statement of the style as interpreted by contemporary views. The formal, simplified realism of the first act of "The Mikado", on a curtained stage, illustrates this type of generalized suggestion. The designer's one aim should be to eliminate and to keep on eliminating, unnecessary details which only tend to complicate the stage and distract the audience. The hardest lesson in design is to learn how to be simple, and, at the same time, to use suggestive form effectively and logically.

The best of the "little" or "experimental" theatres and the finest of the schools of the theatre realize that "a production is great only when it harmonizes the *art* of dramatic interpretation, the *skills* of artistic setting and lighting, and the *crafts* of costume, properties, and make-up." Herein lies the essence of the workshop idea, which I firmly believe is the only successful foundation upon which an amateur group can build. The many different skills and talents provided by the amateur group can be carefully organized so that their separate, but related, activities will dovetail into one another neatly and expertly. At once the production becomes a communal enterprise, giving opportunities for self-expression and self-development to students of many different leanings and crafts. Then, and then only, does dramatic art in all its fulness contribute to the intellectual and emotional development of a community. The value of this workshop idea has been demonstrated by the Guild of Stage Craftsmen at The University of Manitoba. Since 1933 this group of students from the Department of Architecture and Fine Arts has joined in the design, construction, painting, and lighting of the settings for the majority of the student productions at the University, as well as for several civic pageants and Little Theatre productions.

Together we plan and design the settings for a play, we construct the platforms and flats, paint them, die the curtains, install the scenery on the stage, and work as stage hands during the performances. Realizing that light on the stage must be controlled, intensified or diminished with the mood of the play, the Guild enlists the help of electrical engineering students at the University to solve the technical difficulties of creating such effects. Other groups of students have charge of properties, costumes and make-up. Virtually, this forms a complete workshop under the supervision of a central head. Each group considers the salient elements of the design, the harmony and emphasis of color, the kind, quality, and color of the lighting to be used. In this way, the particular contribution of each craft aims to appear to the right advantage, not as a solo voice, but as a note in a rich and swelling chord which will linger in the mind of the audience. Thus, the students participate in the birth, development, and realization of the visual elements of a production.

Whether designing for the amateur group with its limitations or for the professional group with more flexible spaces and budgets, the scenic designer strives for simple, effective backgrounds for actors and costumes. His design should reinforce visually, through form, color and light, the idea of the play which the director presents through his actor's speech and action. Audiences today come to a play, not to revel in the golden fog of delusion, but to share the mood originated on the stage. Only the close co-operation of producer, actor, designer, and craftsman can create a production which will win the expectancy of the spectator, his sympathy, laughter, tears, and delight. In playing his part in this collaborative effort, the designer has the vast, limitless reaches of the audience's imagination at his command as he builds his symphonic effects. With the stage set, the lights lit, the actors dressed and grouped, he has his "muse of fire." Everything is in readiness. Sound the trumpets. *"The play's the thing . . . !"*

HENLEY BRIDGE NEAR ST. CATHARINES, ONTARIO
QUEEN ELIZABETH WAY

OFFICE OF W. L. SOMERVILLE, ARCHITECTS

. . . AS A RESULT OF ENEMY ACTION

By ANTHONY ADAMSON

1. The City Churches

BEFORE the last devastation of London in the Great Fire of 1666 there were 93 churches in the "City" of London. Wren rebuilt about 50, four or five were not damaged by the fire, some were not rebuilt and others were rebuilt by such architects as Hawksmoor or the younger Dance. In the early 19th Century there were 76 churches in the City. Since that date 25 of the lesser ones have been pulled down, and from the latest information available, "Of the 51 that survived the Victorians and the present century, 11 have been almost destroyed" as a result of enemy action "and another 14 have been damaged with varying degrees of severity." They were mostly damaged in the great fire raid on London. There were no spotters on their roofs and it is said that small roof fires were seen by people on the street, but as the churches were locked and without caretakers the fires spread before anyone could reach them. St. Paul's has always had its full complement of spotters who have more than once saved it.

Of the Churches destroyed, three were among the great interiors of the City, all by Wren, St. Bride's Fleet Street, Christ Church, Newgate, and St. Lawrence Jewry. All that is left of the first two is the steeples. St. Vedast's with its intimate Renaissance interior is gone too, though its elegant little triangular steeple still stands. St. Stephen's, Coleman Street, is no great architectural loss, nor is St. Alban, Wood Street, whose Wren Gothic had been corrected by Gilbert Scott. The little hidden church of St. Anne and St. Agnes has lost its beautiful flat domed ceiling. All that is left of the historic old church of St. Giles, Cripplegate, Cromwell and Milton's church, which survived the Great Fire, is the perpendicular arcade. All Hallows, Barking, with its mass of Grinling Gibbons' carving, where a U.S. president was married, and the Dutch Church are gone too.

Of the fourteen which are damaged, the greatest loss is St. Mary Abchurch which had a painted dome by Sir James Thornhill, Hogarth's father-in-law, and a beautifully carved and festooned altarpiece and organ case. Another unique church damaged is St. Mary Woolnoth by Hawksmoor, that most original architect. It will be remembered by anyone who has been to the City as the church with two towers next to the mansion house. St. Mary at Hill has lost its fine woodwork. St. Dunstan's in the East (Wren and others), St. Magnus the Martyr (Wren) outside which Wat Tyler was killed, St. Stephen Walbrook (Wren), St. Clement Danes (Wren) of "Oranges and Lemons" fame, and All Hallows on the Wall (Dance) with its Roman foundations, are among the casualties. Of the twenty odd still standing there are some of the oldest but only three or four of the best known. St. Mary le Bow is damaged but its bells still hang awaiting invasion or armistice to sound.

It is difficult reasonably to evaluate the City churches. There is possibly no group of little buildings anywhere that has aroused so great an interest, yet in most cases they are box-like structures of great simplicity. It is well worth while for architects to look up their books and see what is lost. Externally there is nothing expensive about them, no marble columns as in Rome or Leningrad, no Gothic statuary as in Paris, no Baroque sleight of hand as in Madrid or Lima, no spacious parish buildings as in New York. Wren's fifty, if we exclude St. Paul's which is by itself in its class, are only, to find an adjective to suit, clever. The solution of the site plan, the method of putting many seats into a small cube, the piling of rigid classic details into delicate spires, the virtuosity in his variations are only, that modest adjective, clever. Also as churches they are not what we want today, and this goes for all but the Gothic ones; there is not one that has a chancel. They are auditoriums designed for learned divines in bands to expatiate on theology, not mystic shrines of God with bingo rooms in the basement, which all we sectarians want today. Besides which there is no nearby population to use them, a lot of them are permanently locked. Their original function is dead. Not only that, there is scarcely an English-speaking architect that could not design or rebuild a Wren church passably today, whereas no man anywhere can design (or stonemason cut) the fan tracery of Henry VII's Chapel if our addled adversaries regard it as a military objective. What then is our loss?

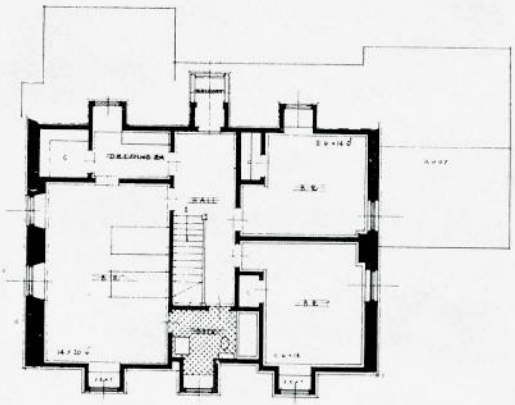
Our loss is this. The City of London is a small place more vividly born on, worked on, thought on, loved on, written on and died on than any plot of its size in this historic chaos of a world, and this life revolved about these churches. It is for this reason then that these churches have a niche in the cosmic culture of mankind. Though they were unused and largely unknown to the modern Londoner, his innate sense of history brought him to vehement protest whenever a church was endangered by the commercial expansion that had throttled their life around them. They were larded with a domestic and spiritual wealth that no group of buildings can approach. Chaucer, Coverdale, Whittingdon, Gresham, Frobisher, More, Cromwell, Laud, Foxe, Bunyan, Milton, Pepys, Burke, Johnson, Garrick, Newton, Lamb, DeFoe cannot have sought inspiration, been baptised, married and buried in these churches without leaving their mark. No churches have more of a well-worn air, everything that past centuries of worthy Christians could give to them was given. The woodwork is magnificently appropriate, the pulpits and organs holding pride of place. The monuments are historic, the vestries lavish in comfort and repose, the plasterwork and painted decoration beautiful. Nearly everything inside these churches is on that domestic scale of quiet nobility that is peculiarly English. In St. Michael's there is a plaque by the entrance which sums up aptly and concisely the spirit of the City churches, "Plenteousness within His Palaces".

This plenteousness does not only include the beauty of organ cases by Gibbons, monuments and glass to 18th Century worthies and painted domes. It includes the dust of a Roman Catholic saint, three Queens and two Pretenders to the throne who lie with severed heads in the yard of St. Peter ad Vincula. It includes the annual pageantry of the City Companies on their saints' days, and the service for the Lord Mayor and Aldermen each November at St. Lawrence Jewry. It includes the "London Stone" at St. Swithin's, and the stone to the fabulous King Lucius "first Christian king of this land, then called Britain" at St. Peter's. It includes St. Andrew, Undershaft, whose name commemorates the Druidical maypole whose mediaeval shaft dwarfed its tower. It includes the head of a Duke of Suffolk at St. Botolphe Aldgate, in a glass case. Such patina cannot be replaced.

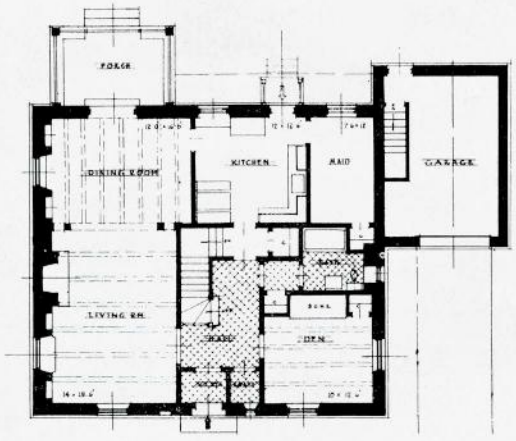
"Fret not thyself because of evildoers, neither be thou envious against the workers of iniquity. For they shall soon be cut down like grass, and wither as the green herb."

HOUSE OF MR. STANLEY STANGER, HAMPSTEAD, QUEBEC

LAWSON AND LITTLE, ARCHITECTS



SECOND FLOOR PLAN



FIRST FLOOR PLAN

HOUSE OF MR. J. S. CORRIGAN, TORONTO, ONTARIO

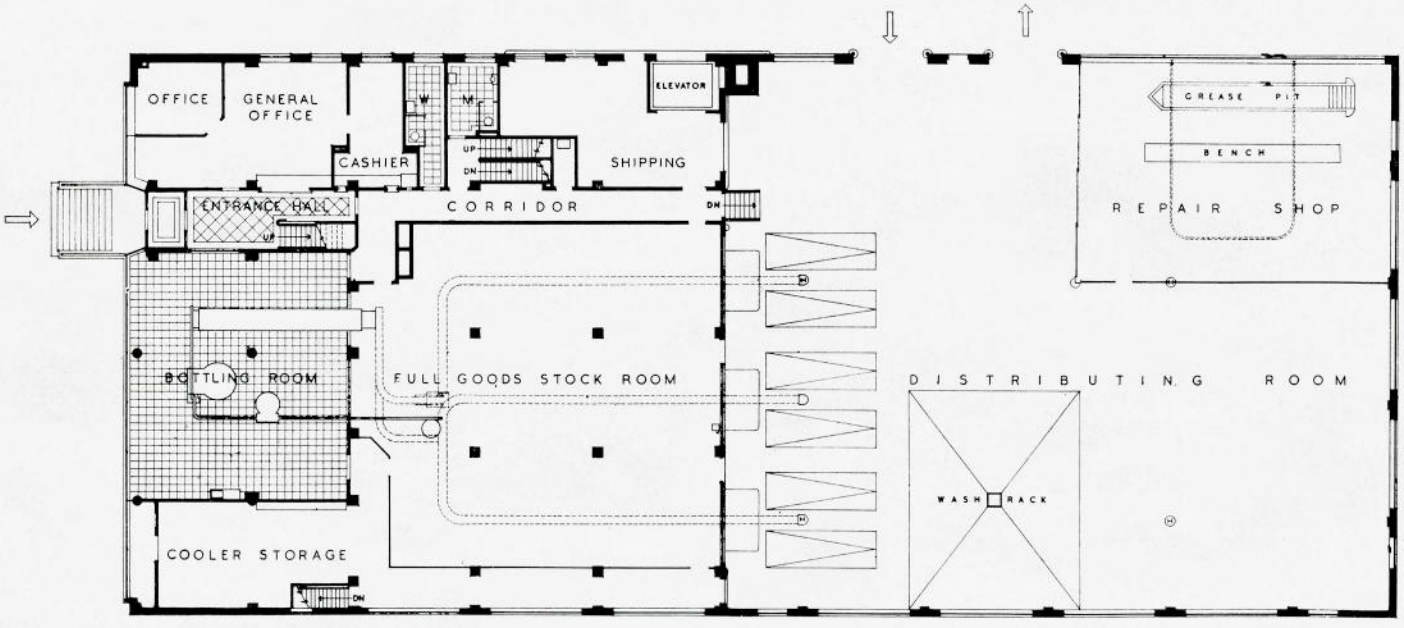
N. A. ARMSTRONG, ARCHITECT

FIRST FLOOR PLAN

SECOND FLOOR PLAN

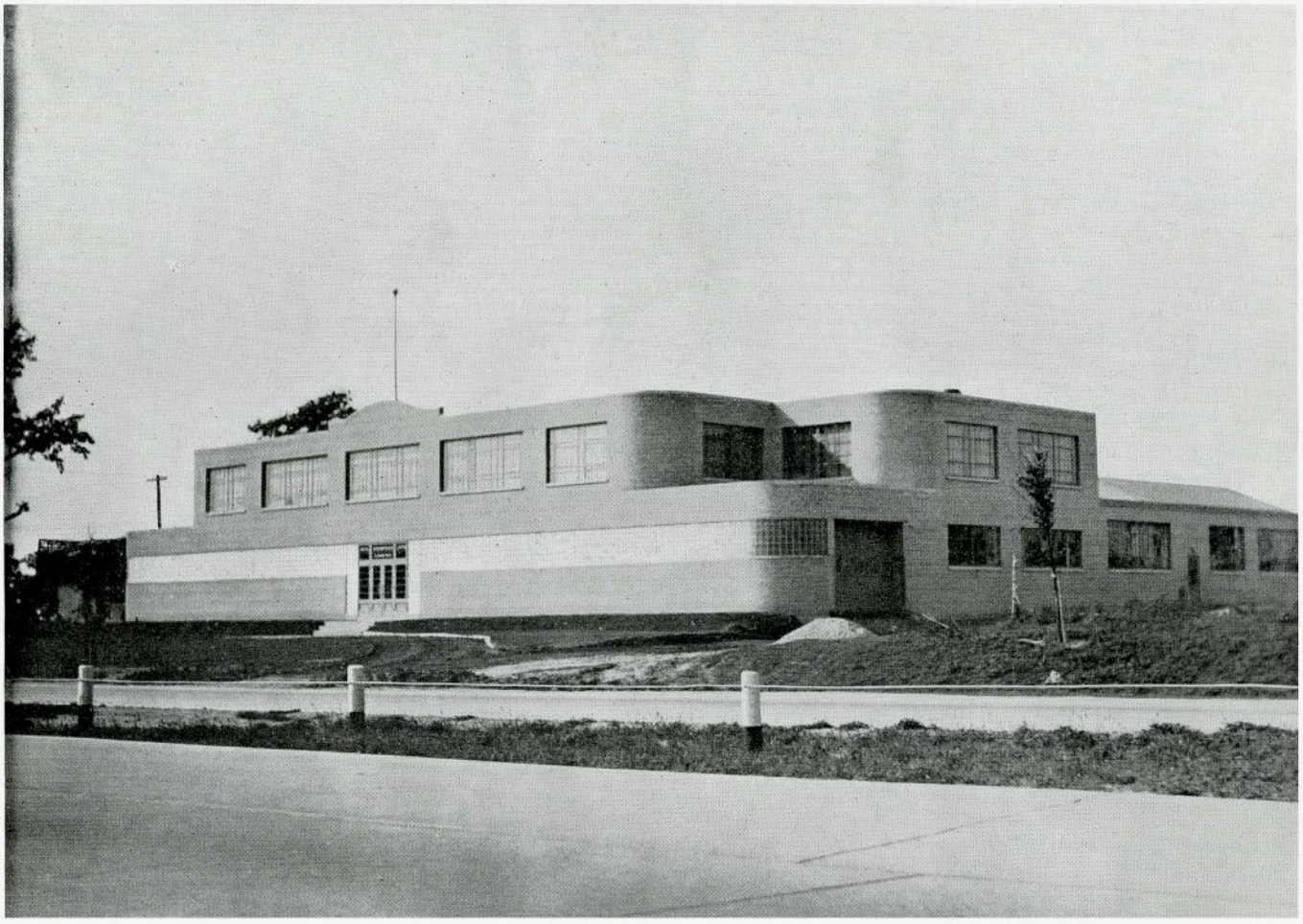
COCA-COLA COMPANY OF CANADA LIMITED, LONDON, ONTARIO

MATHERS AND HALDENBY, ARCHITECTS



PRODUCTION FLOOR PLAN

SCALE 0 5 10 15 20 25 30



METAL STAMPINGS LIMITED, TORONTO, ONTARIO

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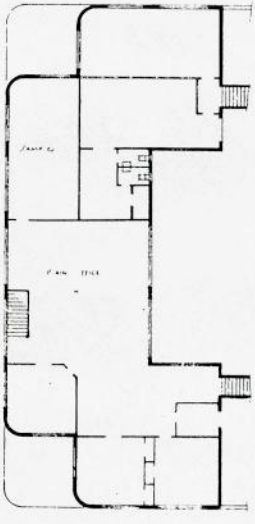
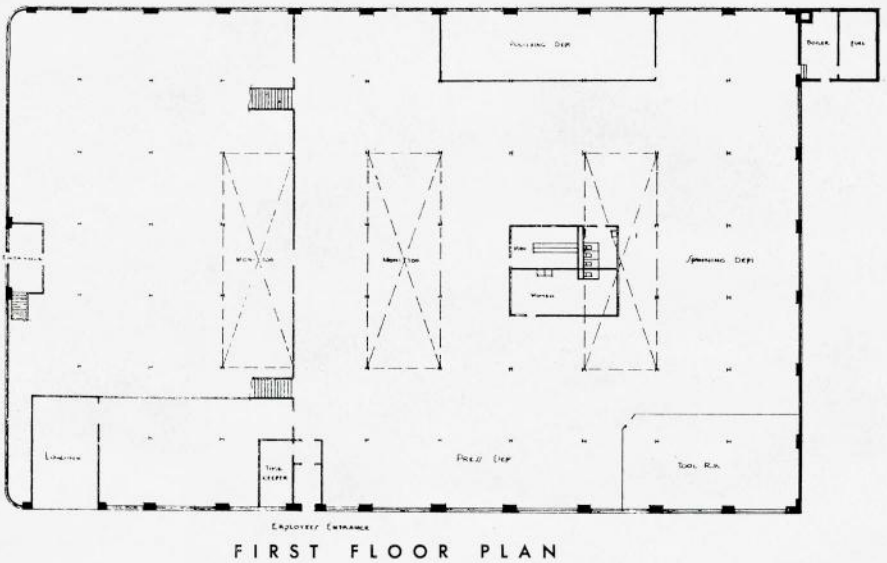


SECOND FLOOR PLAN



FIRST FLOOR PLAN

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INDUSTRIAL LIGHTING PROGRESS, 1940

By H. JOHN WARD

MANUFACTURERS and distributors of industrial lighting equipment are co-operating heartily in the country's war effort. In order to supply urgent defence requirements they have drastically reduced the scope of their activities in commercial and industrial fields.

Manufacturers' cost for labor and material have risen considerably. Some of them have met the challenge by adapting alternative materials and restricting variety to ensure "production line" speed and economy.

Distributors are bearing their share of the burden; changing materials, new taxes, personnel shortage, mean harder work and longer hours.

One representative manufacturer gives interesting comparisons between industrial lighting installations in 1930 and 1940:

Average lamp size of new installations increased from 180 watts to 310 watts.

Average general illumination increased from 7.0 foot-candles to 12.0 foot-candles.

Lamps 300 watts and over increased from 36.7% of the total load to 68.6%.

New fluorescent sources are replacing 100 watt incandescent lamps for local lighting of many industrial operations. Diffuse illumination from the long tubes is excellent for two-dimensional seeing tasks. It should not be forgotten, however, that three-dimensional vision often requires high-light and shadow, and that this is more economically obtainable from point sources. Fluorescent and other gaseous tube sources have been used in a relatively small number of jobs for general lighting in low and medium height bays.

Architects and consulting engineers are paying closer attention to maintenance factors, such as cat-walks in bays where the crane will be used twenty-four hours per day, seven days per week.

Painting of interior building surfaces is now almost universal practice, but the author hopes to see more interest on the part of machinery manufacturers in lighter finishes on the machines themselves. The use of lighter interior finishes reduces brightness contrasts (night as well as day), is an important safety factor, and greatly improves the morale of night-shift workers.

Better lighting in new buildings is already beginning to influence re-lighting of the older factory areas . There was a time when an admitted need for improvement might be held up by the fear that better lighting in a special area would father a demand for re-lighting the whole plant. In this day and age most industrialists know that the advantages of good lighting far outweigh the expense involved.

The necessity of protecting defence industries against sabotage has caused a big increase in yard and fence lighting. The use of the word "flood-lighting" led to a lot of confusion in the early months of the war because, to many people, "flood-lights" and "projectors" were synonymous terms. Flood-lighting may be accomplished by means of "projectors" or "refractors" and each type has its own special field with little over-lapping. Projectors should be used where the area to be lighted is remote from accessible sources of current supply; they should be mounted high enough to protect legitimate traffic from glare. Refractors have supplanted all other types of equipment for the flood-lighting of streets, for reasons of economy, appearance and freedom from glare. They may be mounted much lower, are easier to service, and generally more suitable for yard and fence lighting.

—Extract from Canadian Electrical Association Report—1941.

BOOK REVIEWS

RICHARD NORMAN SHAW

A Study by SIR REGINALD BLOMFIELD.

Published by B. T. Batsford Ltd., London. *Price, 12/6.*

THE Victorian era is often thought of as one of universal bad taste and of unrelieved degeneracy in all the arts; so that a book of this kind is welcome if it does nothing more than correct distorted perspective. Blomfield does more than that, however; he shows not only that Shaw, when seen against the background of his time, was a very great architect, but also that much of his work, judged by any rational standard, is exceedingly good. It was the work of a man whose "whole career was one of steady development from the fads and fashions of his youth to the mature architecture of his later years". And Blomfield adds, "Architects having succeeded are apt to stay put where they are; Shaw was always moving on . . ."

The book is profusely illustrated with photographs, plans, elevations and sketches, which are delightful in themselves and show an amazing versatility and inventiveness. The work itself — like all other handiwork of man — must inevitably disappear; and it is well that so admirable a record of it, and of the unique personality that produced it, has been made available while the opportunity remained.

—Gladstone Evans.

CURIOSITIES OF TOWN AND COUNTRY SIDE

By EDMUND VALE

Published by B. T. Batsford, Ltd., London. *Price 10/6.*

THIS book is good for summer reading for those who are interested in architectural follies of all kinds, medieval instruments of torture and a host of other oddities. What surprised us most were the number of cliff hewn dwellings in England and the charm and beauty of the wrought iron chairs in which shrewish wives were seated while they were ducked in the village pond. An artistic shrew would have that small comfort as the muddy waters closed over her.

PROVINCIAL PAGE

ALBERTA

At the Council meeting of the Alberta Association of Architects held on April 3rd regret was expressed on the death of Mr. H. A. Magoon, M.R.A.I.C., a charter member of the association. Mr. Magoon was 78 years old at the time of his death and had been in practice in Edmonton for 34 years. He was partner in the firm of MacDonald & Magoon. Born in Quebec, he had worked in Chicago, Oelwyne, Iowa, and in Sydney, Nova Scotia, before coming to Edmonton in 1904. In Sydney he designed the Canadian general office of the Dominion Iron and Steel Plant besides a number of stores, offices and a hospital. In Edmonton he designed McDougall Church, Alberta College and the main section of the former All Saints Church. Subsequent to the partnership with Mr. G. H. MacDonald the firm was responsible for the Edmonton Public Library, Concordia College, the General Hospital, the Corona Hotel and many other buildings.

At the same meeting it was agreed to instruct the Association Solicitor to prepare the necessary by-law for presentation to Lieutenant-Governor-in-Council providing for the establishment of a status of Junior or Student Associate, an annual fee of two dollars being suggested. At present no provision for this class exists.

The question of a "Western Number" of the R.A.I.C. Journal was brought up on the receipt of a letter from Mr. Chivers of the Manitoba Association of Architects. The idea was endorsed in the expectation that the required photographs could be readily obtained.

The Secretary was instructed to remit membership fees to members on active service.

Spring has this year come early to Alberta and with the spring a considerable activity in building operations. In Edmonton, building permits up to March 31st were 208 in number totalling $234,660, as compared with 98 permits totalling $135,920 in 1940, an increase of 72%. This year's total is not swelled by any single large contract. The largest item is for 39 permits amounting to $83,875 for dwellings. At the moment of writing the totals for April are not available but the increase seems likely to be more than maintained.

The annual increase in the population of Edmonton has for some years exceeded one thousand persons per year. Reckoning that there is an average of four persons in a family this would require an addition of 250 dwelling units per year. There is no doubt that this number would require to be doubled for five or six years to make up for arrears. It will be realized that there is considerable social pressure for more housing. Rents in this city are not pegged and we are hearing of many cases of rents being raised.

—*Cecil S. Burgess.*

MANITOBA

At a recent meeting of the Council of the Manitoba Association of Architects, members were advised by the Secretary, a letter had been received from the Editor of the Journal of the R.A.I.C., offering an entire issue of this publication to illustrate recent work of Western Architects.

Coming from the East, this honour was considered very generous and was received with considerable pleasure, although possibly there may have been misgivings in the minds of some of the members present, as to what kind of a show could be put on, having in mind the lack of building during the past ten or more lean years, a condition brought on by drought, dust storms, agricultural and other economic problems, finally adding war to this "witch's brew", for good measure.

The proposition, however, was discussed pro and con and enthusiasm began to rise, that old spirit of optimism was still there, a trifle dormant maybe, but not downed, and certainly not dead. Perhaps a "shot in the arm" of this kind would have a rejuvenating effect, pep us up as it were. Majority of Council thought it a splendid opportunity for western Architects to "strut their stuff", good publicity; a few leftists, however, had slight misgivings, but were speedily over-ruled and placed hors de combat for the time being. Then with interference down to a minimum, the discussion proceeded and it was finally decided the "show must go on", and to accept the honour thrust upon us, hoping other western Associations would do likewise, notwithstanding the past lean years they also have had.

The Council, however, was of the opinion the following conditions should be imposed on all buildings to be published:

1. Architecturally good, to guard and uphold the prestige of the West.
2. Not previously published.
3. Of recent date.

Of course, there was never any doubt about item one; item two was simply a case of "had" or "had not"; item three was "a horse of another colour". A mild "blitzkrieg" of apprehension consumed the Council, and about this time one of the leftist members began to revive, and wanted to know what Council meant by "recent date", how far back into his dim architectural past could he go to dig up a job worthy of publication. He was again overcome in the usual manner, and finally, looking over the field, the Council decided to notify the western Associations of its decision to proceed with this special Western Edition of the R.A.I.C. Journal, in fact, the consensus of opinion was, it might have to be enlarged if all the "best of the West" were to be published.

—*Arthur E. Cubbidge.*

ONTARIO

It is no light task wrenching one's mind away from the marvellous Spring weather we have been enjoying lately, and the opening of the golf season and the annual epidemic of gardener's backache—and painter's colic. Building is most certainly out of tune with the season, being a noisy, messy business at the best; spreading havoc all around while nature is trying to conceal the ravages of Winter beneath a cloak of beauty. Yet, paradoxically enough, we are greatly tempted to give up all claims to fame in order to go into the contracting business—a state of mind induced by an advertisement in an esteemed contemporary, informing all and sundry that tenders are being received for the purchase of two large barges and a tugboat. Not that we are particularly keen on the contracting part of it; but the idea of puffing up and down the lake in that tug—and maybe getting *paid* for doing it—is almost sufficient to tempt us into putting in a tender. Shades of W. W. Jacobs!

Our industrial plant capacity continues to increase. Contracts have been awarded for a factory at Peterborough for Outboard Marine & Manufacturing Co. of Canada, Ltd.; for a plant at Kitchener for Doon Twines, Ltd.; and another near Toronto for Modern Tool Works. The City of Ottawa has

taken tenders on a civic workshop building, and work is expected to start shortly on a 46-suite apartment block in the same city. All of these projects are expected to cost about $100,000 each.

A few weeks ago the Canadian Authors' Association heard an address by Raymond Card on "The City Beautiful". With coloured motion-pictures to emphasize the argument, he discussed the possibilities of orderly, well-considered neighbourhood layout, and of the progress made in building design and construction during the past few years. At about the same time, another gathering of responsible people was treated to an address of a very different nature. Referring to a certain Ontario city—whose blushes we will spare—the speaker is reported to have said that for many years it has been a sort of model, on which the rehabilitation plans of the greater cities of North America has been fashioned! Even after discounting the assertion by fifty per cent., as an allowance for possible over-enthusiasm on the reporter's part, it is still remarkable enough; astounding, in fact, to those of us who live in the city under discussion, where the real merits of any scheme for civic improvement are invariably obliterated by an impenetrable smoke-screen of quibbling, of the most short-sighted and parochial kind. The incident is of interest to architects in so far as it reveals the extraordinary degree of complacency with which many people are able to look at conditions which we regard as highly unsatisfactory; but, unfortunately, it provides no clue to the methods by which the problem can be effectively tackled. It is difficult enough, in all experience, to obtain unprejudiced and objective consideration of civic affairs such as improved housing and community planning, where the need is generally recognized; but when influential parties adopt the attitude of the ostrich, it begins to look as though architects may have to study the habits of that remarkable bird—and the sooner the better.

—Gladstone Evans.

QUEBEC

The April number of the Journal — so called Quebec issue—came about a week ago as this is being written and we have already heard some favourable comments, all of which are acknowledged by our local representatives of the Editorial Board with proper humility — we hope. After this experience we appreciate the unpaid and unsung labours of the committee in Toronto who have had this responsibility month after month for years on end. Their load would be much lighter if we sent, without prompting, more photographs, sketches, comments, letters, and articles. Practise writing, Mr. Architect, and improve your style.

The winners in the recent competition for a bomb-proof shelter sponsored by The La Prairie Brick Company have been announced. A first prize of $200 went to W. E. Noffke, F.R.A.I.C., of Ottawa and second prize of $50 to David J. Moir, A.R.I.B.A., Montreal. We congratulate these men on their success. Competitions of this kind make good publicity for manufacturers and we can think of some others who could follow the good example of the La Prairie Brick Company.

The architectural section of the Spring Exhibition at the Montreal Art Gallery has shrunk almost to the vanishing point, and that is not intended to be punny. A few pictures in one corner represented the profession. At the Arts Club there is a fine exhibition of water colours by David H. McFarlane. Mr. McFarlane retired from architecture about twenty-five years ago and has spent much of his leisure in painting for his own pleasure. It is a show well worth seeing.

The members of the A.R.G. are comfortably installed in Dave Morrice's old studio and are working diligently on the forthcoming exhibition which is scheduled to open at the Montreal Art Gallery on May 10th and to be open to the public until the end of the month. Shortly after they got started they took time off to have a reception for friends and supporters. The character of the crowd present and examples of work started furnished a stimulus of interest, in addition to refreshments served, that made it a most delightful party. Mayor Rayneault of Montreal was there and also leaders in Montreal's political, business, professional, and social life. We know it will be a worthwhile exhibit—to put it mildly—and we hope that in its travels in various parts of the city and the province it will excite the interest that it merits.

—Harold Lawson.

Photograph taken at the First Convocation of the College of Fellows, February 21st.

W. L. SOMERVILLE, F.R.A.I.C., F.R.I.B.A., R.C.A., P.P. R.A.I.C., Dean

H L. FETHERSTONHAUGH, B. Arch., F.R.A.I.C., F.R.I.B.A., P.P. R.A.I.C., Chancellor

A. J. HAZELGROVE, F.R.A.I.C., Registrar

NOTICE RE REGISTRATION OF MEMBERS

As a result of the discussion at the Annual Meeting and following the appointment of a Technical Services Bureau by the Federal Government, the R.A.I.C. Council will shortly forward to the Provincial Associations questionnaires for distribution among all members of the R.A.I.C. in Canada. It is very important that every member complete and return to his Provincial Association these forms.

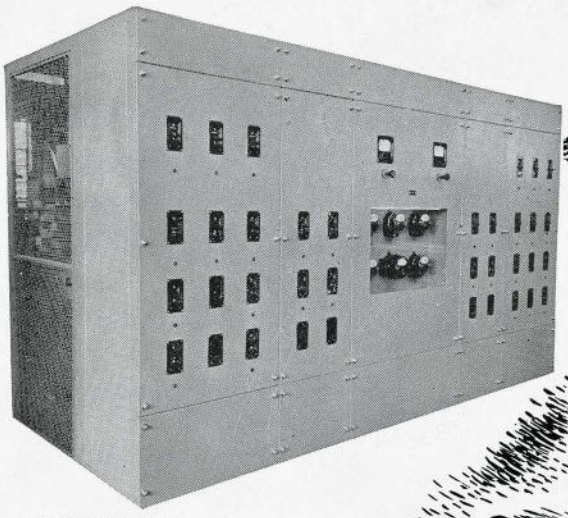
LETTER TO THE EDITOR

Architects can serve their country these days, even in the writing of their specifications. Canadians at large have been advised repeatedly of late to "serve by saving". This war may be a long one and this slogan should apply in more ways than by the purchase of War Savings Stamps. Savings can be effected in our national economy by prevention of overlapping such as the hauling of British Columbia Fir to the East and the transportation of Eastern White Pine to the Pacific.

For the duration of the war, in most cases, it should be possible for Architects in the East to use Eastern Spruce, Hemlock or Pine for framing instead of B.C. Fir, even though it requires larger sizes and to use Ontario or Quebec Cedar shingles, instead of B.C. Cedar shingles; and for Architects in the West to use B.C. Cedar for millwork and siding instead of Eastern White Pine.

Doubtless there are many other ways in which Architects can make more use of their local materials and so leave free for war transportation much rolling stock, for war industry much fuel, and for war production many man hours.

March 18th, 1941. *—L. E. Shore.*



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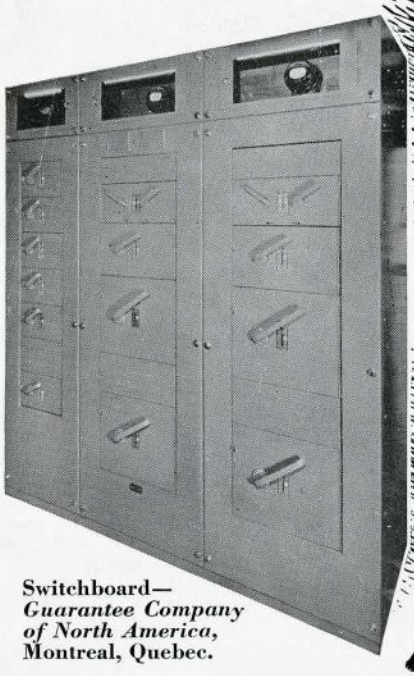

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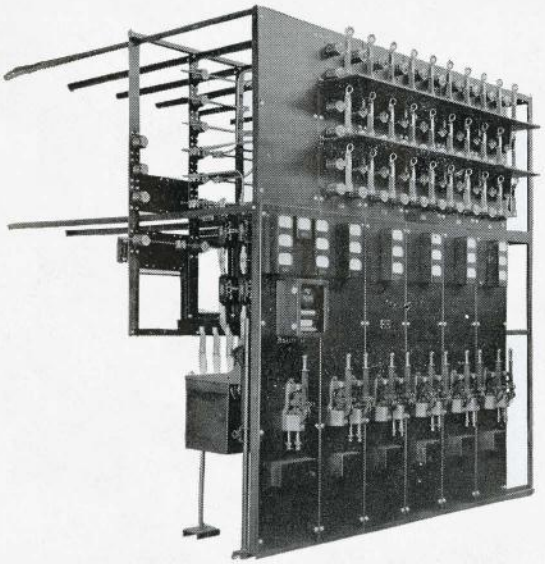

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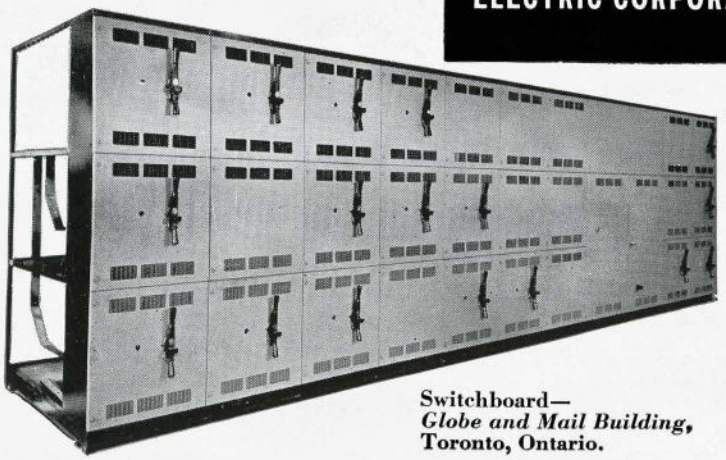

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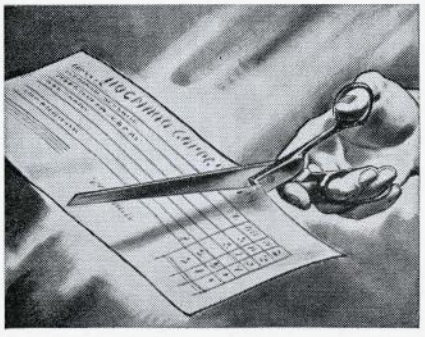

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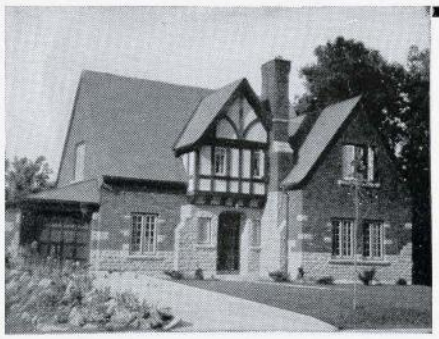

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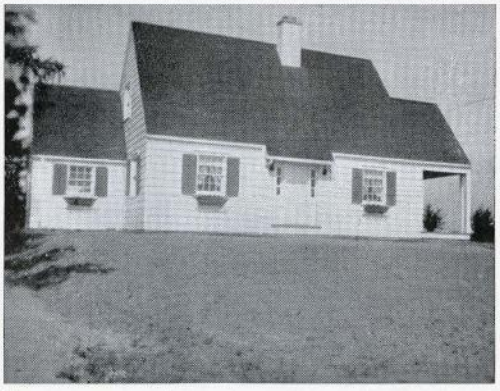
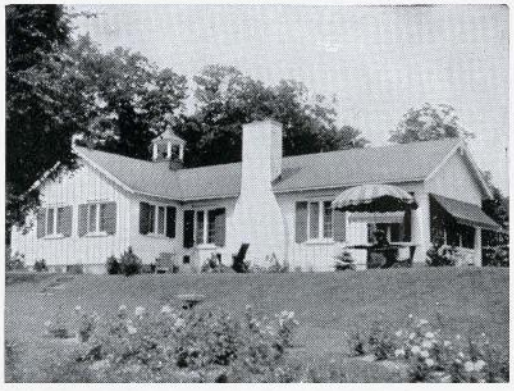


● GAS — *London, Ont.*



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A specification and bond for inclines over 2″ — and up to — 6″ to 1′0″ using Barrett Steep Roofing pitch and felt applied in the membrane manner, with gravel wearing surface and all the advantages of this famous type built-up roof.

2. 15 Year Barrett "S-I-S*" Type Roof

Specially developed for roofs with inclines exceeding 3″ to 1′0″ using Barrett S-I-S* (seventeen-inch selvage) roofing with S-I-S* cold cement on roofing asphalt. Has attractively coloured protective mineral surfacing together with other advantages of sound built-up roof construction.

The addition of these two specifications rounds out the line of bonded Barrett Roofs. It is now possible to obtain 10, 15 or 20 year bonds for gravel surfaced built-up roofs over both flat and steep inclines, or combinations of both, in addition to a 10 or 15 year bond on the coloured, mineral surfaced, S-I-S* type roof.

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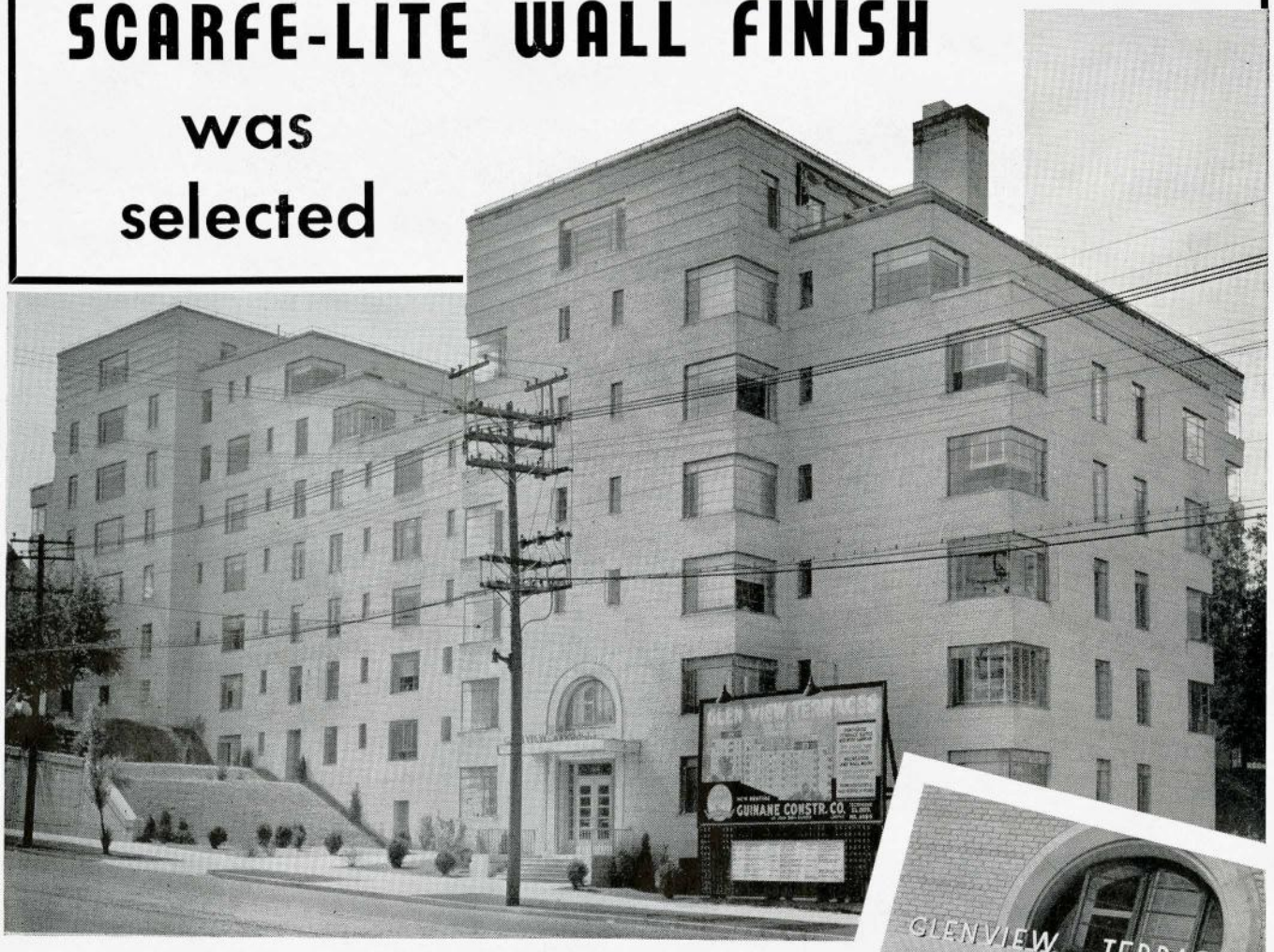

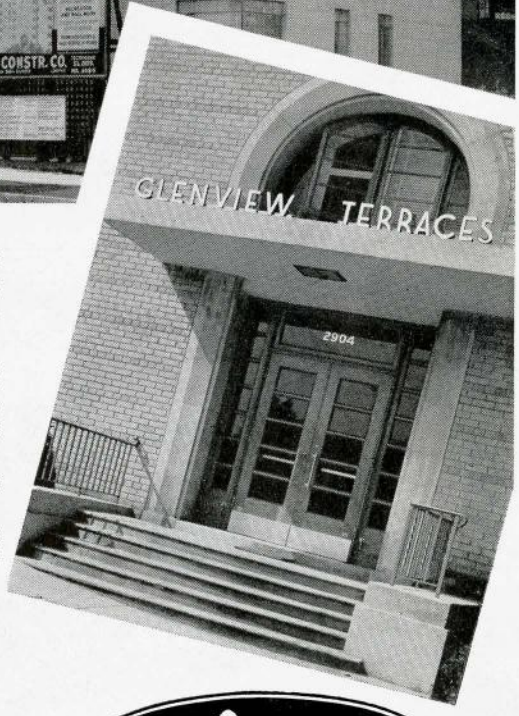

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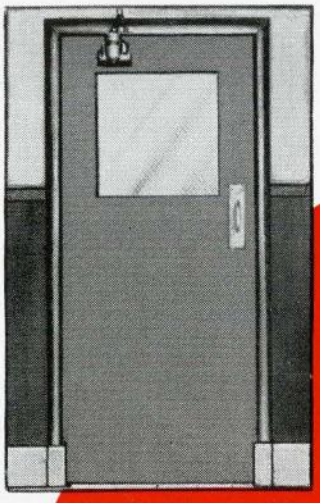
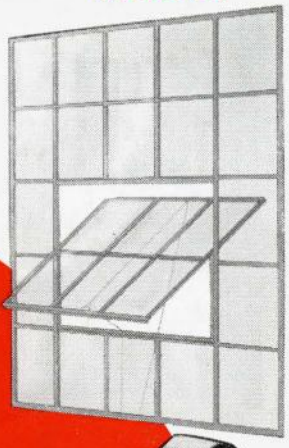


Hollow Metal Doors

Steel Sash



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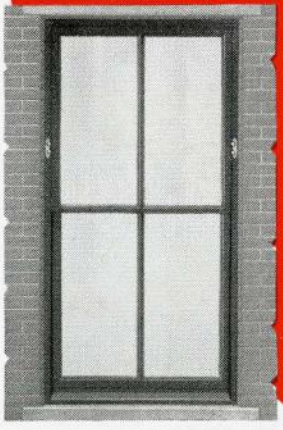
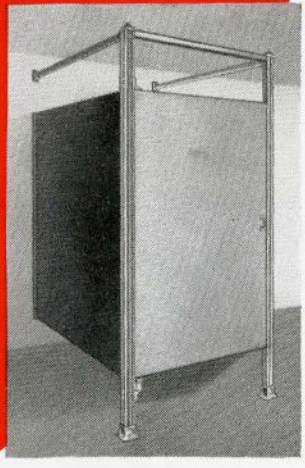


Hollow Metal Windows



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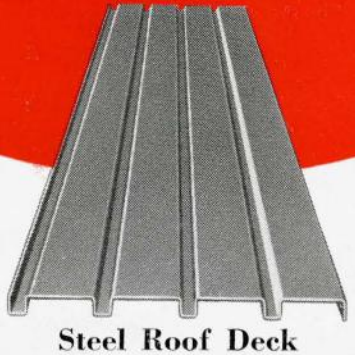

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