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ENGINEERING · AND · CONTRACTING
INTERESTS · OF · CANADA



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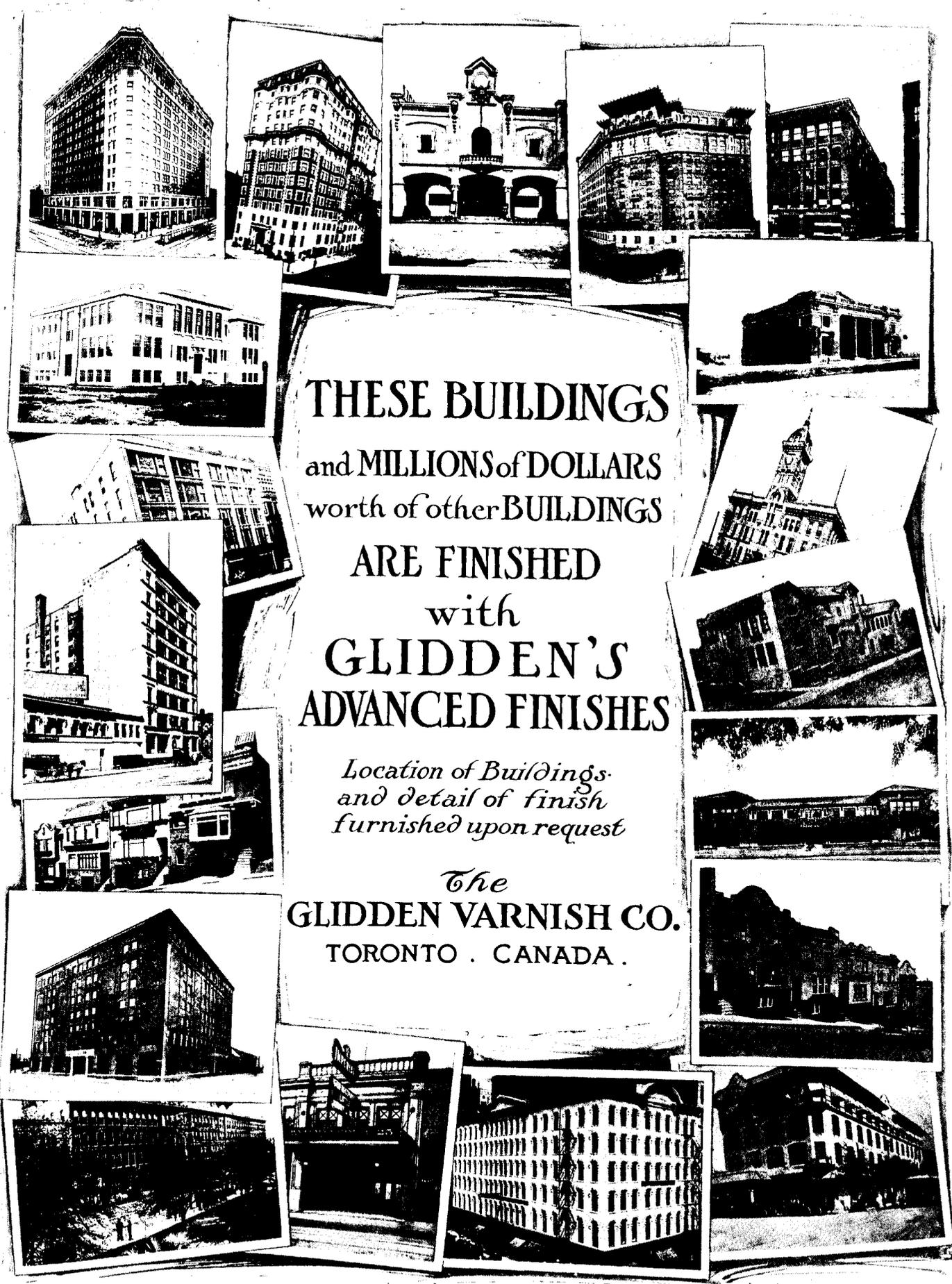
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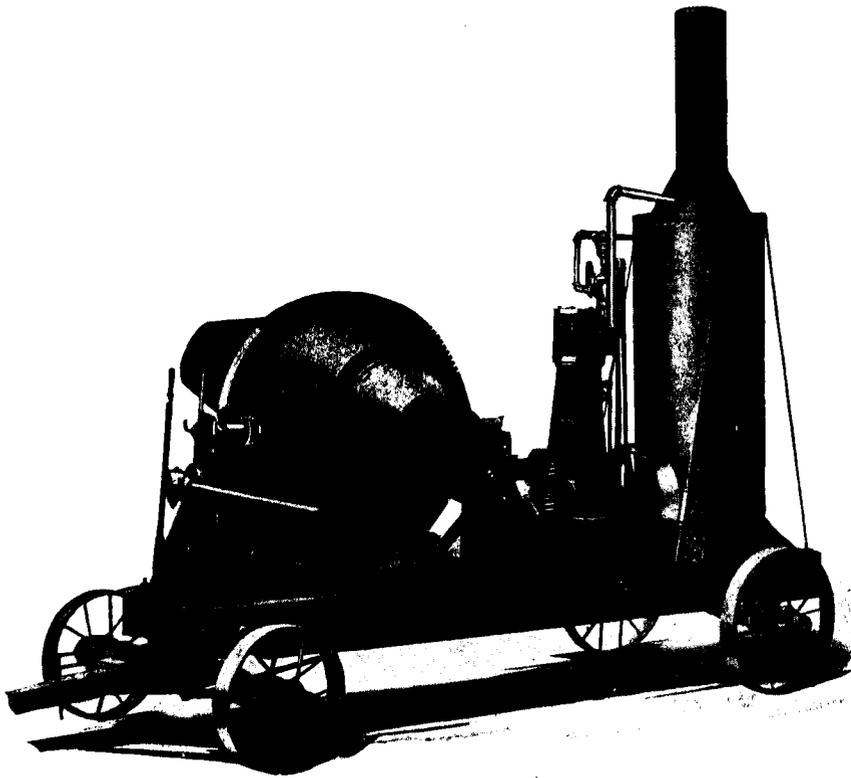
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For building sixteen residences, twelve large barns, four 50-foot silos, a power house, chicken houses, and other buildings, as well as four miles of Concrete fence, on the large Ohio Farm of a millionaire

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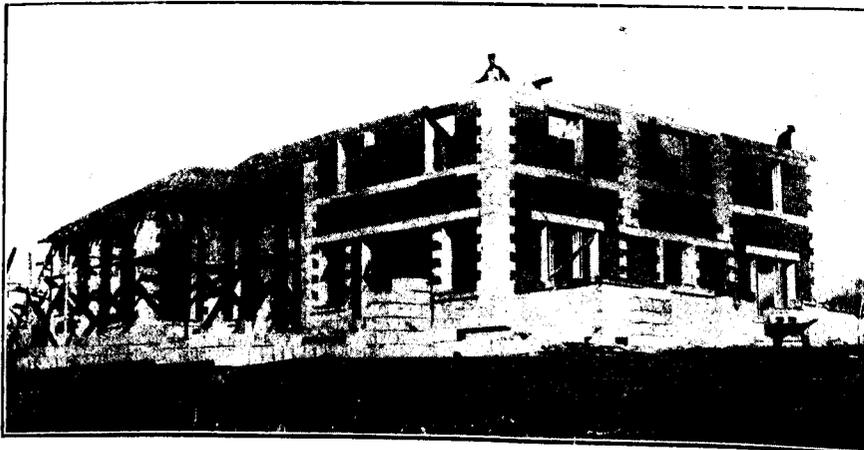
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"Ideal" Concrete Blocks give the strength and durability of stone and brick—the artistic beauty of both at an enormous saving in cost.

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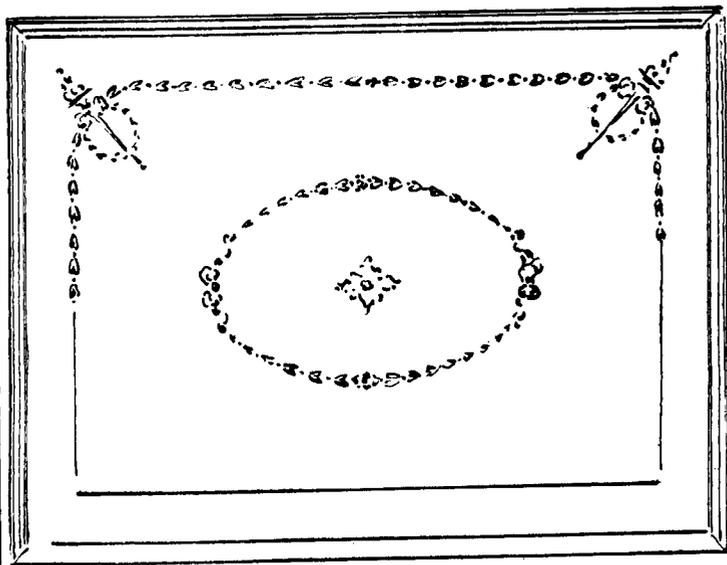


CUT SHOWING: ONE OF THE BUILDINGS IN COURSE OF CONSTRUCTION

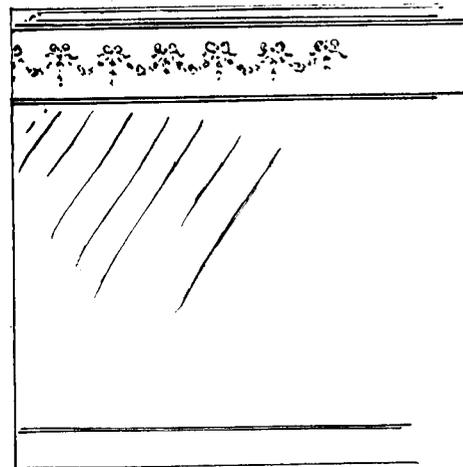
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Illustrated Catalogue, with sizes, prices, etc., on application

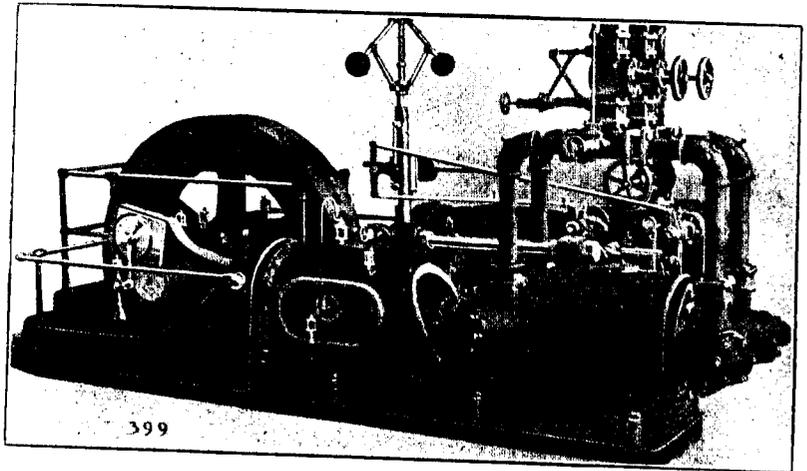
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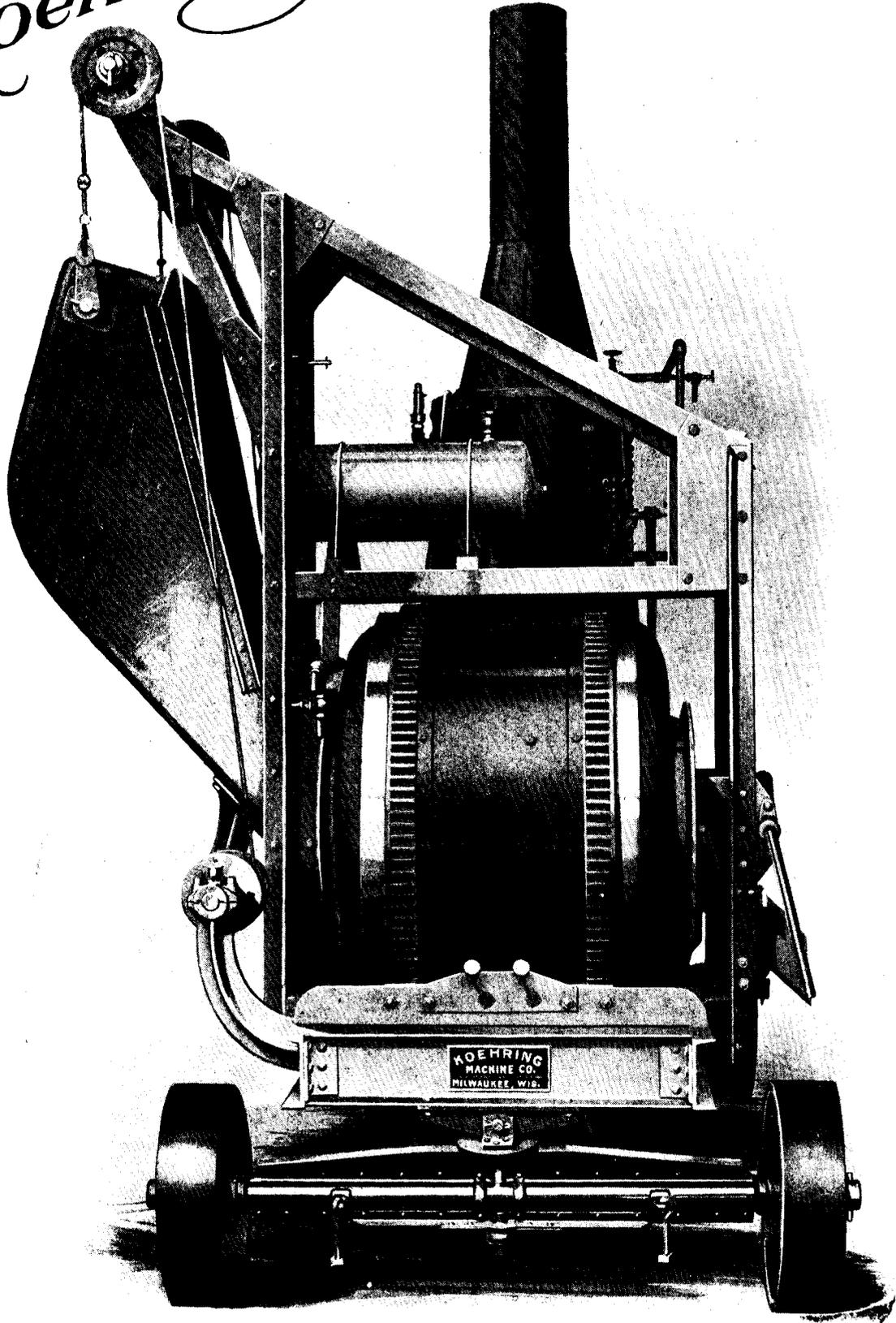
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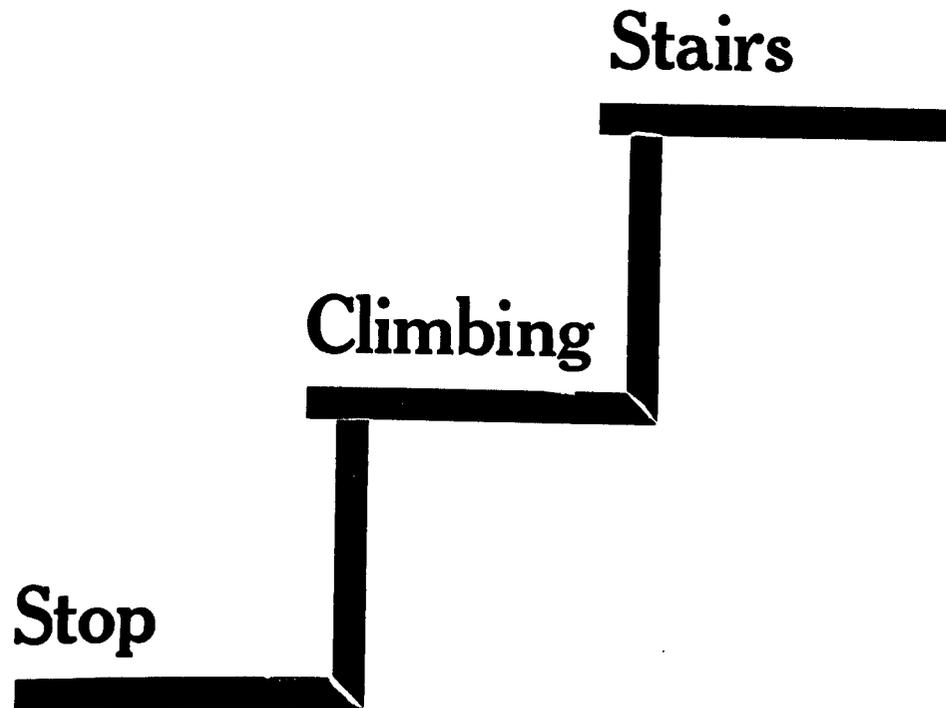


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BRICK

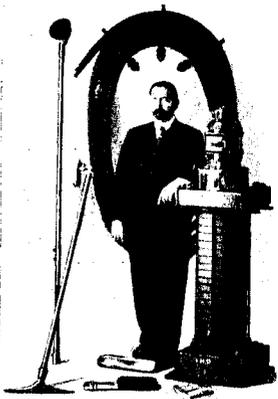
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is designed in small sizes for installation in residences in answer to a demand for an efficient cleaner.

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The Dust, Dirt and Germs are sucked up and deposited in the receiving pan in the basement and the foul air is exhausted in chimney or sewer instead of back in the room as do the portable cleaners.

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Manufacturers' Automatic Sprinklers will protect your factory, your warehouse, your office building, etc.

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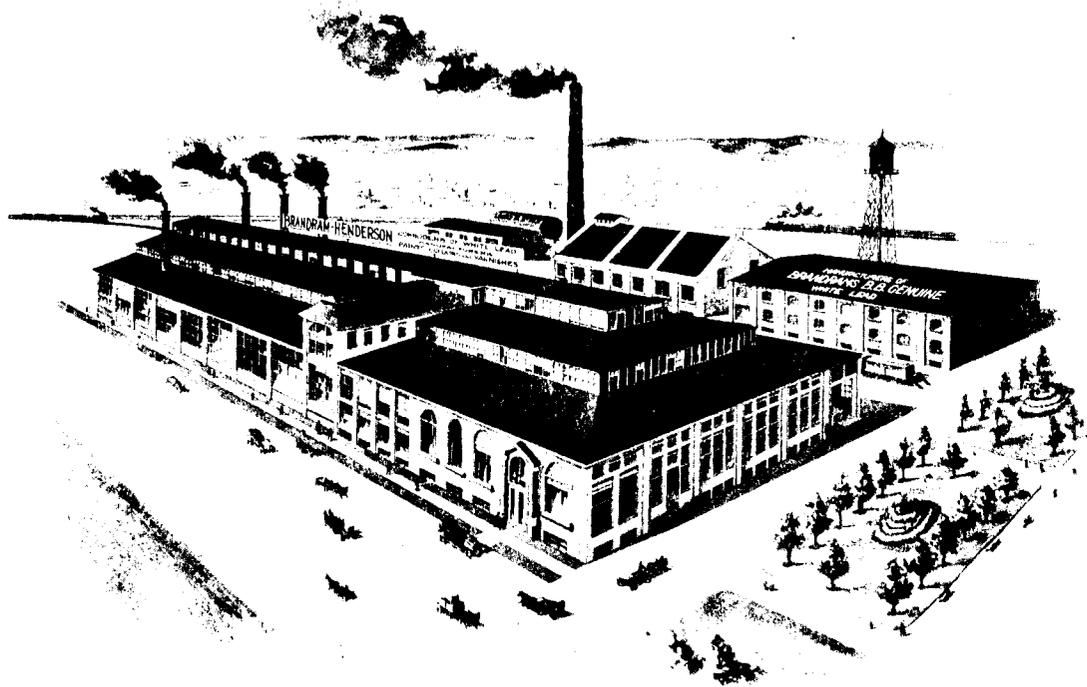
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are always ready for use. They contain six buckets with handles always above the water, are air-tight, thus preventing water from becoming stagnant.

These Appliances can be procured at

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Made by the Brandram's process for practically two centuries.

It is the standard White Lead of the World.

By it others are judged.

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It is the best White Lead that can be produced by that method.

Next to the Brandram's process of corroding White Lead, there is none equal to the Old Dutch process.

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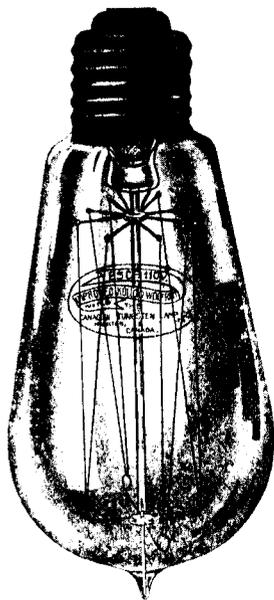
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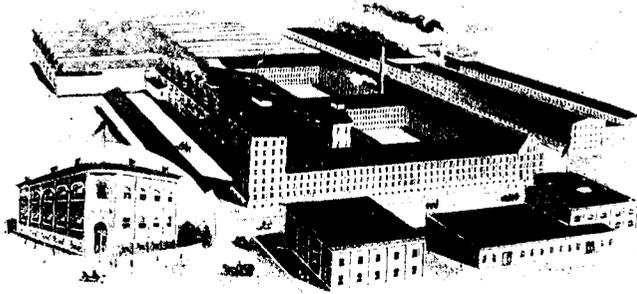
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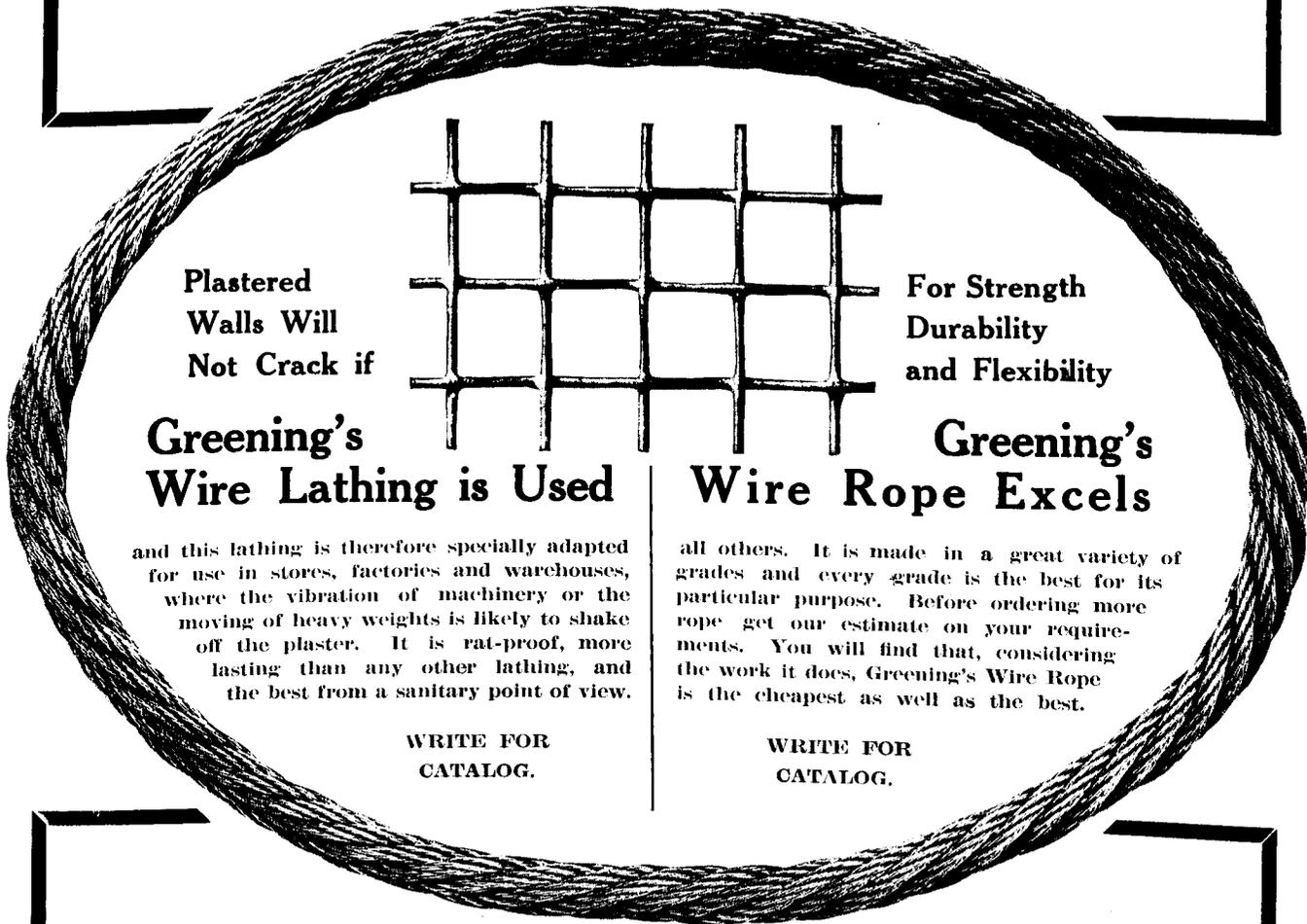


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Walls Will
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all others. It is made in a great variety of grades and every grade is the best for its particular purpose. Before ordering more rope get our estimate on your requirements. You will find that, considering the work it does, Greening's Wire Rope is the cheapest as well as the best.

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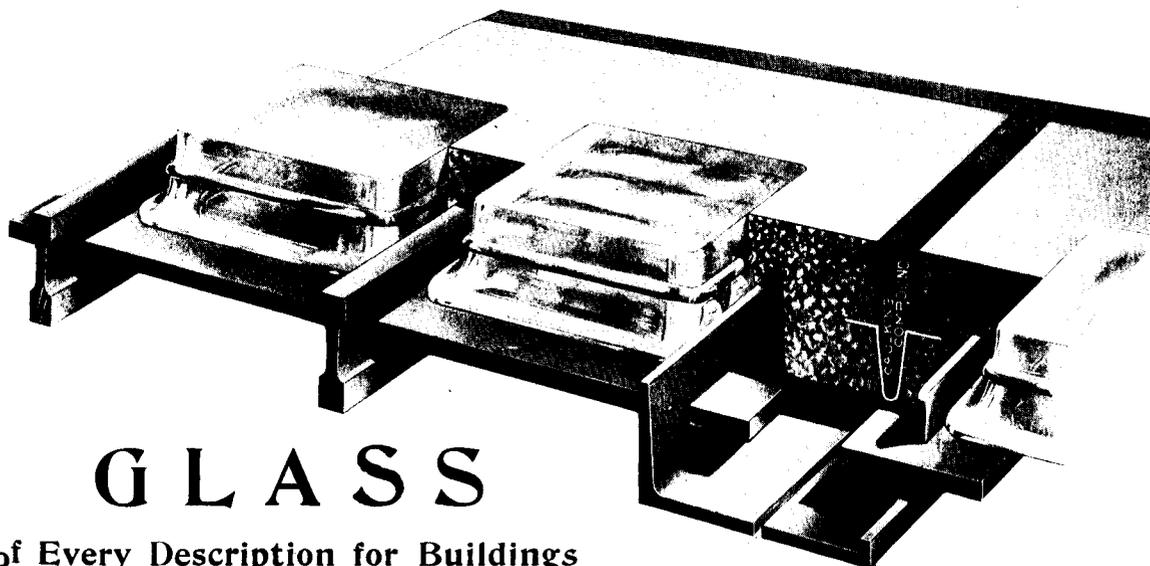
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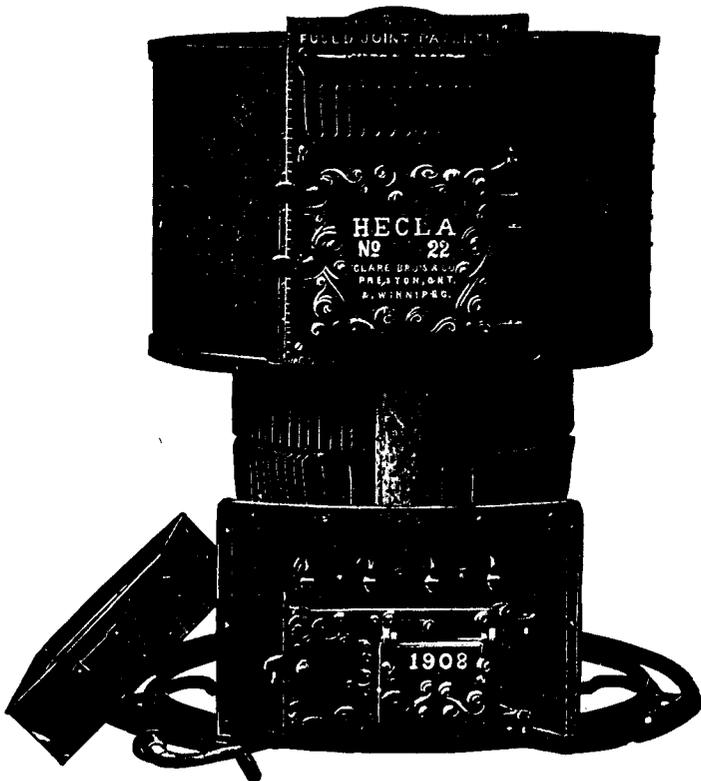
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STEEL RIBBED FIRE POTS
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Tarred Felt to the house is as oakum to the ship. However excellently the ship may be constructed, it is imperative that this last inexpensive step shall be taken to render it absolutely serviceable. So must the properly constructed house have its Tarred Felt lining. It prevents the little leaks that make the heating and ventilating system imperfect.

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IRON CLAD PAINTS— For metal surfaces, exposed and encased, composed of the best pigments, pure oxidized linseed oil, specially prepared. Iron Clad Paint makes a perfect surface, expanding and contracting with the metal without breaking. They are a prevention against corrosion of all iron clad surfaces.

NEW YORK - CLEVELAND - CHICAGO



A King Boiler for You

Twenty models completed—Four hundred and seven agencies selling it—Two Boiler construction—The King Boiler's record for

ACROSS the top and bottom of this advertisement are shown photographic reproductions of 18 models of the King Boiler—Numbers 1 to 5½ including half sizes, high and low bases, 4 and 5 sections. In addition there have just been completed two other models, bringing the total up to twenty of the styles now ready for shipment.

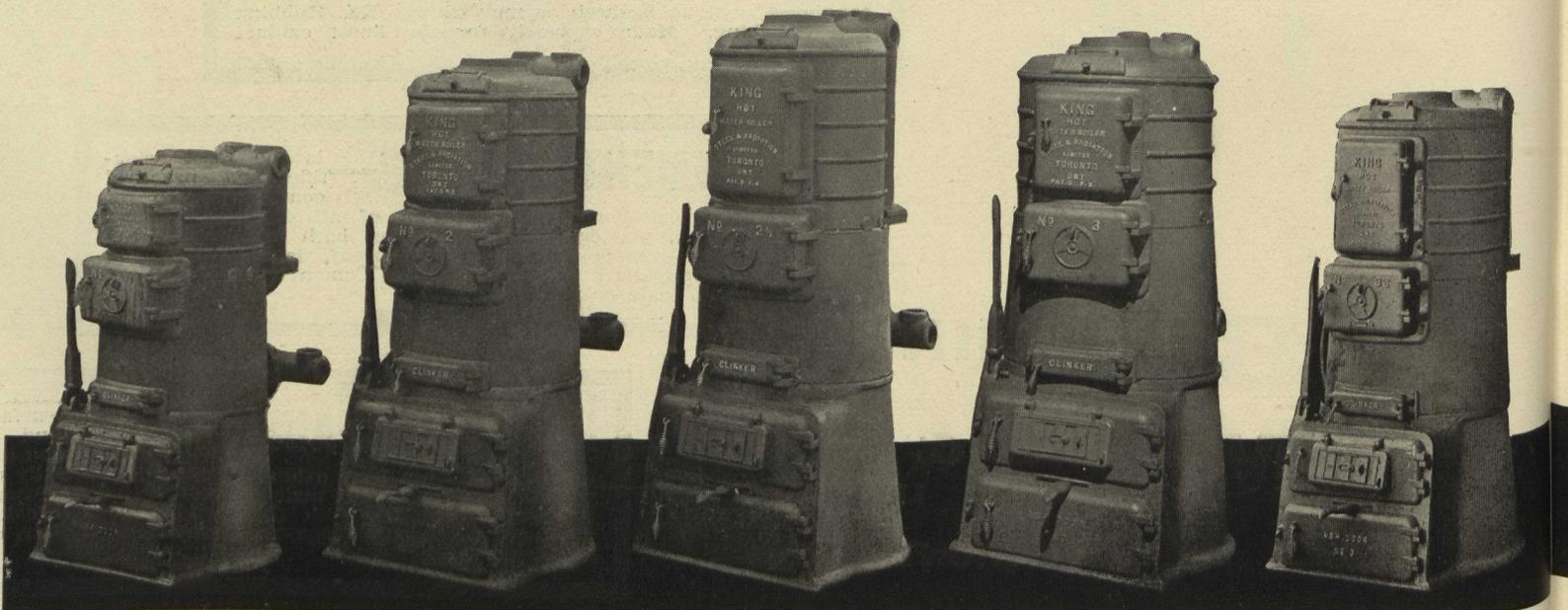
About a year ago, it was expected that by this time the number would have reached thirty. That it did not

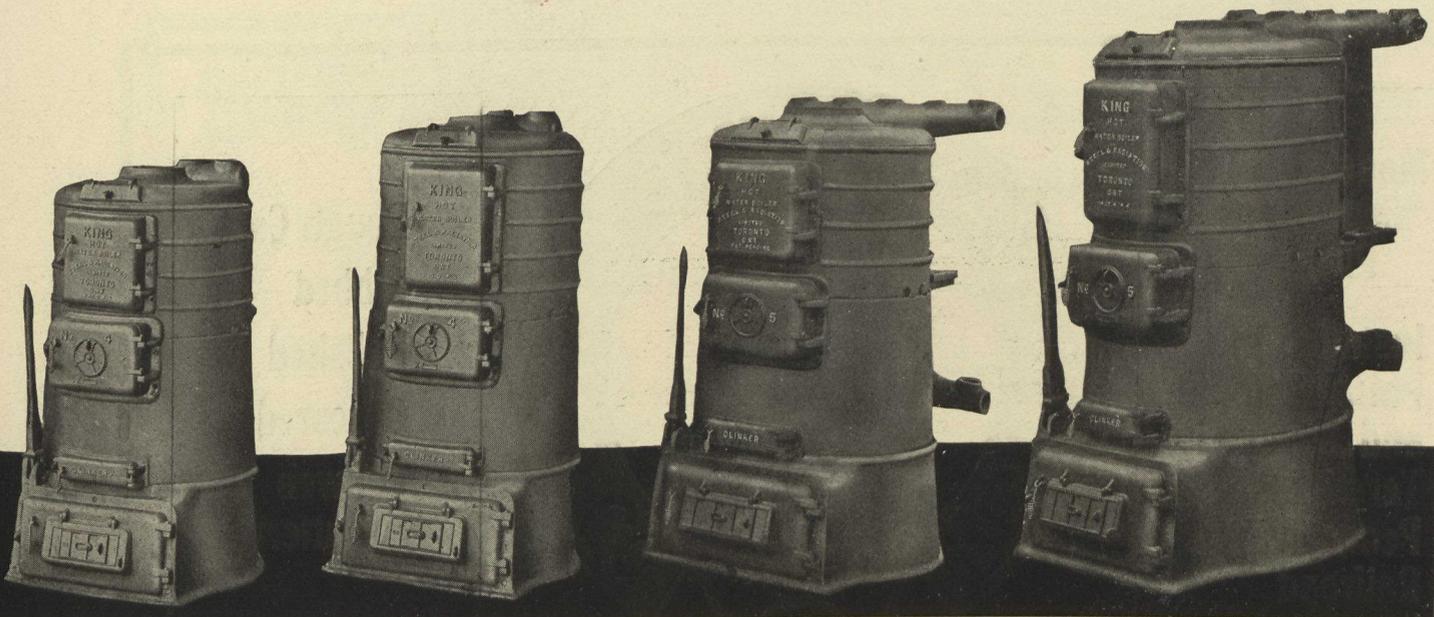
do so, is in itself a tribute to the character of the new King Boiler. With a knowledge based on a lifetime's experience in the heating business, we determined to establish a new standard in Canada in hot water boilers. And we have succeeded. The King Boiler, with its new and exclusive features, is an accomplished fact. Since January last, we have sold and shipped over 400 King Boilers, finished, tested and ready for use.

Now, the King Boiler has a reputation to sustain, as well as to establish. Our future success depends upon

**TORONTO
and
MONTREAL**

STEEL AND RADIA





our Every Requirement

boilers installed—Four branch offices
 Plants in operation and a third under
 for its first nine months of existence

the good will of these 400 owners. To ensure this result, we follow an elaborate and exacting system of inspections and tests which precludes as far as human ingenuity can prevent, the possibility of flaws and imperfections in construction.

As a part of this system, each section is subjected to cold water tests of 100 lbs. pressure, and to make assurance doubly sure, the assembled boiler is again subjected to the same test. Each boiler is given a thorough, searching inspection before leaving the works.

Parts are made perfectly interchangeable by being cast from iron patterns, which, unlike wooden patterns, do not contract and expand under changing atmospheric conditions. Iron patterns mean an even metal line, reducing to a minimum the possibility of defective sections.

The other "Five Points of Perfect Service," included in the King, are Corrugated Firepot (increase heating surface one-third), patented Trouble-proof Grate, Tapered Self-cleaning Smoke Passages, Double-sized Water Passages, generous and economical Combustion Chambers.

L I M I T A T I O N , L I M I T E D

TORONTO
 and
 MONTREAL



Made by
"Continuous
Process"

Installed in
Philadelphia
and Jersey City
Terminals,
Pennsylvania
Railroad



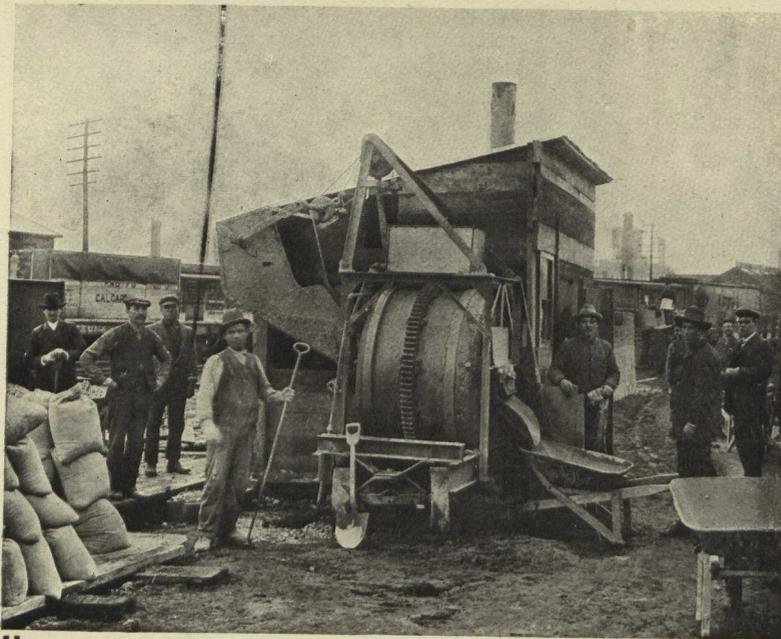
Rough Cast
Ribbed
Polished
Obscured
Cobweb
Pattern

WRITE FOR SAMPLES AND INFORMATION

CANADIAN SALES AGENTS

B. & S. H. Thompson & Co., Limited

==== MONTREAL ====



Building Addition, Massey-Harris Plant, Toronto
London Concrete Mixer used on this job.

London Standard Drum

Batch Concrete Mixer

made in several sizes and with every equipment desired. The very latest ideas and improved plans of construction are embodied in our machines.

We have the largest line of concrete mixers of any firm in America—five different types of machine and fifteen different sizes.

These machines are selling as fast as we can make them.

Let us send you a list of satisfied and pleased customers

Ask for our large catalogue of Concrete Machinery.

The London Concrete Machinery Co., Limited

LONDON, CANADA

Agencies :

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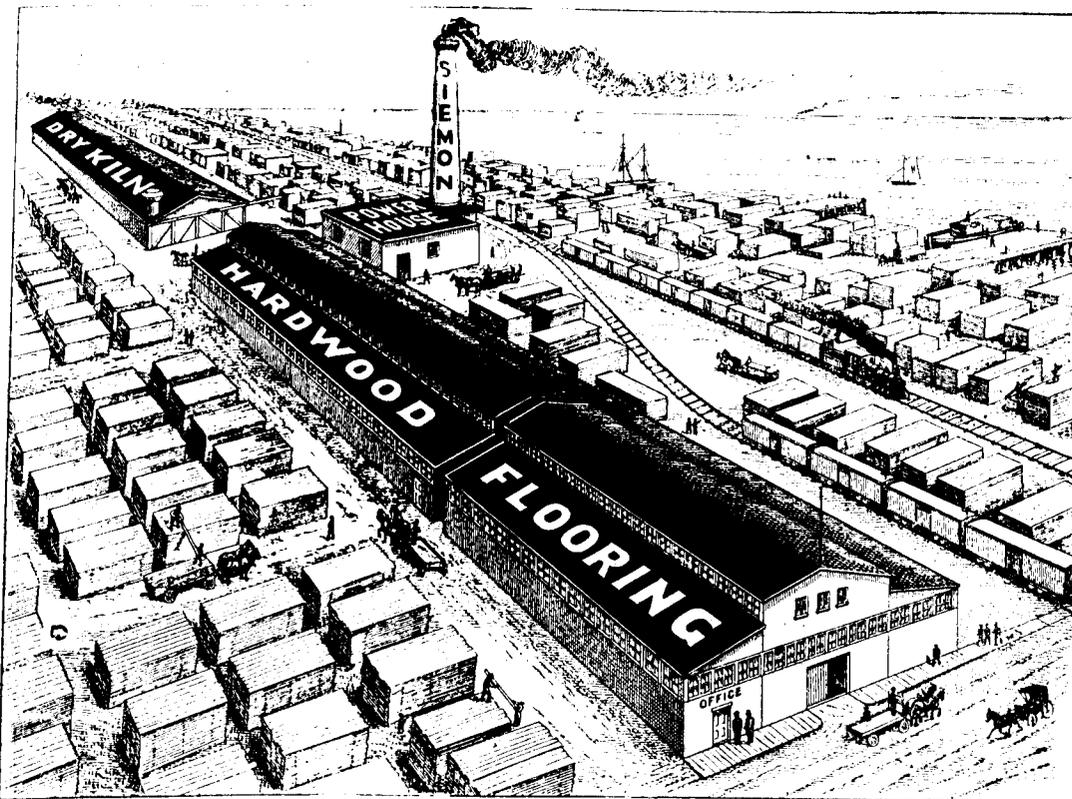
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WIARTON, - ONTARIO

'Diamond Brand'

*Hardwood Flooring
Is Good Flooring*

OAK, MAPLE, BIRCH AND BEECH



Our Modern New Plant, site covering 15 acres, is one of the best equipped plants in existence, the capacity of our plant has been increased several times its former output.

"DIAMOND BRAND" HARDWOOD FLOORING

The highest grade material of its kind on the Canadian Market. It is installed in some of Canada's finest structures. When an especially fine floor is desired "DIAMOND BRAND" is specified.

Principal Markets and Agencies:

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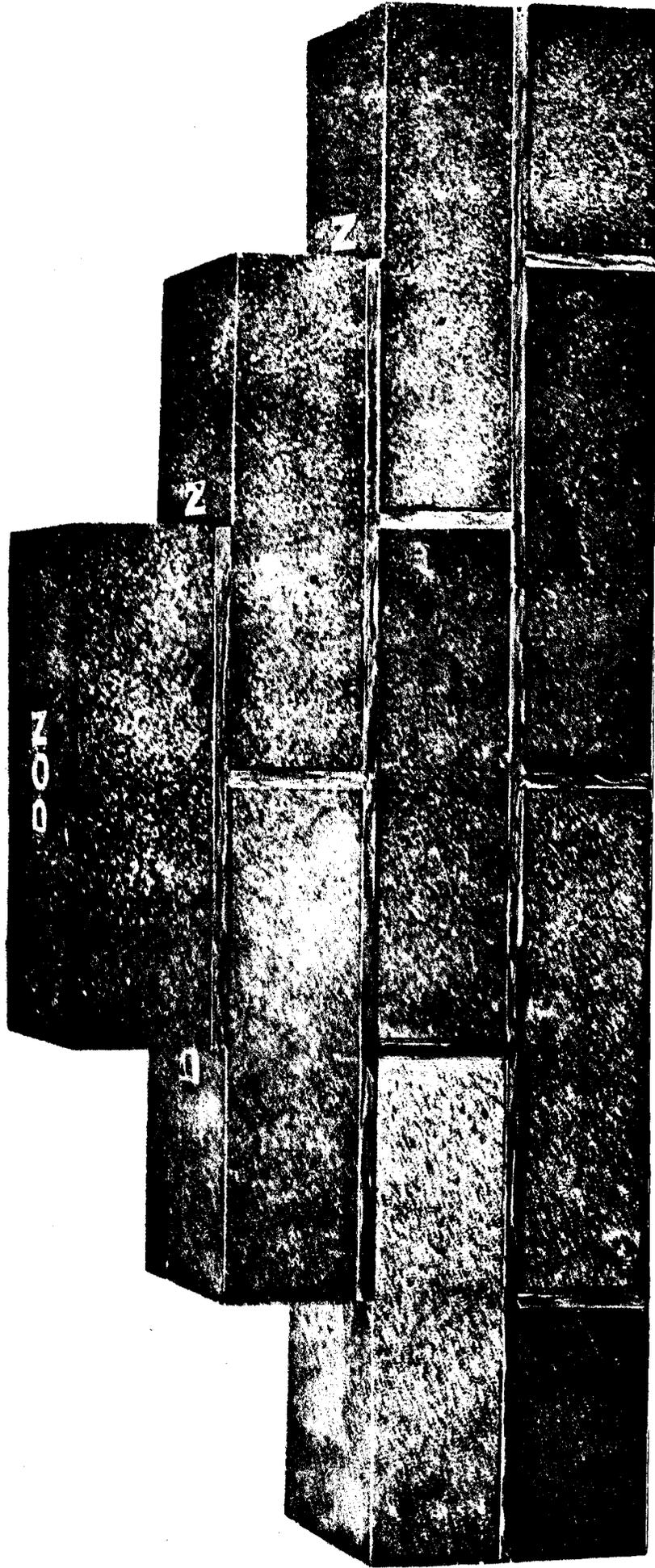
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WIARTON, - - ONTARIO

Toronto Office: 309-10-11 Confederation Life Building - Phone M. 6508

DON VITREOUS BRICKS

¶ These bricks are something more than mere structural units. They are an essential factor to architectural attainment—the culminating achievement in an industry that has endured through all ages from early Biblical times.



Fac-simile of Brickwork in Mr. J. C. Eaton's Palatial Home.

¶ Produced by skilled workmen under expert direction in modernly equipped kilns, and made from a special grade of shale and clay whose chemical properties are peculiar to that portion of the Don Valley comprising our deposits alone, this character of brick possesses in addition to texture, durability and strength, all the beauty and color found in the autumn leaf, with flecked tones ranging from gold and red to purple and deep bronze.

**Don Valley
Porous
Terra Cotta
Fire Proofing
Foundation
Bricks**

**Facing Bricks
and
Enameled
Bricks
Exclusively
Were Used
in This
Structure**



Residence of Mr. J. C. Eaton, Toronto. Wickson & Gregg, Architects.

¶ These bricks have been the unanimous choice of discriminating architects and owners in competition with samples submitted by the leading brick firms of Canada and the United States. They are the only thoroughly vitrified facing bricks ever manufactured in the Dominion, and the most exclusive high-class pressed brick on the American continent.

¶ The above view is an illustration of one of the many important buildings in which this product is used.

DON VALLEY BRICK WORKS

HEAD OFFICE:

36 Toronto Street, Toronto

MONTREAL AGENT:

David McGill, 83 Bleury Street

JAMES LANGMUIR & CO.

MAKERS OF

PAINTS FOR DECORATORS

COLORS IN OIL

Unsurpassed in strength and fineness.
For exacting Painters and Decorators.

COLORS IN JAPAN

For fine Coach, Carriage and Auto-
mobile work.

WEATHERPROOF EXTERIOR ENAMELS

For Porches, Verandahs and exposed
surfaces—White and all colors.

INTERIOR HIGH GRADE ENAMELS

For High Gloss, Egg Shell and Flat
Finish surfaces. Made in White,
Ivory and all colors.

INTERIOR DECORATIVE STAINS

In soft, rich, harmonious colors. For
halls, libraries, dining rooms and dens.

VARNISHES AND SHINGLE STAINS

1372-1376 Bathurst Street, TORONTO

KAHN SYSTEM

United Steel Sash

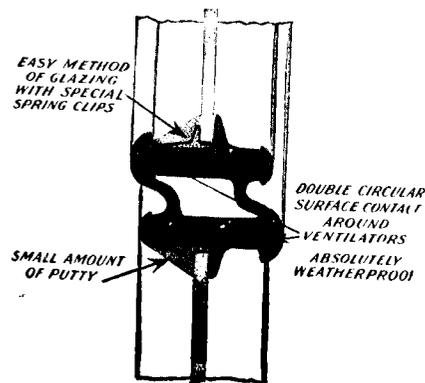
UNITED STEEL SASH are made of specially rolled steel sections, which are combined by powerful presses into sash of maximum strength, and attractive appearance.

The muntins are deep and narrow, offering a minimum obstruction to the light. The joints are not weakened in any way by cutting or punching.

UNITED STEEL SASH are inexpensive and compare favorably in cost with unsatisfactory wooden sash, which are short-lived and inflammable. Ventilators of UNITED STEEL SASH extend the full width of each unit and are made absolutely weather proof around the openings by double circular contact joints. Special spring clips save labor in glazing and hold the glass firmly in place.

UNITED STEEL SASH are made in many standard types to meet all conditions of window opening. Size of glass, 10 to 14 inches in width and 16 to 24 inches in height.

Write for 1911 UNITED STEEL SASH Catalogue, giving full-sized details, tables, illustrations, etc., **Free.**



Our other products include Kahn Truss Bars, Rib Bars, Hy-Rib, Rib Metal, Truss-Con-Chemical-Products



Trussed Concrete Steel Co. of Canada

Limited

Head Office and Works : WALKERVILLE, ONT.

BRANCHES :

Toronto

Montreal

Winnipeg

Vancouver

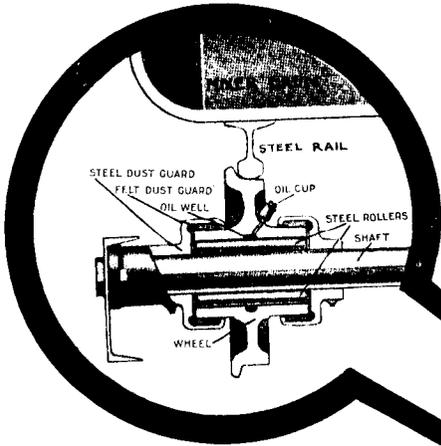


The Right Kind of Mixer Bearings

are wanted by the right kind of contractors and if you have never used an "M-C" mixer, you have never had just the right kind of bearings.

NOTE THE DETAIL SHOWN HERE

See the section of a standard railroad rail trunnion which can never wear out. All other mixer makers use soft iron rings or cast tread as part of the drum—both are bad design.



Notice the heavily chilled car wheels running on perfectly dust-proof roller bearings. This design insures longest life, least power to drive.

Look at the **SEMI-STEEL** Drum cast in two sections, bolted together in center. Run on the "rail-track" trunnion this drum will outwear half-a-dozen others.

Bear in mind this Gear Ring

located in center away from dirt and concrete; cast in **FIVE INTER-CHANGEABLE** segments. A broken tooth means only about twenty minutes delay, taking out five bolts, removing broken section and putting in a new one - cost being negligible. YOU know what happens when other drums break **ONE** tooth.

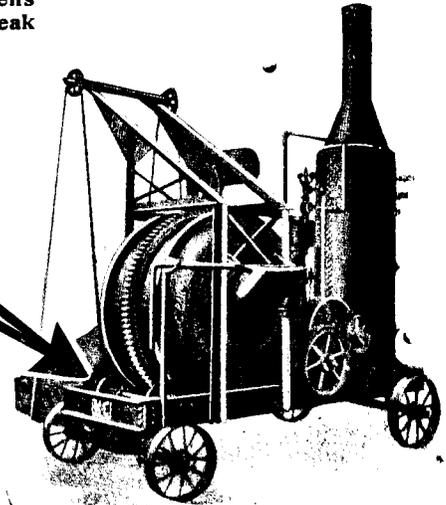
These Points

appeal to the wise contractor and concrete man, the one who wants perfect and rapid output **WITHOUT** the incessant annoyance, delay and expense due to constant repairs to mixers inferior to the "M-C" line.

There are **MANY MORE EXCLUSIVE FEATURES** shown in our new catalog, which show the reason why the most experienced men in the field are buying

"M-C" Rail-Track Mixers

Send for this catalogue which outlines the various types of tilting and non-tilting "M-C" Mixers now being made in Canada by



"M C" (Non-Tilt) MIXER

THE FORD IRON COMPANY LIMITED

MONTREAL

who also carry a full stock of all the requisites for reinforced concrete work, and can supply Derricks, Chain, Wire Rope, Chain Blocks, Buckets, Dump Carts, Wheelbarrows, Stone Crushers and Complete Stone Crushing Plants.

Phone us when next in town — Main 7600



“R. I. W.”
MEMBER T'S WATERPROOF
DAMP RESISTING PAINT CO.

(TOCH BROTHERS)
 ESTABLISHED 1848



Palatial residence in prominent New Jersey town on Atlantic coast.

- ☐ By using “**LIQUID KONKERIT**” all of the cement work has been given a clear uniform color, the cement has been preserved and the penetration of dampness prevented.
- ☐ “**TOXEMENT**” gives to cement concrete a closer bond, greater wearing property and renders the concrete absolutely waterproof against pressure.
- ☐ “**CEMENT FILLER**” and “**CEMENT FLOOR PAINT**” render concrete floors waterproof, oil proof and dustless.

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BITUNAMEL PREVENTS CORROSION

Steel surfaces coated 10 to 18 years are still perfectly protected, and good. It is gas, alkali and acid proof, and is unaffected by one per cent. of boiling caustic water. Bitunamel is employed on the Cunard Liners and other ocean liners against the action of the salt water.



Steel Water Tank and Tower, Ideal Bedding Co., Toronto. Coated with Bitunamel.

The corrosion question has been reduced to a minimum and that remedy can be specified. Bitunamel holds the world's record as an anti-corrosive. We can show you references from the world's most noted engineers, who have used it on their more important work. Samples and full information on application.



Burwash Hall. Sproatt & Rolph, Architects, Toronto.

HENRY SPROATT, A.R.C.A.

ERNEST B. ROLPH.

SPROATT & ROLPH, ARCHITECTS

90 YONGE STREET

Messrs. Ault & Wiborg Co., of Canada, Limited,
19 Charlotte Street, Toronto,

TORONTO, APRIL 8, 1911.

GENTLEMEN,—We have much pleasure in letting you know of the good waterproofing results we have had from "Bitunamel."

We have given it several practical tests, using it for all the foundation work for the new Victoria University buildings, which are built in quicksand.

We also propose to use it for all work in connection with the new University of Toronto group of buildings.

Yours truly,
SPROATT & ROLPH.

P.S.—On examination of the Victoria works this spring, after the severe winter, we find it as good to-day as when it was put on.

THE AULT & WIBORG COMPANY

OF CANADA, LIMITED

VARNISH WORKS

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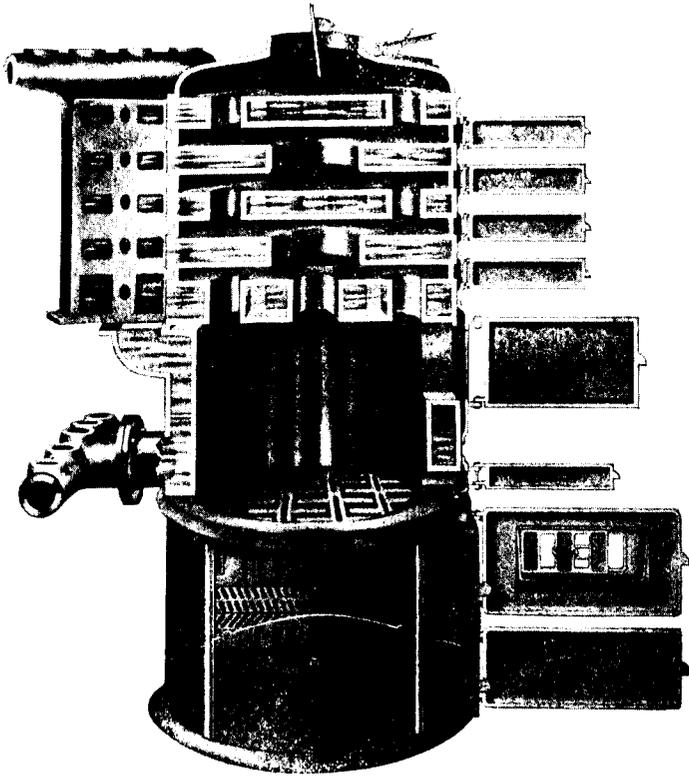
Minneapolis

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It is the Heating that makes A Home of a House



THE "Sovereign"

The most efficient of
all the improved Hot
Water Boilers.

(Our Booklet, "The Dictionary of Heating," postpaid to any address. Write for it.)

TAYLOR-FORBES COMPANY LIMITED

Makers of "Sovereign" Hot Water Boilers and Radiators

Toronto---1088 King Street, W.
Vancouver---1070 Homer Street

Montreal---246 Craig Street, W.
Foundries at Guelph, Canada

(Installed by the Heating and Plumbing Trade throughout Canada.)

This is the day of improved methods in heating, and a house heated by hot air is never a ready seller except at a sacrifice price. At best it is only valued at its worth on the real estate market *less the price of installing a Hot Water Boiler.*

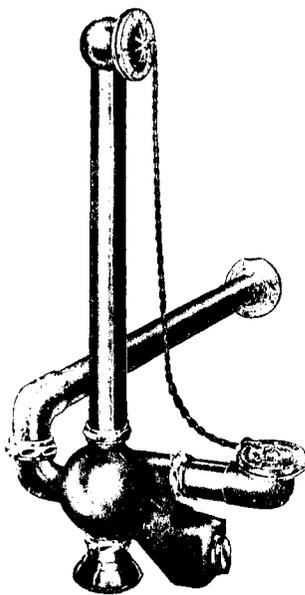
All makes of hot water boilers have the merit of affording sanitary heating, but they are not all equal in heating capacity, coal economy or simplicity of operation.

People who have enquired into the heating problem have everywhere heard good reports of the "Sovereign". It is the one boiler that gives *more efficient heating, saves the coal and eliminates the worry of furnace attention.*

**Wolverine
Closet
Combination
No. 5**



**Reversed
Trap
Washdown**



WOLVERINE CLOSET COMBINATIONS

ensure absolute satisfaction in every detail. In addition to their attractive appearance and finish, every mechanical part is so fashioned as to give it the greatest durability.

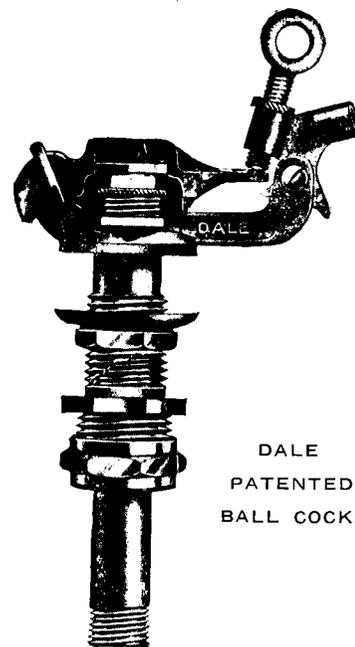
Earthenware—Genuine vitreous china.

Woodwork—Selected oak, golden finish.

Lining—Two-piece heavy copper, double seamed and soldered.

Ball Cock—Genuine Dale (patented) with porcelain seat.

Elbow and Offsets—2-inch seamless brass, with heavy cast nuts.



DALE
PATENTED
BALL COCK.

Special attention is drawn to the Wolverine Combined Waste and Overflow for Bathtubs—both waste and overflow being in the same line, and requiring no special "roughing in."

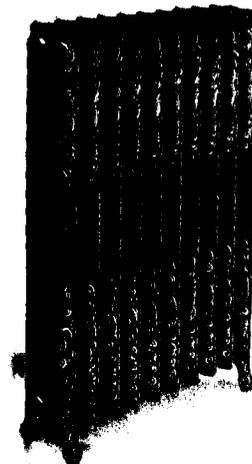
SOLE MANUFACTURERS

CANADIAN WOLVERINE CO., LIMITED

CHATHAM, ONT.

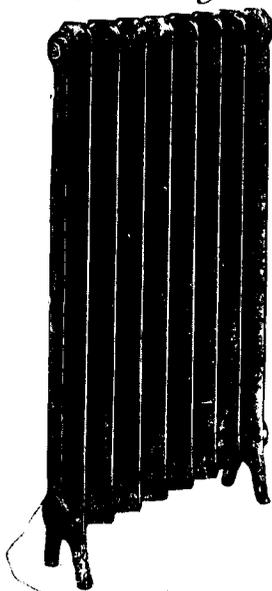


**THE SOLUTION
OF THE
HEATING PROBLEM**

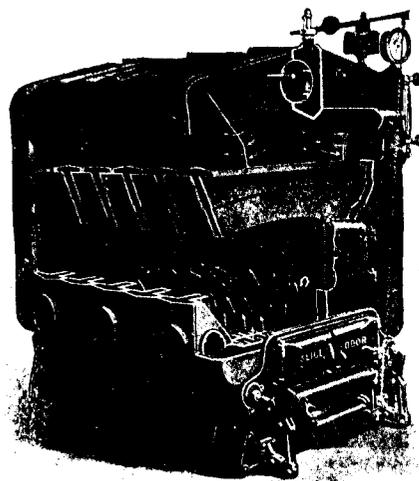


Don't worry over "that heating proposition," let us solve your troubles. It matters not what the demand may be, there is a SAFFORD outfit capable of meeting every requirement. Boilers both in Steam and Water, built on that splendid long firing period idea, with instantaneous heating power; radiators that will fit into the most delicate scheme of architectural treatment, at the same time diffusing from their mechanically perfect lines a maximum of radiant heat.

Let us take care of "that proposition" for you. An outfit of SAFFORD Radiators and Boilers installed in the building relieves your client of the petty drudgery and worry



of an inadequate, antiquated and wasteful heating apparatus. It assures perfect heating results, cheaper fuel bills, less labor, while uneven heating and repair bills disappear.



The **DOMINION RADIATOR COMPANY**
LIMITED

TORONTO, ONT.

Branch Offices and Warehouses at WINNIPEG, MONTREAL, VANCOUVER, ST. JOHN, N.B.



Manhattan Apartments, Church and Charles Sts. J. A. Harvey, Architect, Toronto.

ROMAN STONE is made of the purest material, requires no waterproofing, is of the same quality throughout, and is made by the oldest established firm, with the largest plant and equipment in Canada for the manufacture of artificial stone.



Dr. F. LeM. Grasett, 7 Forest Hill Road. Darling and Pearson, Architects, Toronto.

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"The Same Quality"

For a residence of the better class, **ROMAN STONE** adapts itself perfectly to the most pleasing and artistic forms of decoration. Our manufacturing process enables us to supply the blocks in special shapes to suit the particular purpose for which they are required, thus doing away with the cutting and carving that natural stone requires.

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Factory: We

T. A. MORRIS

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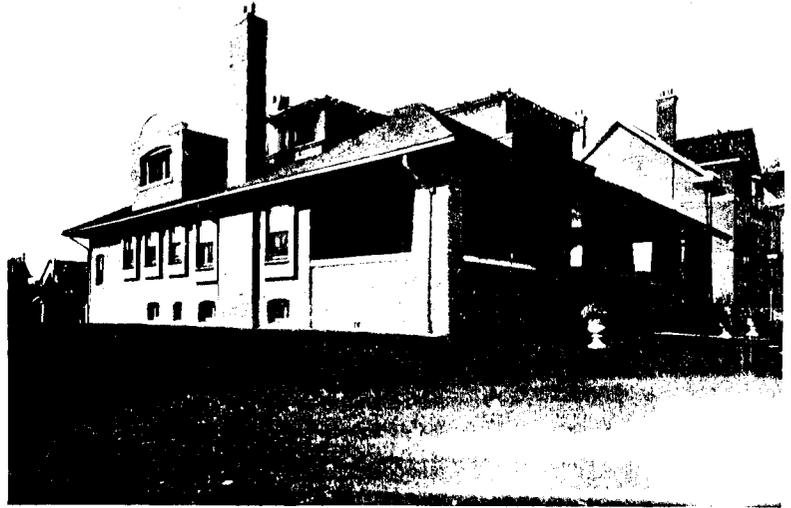
204 St. James

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REGISTERED)

Quality Throughout"

ROMAN STONE is being used to an ever increasing extent for all classes of buildings. It is recognized that the appearance of any building is greatly improved by its use. The illustrations shown on these pages convey some idea of the architectural effects produced by the judicious use of **ROMAN STONE**.



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The popularity which **ROMAN STONE** has attained has been won purely by its merits. Besides meeting every condition demanded by architectural and structural requirements, it offers a decided advantage by effecting a substantial saving in cost.

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HOT WATER

INSTANTANEOUS INEXHAUSTIBLE

*Does this mean
anything to you?*

Can you get a new viewpoint on the hot water question? We know it has become a commonplace necessity through long association. But we want you to consider it in a new meaning—*hot water service*. Contrast the dwarfed, uncertain service furnished by the little water-heater and the splendid convenience of the

RUUD

Automatic Gas Water-Heater

The Ruud is the only heater that furnishes

Uniform hot water at a fixed temperature determined by yourself—

Convenient hot water any minute of day or night—the Ruud responds at the turn of any hot water faucet in the house—

Instantaneous hot water, no delay. Open a faucet and the Ruud lights the gas in its own burner and heats the water *as it flows*—

Send for our representative. He will explain all particulars.

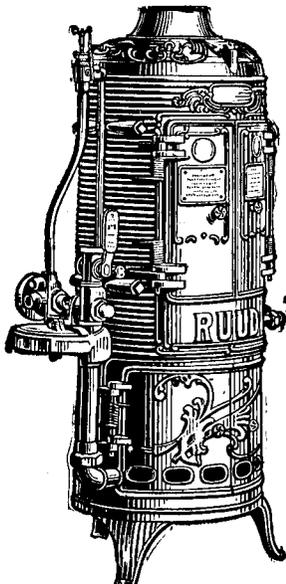
Inexhaustible hot water, steaming hot water in unlimited quantities—a quart or a thousand gallons—

Economical hot water—no gas is burned except to heat the water you are then using—

No water-heater you now have can begin to approach the luxury of the Ruud. Isn't it about time to discard the inefficient heater and install a Ruud? Come in and see it at work.

**The Consumers'
Gas Company**

12-14 Adelaide
St. West
Phone M. 1933



FIRE-PROOF SAFES VAULTS AND VAULT DOORS

*For Household Purposes
For Architects and Contractors
For Office Buildings, Large or Small
For Banking and Monetary Institutions*

If you are at all interested let us know and we shall be glad to supply our catalogue showing all dimensions, etc.



Our Safes and Vaults have passed successfully through all of **Canada's Great Fires.** This should be a sufficient guarantee of quality for you.

Illustration shows **Standard No. 5** Fire-proof safe. This safe is specially designed for household use and for the business man with the small office and only a few books and valuables that require protection.

A GOOD FIRE-PROOF SAFE

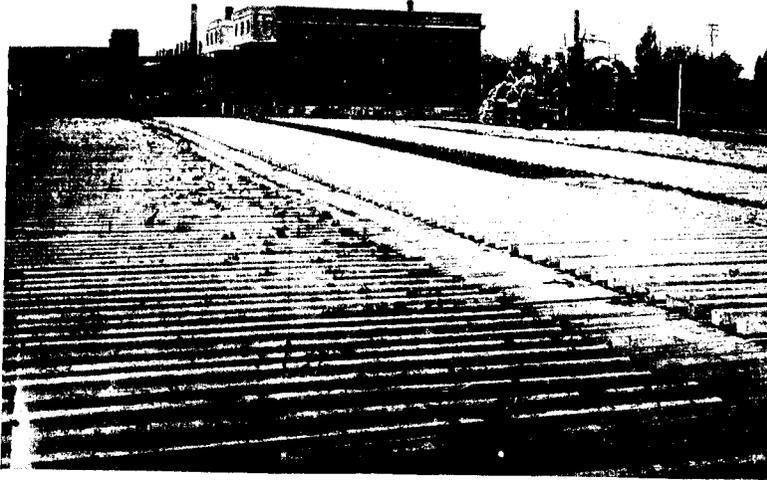
is just as necessary as Fire Insurance if you have Bonds, Deeds, Policies and standing accounts in your possession.

The cost of obtaining this protection is not great.

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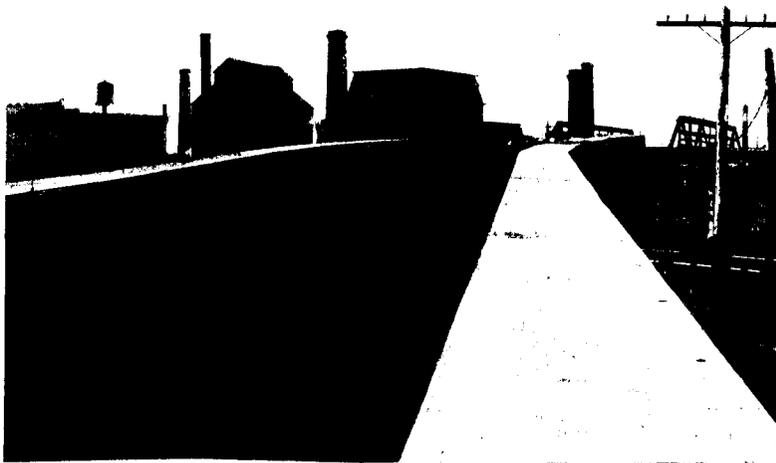
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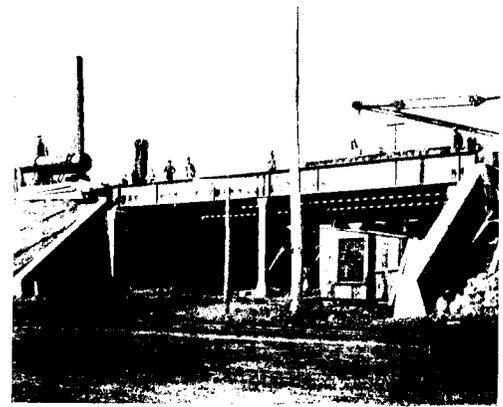
18,000 Hydro Electric Poles, Made of Rogers Portland Cement, Toronto.

THE PORTLAND CEMENT ERA has arrived and it has come to stay. CONCRETE is the logical and most practical material modern science has produced for the myriad forms of construction demanded by our advancing civilization.

☐ GOOD PORTLAND CEMENT makes good CONCRETE. The BEST PORTLAND CEMENT makes the best CONCRETE.



Top of Bridge at West Toronto, Concrete Structure, Rogers Portland Cement.



Railway Bridge, Sunnyside, Toronto. Rogers Portland Cement.

CANADIAN Architects and Engineers use ROGERS PORTLAND CEMENT. The Scientist EDISON says: "A REINFORCED CONCRETE building will stand practically forever."

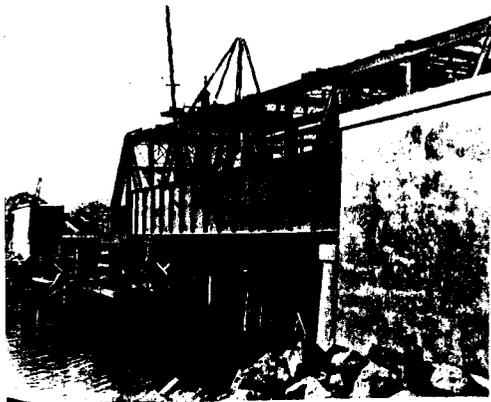
☐ ELECTRICITY CALLS FOR CONCRETE as foundations for conveyance towers, and its SERVICE POLES are made in the hundred thousand of Reinforced Concrete.

ALFRED ROGERS

Toronto,

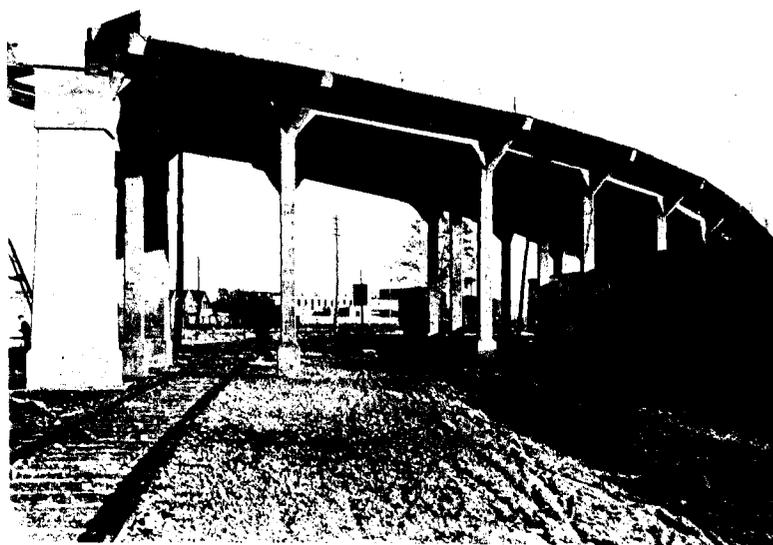


Don Bridge, Solid Concrete Structure, Toronto. Rogers Portland Cement.



Railway Bridge over Humber, Toronto. Rogers Portland Cement.

THE ENGINEER is both a scientist and a practical constructor. He constructs ABUTMENTS to steel swing bridges that will outlast many times the steel frame work that spans the river. His VIADUCTS are constructed ENTIRELY OF REINFORCED CONCRETE from abutments posts and and girders to the floor joists and floors.



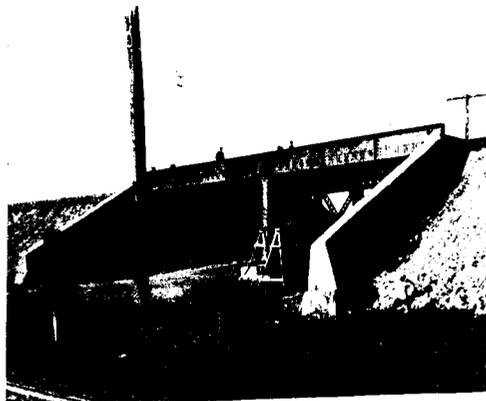
West Toronto Concrete Bridge, Toronto. Rogers Portland Cement.

MANUFACTURED at conveniently located mills, we have unequalled shipping facilities and prompt service for the engineer who builds a sea-wall or a bridge, or the architect who erects a towering office building.

ROGERS PORTLAND CEMENT MILLS are increasing in number. Those in Ontario are located at Atwood, Durham, Hanover, Kirkfield, Orangeville, Owen Sound and Wiarnton.

ROGERS, Limited

Canada



Railway Bridge, Sunnyside, Toronto. Rogers Portland Cement.



Queen St. Bridge at the Don, Toronto. Rogers Portland Cement.

Head and Shoulders Above all Others

WHY?

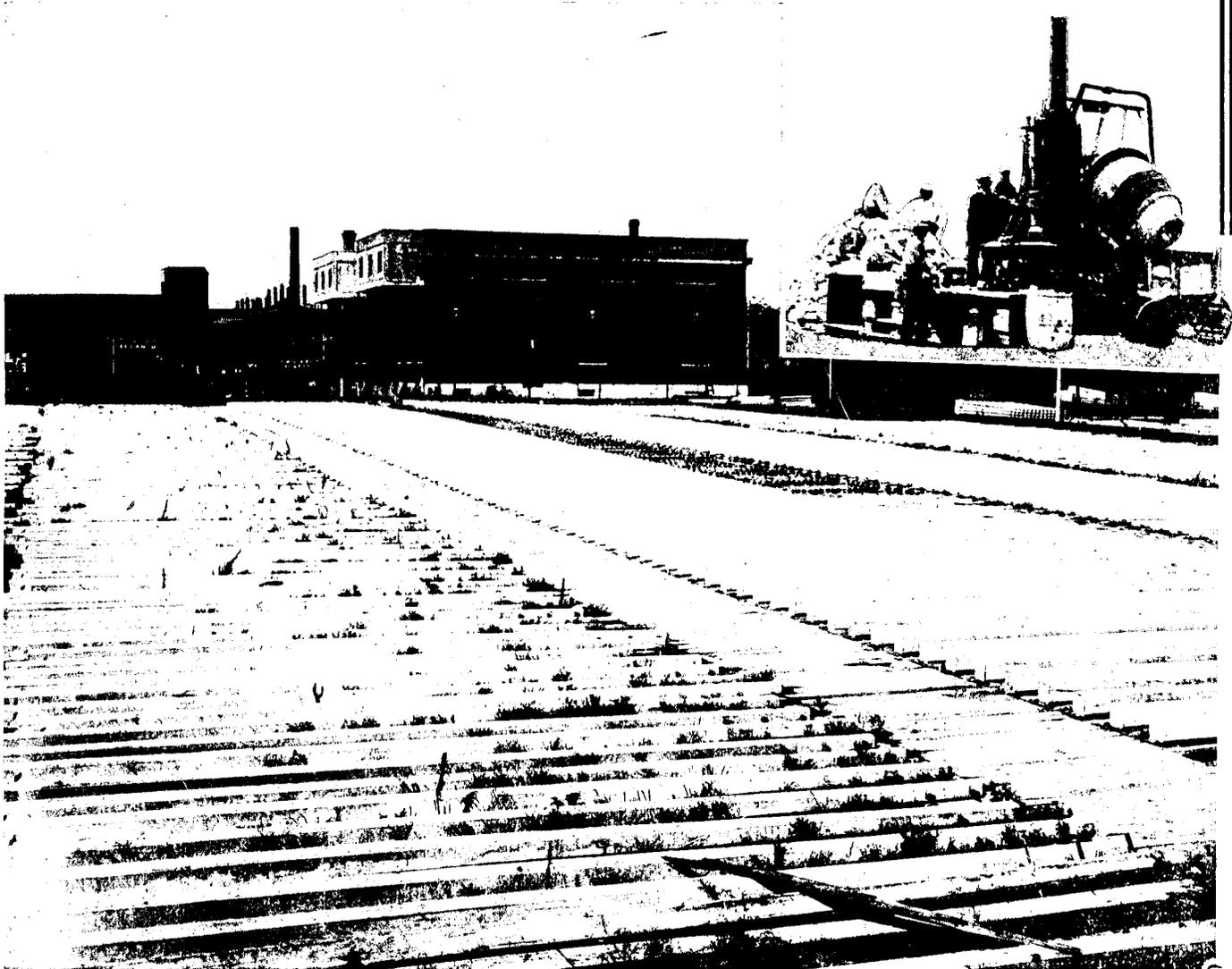
Because the **WETTLAUFER HEART SHAPE MIXERS** are the best on the market.

Because they can save you money on every job. The contractor that is successful always realizes and selects the right mixer for the job.

WETTLAUFER HEART SHAPE MIXERS

are noted for their durability, perfect operation, and thorough and quick manner which they turn out the batch. It is a continuous drum mixer that also correctly proportions and thoroughly mixes concrete materials.

If you use Wettlaufer Heart Shape Mixers you can contract for and completely finish several times the amount of work you are now doing in one season. Best possible result at the least cost.



Wettlaufer Heart Shape Mixer making Hydro Electric Poles at plant on Strachan Ave.

Accompanying illustration shows our mixer turning out 18,000 Hydro Electric poles. This mixer has been in constant operation for over one year. It shows no mechanical wear and tear and is as good at the present time as the day it was put on the job.

WETTLAUFER BROS. Head Office and Warerooms: **171 SPADINA AVE., TORONTO**

Branch Offices: A. R. Williams Machinery Co. 15 Flock St., St. John, N.B.; Princess St., Winnipeg.

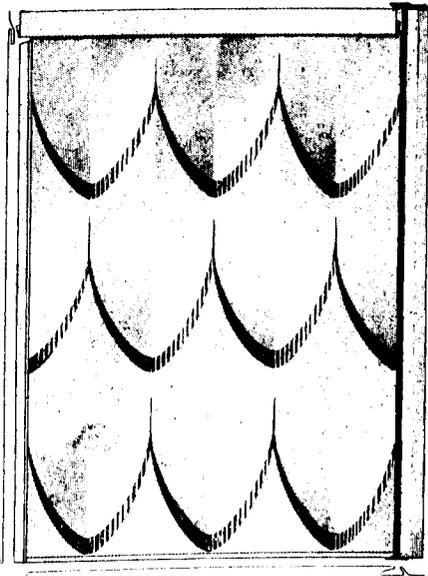
Factories: Mitchell, Ont.; Buffalo, N.Y.; Detroit, Mich.



This Fire

was caused by sparks from a neighbor's chimney falling on a wood shingle roof and may happen to your building any time.

The buildings on each side were protected by being covered with Metal Shingles.



The GALT Metal Shingle

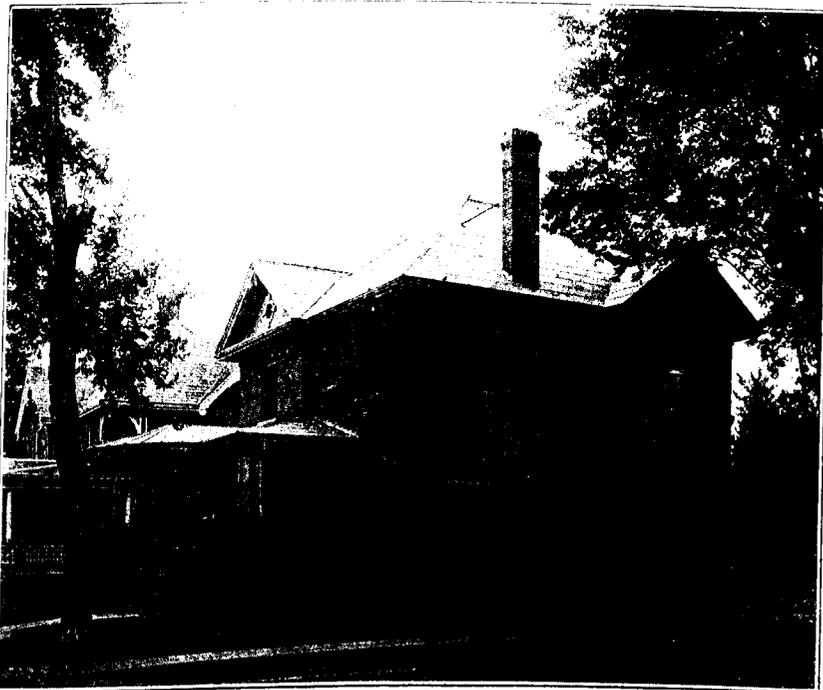
will protect your building from all danger of outside fires and prevent your neighbors' carelessness from endangering the lives of your family.

It will also give you lightning protection, clean rain water in the cistern, handsome appearance and good roof service for twice as long as any wood shingle roof.

Send for our booklet "Roofing Economy and Silent Salesman."

The Galt Art Metal Co., Limited

Galt - - - Ontario



Residence of Dr. McRitchie, Chatham, covered with Galt Shingles.
Architects, J. L. Wilson & Son.

Otis Automatic Push Button Elevators



The Modern Residence

is not complete without an Otis Automatic Electric Push Button Elevator.

This elevator requires no attendant, and is so constructed that a child can operate it with absolute safety.

It cannot be operated if the interlocking doors or gates are left open, but responds immediately to the pressure of the button when doors are closed, and stops automatically when the desired floor is reached.

Elevators of this type have been installed and are now in successful operation in the most modern residences in Canada and the United States.

Plans and specifications freely furnished upon request.

Otis Elevator Company, Limited

Head Office: Toronto

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Nurses' Home, Toronto. Geo. S. Curry, Architect. Fiddes & Hogarth, Plumbers.



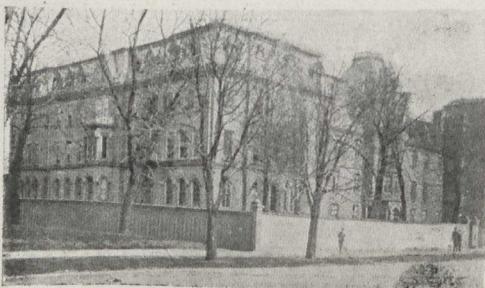
Cottages, Muskoka Sanitarium, Gravenhurst, Ont. Burke, Horwood & White, Architects. Purdy, Mansell Co., Ltd., Plumbers.

These pages show a few high-class residences, and public buildings in which our plumbing ware has been installed.



Main Building, Muskoka Sanitarium, Gravenhurst, Ont. Burke, Horwood & White, Architects. Purdy, Mansell Co., Ltd., Plumbers.

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House of Providence, Toronto. A. W. Holmes, Architect. John E. Gray, Plumber.



Convent Douville, St. Albert, Alta. Barnes & Gibbs, Architects.

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Administration Building, Asylum for Epileptics, Woodstock, Ont. F. Heakes, Architect. Purdy, Mansell Co., Ltd., Plumbers.



One of the Four Cottages, Asylum for Epileptics, Woodstock, Ont. F. Heakes, Architect. Purdy, Mansell Co., Ltd., Plumbers.

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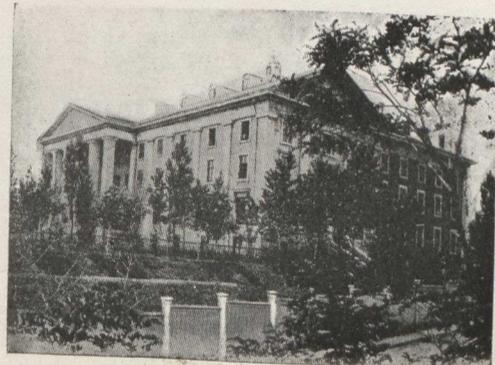


Panoramic View of Hospitals for Epileptics, Woodstock, Ont. F. Heakes, Architect. Purdy, Mansell Co., Ltd., Plumbers.

The characteristic features of this snowy white ware are such that commend it to every architect who is inclined to investigate its qualities.

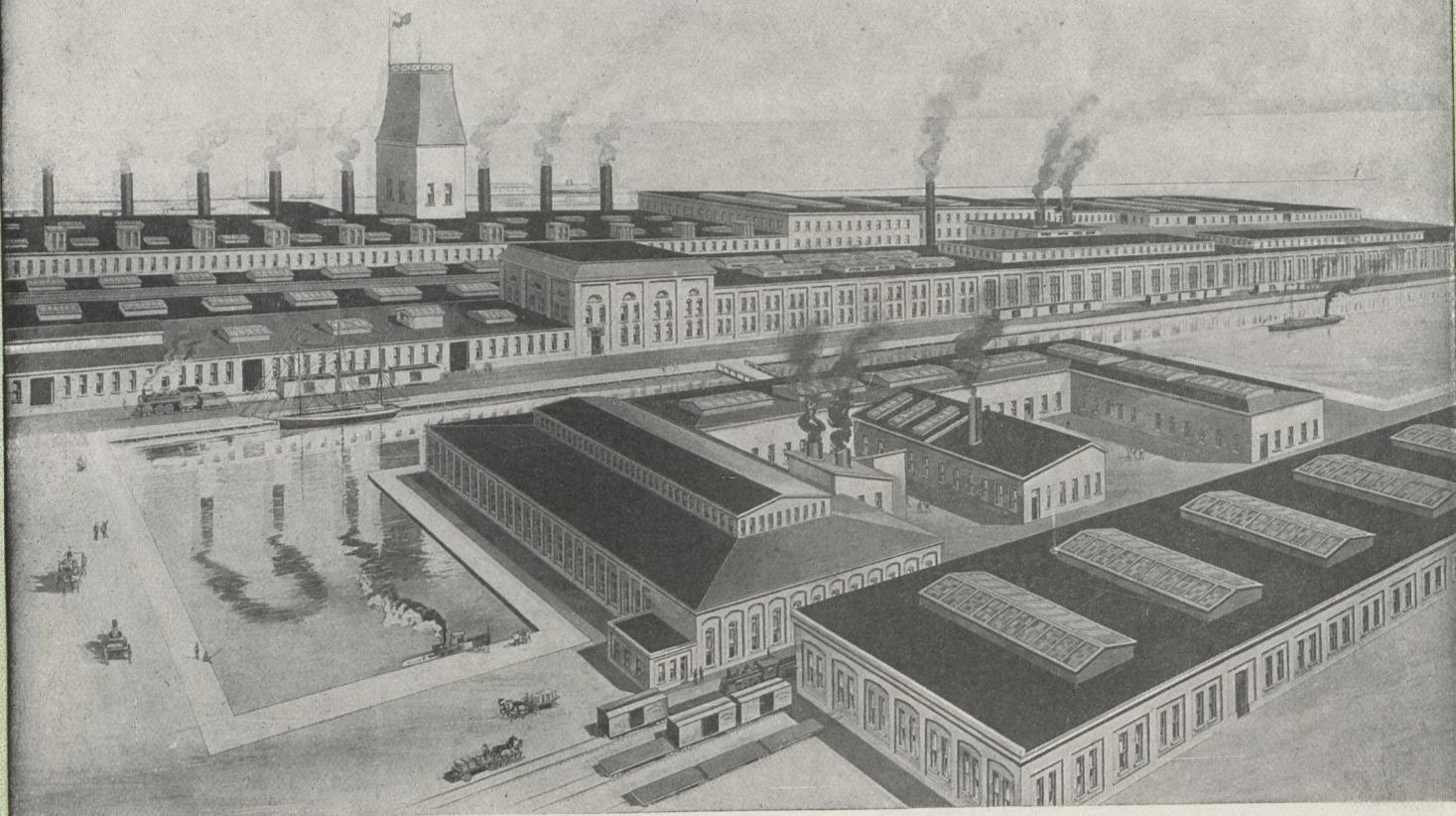


Tuberculosis Hospital, Montreal. Messrs. Finlay & Spence, Architects. Thos. O'Connell, Plumber.



Mt. St. Marie Convent, Montreal. J. P. Resther, Architect. T. Latourelle, Plumber.

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CONSTRUCTION

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



Vol. 4

TORONTO, NOVEMBER, 1911.

No. 12

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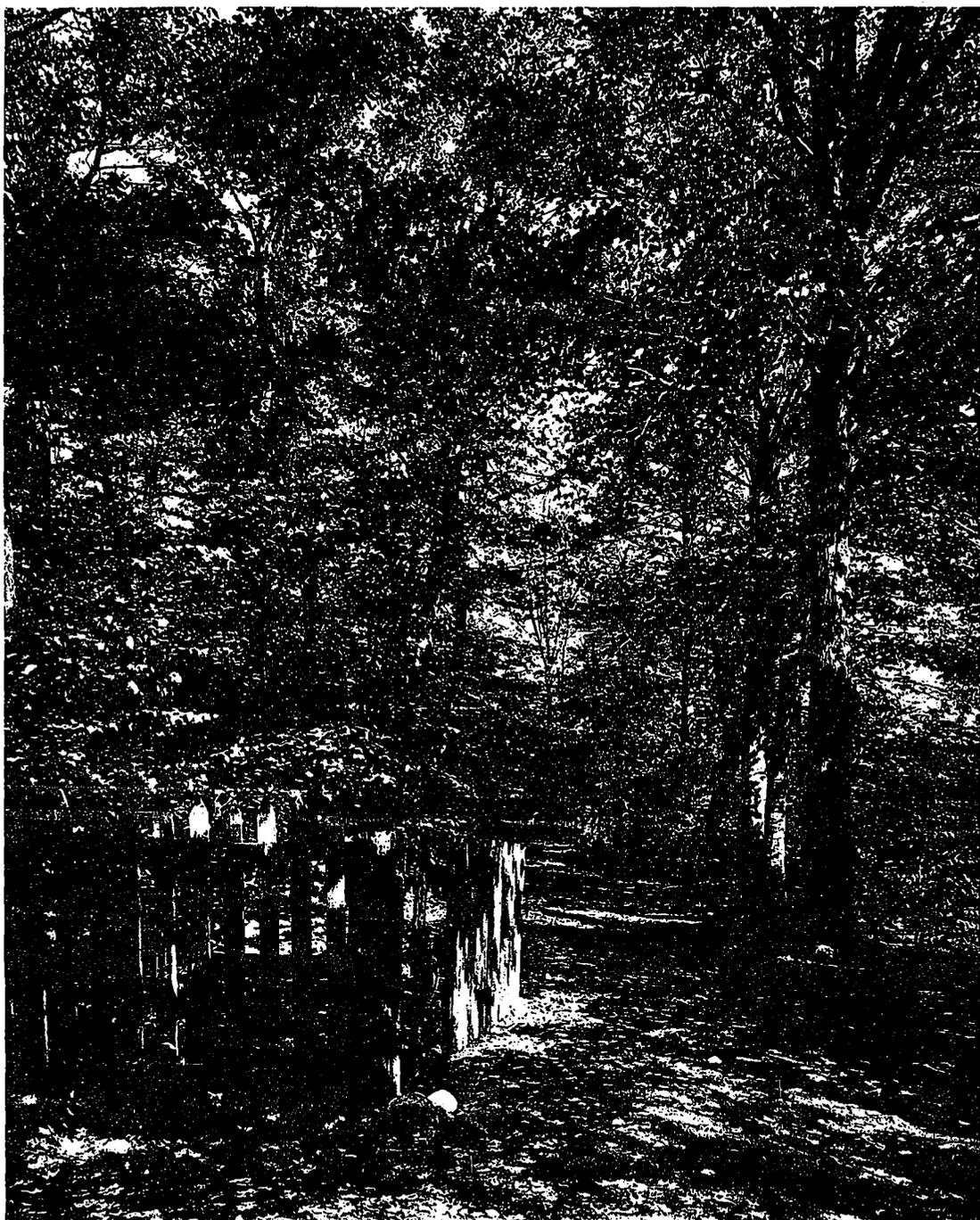
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The Road of Yesterday.



Q *The Federation Convention of the Royal Architectural Institute of Canada, the most important event in Canadian Architectural Association history.*

THE ANNUAL CONVENTION of the Royal Architectural Institute of Canada was, next to that in which it was formed, the most important in its history. In the consolidation of all the Provincial associations under one governing body, it has unified the architectural interests of the Dominion and brought to a point of execution the many measures that have been held in abeyance through the many different organizations acting on a more or less independent basis. It has placed the profession in Canada on a plane with that of other nations, and in its potential aspect is a signal event in the history of Canada's advancement along artistic and constructive lines. It will only be noticed by the public in the betterment of building laws, the development advance of town planning, the better designing and construction of Government buildings and other visible features of improvement in the attractions of cities and the comfort of the people. But each improvement will reach back to the action or the influence of this unified body of architects reaching from one shore of the Dominion to the other, and using its interest in an unselfish way upon local and national projects for the betterment of the people. It is one of the strange facts of our civilization that the public is slow to recognize the direct influence the architectural profession has upon its affairs. It can understand the millions of money that the Government or private individuals invest in structures, and has some conception of the work of the contractor who erects them, but it accepts design and plan as something that grows out of the investment and its labor without question, and does not realize that each would be helpless or abortive were it not for the skill and the advisory council of the profession. In congratulating Canada upon this unification of its architectural organizations, CONSTRUCTION believes that the convention at Montreal has done a work that will have a beneficial effect upon the future architecture of the Dominion, and a restraint upon the haphazard manner in which growth

in public structures and improvements has been carried on. This generation will not be the only one that will look back upon this convention at Montreal as an epoch in our national history.

Q *The removal of the unsightly and dangerous service wires of the electric companies in Toronto demanded by city progress and safety.*

THE POLES FOR CARRYING all sorts of wires to convey electric current for power or illumination are a common nuisance in most cities, but it is probable that no city on this continent has a greater variety or quantity of unsightly or dangerous supports obstructing its streets than Toronto. They are of wood, iron and cement, and carry everything from party line phones to the power from Niagara Falls. They are becoming so numerous that there is no logical arrangement, even, and on some corners the poles and wires almost obscure the buildings which they front. Like the automobile nuisance, the pole excrescence is only tolerated because it has grown gradually and the people have become used to it. If either of these nuisances had been thrust upon the city in their present aggravated form they would not be permitted to exist for a minute. But a combination of a real utility and strong financial interests involved, aids in their perpetuation. As the public have begun to talk of prohibited districts, and will soon demand special roadways for the automobile, so it should at least begin to work toward a clearing of all electric wires from the streets of our cities and their suburbs. It seems to us that the cost of burying the wires in conduits would be more than offset by the saving in repairs, and that even tunnels for their reception would be a paying investment. It was found so in Chicago. But even if it was a change and reduced dividends the people should insist that the unsightly poles and dangerous wires should be removed from the streets of the city. They are relics of the crude days of temporary construction, and now that Toronto is entering upon an epoch of stable and permanent life there is no more argument against the removal of wire-poles than there would be against that of a

pile of brick from the corner of King and Yonge streets. That the wires of the fire department are above ground and subject to interruption by storm when most necessary, would be ridiculous if it were not tragic, and the impossibility of erecting ladders against buildings because of the mass of wires will find its answer in the first factory fire.

Q *City planning and the rearrangement of existing conditions an immediate and imperative necessity in every city that expects to grow.*

WHEN MR. KIPLING made that profound observation that "The Colonel's Lady and Biddy O'Grady are sisters under their skins," he presented the situation, not of human nature alone, but of peoples. Interview the people of any city and they will tell you, "But we are different here, and can't do the same things or act in the same manner as in other cities," when a reproduction or "photograph" of points of view, narrow outlook, or broad enterprise of one city will find its facsimile in every other city in the land. The necessity for town planning is a case in point. Comparatively small towns like Toronto, Louisville or Minneapolis may think it may be necessary in New York or Chicago where "conditions are so different, you know," but exactly the same need exists for immediate reconstruction to meet present conditions and provide for future development in one city as the other. In each case, too, the demand is immediate. It has been immediate since every city in the country started without a plan. Only in some it will cost more in labor and money than in others. Where New York and Chicago must spend millions, and has arrived at a point where the question is not how much money, but how soon can it be done, other cities are only at the stage where the necessity is becoming apparent, and where the future "must" can be clearly pointed out. The money cost increases with each year's delay. It is strange, but true, that in regard to our manner of living we are as yet but half civilized. We are civilized enough to keep our lawns mowed and to remove piles of rubbish from our front yards so that the visitor or ourselves do not have to climb over an unsightly pile of rubbish to reach our front doors. We even in some cases think it advisable to clean up our back yards and to have a sand pile there for the children to play in so they need not play in the street. But we are not civilized enough to make the entrance to our city a broad spot of welcoming space surrounded with our best buildings, to provide broad avenues that go through the city for the convenience of traffic, remove the slums that crowd closely on to our best business or residence sections, or even to provide the small parks in residence districts, particularly where there are no back yards, for the children to play in where they may gain physical strength and moral healthfulness. In this every city in the country is alike, though some have commenced to alter these conditions. Each propo-

sition is met with the cry of the ratepayer, "it will increase my taxes," and each has the same ignorance of city officials, however honest, in regard to what should be done, and the same reluctance of these same officials to call a "doctor," who, by a well considered plan by way of diagnosis and prescription, commences the cure of the disease. Then, again, the average man's impatience is a deterrent factor, for when a city has at last decided to act he asks, "how long will it take and how much will it cost." He does not know that properly handled it does not cost anything, but that a cure is never complete while the city grows. The doctor will tell him that the main thing is to adopt a system of cure and faithfully follow it. The city that has a plan that takes in every condition of transportation and attractive and sanitary housing, not only for the present, but in its general lines reaching over the next fifty years, and can "nail it down" so that every dollar spent will be in accordance with that plan (and any other plan, of a viaduct to cross tracks here and a widening of a block to relieve congestion there, is useless and wasteful), has made an advance in civilization. We do not mention particular cities for these rules, like the conditions both in necessity for relief and ignorant opposition or interference with partial plans, apply to all cities. For, as all human nature is alike in selfishness as well as in broad-minded action, so all cities have the same conditions to meet and the same forces to aid or retard their growth.

Q *The immediate necessity of establishing reforestation and control of hardwood and pine on a European basis in Canada should be promptly acted upon.*

THE CANADIAN PEOPLE cannot call upon the Government too often or too insistently to use every means in its power to compel the elimination of wood waste and the development of forestry. While the balance of soft pine area remains with Canada and will last for domestic consumption for many years, a lesson should be sharply drawn from the wastefulness of the United States in the past and the consequent strenuous efforts that country is making by reforestation to amend it, and commence now to conserve the pine forests that are great still but will not last forever. But if this is necessary in regard to pine, how much more imperative does it become when it refers to the hard woods. Canada already feels the shortage in hardwood supply, and its annual importation from the United States exceeds by more than fifty per cent. the value of the hardwoods manufactured into lumber, and the stock in the United States is getting so low that soon even that source of supply will be gone. In Ontario, southern Quebec, and the Maritime Provinces, wherever hardwoods grow, a system of strict conservation should be established and reforestation commenced at once. Hungary, the oldest country in Europe, exports to-day more lumber than any other European State, and France and

Germany are large exporters of lumber, but it is hundreds of years since the first reforestation was commenced in these countries, and some of their forests are equal to our best wild timber lands in the value of their output of pine and hardwoods. It is not too late, but it is high time that Canada realized the heritage she is squandering in the indiscriminate consumption of her timber, and commence practical reforestation and control established on a European basis.

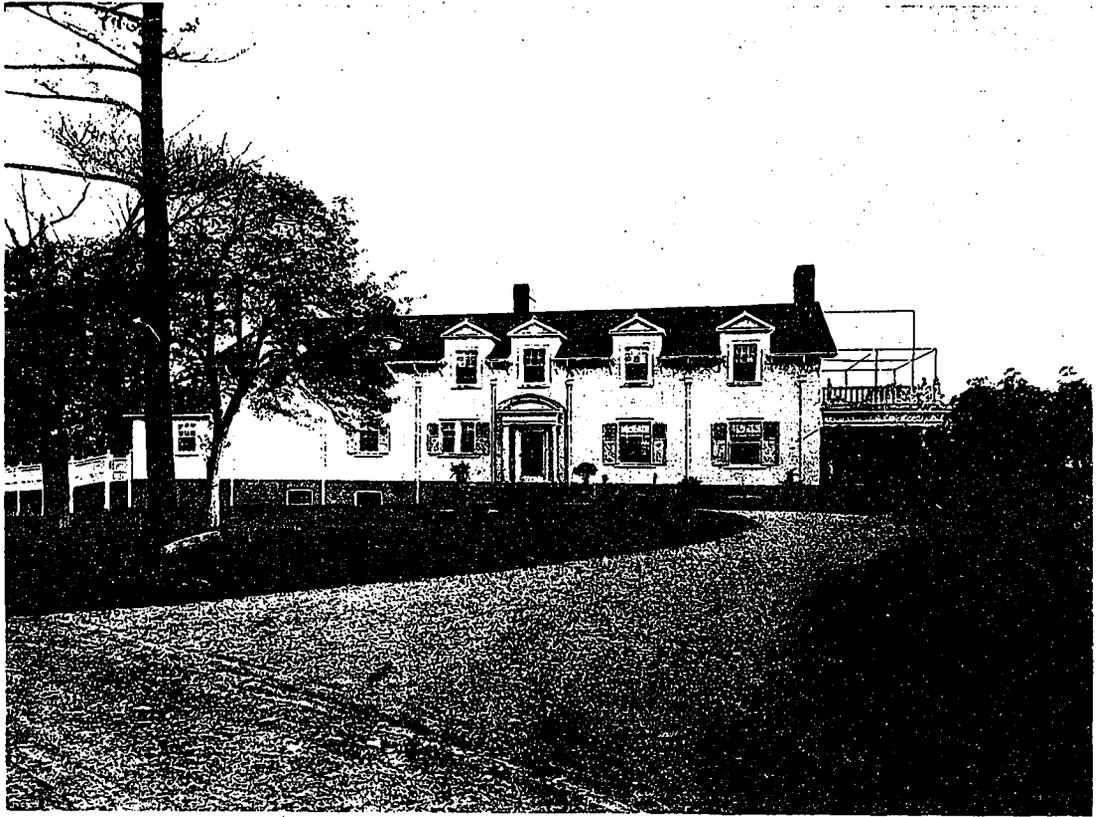
Irregularity in competition programs largely due to the countenance given by individual members, but constantly improving through the energetic efforts of the Institute.

IT IS PROBABLE that the vexed subject of architectural competitions will never be settled except in the mind of the individual architect and by the circumstances surrounding a particular program or practice. The world in a broad way recognizes that "competition is the life of trade," and to professional men there is always a revulsion of feeling where the elements of competition are presented in concrete form, no matter how much it exists in the abstract. The history of architectural competitions this side of the pond is interesting if not instructive. There is a record, almost lost in the mists that obscure the professional life of the early architects, when at the inception of the first organization of architectural practitioners, the American Institute of Architects, about 1857, the subjects of competitions and of fees came up, and a committee was appointed to consider whether it were professionally proper to even discuss these subjects in a meeting of the society. In 1865 at the second convention of the Western Association of Architects held at St. Louis, D. H. Burnham as chairman of a committee on competitions indicated the situation by commencing his report with, "Architectural competitions are a necessary evil and must be recognized," and plainly stated that while this was fundamentally true, that they should and could be so regulated as to destroy much of the baleful influence the competition evil was having on architectural practice. The competition code which this report presented became the foundation for the competition programs considered proper in architectural practice for the next twenty years, but not being in any way mandatory its provisions were more prominent in the breach than in the observance. This led to the rule lately adopted by the American Institute similar to that followed by the Institute of Canada, in which a code was formulated making it unprofessional for a member to enter a competition which does not recognize that code's principles as a basis. That even this progress in the regulation of competitions leaves much to be desired is evidenced by the reference to them by the President of the Ontario Association of Architects in his address before the late convention at Ottawa, which says: "The question of competitions has, as usual, been

prominently to the fore, and we have to record one satisfactory instance, viz., that of the new Knox College, in which the conditions were of such a character as to encourage good architects to take an interest in it. The others were those for the Hamilton Library, the Goderich Town Hall, and the Government House, Toronto, and the less said about these the better." Even that one out of four committees was intelligent and honest enough to present to the profession a programme that was equitable and gave an opportunity for unbiased selection of an architect through the most meritorious design is a matter for congratulation, for it seems singular, but is the fact, that the average business man who is honest in his business dealings will expect the architect to enter the most pronounced gambling enterprise where the dice are loaded in advance, or where the main idea is to get something for nothing. If the members of the profession will take the Frenchman's advice in relation to matrimony, "don't," and rigidly apply it to all competition programs that have not the approval of the Council of their own or some other established architectural association, the public may in time learn through experience what is absolutely true, that disaster in some form always follows the procurement of plans by an irregular competition.

IT MAY INTEREST other cities to know how Toronto's Department of Public Works saves money on its contracts. On all tenders on civic contracts the City Engineer competes with the contracting firms. When the city's bid is lowest other bidders can have the work at that figure, otherwise the city does the work itself. The way it works out is that recently out of twenty contracts the City Engineer's bid was lowest on fifteen. The contractor who bid lowest on the other five took the fifteen at the city's figures. There was a saving to the city of \$2,400 on these contracts as well as the indirect saving on all contracts, through the city's competition. Pretty good scheme if the city's engineer is straight and capable, and that describes City Engineer C. H. Rust of Toronto.

THE ELECTION RESULT is readily seized upon by the Commercial Review of Vancouver to point a moral and adorn the otherwise bold fact that advertising pays. It points out that it was almost if not quite wholly by the strong advertising campaign in the newspapers of the Dominion against reciprocity that overturned a Government strongly entrenched and conforming with the policies most approved by a majority of the people. The advertising of "another brand of goods" was so effective that it should convince every manufacturer of the value of advertising space. If a publicity campaign can change a man's political opinions it surely should be more effective when used to convince him of the merits of a particular manufacture. It is commonly supposed that one's politics and religion are scarcely subjects for convincing argument. The minds of men are open to the claims of a needed commodity.



Front.



Garden Front.

Residence for Colonel J. B. MacLean, Toronto, Ontario. John M. Lyle, Architect.



Garden Alcove, Residence of John S. Ewart, Ottawa. Colborne P. Meredith, Architect.

DOMESTIC ARCHITECTURE AS ILLUSTRATED IN SUBURBS AND COUNTRY.

The Canadian expression of livable houses, eclectic in design, and brick, stone and cement used in their construction

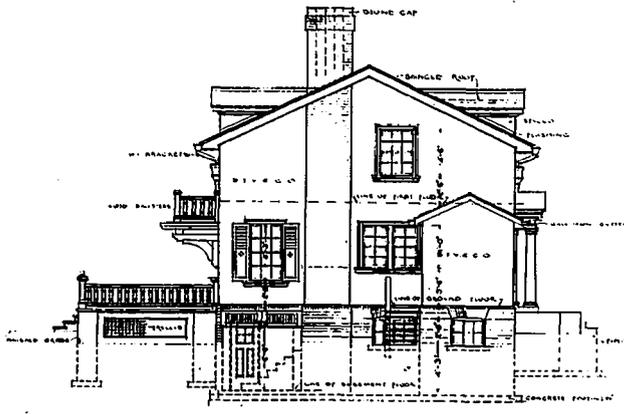
TO THE STUDENT of architecture, professional or layman, there is something inspiring in the many types evolved by practitioners, and their application to environment. This variation in type is particularly true of the suburban or country residence, though in the former it is most pronounced. In the country residence, while the architect designs with a particular view to conditions, the type of English country house is followed to a predominating extent. But whatever the form of design the plan is apt to be one which most closely suits the needs of those for whom the residence is built. For, as Nathaniel Cotton says in "The Fireside:"

"If solid happiness we prize,
Within our breast this jewel lies,
And they are fools who roam.
The world has nothing to bestow,
From our own selves our joys must flow,
And that dear hut, our home."

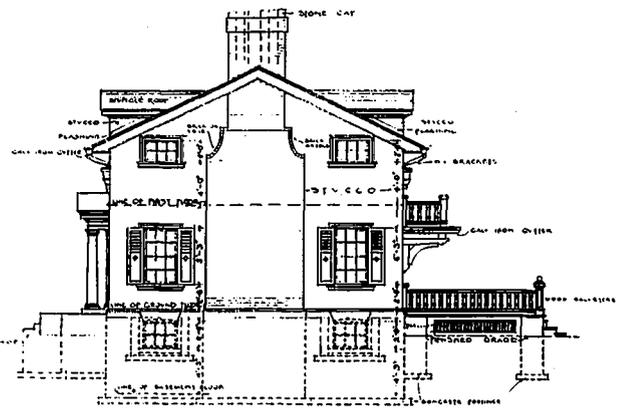
It is home. Long enjoyable hours have been spent

by the family in discussing the plan, and each member of the family, their tastes and their desires, as well as general utility and convenience, has been considered before the architect has been approached. Thus, the form of the "dear hut," its rooms, alcoves, window views, sunlight; all the interior of the house, is of direct interest. Then comes the exterior upon which the mind is somewhat hazy, but all have the sense that says that it should fit the surrounding landscape. It must "belong." This, of course, is also the architect's view, and when this intelligent knowledge is vested in his client the architect works with freedom and inspiration. Too often the "little knowledge" of the client, however, is dangerous to the success of the whole through the inclination to interfere in the architect's interpretation of the client's desires, and the result is injured to that extent through the interference of the client's lack of confidence in the architect and over-confidence in himself.

The growth of the suburb is one of the striking social movements of the time. It is not altogether

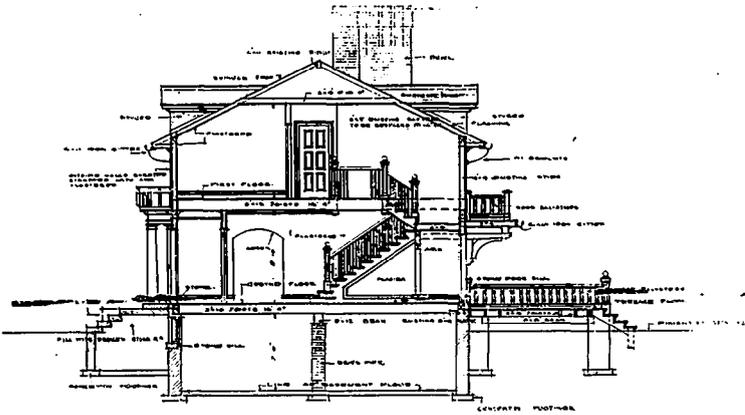


East Elevation.

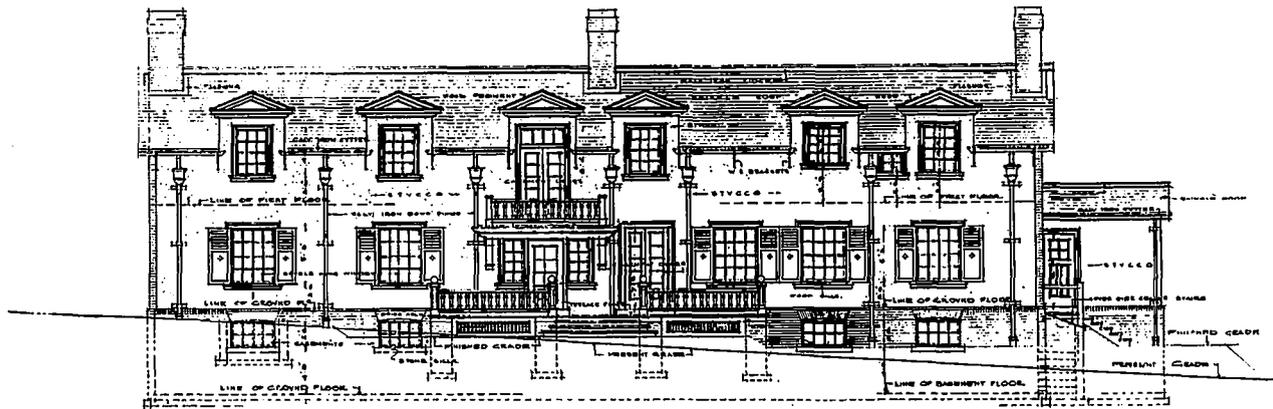


West Elevation.

ALTERATION ELEVATIONS OF
 RESIDENCE FOR COL. J. B.
 McLEAN, WELLS' HILL,
 TORONTO, ONTARIO.
 JOHN M. LYLE ARCHITECT.



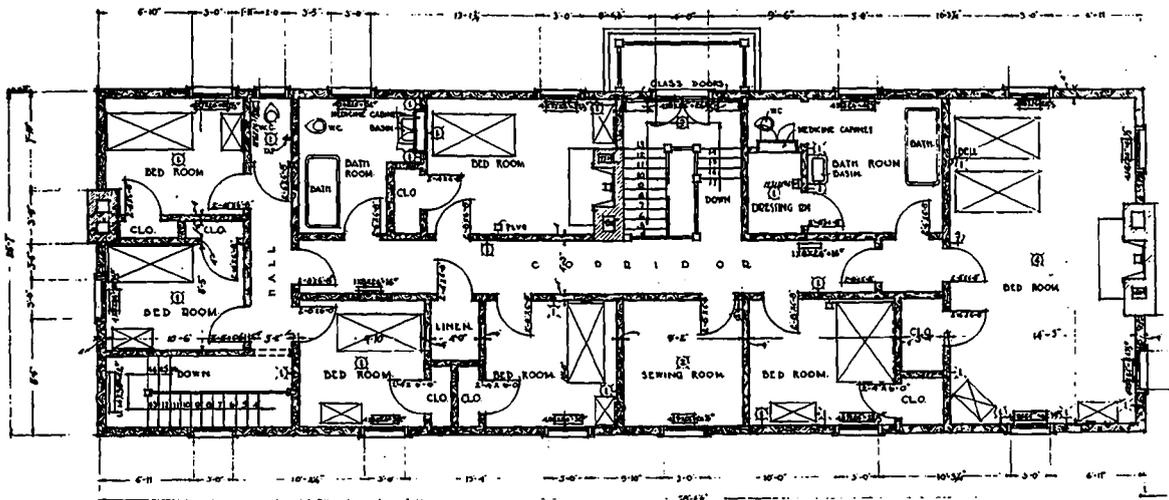
Section Through Hall.



North Elevation.

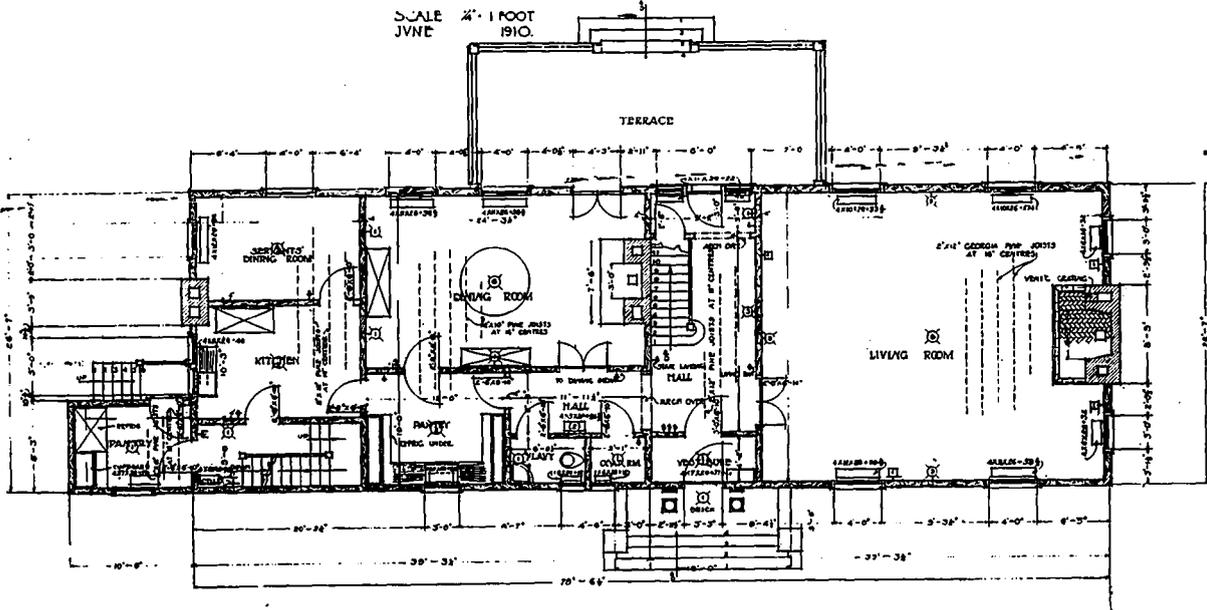


South Elevation.

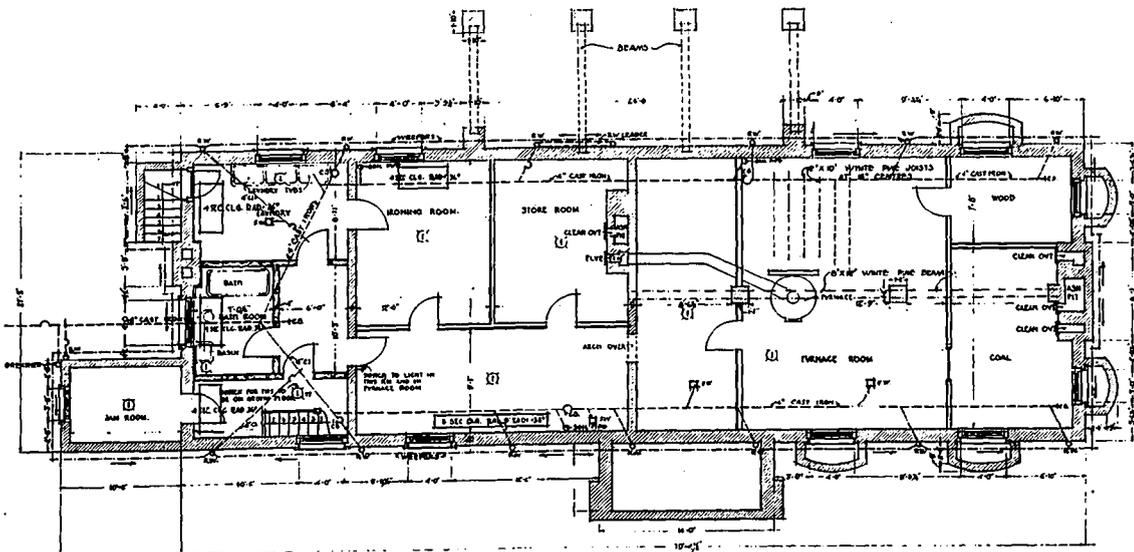


Plan of First Floor.

SCALE 1/4" = 1 FOOT
JUNE 1910.

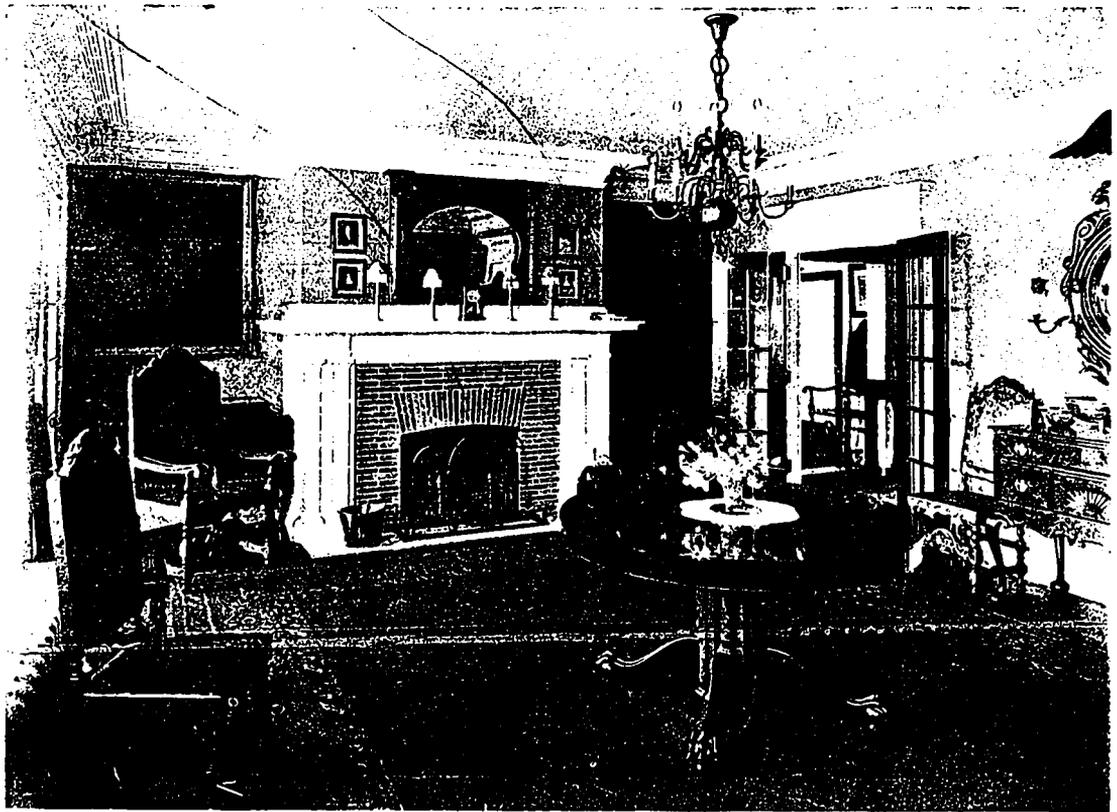


Plan of Ground Floor.



Plan of Basement.

Alteration Plans of Residence for Colonel J. B. MacLean, Toronto, Ontario. John M. Lyle, Architect.



Dressing Room.



Living Room.

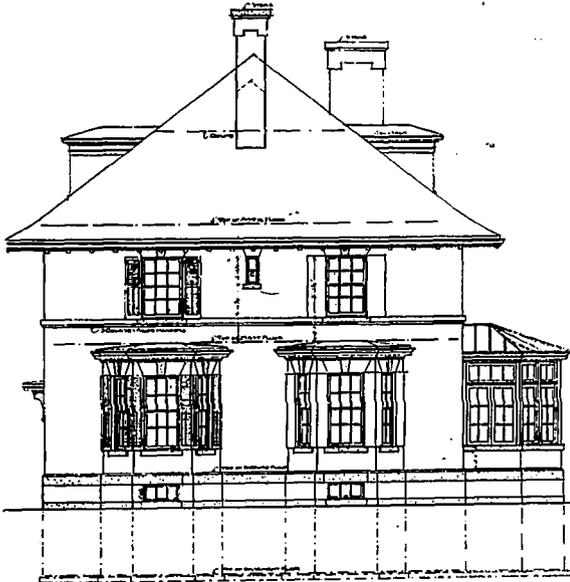
Residence for Colonel J. B. MacLean, Toronto, Ontario. John M. Lyle, Architect.

a back to the farm spirit which induces the average man to seek the city's environs and become a "commuter." It is here that the sunlight, fresh air and space of broad streets, and a house with at least a frame work of grass and trees can be enjoyed, because the transportation problem has been solved by the electric car and the auto. While not in the province of this article, it might be mentioned that

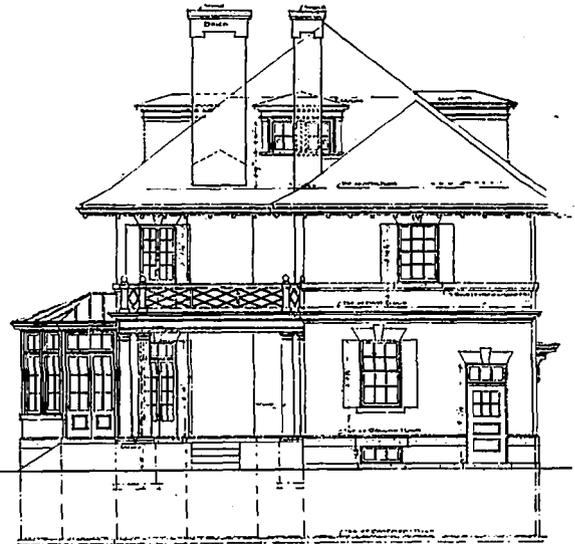
Lawrence from Mount Royal, is rapidly changing into a stable home-establishing condition. The tenement is disappearing, and the money that formerly was paid for rent, for a room in an apartment building or a house, is being invested in a home owned by the occupant where he feels that he will live the remainder of his days. Therefore, where our habitations from tent to log hut and from



SOUTH ELEVATION



WEST ELEVATION



EAST ELEVATION

Elevations of Residence for Mrs. Larratt Smith, Toronto, Ontario. Langley & Howland, Architects.

this from city to country movement will have its result in the former residences of the well to do being taken by the classes that rapidly create slums, if the city corporations do not quickly meet the issue by purchasing the old residences and removing them, and build appropriate housing for this class. To return to our residences, it is also one of the changes that is coming across the social aspect of this country that the nomadic spirit that has been a basis for action ever since Sir Walter Raleigh landed in Virginia, or Champlain viewed the St.

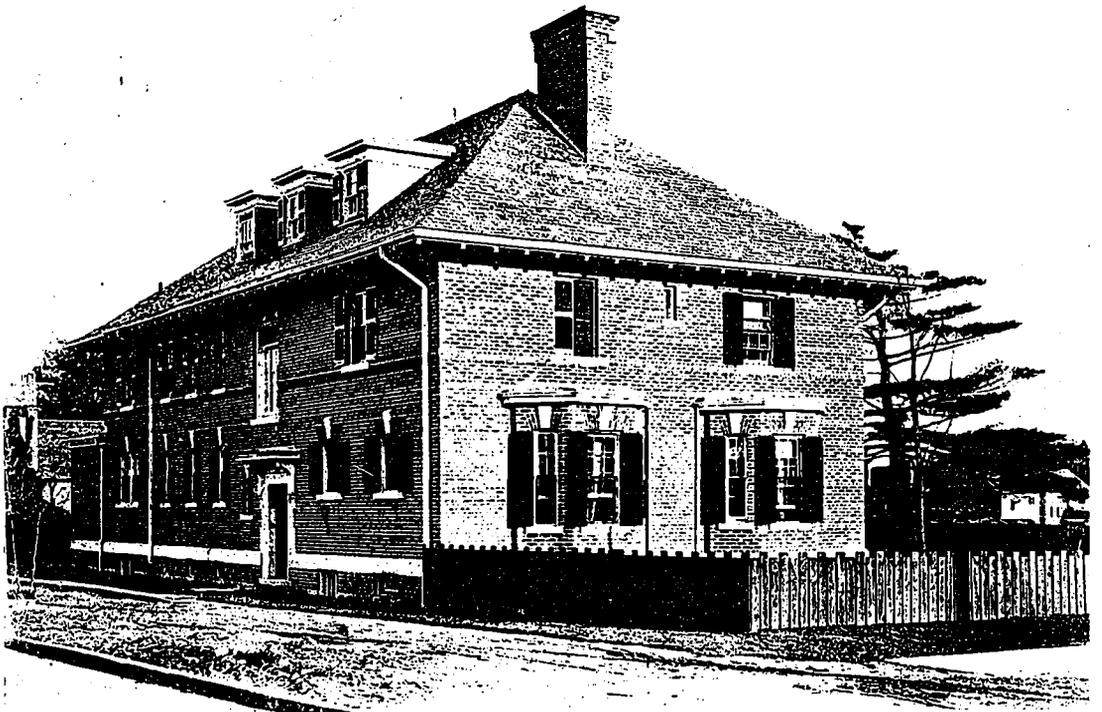
log hut to wooden frame house each a confessed temporary makeshift, the home must now be built of stone, brick or other permanent and time resisting material.

If the premise be true that the first function of a house lies in its ability to prove itself a home, in the real sense of the word, the ways and means of arriving at that end are many.

In its outward and physical form, therefore, the home should first make the attempt to express domesticity. And nowhere in the wide field of do-



Hall.



Residence of Mrs. Larratt Smith, Toronto, Ontario. Langley & Howland, Architects.



Living Room.

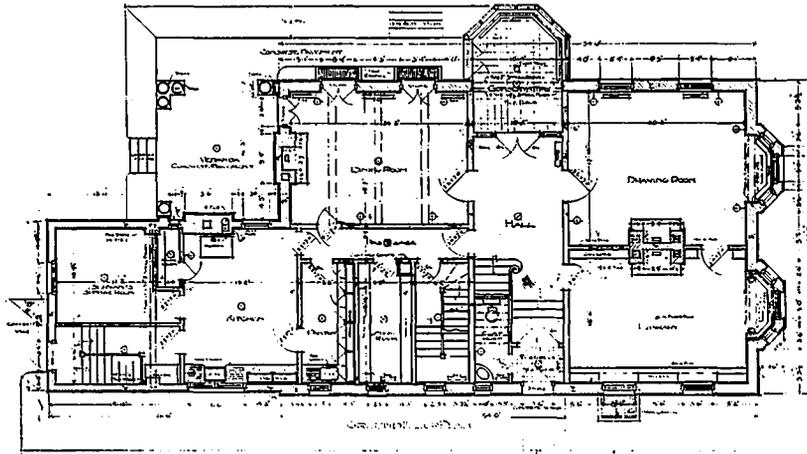


Dining Room..

Residence of Mrs. Larratt Smith, Toronto, Ontario. Langley & Howland, Architects.

mestic architecture is the home feeling better exemplified than in the English type. It is a fundamental law in architecture that what is

inspiration, and the necessity of studying it as the foundation of architectural education and good taste. Our Colonial work, founded on the best expression of the Georgian, will rightly always remain, under certain conditions and for certain environments, the most rational style for our domestic architecture. But as we borrowed them from England in her formal moods, so now can we also borrow to advantage her more humble architecture when the setting of our houses permits an expression of the picturesque. On all sides of us we have country which fairly calls for the picturesque in the building. Moreover, as the houses were then for the most part considerably isolated on large estates, and even the villages were of a rural character,

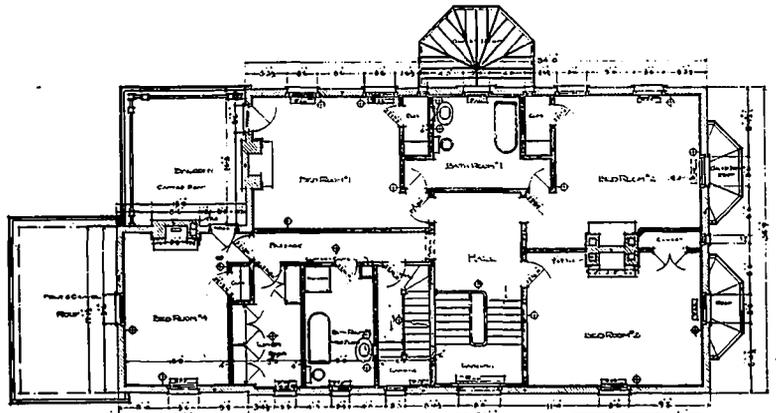


The Mrs. Larratt Smith Residence—Ground Floor Plan.

perfectly adapted to one people at one time, can rarely be successfully modified or altered to suit new requirements. Ours must be a natural growth, answering to well defined demands and needs; for we are called upon to express the life of our own day and generation. There are, however, certain characteristics which can be adapted to advantage, and certain forms which are as appropriate to our time and country as they were and are to England. We are gaining ground in our domestic architecture when we follow our English cousins, just as we make our country life more rational when we plan it on English lines. We are beginning to build country homes which are fit to be called homes, rather than summer villas, and to remain longer in these houses and take a more general interest in the things of the country.

There is in this suggestion no bid to present the

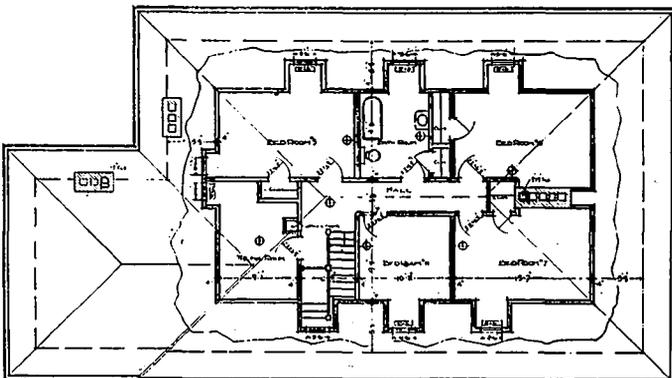
the Georgian style, on this side of the Atlantic, at least, has always seemed to typify the country, and to be most appropriate here. This tendency is a happy one, too, for the simplicity and dignity of its



The Mrs. Larratt Smith Residence—First Floor Plan.

lines are quite in keeping with the ideals as well as the actual surroundings of country life; while, from a far more practical standpoint, the style as a whole possesses, to a greater extent than any other, that valuable quality of appearing as appropriate for a small house as a large one.

Another architectural style of early days lends itself readily and inexpensively to modern reproduction. And that is the Dutch. This prototype has, however, many disadvantages. The client who favors this "style" requires upstairs four well lighted and well ventilated bedrooms, and the original attic was lighted only from the ends, and the ceiling much broken up to conform with the graceful lines of the roof, and it is impossible to follow those quaint and attractive lines and have inside comfort and convenience. For the sake of ample fenestration the roof must be broken by dormers, although in the original Dutch farm-house they were absent. Whether this was because a dormer exposed too



The Mrs. Larratt Smith Residence—Attic Plan.

English country house or cottage as an ultimate type suited for a national domestic style. It is merely to insist on the value of this old work as an



View from Northeast.

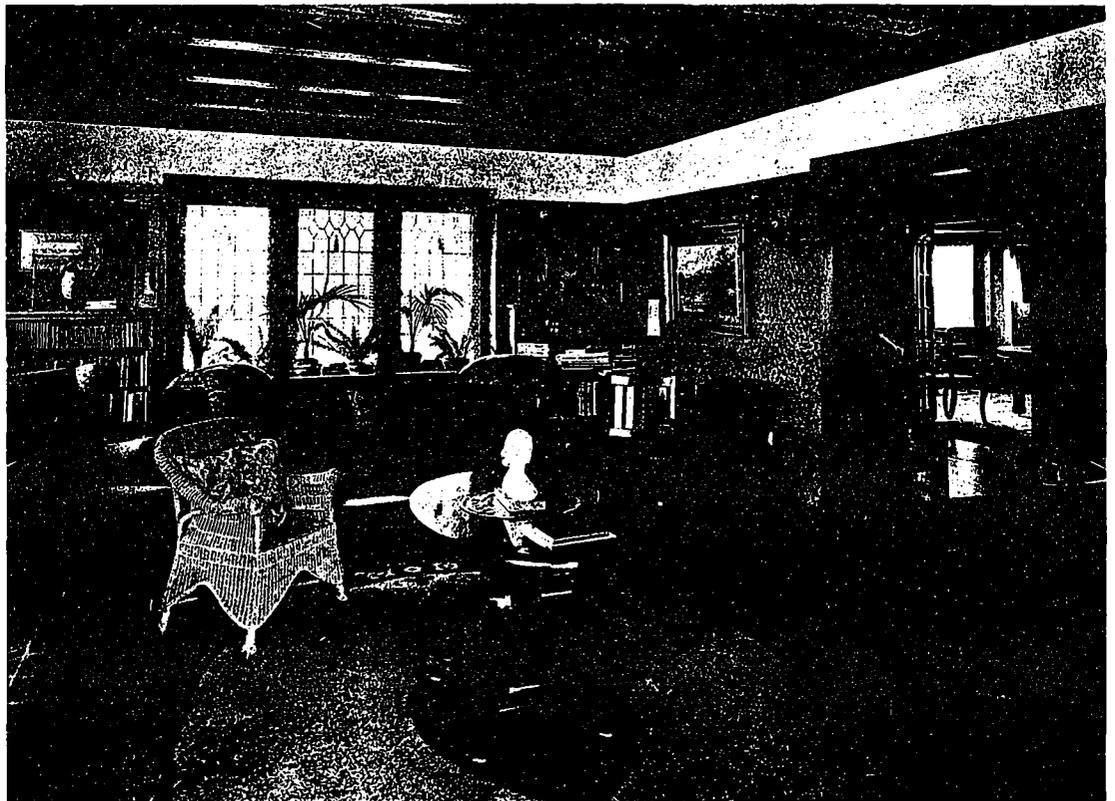


View from Northwest.

"Marbrae," Residence of Melville P. White, Hawthorne Gardens, Toronto. Burke, Horwood & White, Architects.



Dining Room.

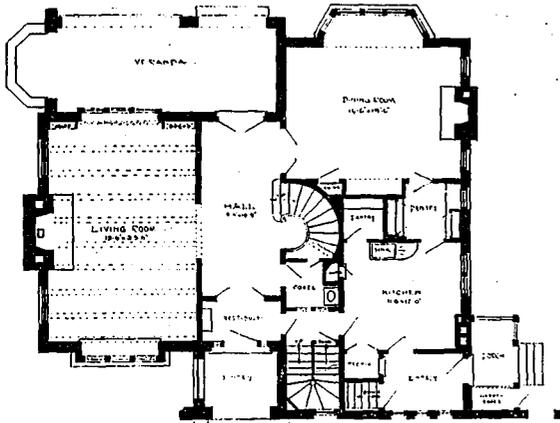


Library.

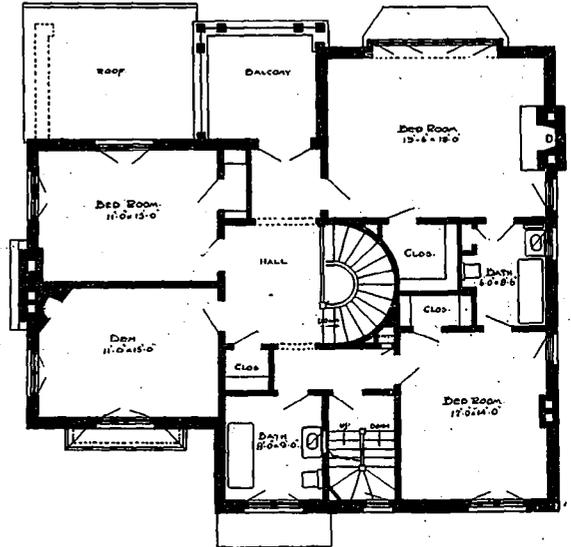
"Marbrae," Residence of Melville P. White, Hawthorne Gardens, Toronto. Burke, Horwood & White, Architects.

much area to winter winds, or because its construction implied the difficult metal flashings which were ever a bugbear to the carpenter, or whether phlegmatic Father Knickerbocker had no sympathy with such facetious and flippant interruptions in his roof expanse, we do not know; but certainly whatever dormers are now seen were later additions to the house—either a cry for more air than the tiny floor-level windows admitted, or a concession to the ex-

leaves the eaves to be formed by prolonged rafters and horizontal outlookers. To these horizontal outlookers are nailed the sheathing of the soffit of the eaves. This is not as logical construction as that first described, but it gains you additional head-



Ground Floor Plan.



Second Floor Plan.

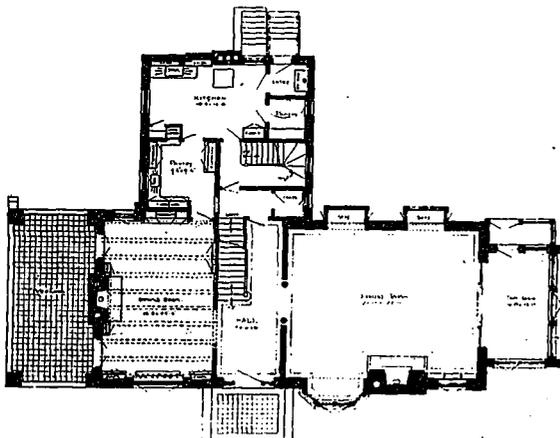
The M. P. White Residence.

travagance of some succeeding generation. At any rate, the dormers added were usually small and not compactly grouped under one roof so as to make a prominent note on the exterior. Though a departure they are by no means a detraction, contributing as much variety outside as they do convenience inside.

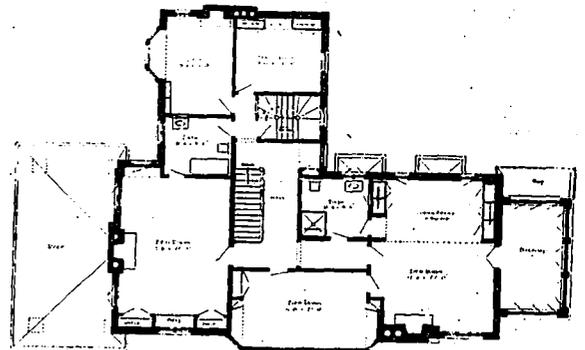
The best construction implies, of course, that the second story floor beams project to become the

room. It necessitates the dormers being three and one-half or four feet above the floor, by no means an inaccessible height and one which gives the room a quaint look. The whole ceiling level is extended out to the dormer face, and the remaining irregularity in the corners is converted into closets.

But whatever may be the "style" or no style that is selected for the design the home idea is paramount, and it is natural that the home idea in Canada must run parallel with that in England. An Englishman's idea of home is shelter and seclusion, two inherent tenets of the Anglo-Saxon faith. In



First Floor Plan.



Second Floor Plan.

The Harry H. Love Residence.

eaves, where the ceiling tapers down to nothing. If a maximum of head-room in the second storey is not vital, this honest method is never departed from; but if a flat ceiling throughout is desired, an expedient resorted to often by the Dutch themselves (but rather mildly, as if none too convinced of its integrity) was to raise the roof and eaves somewhat above the upstairs floor by means of carrying the vertical studding up to the required height where, capped by the plate, it supports the roof. This

the United States it is the custom to place a house on the topmost pinnacle of a hill where it will be exposed to the relentless sunlight and to all the winds that blow; where it may be seen from afar and become known as a landmark in the country, a sort of advertisement for the architect and owner. This idea is distinctly opposed to the Englishman's conception of a place for a dwelling that is to be continually occupied. The English house was not built to be boarded up for eight or ten months of



Dining-Room.



"Faeriebanke," Residence of Harry H. Love, Toronto, Ontario. Burke, Horwood & White, Architects.



Living Room from Hall.



Living Room from Front Windows.

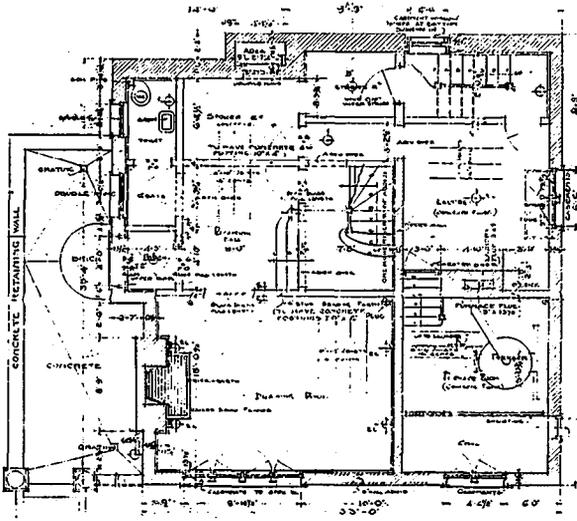
Faeriebanke, Residence of Harry H. Love, Toronto, Ontario. Burke, Horwood & White, Architects.

the year, but by being lived in generation after generation it was gradually brought to the present state of perfection that is the envy of Americans to-day, for each generation left an impress of its personality on house and garden. In the houses here illustrated no attempt has been made to select those which were pronounced in style, but rather to show some of the best of our recent architecture, that, aesthetic

verandah is constructed so that it can be entirely closed in or made open as desired. The door frames shown are all readily removable. The roof is stained a rich deep brown, and the whole house has an air of simplicity and refinement.

A picturesque hit is Garden Alcove, attached to the residence of John S. Ewart, Esq., K.C., at Ottawa, Colborne P. Meredith, architect. It is a feature in the garden surrounding a house which was illustrated in a previous number of CONSTRUCTION. It was primarily erected to screen an undesirable view, but in its use has developed into a charming snugery. It is build of pine, painted dead white with square red tile floor.

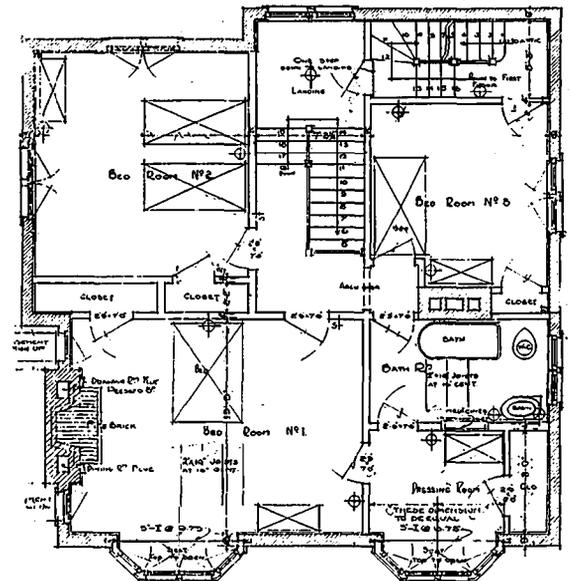
The residence of the Hon. Mr. Justice Duff, on Goulborne avenue, Ottawa, Colborne P. Meredith, architect. It is inadequately shown a sit was impossible to get a satisfactory photograph of this building owing to the hilly nature of the locality.



The John M. Lyle Residence—Basement Plan.

in spirit and involving the inclinations of many people and their interpretation by the architects who designed them, as a whole expressing the present type of Canadian homes.

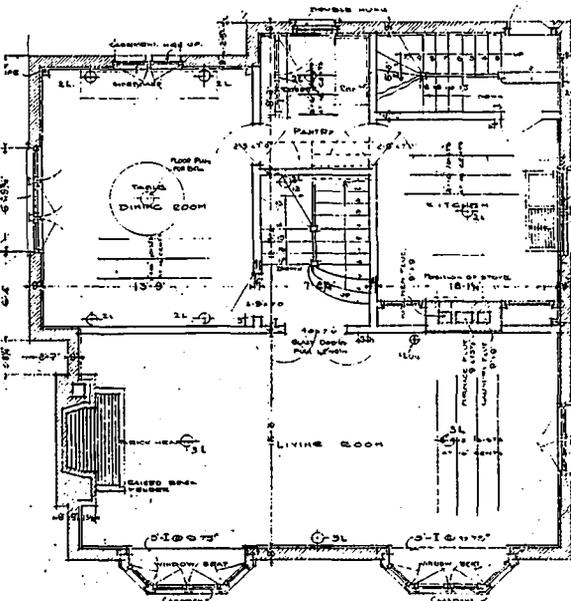
The residence of C. P. Meredith, architect, situated on elevation to Strathcona Park, Ottawa, Ontario, stands in an elevated situation, commanding



The John M. Lyle Residence—Second Floor Plan.

The house is built on the hillside, and has a charming outlook to the east. The material used is a coarse red brick with half timber above. In designing this residence the owner's wish to have a maximum amount of sunlight was considered, and the sun room and terrace on the south and east with large windows on these sides have made the building very successful from this point of view. In addition to the rooms shown on the first floor, the basement is arranged with a large billiard room on the hill side with windows to the south.

The residence for John M. Lyle, on Avondale road, Toronto, was originally designed for a fifty-foot lot situated on the side of a steep hill. The adjoining lot to the east was purchased at a later date. The problem was to find an easy means of approach from the front, and to so plan that the kitchen floor could be easily reached from the rear, there being a service lane at the back of the property, from Rosedale road. It was decided to enter the house on the level of the basement, and by putting a brick wall across the middle of the

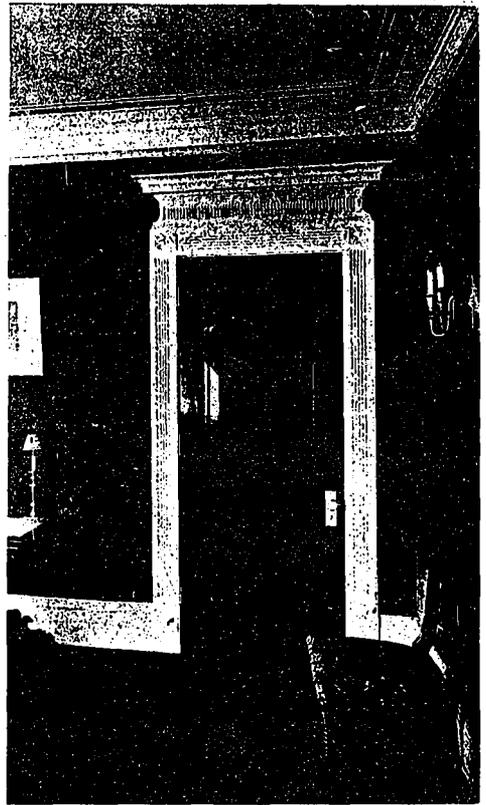


The John M. Lyle Residence—First Floor Plan.

extensive views over the park and valley of the Rideau River. It was designed by the owner for his own habitation. The first storey is Laprairie rustic shale brick with very wide white joints, and the upper storey is covered with rough cement. The



Mantel in Living Room.



A Door in Dining Room.



Residence for John M. Lyle, Architect, Toronto, Ontario.

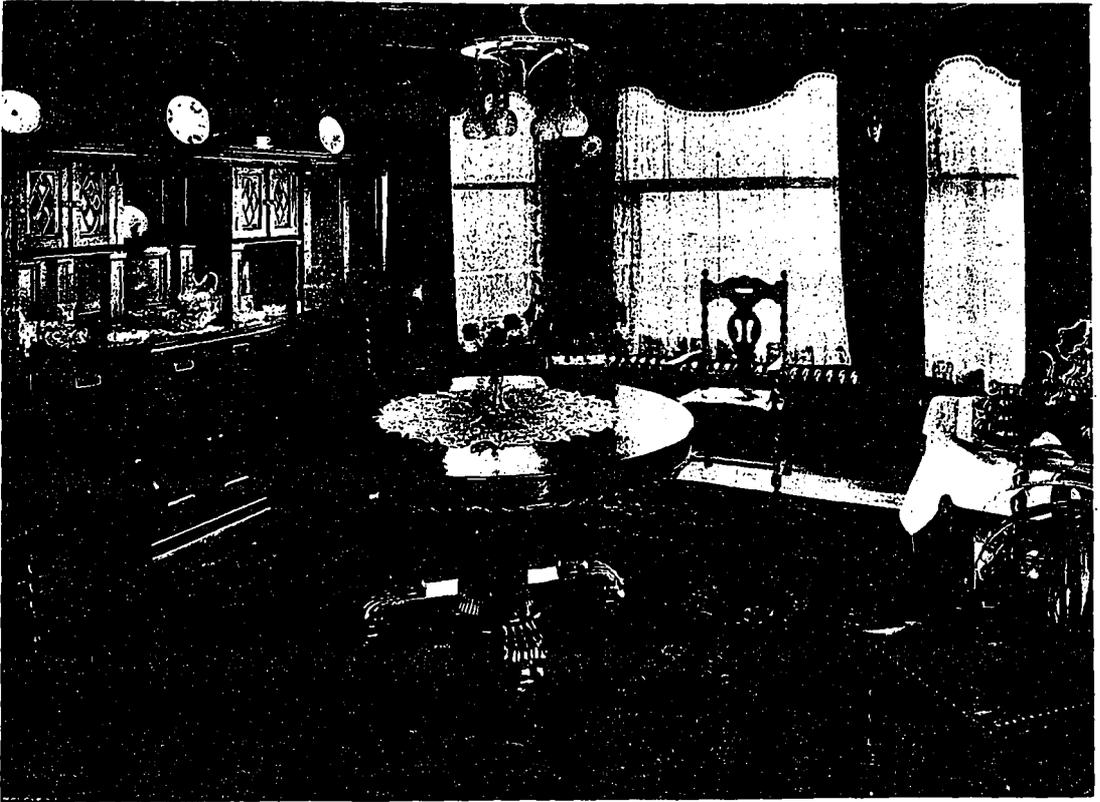


Bedroom.



Library.

Residence for John M. Lyle, Architect, Toronto, Ontario.



Living Room.



Residence of F. C. Calder, Winnipeg, Manitoba. J. H. G. Russell, Architect.



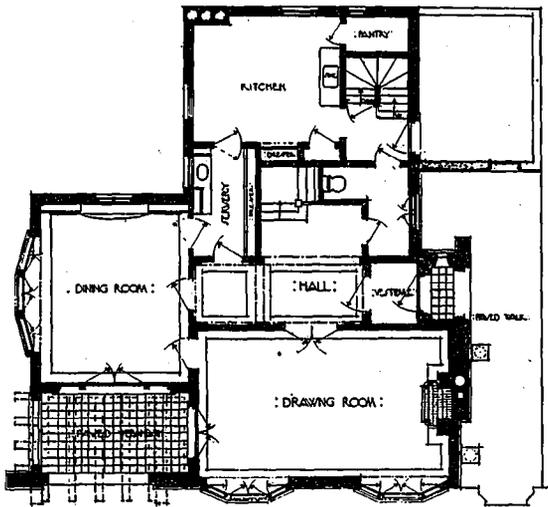
Residence of Colborne P. Meredith, Architect, Ottawa, Ontario.



Residence of Hon. Justice Duff, Ottawa, Ontario. Colborne P. Meredith, Architect.

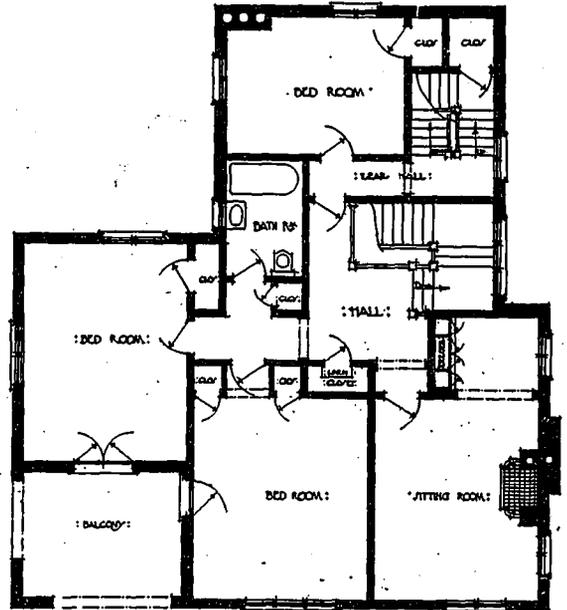
house to use half of the cellar for staircase, hall, lavatory and reception room, the balance to be devoted to cold storage, laundry and furnace room. This scheme gave an easy approach from the front and enabled the kitchen, pantry, dining room and living room to be placed on one floor. Generally

original plans were carried out in new materials. The big living room is the essential feature of the plan. The exterior is built of stucco on metal lath, the same being laid on sheeting placed on wooden studs. The interior floors are Georgia pine, birch



The Colborne P. Meredith Residence—First Floor Plan.

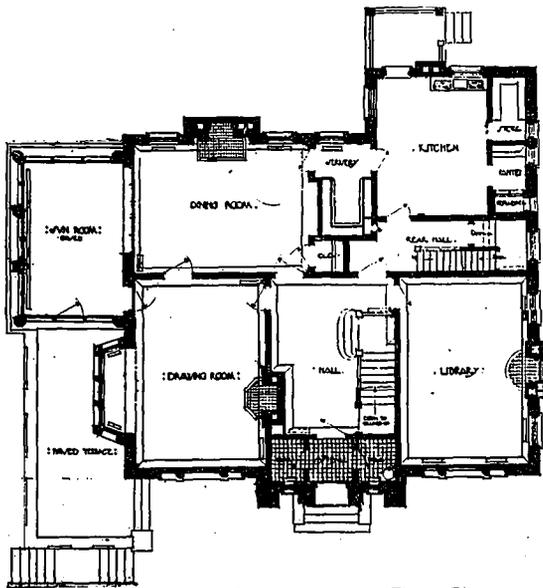
speaking, this residence has been planned to give large rooms in a small house, and with this end in view, the staircase and halls have been reduced to a minimum. The exterior is built of John Price's deep red stock brick, laid up with a wide white mortar joint. The floors throughout are oak, birch and maple; the trim in living room is red oak with



The Colborne P. Meredith Residence—Second Floor Plan.

and maple. The trim is Georgia pine in the living room, with Georgia pine panelling and ceiling. Staircase is mahogany and white finish. Dining room, hall and bedroom floor trim pine, painted finish.

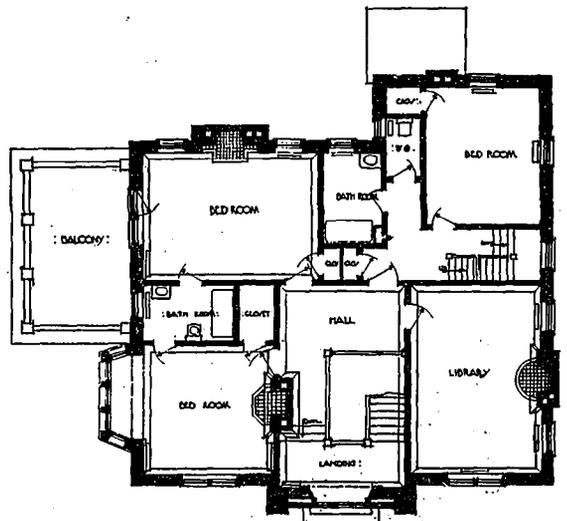
The Stuart Strathy House, Toronto, Langley & Howland, architects, is so arranged in plan that



The Justice Duff Residence—First Floor Plan.

red oak ceiling. Bedroom floors pine, painted finish.

The residence for Lt.-Col. J. B. Maclean, on Wells' Hill, Toronto, John M. Lyle, architect, was originally planned as an alteration, it being the intention to place an old frame house and an old wooden barn together to form a new house. It was finally decided to abandon this idea, and the



The Justice Duff Residence—Second Floor Plan.

principal rooms open on the garden at back of house, the entrance, however, being on street side, the kitchen also being on street side. The house is constructed of red brick with gray stone trimmings at entrance, etc., and portions of exterior walls above first storey are of frame finished on exterior with



Residence of Stuart Strathy, Toronto, Ontario. Langley & Howland, Architects.



Library.



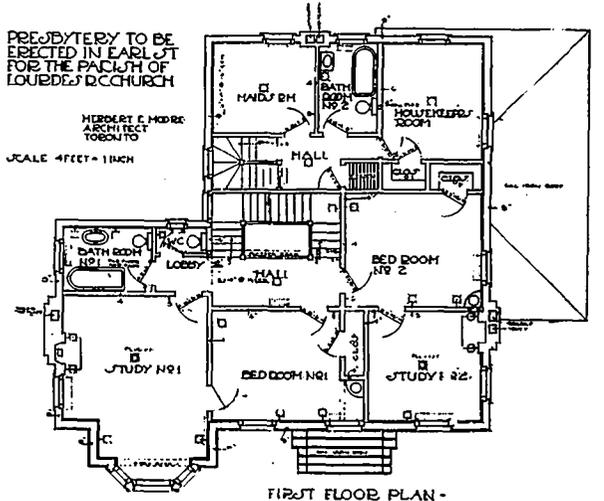
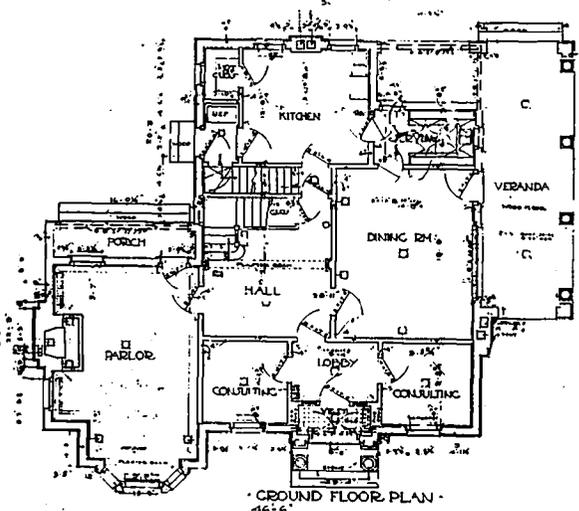
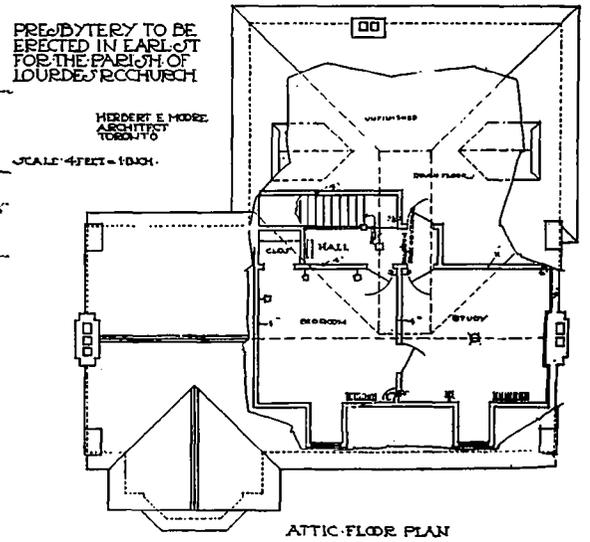
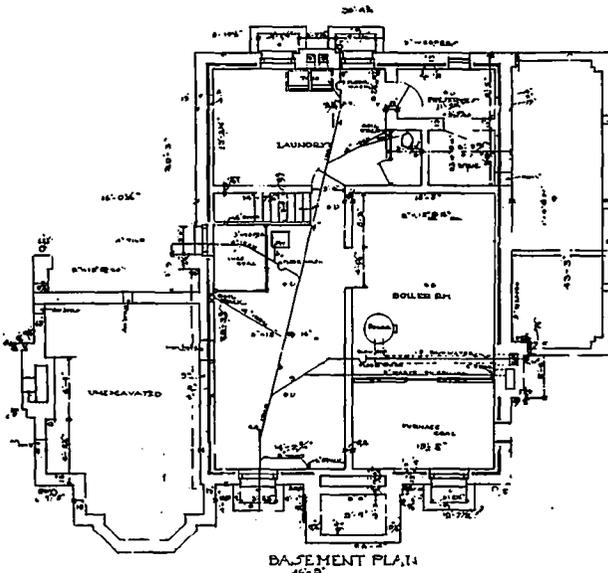
Living Room.

Residence of Stuart Strathy, Toronto, Ontario. Langley & Howland, Architects.

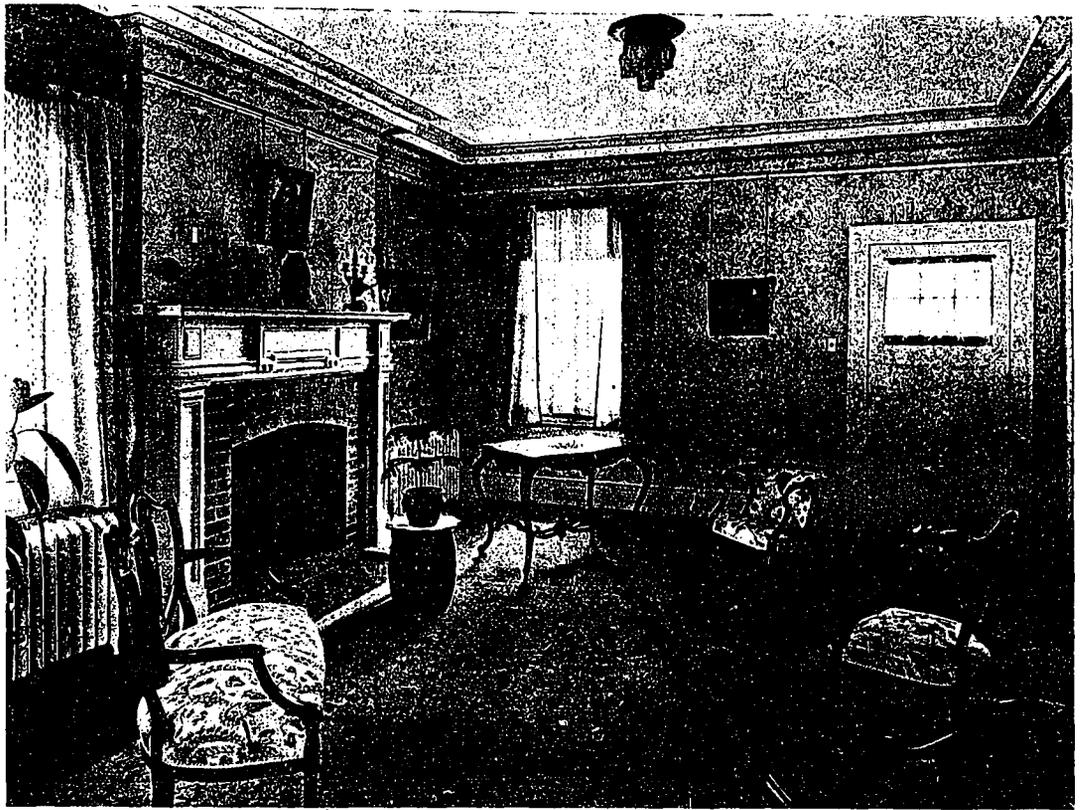
metal lath and cement stucco, gables being finished in half timber construction. The roofing is of green slates. The main stair hall, stairway and library are finished in oak and remainder of house trimmed in pine with white finish.

Mrs. Larratt Smith's house, Toronto, also by Langley & Howland, is placed on a lot at southeast corner of two streets, the house being placed close to north boundary of lot so as to have ample garden space to south. The entrance is from north side, thus giving entire privacy to garden, and the plan is so arranged that all principal rooms face the south and overlook the garden, the lot extending about 200 feet to the south. The drawing room and library and rooms over have an outlook on street and to west, in this case the kitchen is again placed on the street, and it might be mentioned in this case that this arrangement has been found to be very desirable under conditions of this kind. The main entrance on north side of house is practically at grade level, the steps rising to ground floor level by

inside. The kitchen portion is well isolated from remainder of house, including dining room, by a passage way, two doors have to be passed before going to kitchen from other portions of the house. The verandah is placed off the dining room at the southeast corner of the house, so as to give privacy from the street and yet have full advantage of the garden on the ground floor. Opposite the entrance and main hall at the south side of the house is arranged a conservatory, which is really used as a sun room. The main stairs extended on from the ground floor to the first floor and the back stairs extend from basement to attic for service purposes. The interior of dining room and library are finished in oak, the drawing room, hall and bedrooms are finished white, the doors in the principal portions of the house are finished in mahogany, including the posts, and hand rail of stairway. All principal rooms off ground floor and first floor have oak floors. The house is constructed entirely of dark red brick with white mortared joints and gray limestone trim-



Presbytery, Our Lady of Lourdes Church, Rev. Hugh Canning, Pastor, Earl Street, Toronto. Herbert S. Moore, Architect.



Reception Room.

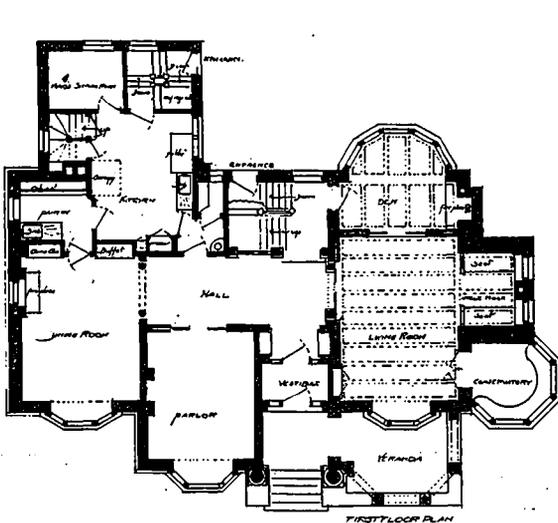


Stairway.

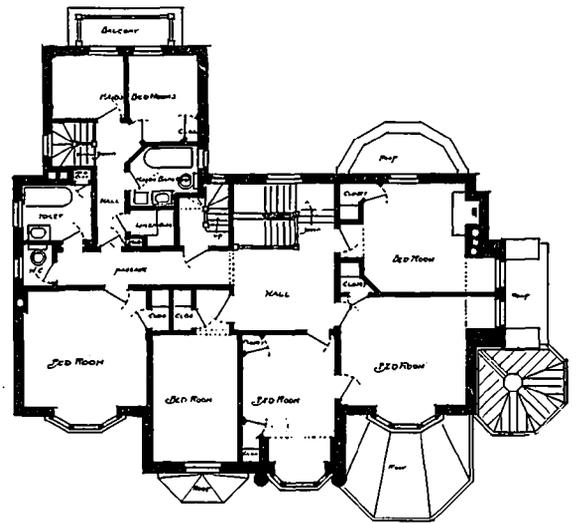
Presbytery, Our Lady of Lourdes Church, Rev. Hugh Canning, Pastor, Toronto, Ontario. Herbert S. Moore, Architect.



Presbytery, Our Lady of Lourdes Church, Rev. Hugh Canning, Pastor, Earl St., Toronto. Herbert S. Moore, Architect.

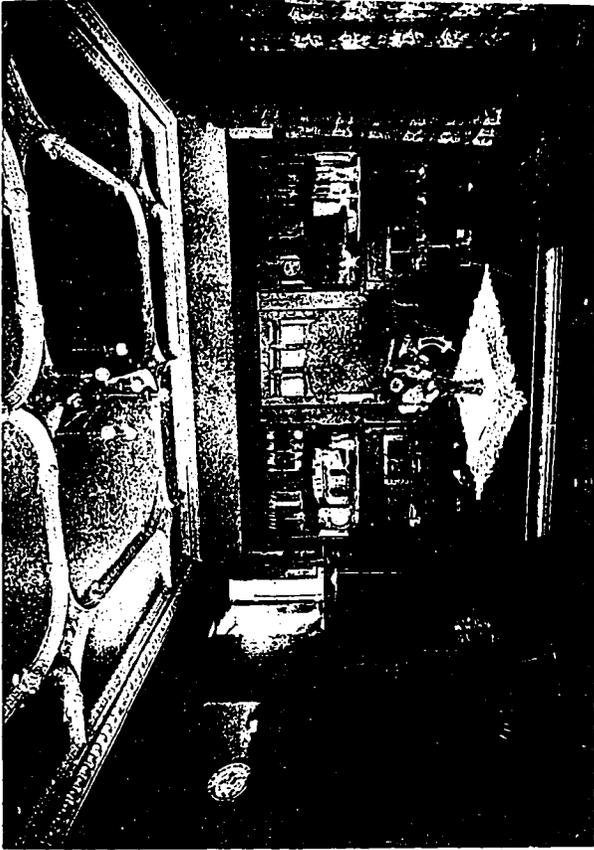


First Floor Plan.

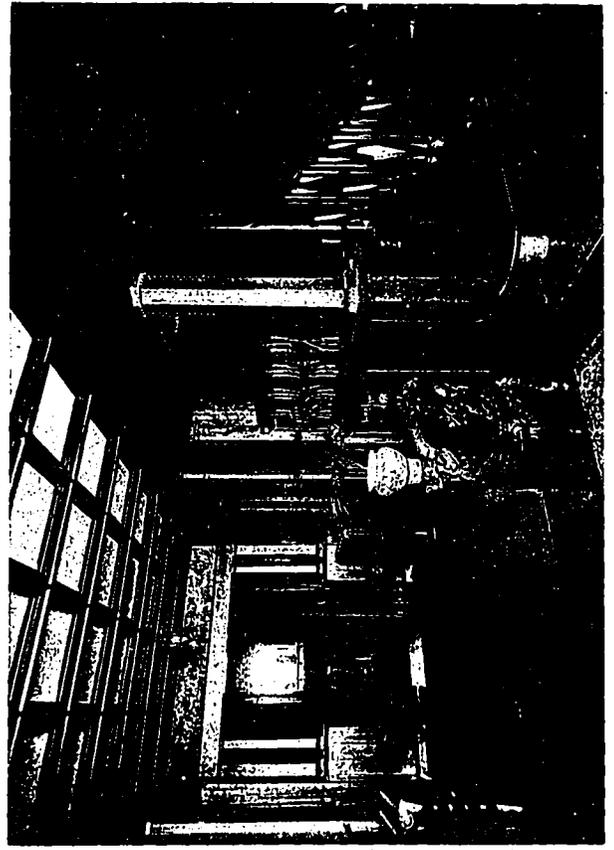


Second Floor Plan.

The Harris Residence.



Dining Room.



Reception Hall and Staircase.

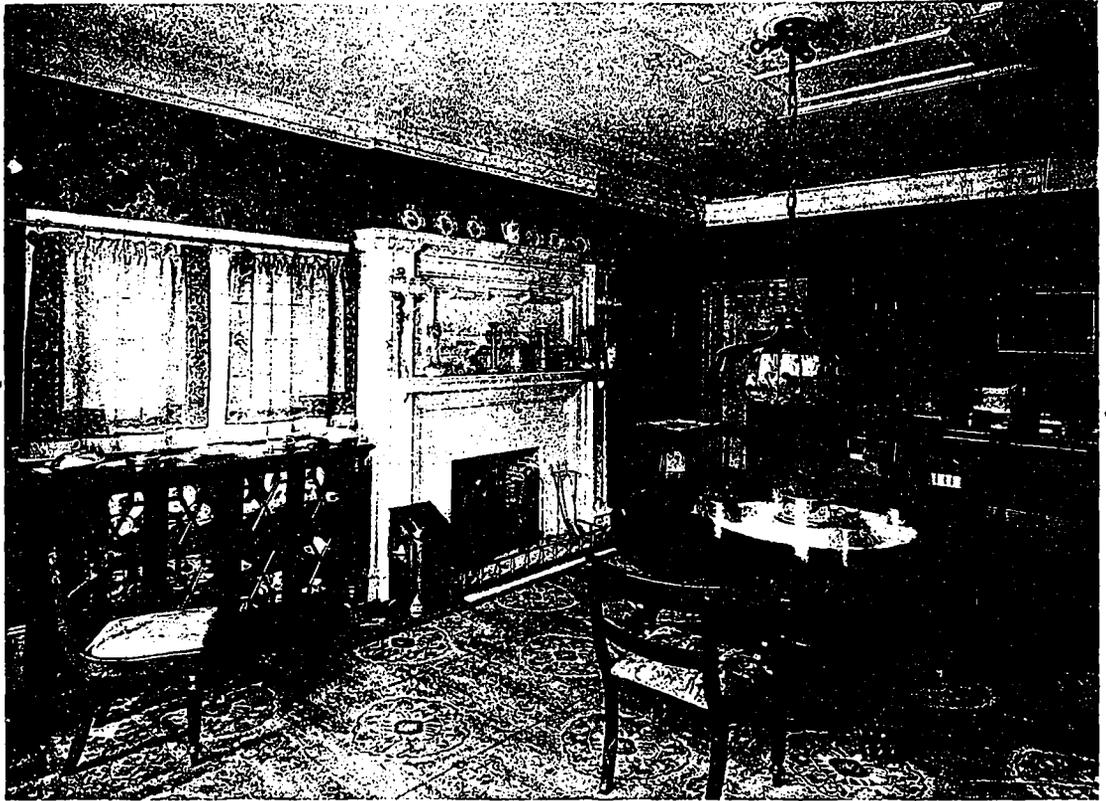


Front.



Living Room.

Residence for W. T. Harris, Toronto, Ontario. Henry Simpson, Architect.



Dining Room.



Residence for Mrs. H. C. Hammond, Toronto. Eden Smith & Sons, Architects.



Hall.

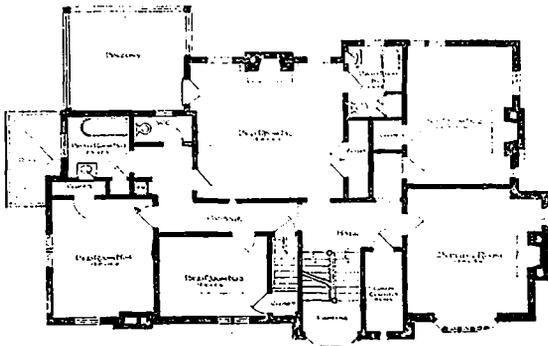


Hall, Looking Toward Sun Room.

Residence for Mrs. H. C. Hammond, Toronto. Eden Smith & Sons, Architects.

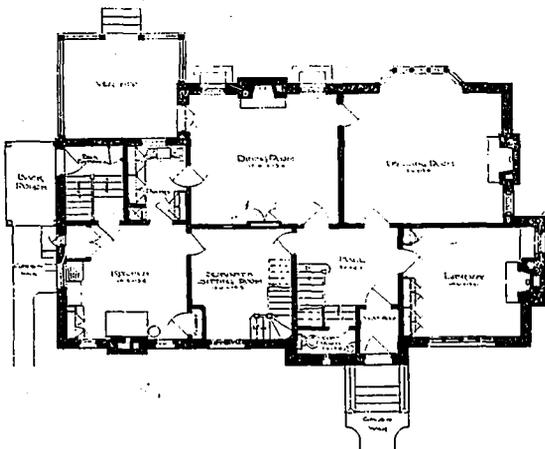
mings. The roof is covered with mottled green slates.

The residence of W. T. Harris, Broadview and Bain avenues, Toronto, designed by Architect Henry Simpson, stands on spacious terraced grounds, and is planned to take advantage of an elevated site overlooking Riverdale ravine. The exterior is built of red brick with Indiana limestone trimming and a slate roof. Entrance is by a large verandah floored with red Welsh quarries, into a large reception hall



The Stuart Strathy Residence—First Floor Plan.

having a molded staff ceiling and an open staircase of unique design. Both here and in the principal rooms the woodwork is in quarter-cut oak, with panelled wainscoting from one-half to three-quarters the height of the walls. Off the living room, which has a beamed ceiling and an angle nook with a large clinker brick fireplace, is the owner's den, elevated one step above the main floor, and so arranged as to form an improvised platform or stage for musicales and children's entertainments. The dining room, which has also a moulded staff ceiling of ornate design is decorated above the wainscoting with mural painting, a feature of the scheme being the built-in buffets which are seen in the accompanying view. In every respect the plan shows an interesting



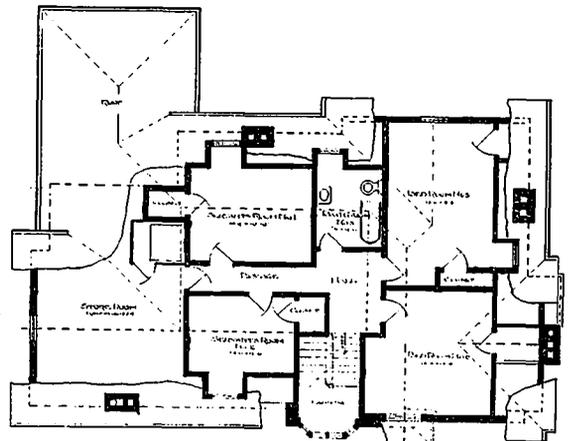
The Stuart Strathy Residence—Ground Floor Plan.

consideration with all rooms advantageously placed, and direct means of communication from one part of the household to the other. The kitchen, which is situated in a northeast position, is modernly equipped and provided with a large built-in refrigerator having an outside door for the reception of ice.

Directly above the kitchen are the servant's quarters, isolated from the rest of the house and provided with every necessary accommodation for convenience and comfort; the rooms opening onto a balcony overlooking the east lawn and vegetable garden, which form an interesting part of the ground scheme.

The exterior of the Harry H. Love residence is constructed of stone to the second story, with large exterior chimney of the same material. The second story is of brick faced with plaster. The gables and roof are gray colored shingles. The living room is finished in birch. The walls are tinted in old colonial buff green. A fireplace of Dutch tile ornamented with Dutch painted tile in centre completes the attractive design. The second floor apartments are finished in white enamel with mahogany doors.

The residence of Mr. White, of the architectural firm of Burke, Horwood & White, two views of which are shown, is constructed of brick, stucco



The Stuart Strathy Residence—Attic Plan.

faced. The shingles and timber work are stained brown. The hall and dining room are finished in oak and the living room in selected black ash with beamed ceiling. The walls are decorated with cork velour, the hall and dining room in buff, and the living room in green paper with a small design in the pattern. The hall has an elliptical plaster ceiling. The main stairway is of iron, semi-circular in form. The second floor is finished in white enamel with mahogany doors.

The residence of T. Ross Boys is built on a lot 75 x 170 feet, advantageously lifted above the sidewalk and shaded by well selected trees. The walls are stock red brick with gray stone trimmings. The roof is shingled, stained green. The interior is finished in quarter-sawed oak stained a dark tan. The fireplaces are of brick, well designed and attractive. The wide central staircase is the principal feature of this exceptionally well studied interior.

While no floor plans are shown of the two Toronto houses designed by Architect Charles B. Band, the exterior and interior views in either case are sufficient to indicate a well devised arrangement. The Clarendon avenue house, with its projecting ends and half-timber work, presents a scheme that is happily invested with both graceful lines and a decided architectural character. Attention might be called to the

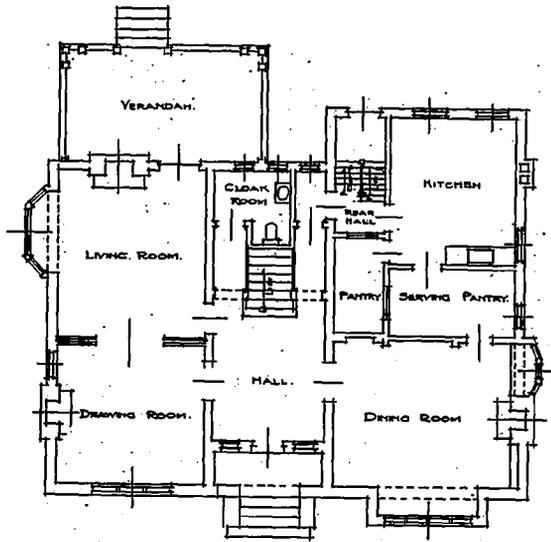
location of the garage, to the left of the approach, which provides accommodation for two cars at the front of the house. Entrance to the house is through a panelled vestibule floored with hexagonal tile and finished with an elliptical ceiling. The reception hall is panelled the full height to the beams of the ceiling overhead, and the main living room is carried out in oak. The lavatory and approach to the billiard room in the basement is under the main stair. This latter interior, the position of which is shown by the two basement windows noted in the rear view, is located and arranged to take advantage of the natural fall of the ground on this side of the house. At the end of the main hall opposite the vestibule is a palm room separated from the hall by a glass door. The floor of the palm room is tiled with red quarries 3 by 6 in., laid "herringbone," while the walls are tiled with a pale greenish yellow "Panticon" tile. The servants' dining room, which is situated beneath the main dining room, is connected with the kitchen by a dumb waiter. The house is equipped with a vacuum cleaning system and all electric wires are run in conduits. The billiard room is finished in an autumn tint with strapped dado walls filled in with a wine-red cloth. An interesting domestic character has been imparted to the stone and stucco residence on St. Clair avenue designed by Mr. Band. In this house the entire lower floor is in oak, while oak and white enamelled

woodwork has been adopted for the rooms above. A feature of the upper floor scheme is the arrangement of the sun room, which is finished with a tile floor, and the large sitting room, which is placed on a higher level and has a glass door giving a view through the sun room to the outside. In the dining room, which is decorated in excellent taste, the panelling is four feet wide, while the walls above the plate rail are finished with a stencilled frieze. An interesting feature of this room is the fireplace, the detail of which can be seen in the accompanying view. Beneath the staircase, convenient to the door of the verandah on the west side of the house, is a laboratory and cloak room. This verandah can be approached from either the hall or the drawing room. The exterior is carried out in stone with stucco and Vermont green slate roof, the mullions in the window being of stone with metal frames and sash.

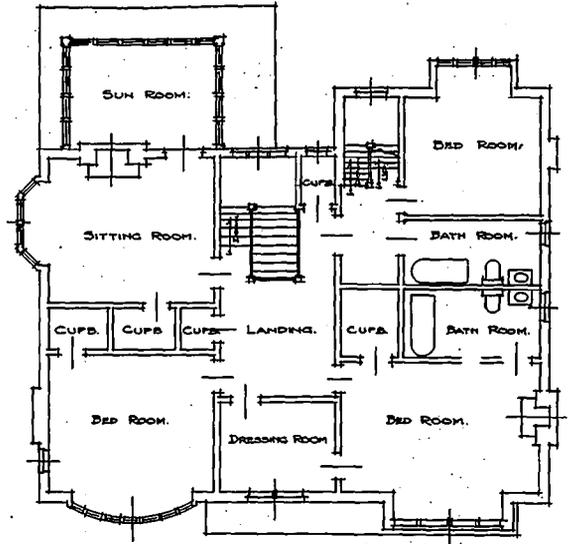
The presbytery of Our Lady of Lourdes Church, Earl street, Toronto, designed by Architect Herbert E. Moore, has little of the marked austerity which often characterizes the treatment of residences designed for this purpose. Like all well considered Georgian houses, the scheme, while dignified in feeling, is yet essentially more homelike than formal in character. The exterior, which is interesting both as regards the color and texture of its walls, is carried out in red pressed brick laid up in Flemish bond with



Residence of T. R. Boyes, Toronto, Ontario. F. S. Baker, Architect.



First Floor Plan.



Second Floor Plan.

Plans of the Boys' Residence.

white mortar joints, grey cut stone trimmings, green painted shutters and an unfading green slate roof. Entrance is by a hooded doorway into a vestibule having consulting room on either side. These rooms take the place of a general reception room and make it possible for a private administration of the parish affairs without an encroachment on the household proper. Back of the lobby is a large hall off which the parlor, dining room and service portion of the house open. The servants' rooms, which are located at the rear of the upper floor, are cut off from the rooms of the pastor and his assistant by a solid wall, each part of the second floor having its own separate staircase. All rooms are papered with appropriate patterns, and the electric fixtures and hardware were selected from Georgian and Colonial designs to harmonize with the treatment of the various rooms. The parlor is finished in white woodwork with a plastered cornice; the stair hall and consulting rooms in white woodwork with mahogany doors, while the dining room is in Georgia pine stained a rustic brown. Georgia pine is also used for the two studios, which, together with the parlor, have interestingly designed fireplaces.

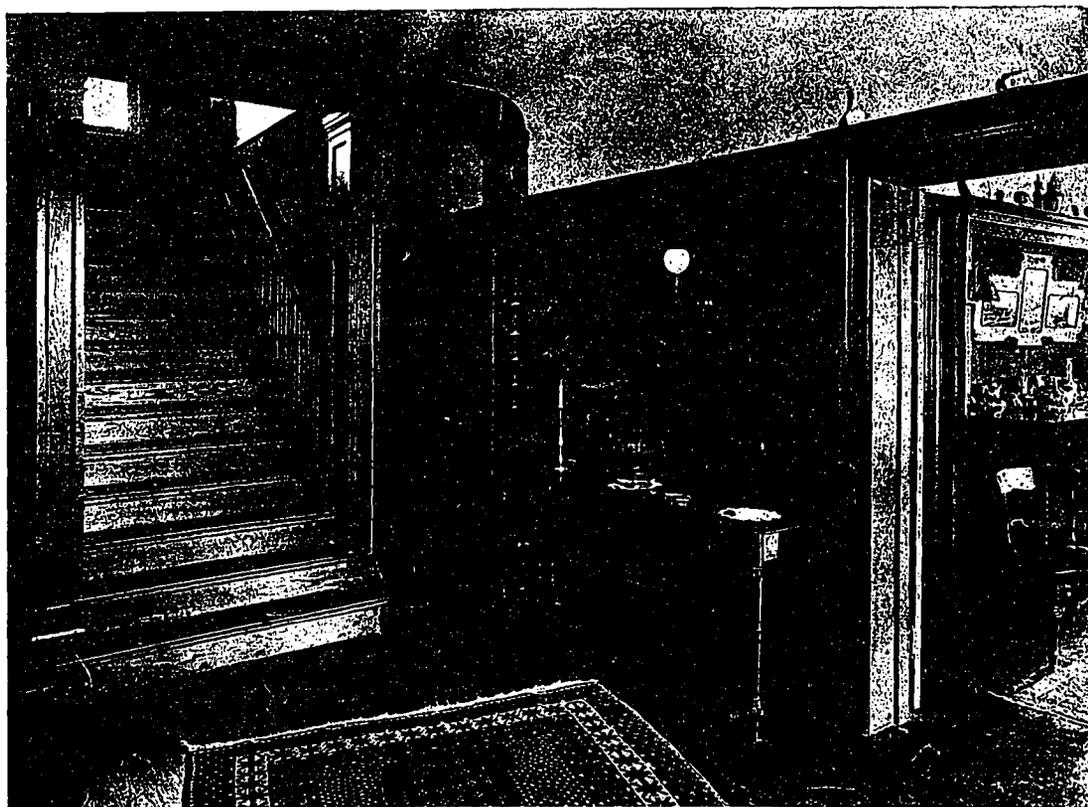
While a detailed description of the residences illustrated from designs by Winnipeg architects cannot be given, it is apparent that the correct use of brick and a feeling for its true place in design is possessed by the designers in that city. In these days of half-timber, plaster, stucco and concrete, when even in the last year's volume of the leading exponent of Brick in the United States, the word "Brick" cannot be found, except as a part of its title, it is refreshing to note that many of the best residence designers refuse to adopt the Spanish adobe or the Italian stucco in expressing their conception, but adhere to the rich color, varied bond and arrangement of brick for the warm, dignified, and inviting color and shape of the brick wall, than which for residence work there is none to compare. It never is obtrusive, and in the hands of even an incompetent designer its texture and color gives a

softening effect to bad lines, even as massive stone in crude design shows dignity and strength. In the Aldinger house, by Herbert P. Rugh, a screened veranda, with brick corner piers, opens into the living room, which is separated from the dining room, also fronting on the veranda, by wide glass doors. In the Allen and the Ball residence, by John D. Atkinson, the plans are similar, both having a central hall with living and dining rooms on either side. The entrance to the hall in the Allen residence, however, is direct from the street through a well designed and dignified doorway, colonial in design. The entrance to the Ball residence is from an enclosed tender across the entire front. The residence of C. F. Calder, by J. H. G. Russell, is also of brick, and here, too, the hall is in the centre and entered from a broad screened porch with brick corner piers.

ACCORDING TO A REPORT recently submitted to the British Government, the Chinese to a considerable extent are changing their mode of construction and adopting European methods and materials. The dilapidated rows of one-storied houses of lath and plaster, dark, unsanitary and comfortless, which formerly did duty as Government offices, schools, barracks, etc., are rapidly disappearing before buildings in foreign style of brick and stone, fitted with such up-to-date conveniences as electric light and steam heat; while in all the large cities and trading centres merchants and shopkeepers are replacing the shanties of former days with modern structures in which the *yanglou* or foreign upper story, and the plate-glass window, are usually conspicuous features. The style is more often than not atrocious and the work shoddy, but in places like Shanghai and Peking, where the erection of business buildings and Government offices has been entrusted to foreign architects, the results are not unworthy of a European city. Approximately \$7,000,000 worth of foreign building materials were imported by China in 1910.



Dining Room.



Hall.

Residence of T. R. Boys, Toronto, Ontario. F. S. Baker, Architect.



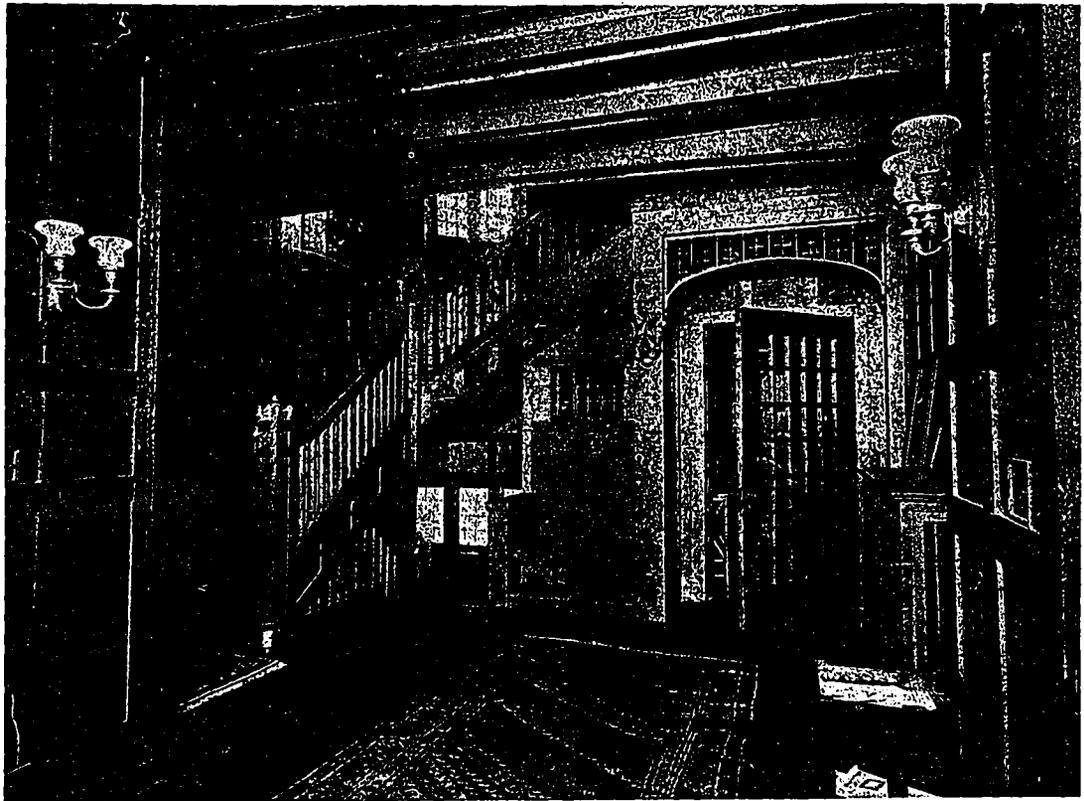
Front.

Residence on Clarendon Avenue, Toronto. Charles P. Band, Architect.

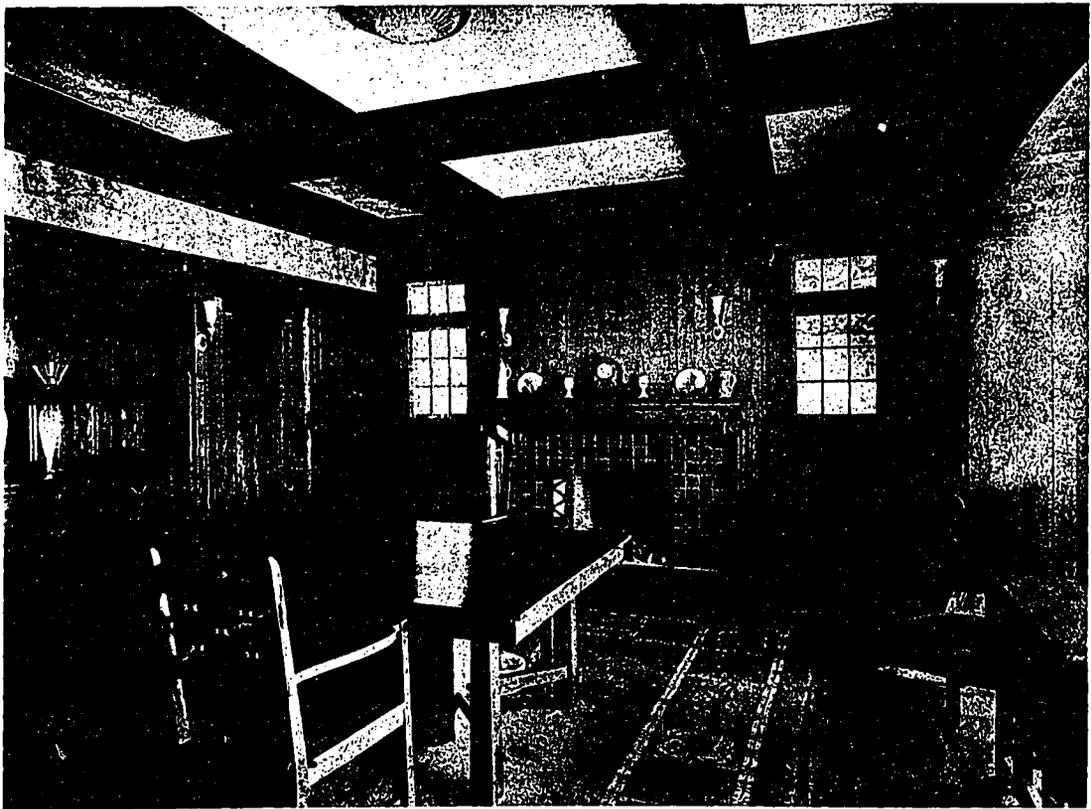


Rear.

Residence on Clarendon Avenue, Toronto. Charles P. Band, Architect.

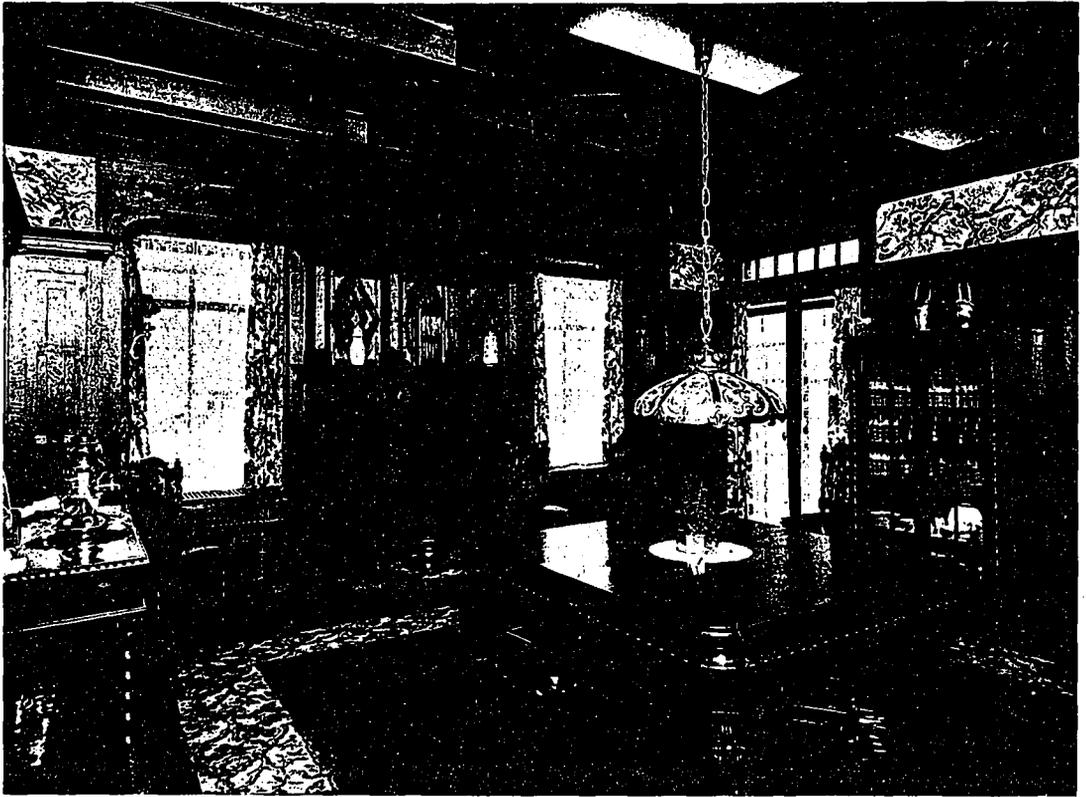


Hall.



Living Room.

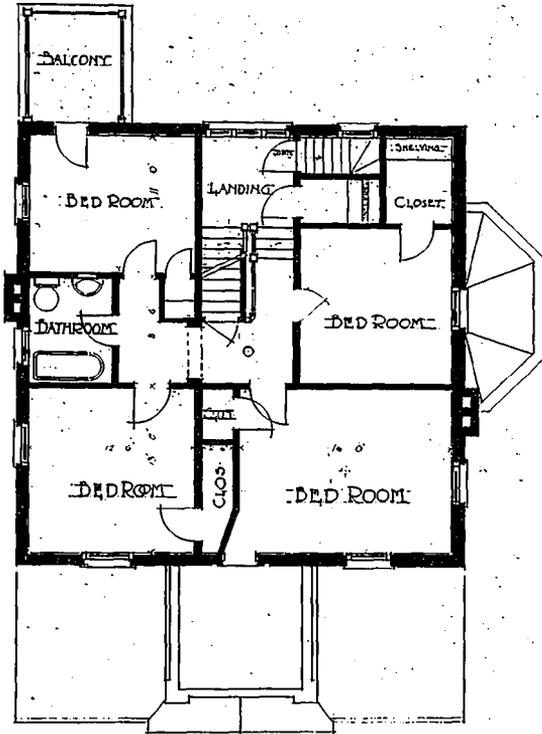
Residence on Clarendon Avenue, Toronto. Charles P. Band, Architect.



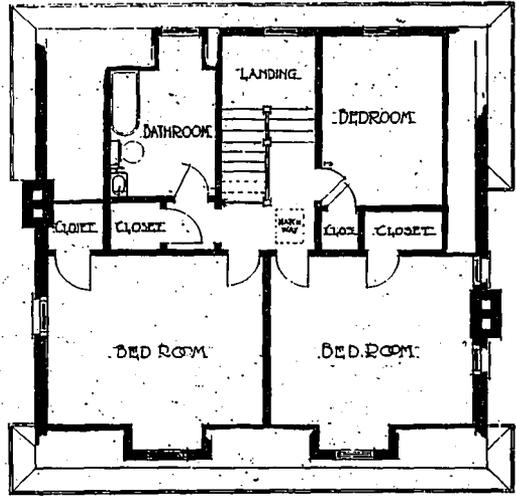
Dining-Room.



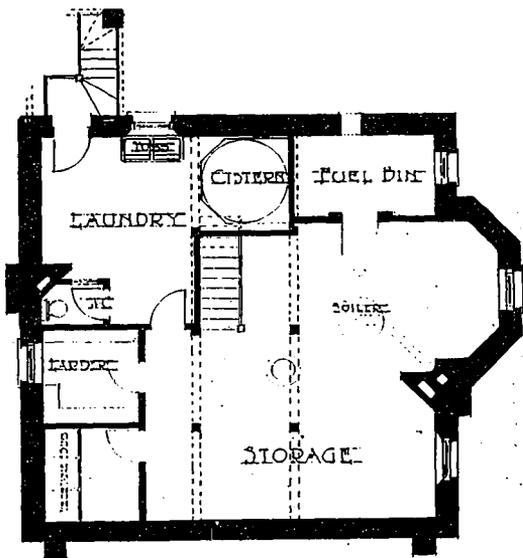
Residence on St. Clair Ave., Toronto. Charles P. Band, Architect.



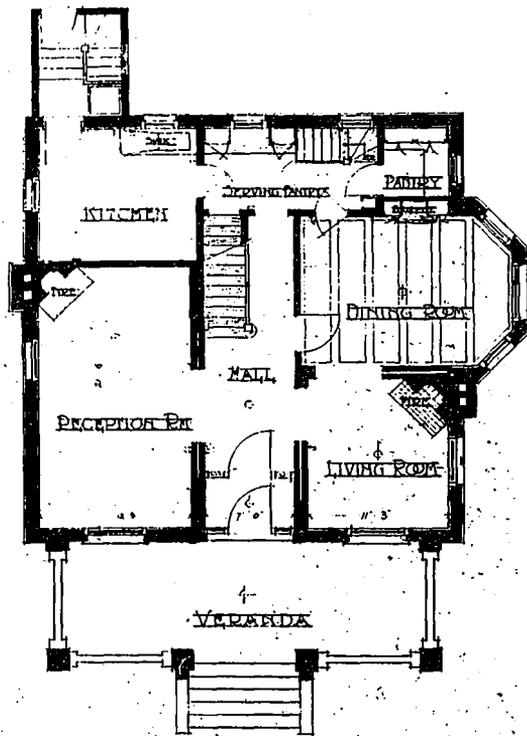
Second Floor Plan.



Attic Floor Plan.

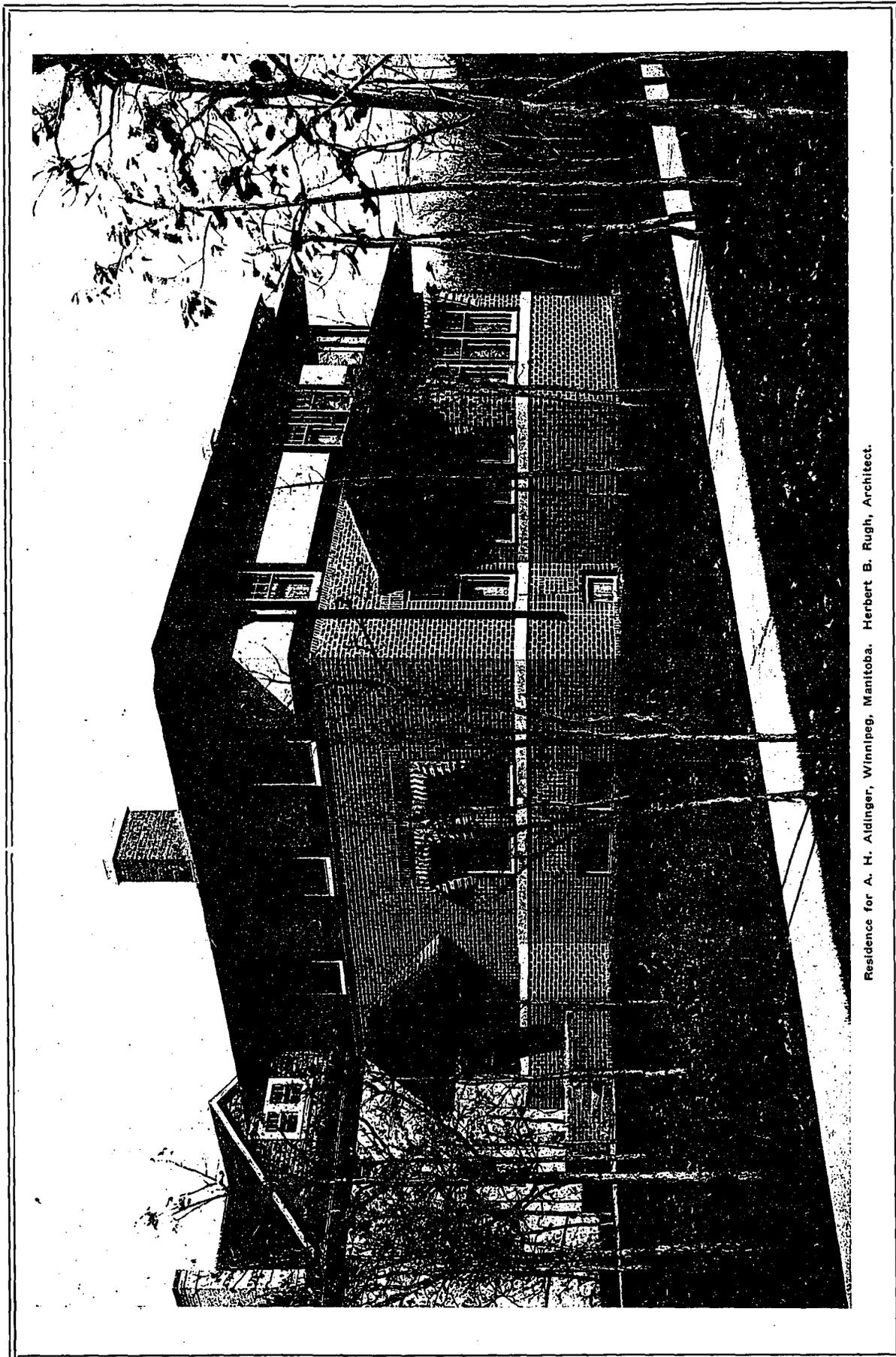


Basement Plan.



Ground Floor Plan.

Plans of Residence of N. F. Calder, Winnipeg, Manitoba. J. H. C. Russell, Architect. See page 69.



Residence for A. H. Aldinger, Winnipeg, Manitoba. Herbert B. Rugh, Architect.

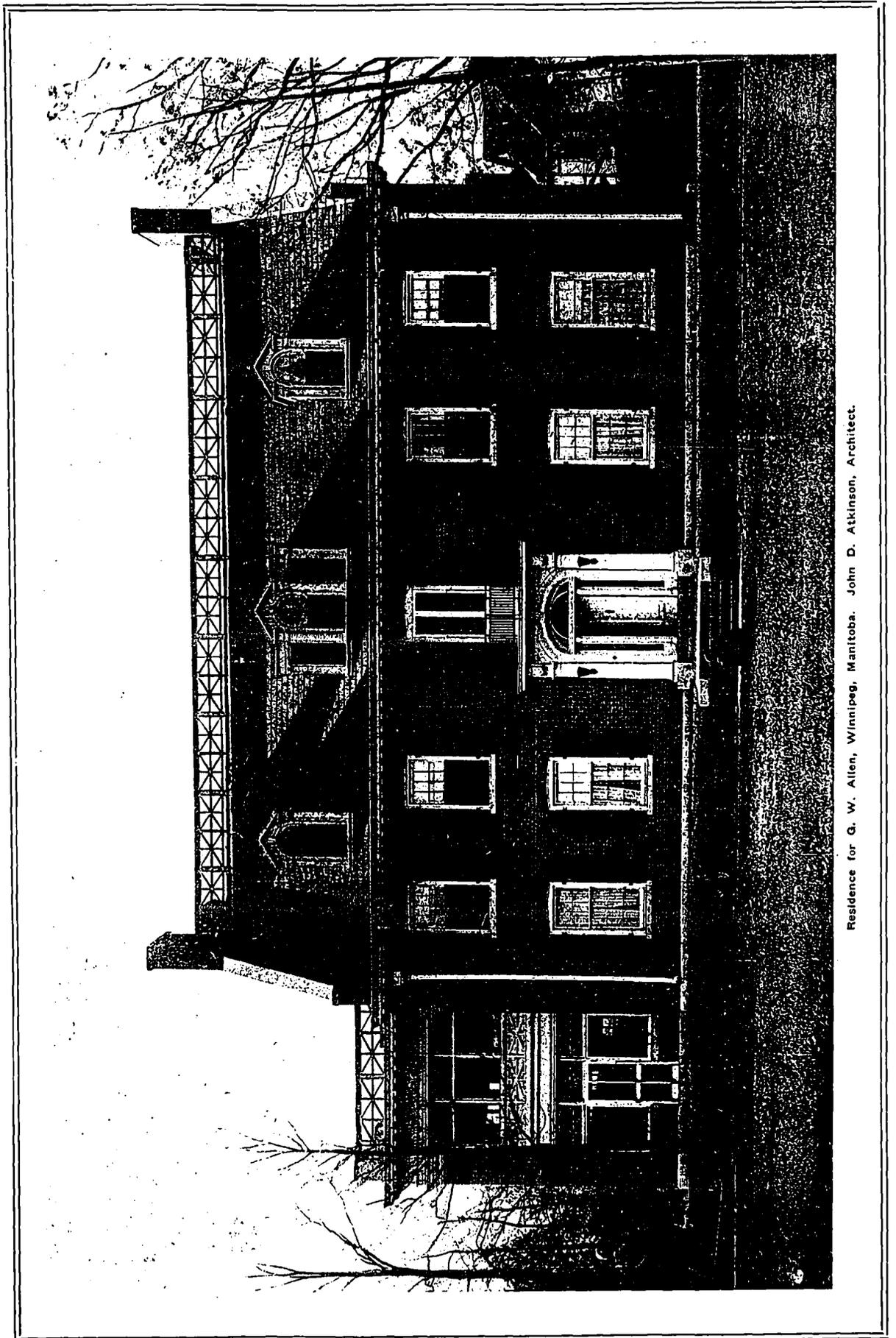


Fireplace in Living Roo...



Dining Room.

Residence for A. H. Aldinger, Winnipeg, Manitoba. Herbert B. Rugh, Architect.



Residence for G. W. Allen, Winnipeg, Manitoba. John D. Atkinson, Architect.



Dining Room.



Living Room.

Residence for G. W. Allen, Winnipeg, Manitoba. John D. Atkinson, Architect.



Residence for W. L. Ball, Winnipeg, Manitoba. John D. Atkinson, Architect.

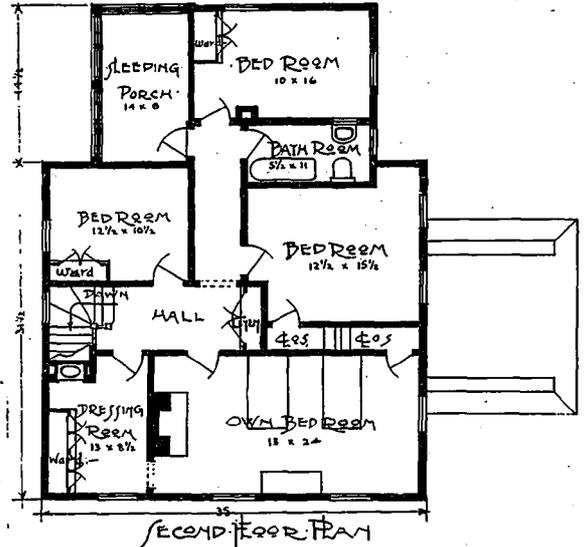
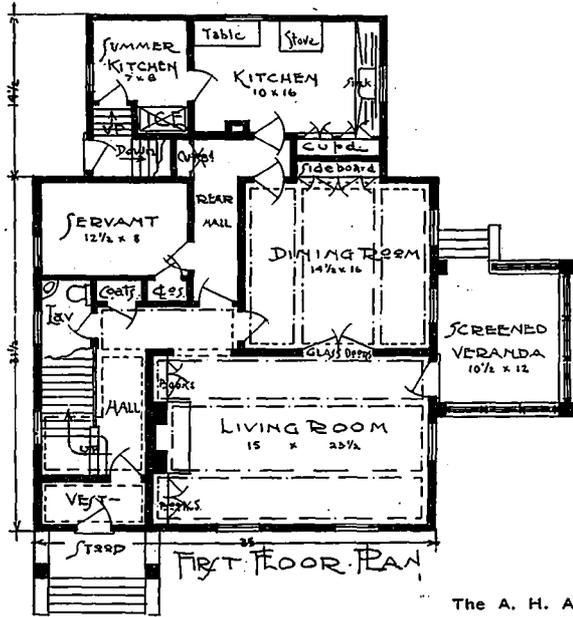


Living Room.

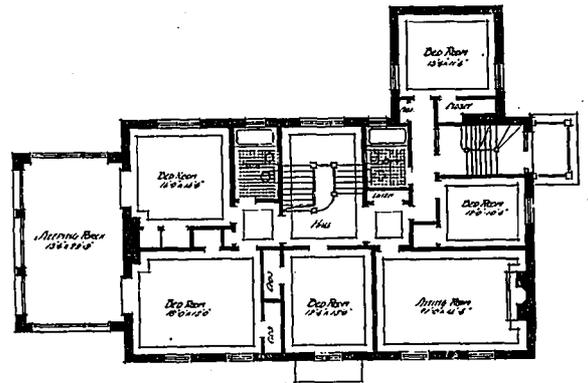
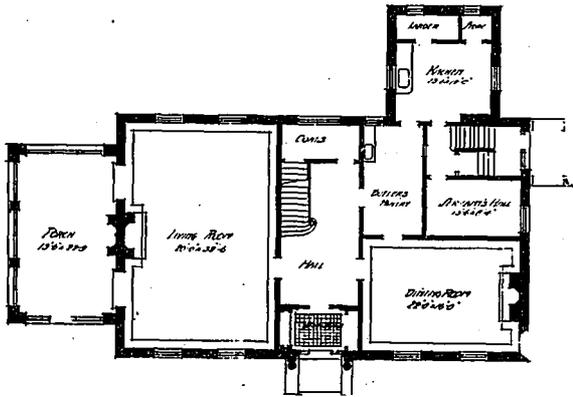


Living Room, showing Sun Room.

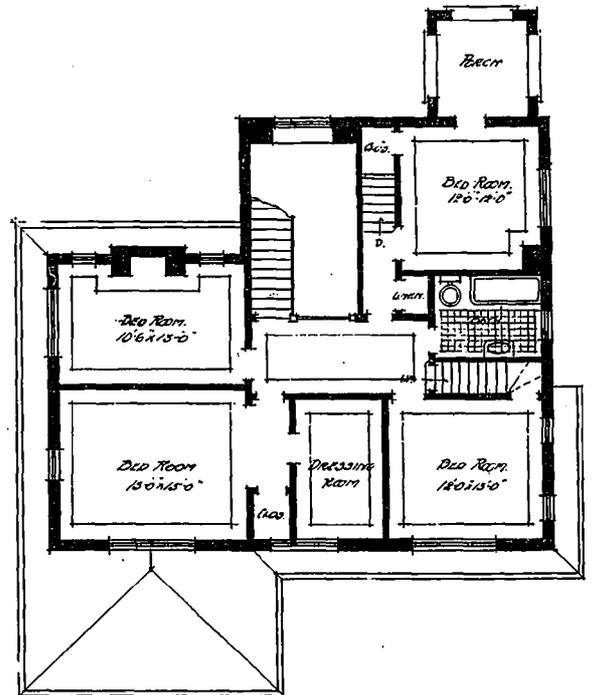
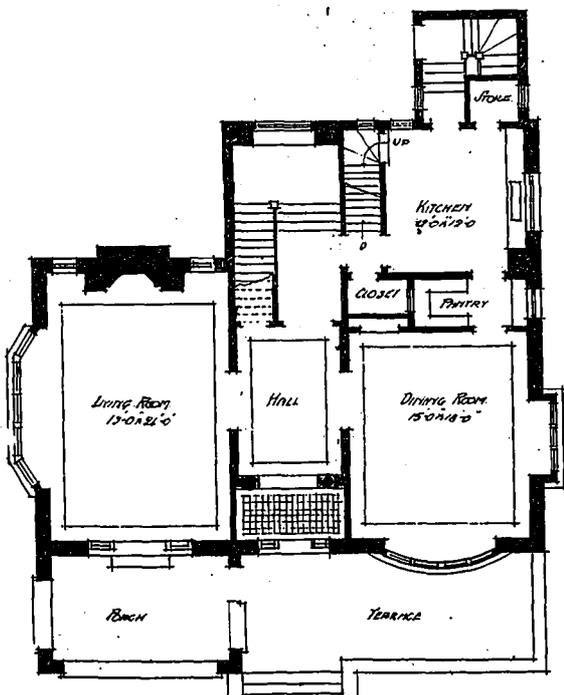
Residence for W. L. Ball, Winnipeg, Manitoba. John D. Atkinson, Architect.



The A. H. Aldinger Residence.



The G. W. Allen Residence.



The W. L. Dall Residence.

CONSTRUCTION

A JOURNAL FOR THE ARCHITECTURAL
ENGINEERING AND CONTRACTING
INTERESTS OF CANADA



Robert Craik McLean Editor.

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Vol. 4 Toronto, November, 1911 No. 12

CURRENT TOPICS

SASKATCHEWAN IS TO HAVE an architectural association in the near future, which will add another Provincial association under the new federation of the Royal Architectural Institute of Canada.

* * *

TORONTO has joined the movement so active in Ottawa and Montreal in the direction of replacing the city slums with properly planned houses. A sub-committee of the Board of Health reports on broad lines. It demands suburban garden cities with rapid transportation, a proper scheme of city planning, including the surrounding area of the city, and the housing division of the health department under the control of a representative committee of citizens. The sanitary features to such a programme are most important, and it should have extraordinary powers for the repair and installation of sanitary appliances in houses and the razing of houses of the worst class. In Ottawa and Montreal Earl Grey did much during his official residence, and in his last speech to the people of Canada, at a banquet at Montreal, he departed from his written argument and gave a large portion of his time to remarks on the subject that is so near his heart, the building of workingmen's houses.

NOTHING SO THOROUGHLY indicates the growth of our Western cities along substantial and permanent lines as the buildings that are being designed and erected by the Western architects. Cities where eight years ago the prairie spread a limitless plain, are now, through the enterprise of investors and skill of architects, assuming metropolitan appearance. The reason why these Western cities can equal those in the older East (and this is true in the United States as well as in Canada) in point of design, is that some of the best designers in the crowded East have gone West and thrown their fortunes and their enthusiasm into the work of building the cities of a new empire.

* * *

THE MODEL HOMES Association of Ottawa plan for a workingman's house worked out in detail by Albert J. Hazelgrove, illustrated in this issue, presents the problem of a small house of substantial construction and convenient plan. This association is presenting in a practical manner the main point in the workingmen's homes' movement, and the studied plans presented by Mr. Hazelgrove are as near a solution of the most warm, comfortable and sanitary house for the least money that has yet been presented. His plan presents in a practical way a house that contains each necessity of the ordinary Canadian citizen and leaves out unnecessary luxury. As such it cannot receive too much attention from the associations in other cities who are discussing and urging upon the civic and provincial authorities the absolute necessity for the abolition of slums and substitution of livable housing for the working people.

* * *

AT ITS LAST MEETING the Manitoba Association of Architects discussed a report of progress of a committee appointed to meet with committees of the Western Art Association and the Crafts Society to study and work out the details for the formation of an Art Institute. The intention is that the new Art Institute would provide for art classes, the holding of regular exhibitions, and the securing of a permanent building through the assistance of the city and provincial governments. No better enterprise of a civic character could be engaged in by the Architectural Association or individuals of the province who have the progressive future of the people at heart. The movement should receive the active and financial support of the commercial public that will be benefited and not be left to the artists who are most closely allied to it, but for whom there is no direct recompense but the satisfaction of having made two blades of grass grow where one grew before.

* * *

MONTREAL is taking the right course in regard to the construction of school buildings. It not only has a by-law that provides that the construction of all schools must be fireproof, but the law is retroactive and buildings designed before the law went into effect must come under its provisions.

Now that fireproof materials are within a small percentage as cheap as those that are combustible, there is no excuse for other than fireproof school houses, and even the lessening of the number built would be compensated for by the security of the occupants. The troubles of the average school board are many as an inadequate school fund is the rule, but the law should protect it in this desire to build substantial buildings, even against the parsimony of those who are directly benefited by the fireproof building rule.

* * *

CANADA LEADS in the movement toward providing homes of modest cost and convenient and healthful places for the wage earning population, and it extends from Cape Breton to Vancouver. In the large cities it takes the form of the abolition of slums that threaten the health, to say nothing of its humanitarian aspect, of the balance of the population. In the smaller places, where individual concerns employ large numbers of people, and where the proprietors do not follow Herr Krupp's plan of providing garden cities for the employes, men of capital should take the matter up, first as an investment, and second because of the benefit it would be to the city at large. In every industrial community there are a large proportion of married men who are boarding and sending the balance of their wages to their families in distant cities. These would occupy houses if they could find them at a reasonable rental, and add that much to the city's population and business. The most pressing want in every large city and industrial community is the proper housing for the wage-earning portion of the population. The influx of workmen from the United States, who are used to better living conditions, seems to be utterly disregarded as far as their living accommodations go, and the same can be said of the cities. The result is a crowding of tenements in unhealthy districts and a condition evolved that is decidedly against the best interests of any city.

* * *

THE FIRM of James Stewart and Co., which is bidding on Toronto's three miles of subway, or "tubes", has an interesting history. The founder of the firm, James Stewart, was a builder in Scotland in his early life, and was the builder, and the designer as well, of Balmoral Castle. He emigrated to the United States in the seventies, and settled at St. Louis, and soon was one of its largest contractors, his work extending down and up the Mississippi River, and in variety from bridges and jetties to residence construction. When Alexander, the youngest member of the firm, grew up he received an architectural education, and for a number of years an architectural office was a department of the business of James Stewart and Sons. As the business grew, general contracting for large buildings occupied, to a large measure, the attention of the firm, and in that direction its name is international. It was John Stewart who showed the English builders American methods, and erected a

building in one year that the native contractors were positive could not be finished in five. It would be singular if the sons of the builder of Balmoral should build a subway in Toronto.

* * *

ONE HUNDRED years of peace will be celebrated by a bridge between Fort Erie and Buffalo if the plans of public spirited and patriotic citizens on both sides of the line are carried out. The bridge is a necessity for the proper communication of the people on the southern end of the Niagara peninsular and Buffalo, and the people are calling upon the representatives at Ottawa and Toronto to do every thing in their power towards its accomplishment. The sentimental nature of such a permanent memorial is of more lasting and concrete value than is usually supposed by those who do not take into account the fact that it is sentiment that makes or unmakes nations and governs financial panics.

* * *

THE VARIETY of purposes to which concrete lends itself as a material is indicated by the output of the National Concrete Manufacturing Company, which has recently erected a factory covering several acres at Lindsay. Besides turning out all kinds of concrete building material from foundation walls to shingles and chimneys, the company is prepared to furnish plans and estimates for the complete erection of concrete houses or buildings of any kind, and will make specialties of cement verandah columns, piers, railings, balusters, etc., porch steps, lawn vases, flower pots, window sills, lawn rollers, lawn fences, gate and tie posts, well linings, watering troughs, feeding troughs and cisterns for both barn and house use, concrete silos of most perfect construction and design, also culvert tile and sewer pipes of all sizes.

* * *

INFORMATION COMES TO CONSTRUCTION that a majority of members of the Upper House in the Japanese Diet are in favor of constructing a new Diet building, at a cost of about \$2,500,000. A bill to this effect will probably be submitted to the next session of the Diet. This ought to be interesting to architects who are desirous of extending their clientele beyond the Dominion, or designers who would find a foreign commission attractive. There have been many Japanese draftsmen educated in the United States, but on so important a structure it is probable that an "imported" architect would be favored.

* * *

VINCENT MASSEY of Toronto has given the Regina College a woman's building, to cost upwards of \$200,000. The donor's object is to place at Regina for the benefit of the women of the Saskatchewan district, the best equipped educational institution for women in the Dominion.



An Interesting Detail of Garden at "Flagcourt," Residence of Mr. John Firstbrook, Lawrence Park, Toronto. Chadwick & Beckett, Architects.

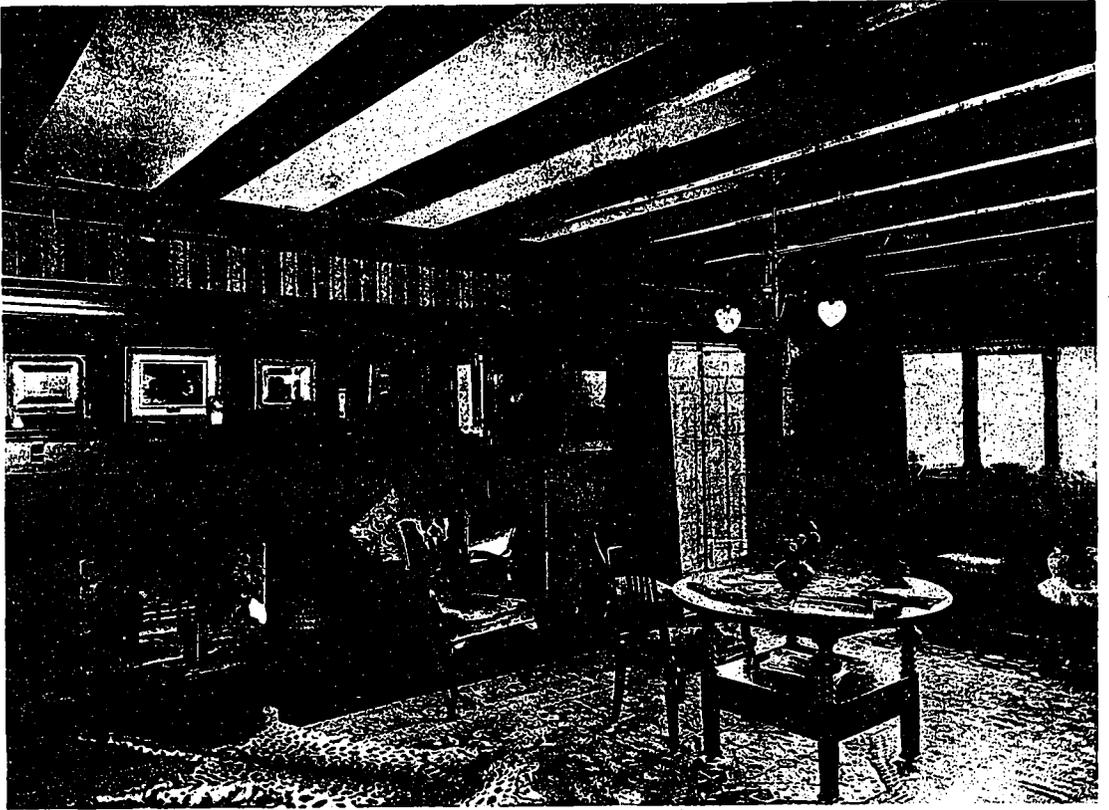
THE ARCHITECTURAL DEVELOPMENT OF A SUBURB

Under architectural direction, and with the sympathetic cooperation of appreciative clients, Lawrence Park, North Toronto, is developing ideal suburban conditions.

ONE OF THE DISTINCTIVE features noticeable in the growth of Toronto is the development of its suburbs. The country around the city is rich in residential possibilities that have only recently been recognized by the real estate dealer and the home builder. It is most regrettable that of the two the real estate dealer "saw it first," and by paying the farmer hundreds per acre he is holding up the builder for thousands per lot, a feature that will equalize itself in time. At the present purchase of one of these ideal building sites is a luxury rather than an investment, and only those who can afford the luxury are apt to purchase at present inflated prices that will continue until transportation facilities bring other districts into the market for the man

of moderate means. But meanwhile, the residences that are being designed by Toronto architects fully meet the requirements of their beautiful surroundings. On the east and west of the city, where high bluffs overlook the blue waters of Ontario, the suburb is a thin string of villas, each with its own individuality, but all having that feeling of association with surroundings that makes for residential beauty. On the north of the city, on high ground cut with ravines, their pine-clad banks covering the scars left by the eroding water or glacial drift that made them, with sloping hillsides between, the subdivision called Lawrence Park, is located.

From a collection of farms the art of the landscape architect and the designer of homes has changed the bare slopes of the hills into a homelike collec-



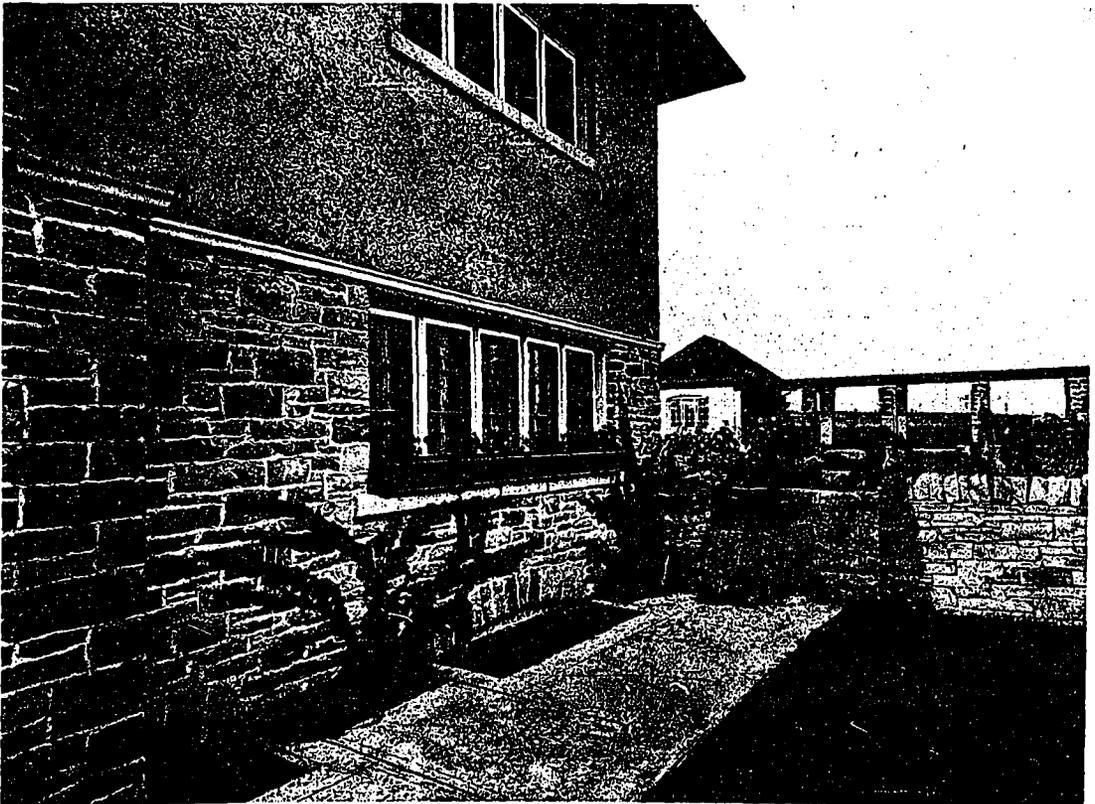
Living Room.



"Flagcourt," Residence of John Firstbrook, Lawrence Park, Toronto, Ontario. Chadwick & Beckett, Architects.



The Garden.



Detail of South Front.

"Flagcourt," Residence of John Firstbrook, Lawrence Park, Toronto, Ontario. Chadwick and Beckett, Architects.



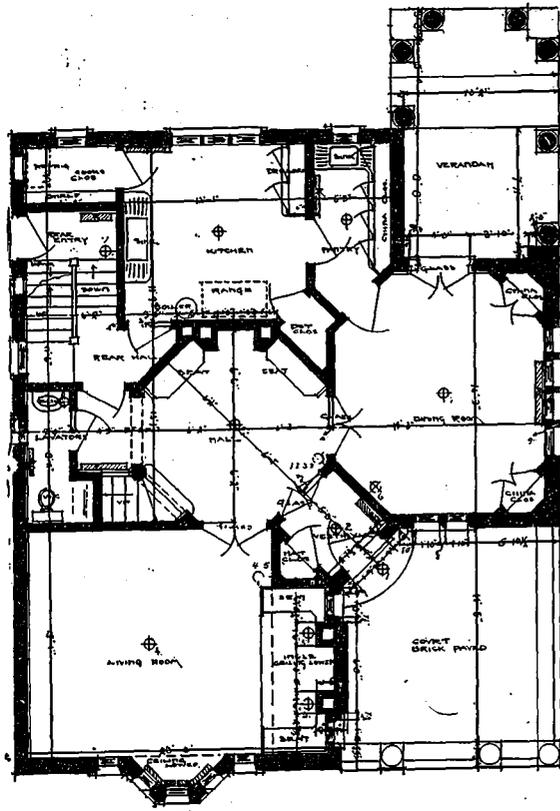
Living Room.



Residence of W. S. Dinnick, Lawrence Park, Toronto, Ontario. Chadwick and Beckett. Architects.

tion of suburban residences. Each house has a commanding position and magnificent views of hill, valley and pine embowered ravine, are made a part of the study given to the plans by the architect who designs the home.

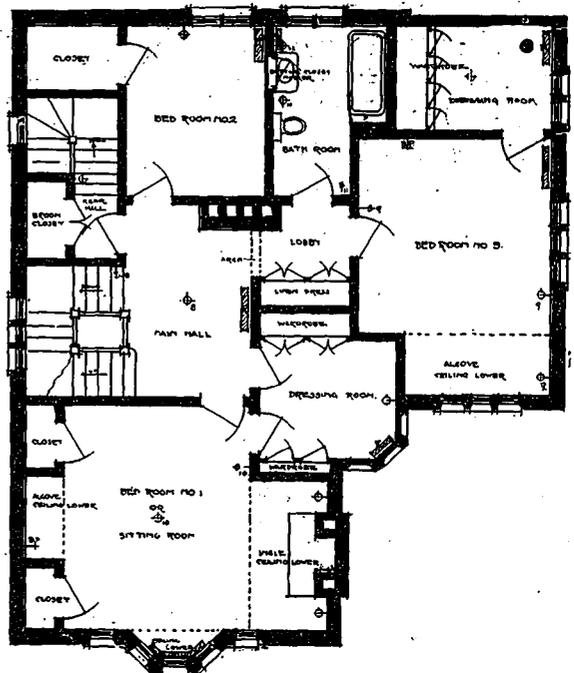
The official architect of the suburb is S. G. Beckett, of the architectural firm of Chadwick and Beckett, and though each owner is at liberty to select his architect, this firm have designed the majority of the houses yet erected. With a fine sense of proportion and a keen sympathy for the association of house and landscape in the completed picture, the architects have produced a number of types of suburban residences here that are individually delightful and collectively give an air of refinement to the suburb that is usually conspicuous by its absence in



Ground Floor Plan.

The home of Mr. Evans, designed by Chadwick and Beckett, architects, of Toronto, is appropriately named.

Grey Gables is a hilltop house, standing out boldly on the skyline, built of stone and stucco. The stucco is finished with a bold trowelled finish. The roof is of shingles stained in three shades of green. The ground floor consists of a large living room with an angle, the latter paved entirely in brick; dining room with built-in sideboard, kitchen, pantry, etc. The woodwork is of Georgia pine stained to a warm chestnut brown. The walls and ceilings are of stucco plaster. The verandah is paved with Welch Quarry tile. The exceptional feature of this house is the treatment of the upper hall. The main stair is enclosed and is without balusters or newels, stucco plaster parapets being carried up instead with posts ceiling high springing from each corner and supporting beams and cross beams at the level of the first floor ceiling. The rose garden is paved



First Floor Plan.

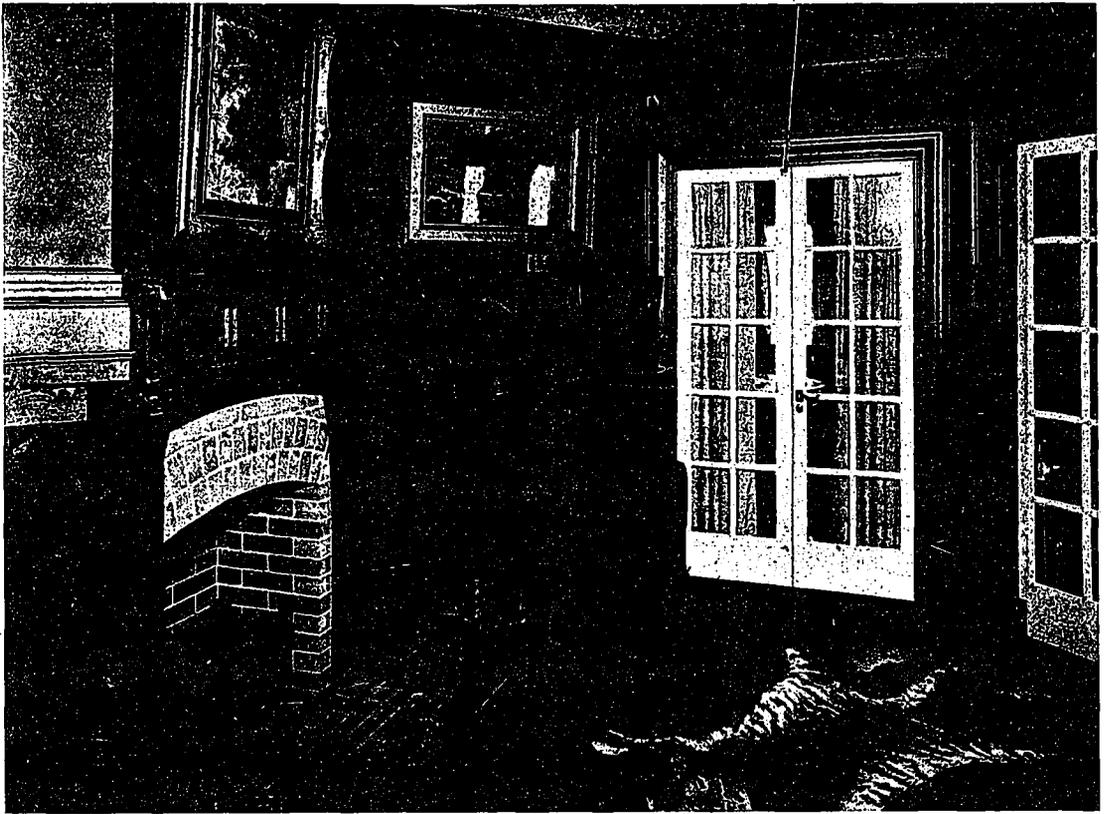
The W. S. Dinnick Residence.

the majority of similar suburbs. Even here it is regretted that already the iconoclast that thinks the carpenter or mason and a plan book is all that is required in the erection of a house is in evidence, and the houses thus erected will continue a blot upon an otherwise exceptionally artistic picture of suburban design.

In presenting a few of the completed residences, it is noted that they are new. The garden growth and the vines in the pergolas give that decorative effect that is so necessary to complete the picture, but it will be years before the picture is finished through the growth of trees. But these are all part of the plan, and, like the streets that are still unfinished, will in time give the effect that will make Lawrence Park a credit to the architects who have designed it.

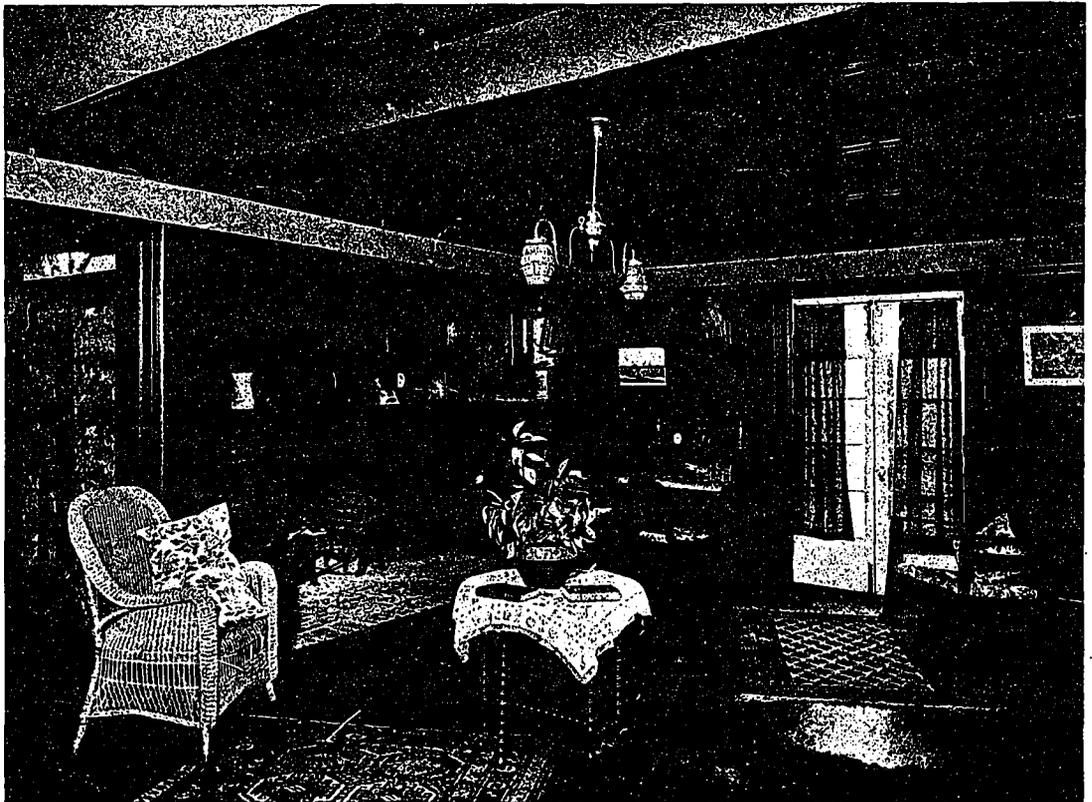
with large Credit Valley flag stones, from Mr. Graham-Bell's quarries; in the centre is a Roman stone sundial, and a cedar hedge surrounds the whole. From the rose garden a gate leads to the formal garden in the rear, in the centre of which is an octagonal basin of rubble masonry with a Roman stone fountain modelled by Messrs. Green & Wicks, and a pergola. The whole is enclosed by a dry stone wall. The French window from the living room leads to the formal garden. On the north side of the house the drive leads to a small stone garage and drying ground, separated by a dry stone wall from the garden.

Mr. Jones' house is built of clinker brick and stucco plaster stained a warm ochre with half-timbering. It is also finished in Georgia pine, with oak floors. In the basement is a billiard room. A flight of



Hall.

Residence of W. S. Dinnick, Lawrence Park, Toronto, Ontario. Chadwick & Beckett, Architects.

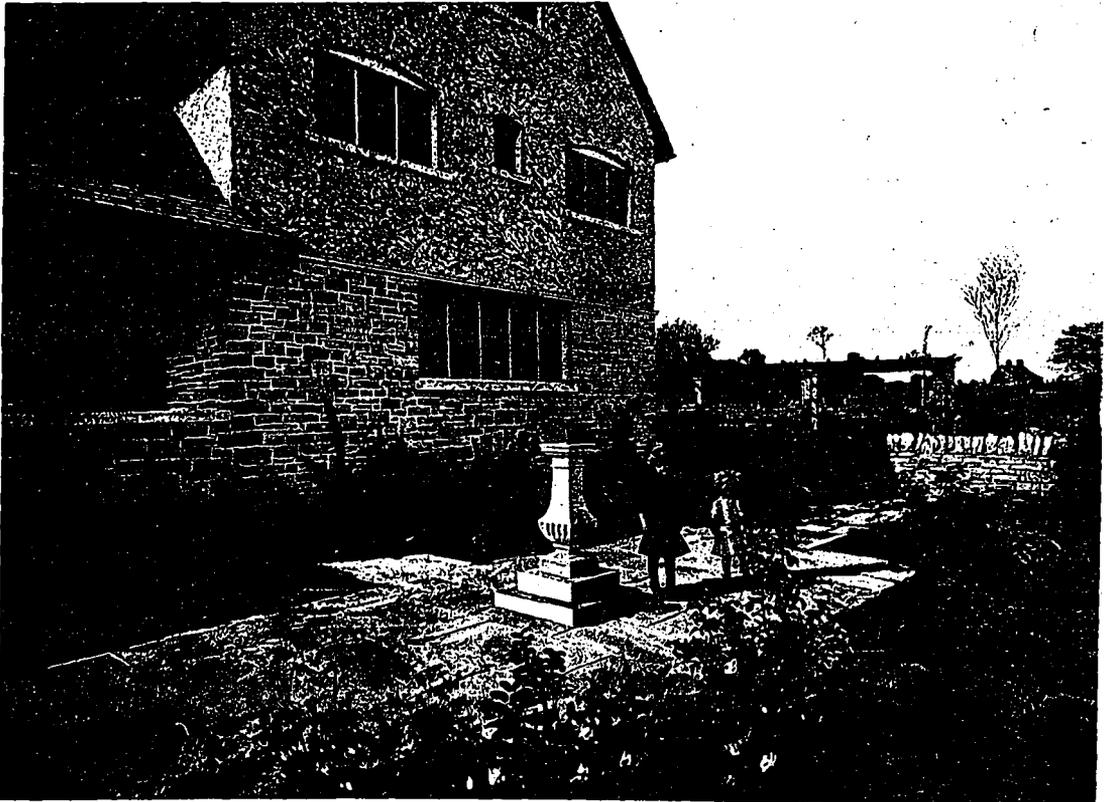


Living Room.

Gray Gables, Residence of J. H. Evans, Lawrence Park, Toronto, Ontario. Chadwick & Beckett, Architects.



View From Rear.

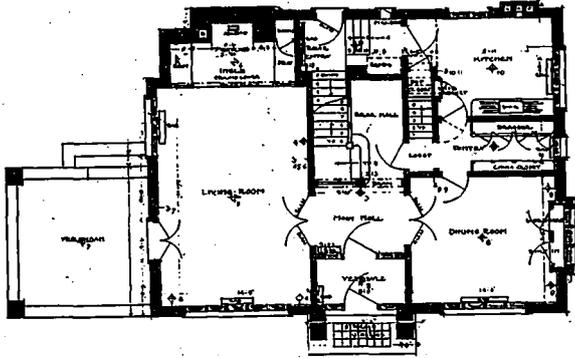


Garden Detail.

Gray Gables, Residence of J. H. Evans, Lawrence Park, Toronto, Ontario. Chadwick & Beckett, Architects.

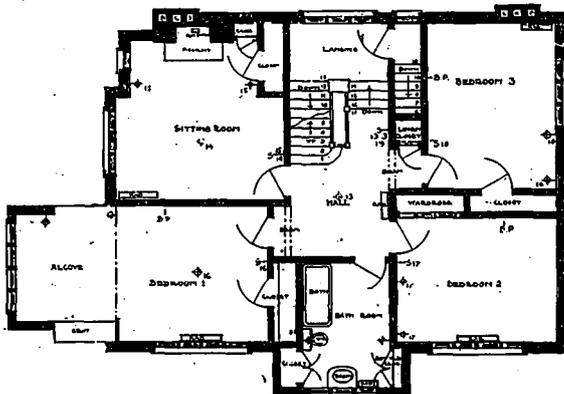
brick steps leads to a simple garden enclosed by a brick wall, with pergola built of the same material. In rear of this is a vegetable garden and tennis court. There is also a small garage.

Mr. W. S. Dinnick's house. This house has a somewhat interesting plan. The house is situated on the north boundary of the estate, and the principal view is to the southwest. In order to make the most of this view, the vestibule and main hall



Ground Floor Plan.
The Jones Residence.

were placed on a diagonal axis. The main hall is octagonal, and from two sides of the octagon the living room and dining room opens. This house is finished in black ash with angles and beamed ceilings, etc. The dining room has a white enamelled wainscot and plate rail 7 feet high. It is octagonal in shape with china closets in the corners. The ceiling and frieze are of panelled plaster with decorations by Mr. Hahn. The verandah is paved with Welch Quarry tile, and in winter will be enclosed and heated to form a sun room; it opens directly into the garden. The first floor is arranged



First Floor Plan.
The Jones Residence.

with a very complete suite, consisting of own bedroom, boudoir and dressing room, bathroom and night nursery. The garage is a very complete one for four cars with living quarters for the chauffeur above. A circular drive leads up to an open terrace at the front of the house. On the south side is a rose garden and sun dial of Doulton terra cotta. The terrace is of paving brick with Roman stone parapet. The formal garden has a circular pool and

jet in the centre, surrounded by a circular pergola of cement stone around which are arranged formal bed and borders. To the north of the house is a tennis court surrounded by a cedar hedge and flower border. In rear of the tennis court is the rose garden with flower and vegetable beds. The circular drive and court leads to the garage and drying ground in the rear. The garden and drive are surrounded by brick garden walls. The house is in Tudor style of light red stock brick with Roman stone sills, quoins, mullions and lintels to all windows, which are glazed with leaded glass throughout. The roofs of the house and garage are stained a light tile red. Mr. McConnell's house is built in Dutch Colonial style with gambrel roof and stucco pillars to verandah. The brick work is in Flemish bond. The

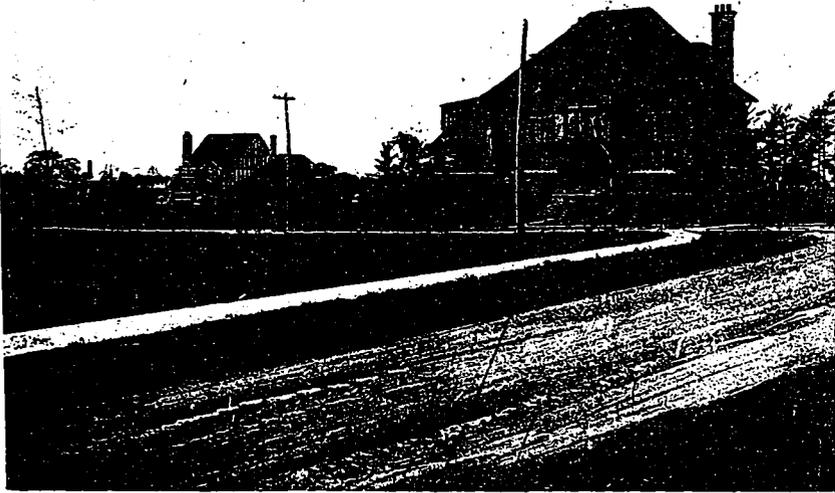


Hall in the Evans Residence.

roof is of cedar shingles in the natural state. The verandah is paved with brick and Roman stone border. The terrace covered by the pergola leads to the front door. The ground floor consists of reception room, staircase hall, living hall, dining room, pantry, kitchen, etc., all of which are finished in white enamel with Colonial mantels and Colonial detail generally.

Mr. Brooke's house is entirely in "pebbledash" stucco and brick, with a brick base and cement borders to the windows. All windows are metal casements with leaded glass. The living room and dining room have strap dados with panels of leather and stucco respectively, decorated with stencilled borders by Mrs. Brookes. The verandah is paved with Welch Quarry tile.

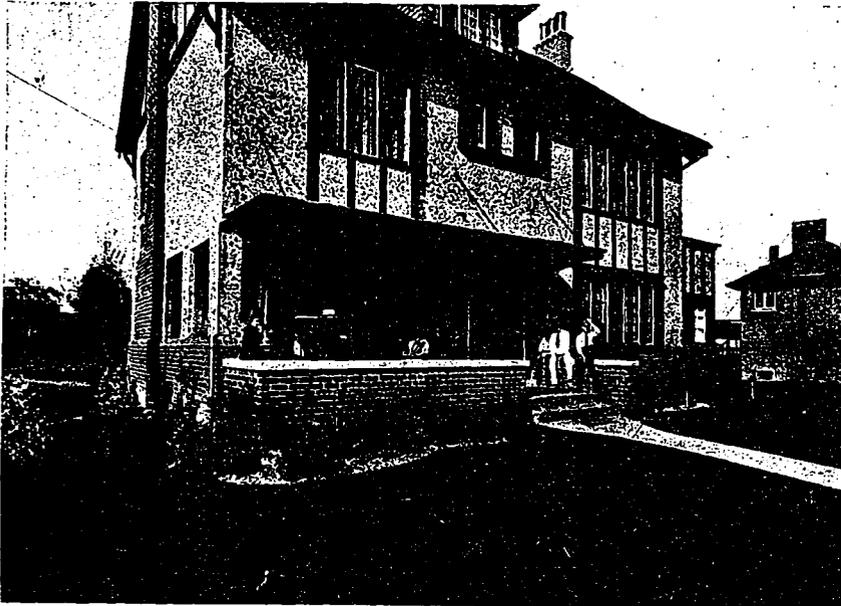
Mr. Julian Sale's house stands boldly on an eminence. It is of dark red brick and green stained shingles. The living room is finished in stucco plaster with a large paved brick fireplace. The dining room is finished in mahogany.



Residence of F. A. Jones.



Residence of Julian Sale.

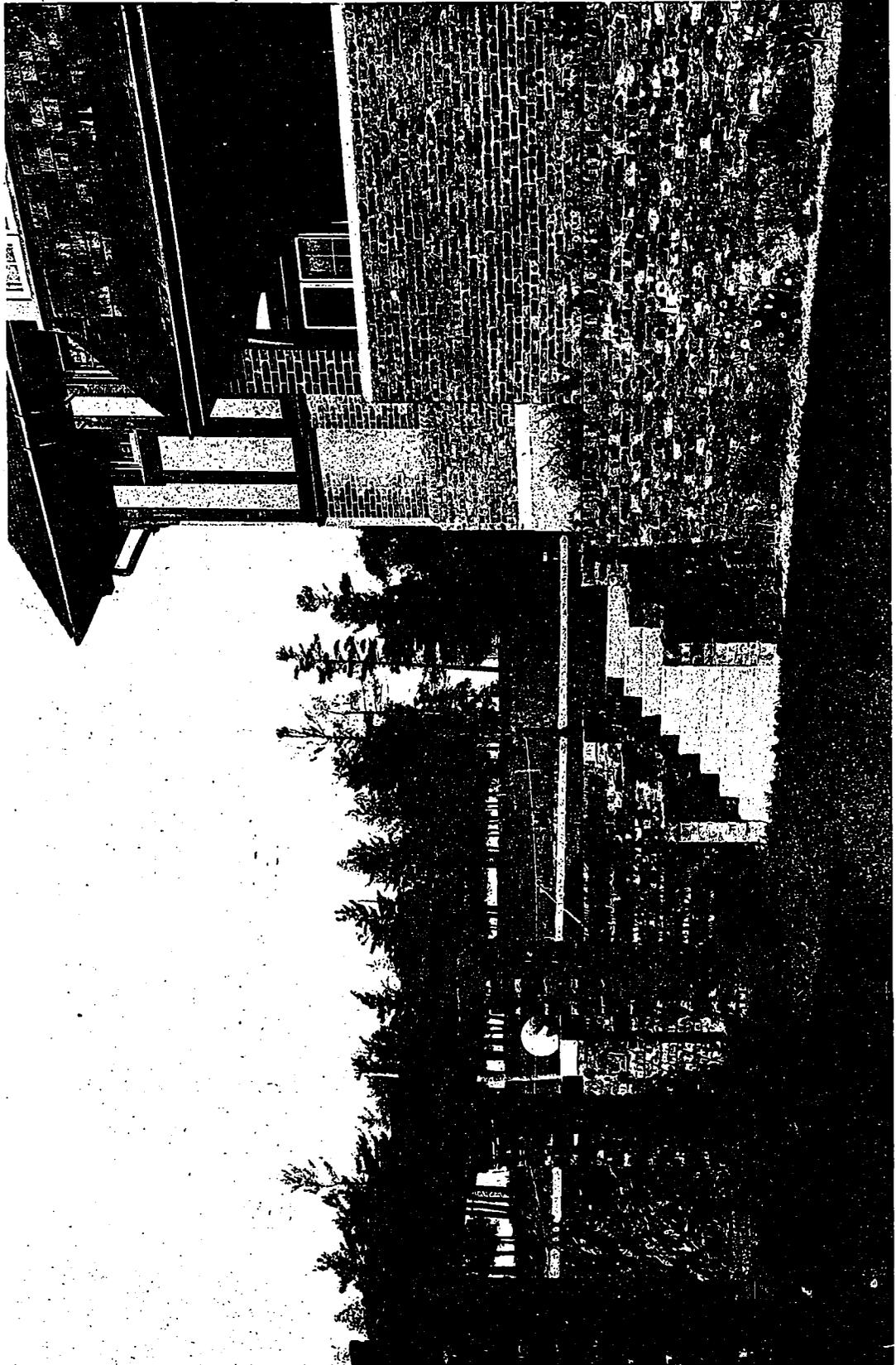


Residence of John Brooks.

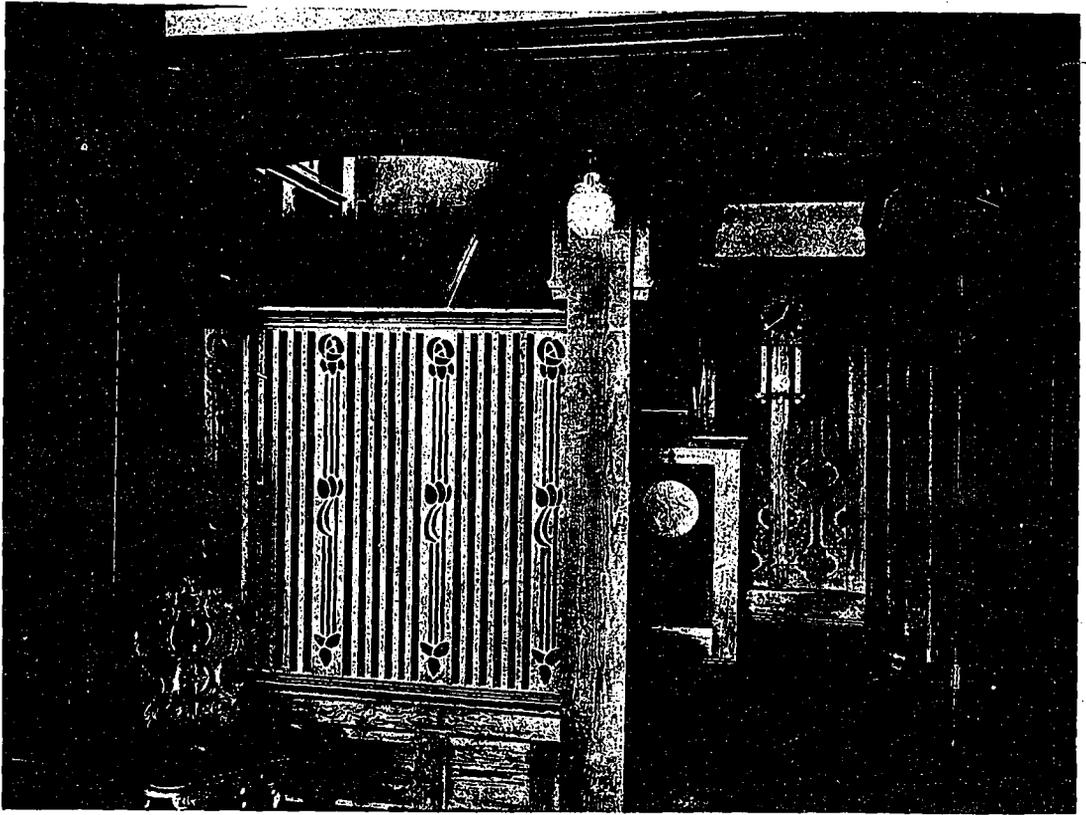


Residence of John McConnell.

Typical Residences at Lawrence Park, Toronto, Ontario. Chadwick and Beckett, Architects.



Garden Detail, Residence of F. A. Jones, Lawrence Park, Toronto, Ontario. Chadwick and Beckett, Architects.



Hall.



Living Room.

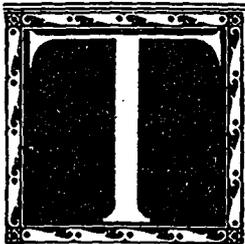
Sunnyholm, Residence of F. A. Jones, Lawrence Park, Toronto, Ontario. Chadwick and Beckett, Architects.



Detail of South Porch and Sun Room.



Residence of Dr. Dinnick, Lawrence Park, Toronto, Ontario. Chadwick and Beckett, Architects.



THE FOURTH CONVENTION ROYAL ARCHITECTURAL INSTITUTE OF CANADA

The final act of federation of all provincial associations under the title of the Royal Architectural Institute of Canada the principal work of the Convention held at Montreal, October 2nd and 3rd, 1911.

THE FOURTH GENERAL Assembly of the Royal Architectural Institute of Canada convened at Montreal on October 3-4, 1911. The attendance, numerically small, was representative, delegates being present from the Quebec, Ontario and Manitoba Provincial Associations. F. S. Baker, of Toronto, President; Alcide Chausse, of Montreal, Hon. Secretary, in the Assembly Hall of the Province of Quebec Association of Architects, 5 Beaver Hall Square. President F. S. Baker opened the first session and introduced His Worship the Mayor of Montreal, Hon. J. J. Guerin, M.D., who welcomed the Association to the city, and expressed a hope that the meeting would have an effect in advancing a movement toward better housing for workingmen.

J. R. Gardner, President of the Province of Quebec Association of Architects, welcomed the delegates in behalf of the Quebec Association. Mr. Gardner congratulated the President upon the programme outlined for the convention, and endorsed the remarks of the Mayor in regard to the bettering of workingmen's houses. He referred to the death of Vice-President L. Lemieux, which was a distinct loss to the Association, the Institute and the profession in Montreal. Mr. Gardner announced that King George had consented to become a patron of the Institute. He then reviewed the work that had been done in the direction of federation and said that the foundation having been laid the next meeting of the Institute would probably be a solid gathering of Canadian architects. Mr. Gardner then spoke on civic improvements and the importance of the work of architects in relation to them. He referred to the late city planning conference at London, at which 1,500 delegates were present. Various matters were touched on by Mr. Gardner such as the St. Alban's Cathedral, in which he referred to the recent appointment of Ralph Adams Cram of Boston, stating that while he admired Mr. Cram's work and his standing as an exponent of English Gothic, he had hoped that the Bishop would engage a Canadian if not an English architect, and thought it a pity that a Canadian had not been appointed. Referring to the late change of Government, Mr. Gardner expressed a hope that it would result in a more pronounced recognition of the profession, as the last Government presented a "cold shoulder" to architects on every occasion and that it was probable

that this had a certain influence on the election. He hoped that the new Government would take advantage of the willingness of the profession to advise with it upon a basis of general good and not because the profession was looking for fees, to the bettering of Government work in the Dominion. Mr. Gardner then in detail spoke of the necessity of an architect being added to the Government Art Committee and that this committee pass upon designs of all public buildings, and the important improvements now going on in the Capital city of Ottawa, without such inspection of design and, what was more serious, the absence of any general city plan. Mr. Gardner made a strong plea for the improvement of opportunities for the architectural student and the establishment of scholarships in architecture by the Government, or an academy where architects and other artists could take degrees. In closing, the speaker paid tribute to the Ontario Government for its reservation of Algonquin Park for the use of the public. The reservation of this great park with its three hundred lakes, two thousand feet above sea level, is an example for other Provinces and cities. President Baker replied to these welcomes. He said that this meeting was not perhaps as important as some they had had, as matters were in a state of development, owing to the condition they were in so far as the relations with the Government were concerned. The President then referred to the death of the late Vice-President, J. Z. Resther, whose demise was a great loss to the Institute. The efforts to bring about a federation of all architects of Canada in this Institute were coming to a completion, and as soon as some amendments were made to the charter of the Institute the matter would be accomplished. They could look forward to the next meeting as being one of architects from the Atlantic to the Pacific. There had been considerable correspondence with various people as to competitions, and in all cases the Institute had given advice with good results.

Referring to the town planning conference in London, where the President was the representative of the Institute, Mr. Baker said he had never attended meetings where such enthusiasm was shown. Two gold medals had been awarded by the Societe Academie d'Histoire Internationale, one to Mr. Watts, and one to himself, the latter on the suggestion of the gentleman nominated by Mr. Baker. The Insti-

tute had had some correspondence with the Government on the question of good architecture, and the President expressed the view that some members of the Government seemed to think it did not matter so long as they obtained well-built structures. There was also the question of the new St. Alban's Cathedral, Toronto. The Institute asked that a Canadian architect should be employed, or in the alternative, a British architect. The chapter, however, replied that they had decided to employ a foreigner, and had retained Mr. Cram, of Boston. It seemed a pity that in a country of this size that its professional men could not be looked upon with confidence in every respect. There had been a change in Government since the last meeting, and he hoped that so far as architects were concerned it would be a change for the better. The Laurier Government had cold-shouldered the architects on every occasion that he knew of. They had offered them advice which would cost the Government nothing, but their own officials seemed to think they knew best. He hoped the new Government would see the wisdom of consulting those who had spent their lives in studying these questions and were not always looking for fees. There were many buildings in contemplation by the Government, and he trusted the architects would receive more consideration than they had done in the past. He was also sanguine that the Government would do something for them in the way of education for architectural students; the Government might establish a scholarship for architects or an academy in which architects or musicians might take a degree of a more permanent character than that obtained from the Provincial Governments. Mr. Baker, in conclusion, suggested that other Provincial Governments might follow the example of the Ontario Government and establish parks similar to that of Algonquin Park in the northern part of the Province.

The report of the auditors on Treasurer J. H. W. Watts' report showed the accounts to be correct and a handsome balance in the Institute treasury.

The matter of a higher standard of architectural education in the Provinces was taken up by J. P. Hynes of Toronto. He said that the entire regulation of architectural practice and the improvement of design and construction lay in the education of the student of architecture, and that it was the duty of Provincial Governments and that of the Dominion to establish schools of architecture, not departments, in the universities. That the progress of the country and the building for the future required skilled architects, and it was the duty of the Government to undertake that education. In his opinion the only way to successfully combat the influx of foreign architects was to produce better qualified practitioners. He called attention to the fact that all other professions have well established means of education except the architectural, and it was taking on too great a burden for the private practitioners to educate young men in their offices, and it was essentially the province of the Government which endowed universities to see that adequate provision

was made for architectural education. He called upon the Institute to make the proper representations to the Government with this in view, and made a motion to that effect.

In seconding Mr. Hynes' motion, Mr. H. B. Gordon of Toronto said that under some well devised plan the Provincial Governments should take measures to elevate the standard of architectural education and thus provide better public and private structures, and suggested that committees from representative architectural bodies in the various Provinces be appointed to personally wait upon the Ministers of Education and urge the establishment of improved courses in architectural education.

J. H. G. Russell, of Winnipeg, reported that the architects of Manitoba were trying to obtain the establishment of an art school in the Manitoba University which is now in process of formation. Mr. Ross, his colleague, gave a sketch of the situation, in which he stated that the Minister of Public Works thought that engineering and architecture would be taken care of by the Provincial educational authorities.

The convention was in thorough accord with Mr. Hynes' plan of thoroughly established courses of architecture in Provincial universities, following the precedent of the McGill University School, which was established personally by Sir William Macdonald, and that all the affiliated associations should get together with this establishment of educational facilities for the future architects of the Dominion in view, including the endowment by the Government of post-graduate courses in the arts of architecture, painting, sculpture and music, and when special talent was shown a Canadian academy be formed of representatives of these schools. Mr. Watts endorsed the motion with the suggestion that Mr. Hynes head such a committee. After a full discussion a motion was unanimously adopted to the effect that a committee be appointed to wait upon the Minister of Education, and urge the establishment of architectural schools, and that the Dominion Government be urged to establish an academy and a post-graduate course in architecture and other arts. The session then adjourned.

Second Session.

The second session was devoted to a joint conference between the Institute, the Province of Quebec Association of Architects, and the City Improvement League of Montreal, on the subject of town planning and the betterment of workingmen's homes. The discussion was introduced by Dr. W. H. Atherton, Ph.D., secretary of the City Improvement League, who said the main thing was to have a thing, to know it when you have it, and how to keep it when you have it. He reviewed the situation in Montreal previous to the formation of the City Improvement League, and dealt with the Metropolitan Park Commission, and described the struggle to show the city the importance of parks and playgrounds, a movement which called for the co-operation of all social workers. Then the formation of the League was made in order to strengthen the movement to-

ward better conditions in the way of water filtration, child culture and city planning all concentrated in a Metropolitan Park Commission.

In regard to city planning, Dr. Atherton said the case did not need any special pleading before such an audience. The world-wide movement for city planning was so well known by the architectural profession and members of the City Improvement League and members of associated bodies. The purpose of his paper was to indicate what stage that movement had reached in Montreal, and what the League was doing in the problem.

Tracing the history of the movement, Dr. Atherton showed how, prior to the inception of the City Improvement League, there had been individual efforts for the provision of playgrounds, improved transit facilities, and the development of the harbor front and beautification of the river banks, but the movement to draw up a bill for a Metropolitan Parks Commission had died down owing to lack of a strong public opinion. The League had been formed to be a ready vehicle to concentrate public opinion on civic improvement by being the convention ground of all those best elements of thought in the city, both of societies already working or of individual experts. The speaker claimed that the water problem conference had led to the new filtration system being undertaken, and the conference on Child Welfare was going to eventuate in the exhibition of 1912, while the two conferences on city planning and housing had started the present movement for a city plan, which had attracted attention under the name of the Metropolitan Parks Commission.

The steps taken in regard to the drafting of the bill for the Metropolitan Parks Commission were outlined by the speaker, who showed how that measure had received the support of the mayor and controllers, and how a preliminary commission of enquiry was appointed. The powers given by the Act of last session were "to propose plans and seek the best means of putting them into execution for the establishment of parks, boulevards, recreation grounds, baths, street and model dwellings for working men, and for the general improvement of Greater Montreal and its environs." The commission, after visiting other cities, had recommended what was known as the "city plan," which had most of the foregoing features, together with efficient transportation, and the provision of garden suburbs.

It was want of unanimity, concluded Dr. Atherton, that was responsible at the close of a busy session for the side-tracking of this scheme. Many were asking what the Parks Commission was doing. "They are doing nothing," he answered, "because no commission exists. They had no idea that such a good idea could have been utterly squashed. It had made its report and the commission was dead as far as actual powers were concerned, but the body that was promoting it was not dead, and intended to go on following it up."

A general discussion ensued. Mr. W. D. Lighthall urged the architects to lend their support, and referred to the efforts of those who had pushed the scheme.

He emphasized the humanitarian side of the project, and said that as in London it had been said that the fourth generation became extinct in the crowded slums, so the same thing must be happening in Montreal. He held that the Provincial Governments should be the target for first effort.

Mr. Lighthall spoke of instances in England where sections of land were bought, tracts cleared and houses for workmen built and rented for five and six shillings a week, and the investment paid three per cent. It was singular that a city like Montreal, that could buy park property for one-tenth of what Chicago was paying should not do so. These represented two distinct problems, city planning, and housing, and should be kept separate.

Mr. J. P. Hynes, of Toronto, reviewed the history of the present city planning movement that first took concrete form eleven years ago at the initial convention of the Architectural League of America, at Cleveland, Ohio, in a movement for a city plan for Cleveland, which rapidly solidified till to-day, under the commissionership of Architects Daniel Burnham and Arnold W. Bronner, is probably the most advanced of any of the civic plans for American cities. In the development of a civic plan it was not necessary to destroy revenues, but the contrary. In King's Park in London, and the Metropolitan Park in Boston, the land was bought at a low figure by the municipality and sold at a largely advanced profit. Mr. Hynes said that in the development of a city plan, in giving the charter the Legislature should see that the plan included a proper water supply, sewer system, etc., and that provision was made for proper financing. He also spoke in favor of a provincial publicity bureau for the spread of information on city planning among the general public.

Alderman Emard, president of the Parks Commission, regretted that the municipal authorities did not keep in touch with bodies such as the Civic Improvement League.

Reverend Dr. Paterson-Smyth advocated the movement from the humanitarian standpoint, and spoke of his own knowledge of certain parts of his parish, where factories were being erected, but houses were not. "The case of these people in their houses with big rents is very awful," he said. He told his hearers of an experiment in Dublin, where the council had borrowed some millions on a rebuilding scheme and made it pay four or five per cent.

Mr. Recorder Weir expressed the hope that any city improvement scheme would include something to dissipate the noises of the city. Street noises were, he said, becoming intolerable, and it should not be beyond the power of modern invention to remedy this. Lieut.-Col. Burland and Dr. Pelletier, both said something from the health point of view, and Senator Dandurand, Mr. Alp. Venne and Miss Watts, secretary of the Playgrounds Association, of Montreal, also lent their support to the city plan.

The chairman, Mr. F. S. Baker, in closing this part of the discussion, referred with appreciation to the interest displayed by Earl Grey to the city planning movement, and stated that the city Boards of Trade

and the Manufacturers' Association should be called upon to back up any movement toward a city plan. A motion was then presented by J. W. H. Watts, seconded by Alcide Chausse as follows:

"Resolved, that this assembly of the Royal Architectural Institute of Canada earnestly desires to urge upon the attention of the several Provincial Governments the necessity of providing without delay parks and playgrounds and housing commissions for each large city under their jurisdiction, especially with the object of preventing excessive mortality, and making better provision for the health, comfort and recreation of the masses. That the Government of the Province of Quebec is especially urged to appoint a permanent Metropolitan Parks Commission for Montreal with executive powers.

After some discussion, in which Mr. C. P. Meredith, Dr. Atherton, Mr. H. B. Cordell, Mrs. Jane Radford, Mrs. Alfred Grafton and Mr. Ross took part, the motion was carried with unanimity. The session then adjourned.

A paper giving a resume of the proceedings at the recent town planning conference at Philadelphia was read by Mr. C. P. Meredith, F.R.I.B.A., of Ottawa, and is printed in full in this issue.

Third Session.

The third and last session of the convention was largely devoted to the final ratification of changes in the Royal Architectural Institute charter, in the line of making it conform to the new conditions established by the proposed federation

Mr. J. W. H. Watts moved, seconded by Mr. Gardiner (president of the Province of Quebec Association of Architects), that clause 6 read:

"*Composition of the Council.*—The Council of the Royal Institute shall be composed of representatives appointed by each provincial association from its membership. Associations of forty (40) members or less to elect two (2) representatives each. Associations of over forty (40) members to have one (1) representative for each additional forty (40) members or fraction thereof. This Council to elect the officers of the Royal Institute."

The resolution was carried unanimously.

Members of the Institute not members of Provincial associations are placed in a separate class, known as non-registered members. They have no voting power, and any members joining the Institute hereafter will have to come through the Provincial associations.

The previous board of officers and Council were re-elected as follows: Officers—President, F. S. Baker; Vice-Presidents, Edmond Burke, S. Frank Peters, G. A. Monette; Hon. Secretary, Alcide Chausse; Hon. Treasurer, J. W. H. Watts. Council—A. F. Dunlop, H. E. Gates, J. P. Hynes, Wm. H. Archer, H. B. Gordon, R. P. LeMay, C. B. Chappell, E. L. Horwood, C. P. Meredith, David Ewart, P. E. Nobbs, Sam Hooper, C. E. Fairweather, Jas. E. Wize. L. F. Taylor and F. J. Alexander of Ottawa were elected auditors for the ensuing year.

It was moved by Mr. Alcide Chausse, secretary of the institute, and seconded by Mr. J. W. H. Watts: That the council be instructed to approach the Federal Government with the view of having the matter of departmental buildings about to be erected, reconsidered with reference to site and designs.

The motion was adopted without discussion.

In connection with this motion the following resolution was proposed by H. B. Gordon of Toronto, seconded by J. H. G. Russell of Winnipeg:

"Whereas the Federal Government of Canada has for some years been distributing a certain amount of money with the laudable intention of beautifying the city of Ottawa and its environs; and whereas this work has been carried out without any comprehensive interest or plan of the whole possible scheme of improvement; and whereas many things have been done which are unsuitable and inadequate and will require change, the Royal Architectural Institute of Canada, in their annual convention assembled, respectfully petition the Federal Government of Canada to appoint an advisory commission of not more than five persons, all of whom have artistic or technical knowledge directly valuable to the evolution of a general scheme; such gentlemen to serve without remuneration (their travelling expenses only being reimbursed); this commission to have authority to employ such technical help as may be necessary for the amplification of their ideas and the preparation of the necessary drawings. Also to consult specialists in regard to the feasibility and desirability of carrying out any or all parts of their proposed scheme; and that the Federal Government be asked to assume the expense of such commission as above outlined; also that the Federal Government be respectfully solicited to exercise their good offices in securing the co-operation of the authorities of the city of Ottawa and the present Ottawa Improvement Commission in the carrying out of the suggestions of the proposed Advisory Commission."

The clause relating to the voluntary service of the members of the proposed commission was criticized by Mr. Percy E. Nobbs, of Montreal, who complained that too much in the way of sacrifice of this nature was being asked of professional men, while the Department of Works was squandering money quite light-heartedly. He advocated that they should be paid experts on the commission.

Mr. Gordon stated that this had been fully considered in forming the resolution and was placed in its present form both to convince the Government that the resolution was entirely public-spirited in character and to avoid making it abortive when carried out through unsuitable persons lobbying for the position to secure the pay, and attract office seekers and involve political jobbery. This view was shared by J. W. H. Watts and C. P. Meredith, of Ottawa.

Mr. Baker stated that while architects, to a greater extent than any other profession, were called upon by the public for gratuitous service, it did not seem possible to get the bill through in any other form.

The situation was simply that the architectural profession as represented by the Institute wants things done in Canada for the betterment of the cities and the people, and the only hope in regard to recompense was that some time the public might recognize its efforts. He fully shared the opinion of Mr. Nobbs regarding the too many sacrifices asked of architects. He was inclined to think that either the Institute should have the power to nominate the members of the commission, or they should be paid if appointed by the Government.

The motion then carried.

A vote of thanks was tendered to the local association for the use of its quarters, and the City Council for courtesies extended, and the convention adjourned.

R

EDUCTION IN PRICE OF CEMENT

Important announcement made by Canada Cement Company—Reduction made possible by increased output.

IN NOVEMBER, 1910, it was announced that the price of cement had been reduced. That announcement was admitted by many as corroborative of the opinion that the merging of the cement interests in Canada would prove a good thing for the public.

The theory of a consolidation such as the Canada Cement Company is that the consolidated interests are in a position to effect economy in production and distribution.

That the Canada Cement Company are working upon the idea of increasing consumption by lowering prices, rather than curtailing production and obtaining higher prices, is clearly shown by its President's report to the shareholders at the last annual meeting, when he stated: "It is confidently expected that the increased demand and increased output will result in further savings in the cost of manufacture and distribution, and it is the policy of your directors to give your customers the benefit of these reductions."

This is further evidenced by the announcement which was made on November 1st, 1911, of a still further reduction in the price of cement. The reduction in some districts is 10c. per barrel, and in others, 5c. On the whole, it will probably average 7c. per barrel. This reduction, with the reduction made last year, means a very large saving to the cement consumers of Canada.

We trust that the expectations of lower cost voiced by the President of the Canada Cement Company will be realized again next year, so that the company may continue its policy of giving the benefit of these reductions to its customers—thereby enlarging the uses to which cement may be put.

M

ARKED ACTIVITY IN BUILDING LINE STILL CONTINUES

September witnesses heavy operations in practically all sections. Thirty-one cities note average gain of 69 per cent. over corresponding period.

A HEAVY GAIN in building operations has become such a regular thing, so far as the Canadian field is concerned, as to resolve itself into a mere matter of monthly record. To say that a new mark has been established is to use a much worn phrase that repeatedly suggests itself as each succeeding period comes around. There are few communities in the Dominion that cannot boast of substantially increased investments, and a still less number, it might be said, which have not extremely promising prospects immediately ahead. September found nothing to stay the remarkable

progress that has signalized development up to the present time. On the contrary, the returns from thirty-one cities reporting to "Construction" show an average gain of 69 per cent., the total investment amounting to \$12,478,900 as against \$7,311,577 in the corresponding month of last year. Not only was the force of activity previously reached fully sustained, but in several cases the totals are such as to denote a growth entirely without parallel as regards ratio of increase.

For the fourth consecutive time, Winnipeg, with a total of \$2,547,000, representing a gain of 212 per cent., registered the heaviest amount from a standpoint of investment. Toronto was second in order with an expenditure amounting to \$1,904,810, which is 42 per cent. in excess of her comparative figures; while Vancouver came third with an aggregate value for new work amounting to \$1,736,568, equivalent to a gain of 134 per cent. over the amount recorded in the same month last year. Montreal, where permits were issued to the extent of \$1,157,876, also made a very substantial showing, the gain noted being 16 per cent., which, to say the least, is most satisfactory, especially in view of this city's previous heavy investment and the fact that several important projects have been a trifle slow in materializing.

These figures but indicate the vast improvement experienced in a general way, for aside from the eight cities in the list which failed to equal their corresponding mark, a decided upward trend was manifest on every side. Places such as Guelph, whose total of \$103,000, representing a gain of 1,905 per cent., and Nelson, B.C., where an advance of 750 per cent. was made, show a condition the direct reverse to that which obtained in these centres a year ago. Ontario witnessed heavy operations in the majority of cases, although five of the nine decreases noted occurred in this Province, viz., Brantford, 3; Fort William, 13; Kingston, 23; London, 23, and Stratford, 16 per cent. These decreases,

(Continued on page 119.)

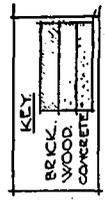
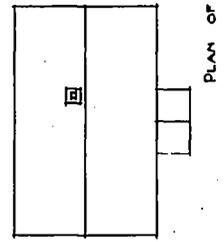
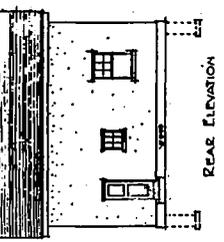
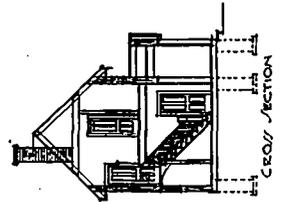
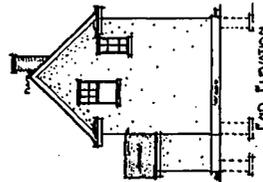
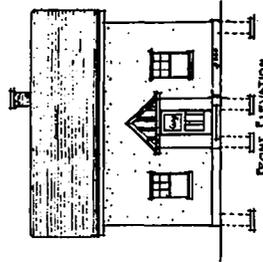
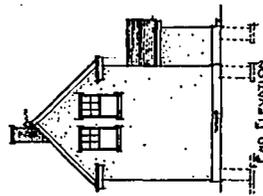
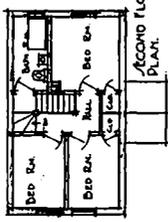
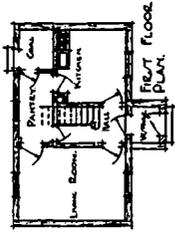
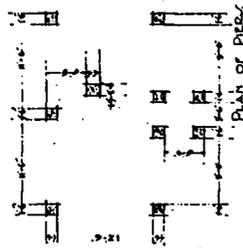
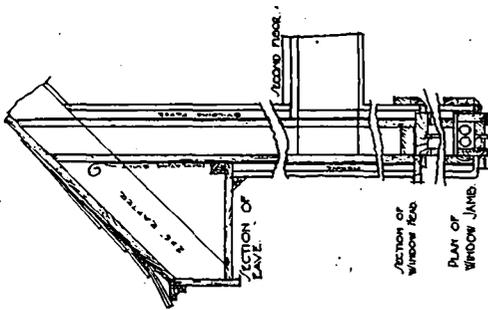
	Permits for Sept., 1911.	Permits for Sept., 1910.	Increase Per Cent.	Decrease Per Cent.
Brandon, Man.	\$ 150,200	\$ 438,675	.....	65.76
Brantford, Ont.	84,900	87,775	.....	3.28
Calgary, Alta.	903,210	720,372	.....	25.38
Edmonton, Alta.	369,970	169,863	.....	117.80
Fort William, Ont.	147,500	170,340	.....	13.41
Guelph, Ont.	102,300	5,100	.....	1905.88
Halifax, N.S.	20,405	148,119	.....	86.23
Hamilton, Ont.	771,200	266,475	.....	189.40
Kingston, Ont.	13,425	17,576	.....	23.62
Lethbridge, Alta.	93,200	72,180	.....	29.12
London, Ont.	114,463	148,950	.....	23.16
Medicine Hat, Alta.	174,600	16,500	.....	958.18
Montreal, Que.	1,157,876	993,286	.....	16.56
Moose Jaw, Sask.	192,400	35,500	.....	440.44
Nelson, B.C.	20,520	2,425	.....	750.30
Ottawa, Ont.	277,275	160,950	.....	72.21
Peterboro, Ont.	89,954	21,865	.....	306.83
Prince Albert, Sask.	147,600	188,150	.....	21.56
Port Arthur, Ont.	75,400	42,450	.....	77.62
Regina, Sask.	425,700	209,760	.....	102.95
Saskatoon, Sask.	330,950	183,550	.....	80.30
Stratford, Ont.	15,000	18,000	.....	16.67
St. John, N.B.	25,000	17,200	.....	45.34
St. Thomas, Ont.	35,750	25,650	.....	33.37
Sydney, N.S.	18,650	25,110	.....	25.73
Toronto, Ont.	1,904,810	1,332,535	.....	42.95
Vancouver, B.C.	1,736,568	740,715	.....	134.44
N. Vancouver, B.C.	78,344	.....	.....	.....
Victoria, B.C.	406,295	199,686	.....	103.43
Windsor, Ont.	49,425	38,300	.....	29.05
Winnipeg, Man.	2,547,000	814,350	.....	212.76
	\$12,478,900	\$7,311,577	.....	69.60

THE HOUSE is being built on concrete piers, there being no basement. The piers and beams are so arranged that the tenant can if desired put in concrete basement subsequently. The walls are of stud-framing covered with boarding, insulating quilt, battens and roughcast on metal lath. The accommodation on the ground floor consists of a living room 14 by 10, kitchen 10 by 9, large pantry and fuel store. It is noteworthy that the kitchen is planned to face the street, not into the back of the lot. The utmost economy of space has been sought for in every particular. On the upper floor three bedrooms and a complete bathroom are provided, two of the bedrooms have complete closets. The aim has been in the interior to unite economy with good appearance, and it is hoped that the simple lines will give character to the mass without the addition of unnecessary ornament. The roof will be stained a bright tile red. The house is backed by a clump of trees, which will help in general effect.

In regard to the heating of this house, a special system is being evolved by a leading firm of heating engineers, whereby a hot water heater will be placed in the kitchen, connected with a special range with gas connections for the summer. This will heat the whole house. As this scheme has not yet been fully worked out, it is not possible to give details.

The cottage is being built by day labor.

MODEL HOMES ASSOCIATION - OTTAWA
COMMITTEE DESIGN
BY ALBERT J. HAZELGROVE.
SCALE OF DETAIL
1/2 INCHES = 1 FT.
SCALE OF DRAWINGS
1/8 INCH = 1 FT.



In the accompanying Plans and Details, "Construction" presents Mr. Albert J. Hazelgrove's scheme for a Model House of Five Rooms, with Bath, Hall and Pantry, for the Small Investor. This Design was Approved by the Model Homes Association of Ottawa, of which Mr. Hazelgrove is Honorary Secretary.



Margaretenhohe, Essen, Germany. The Approach from the Bridge.



THE HOUSING PROBLEM IN FOREIGN COUNTRIES

Essen and Ulm in Germany, and the new law in New Zealand, illustrates the attention given abroad to the proper housing of wage earners.

ESSEN AND KRUPP'S in Germany are inseparable. All around Essen and in the city itself everything seems to be impregnated with the greatest iron firm of modern times. According to the status of May 1, 1910, the total number of persons employed at the Krupp works, inclusive of 6,840 officials, amounted to 68,905. In this total the different departments share as follows: Cast steel works and paving grounds, 37,848; collieries, 10,035; iron ore mines, 4,763; iron works on the Mde. Rhine, 1,075; shipping agency at Rotterdam, 49; Fredrich-Alfred-Hutte, 5,665; steel works, Annen, 1,027; grusonwerk, 3,939; Germaniawerft, 4,504, a total of 68,885.

With such a magnitude of people to control, etc., it follows that the question of housing is one that demands serious thought and consideration either by the municipal authority or by the Krupp firm itself, and it is of interest to know that the firm have, and are entering upon new schemes of housing for their work-people.

What is known as the Margarethe Krupp Habitation Fund, was created by one of the Krupp family and is chiefly intended to provide habitations for officials in minor positions and circumstances.

The endowment made by Frau Krupp comprised a capital of one million marks and building ground to the extent of 50 ha. (123.5 acres). By a further donation on the part of Frau Krupp, the whole of

the settlement has been encircled by a belt of meadow and wooded land, which is eventually to enclose the city which is in course of building.

To start with, houses are going to be built to the value of one million marks. These houses will be mortgaged to raise further capital, which again will be spent in more buildings in the course of years to come. The whole settlement is intended to house between 15,000 and 18,000 people. The total expenditure is calculated to be about 20,000,000 marks.

The fund was not meant only to benefit employees of the Krupp works, but anyone who cares to live in the settlement. Among the first tenants to whom houses were let, 45 per cent. about, were connected with the Krupp works, the others being officials of the local administration, railway workers and the working classes generally.

The endowment capital of one million marks, as has been said, is destined for the building of houses. A portion of it, however, limited to a total of 250,000 marks, may be loaned out as building money to those who have acquired a copy-hold or hereditary tenure of a building plot.

In the first place, the peculiar position of the ground set aside for the houses of the Margarethe Krupp Fund had to be considered in laying out the plan of the new city, in dividing it up, and in tracing out the streets. The district is charming, rivulets cutting the deep valleys between the rising hills, the whole encompassed by a belt of beautiful forest trees, mostly firs and pines.

The ground plan of the streets has closely followed the contour of the ground, so as to avoid expensive shifting of earth, and in consequence of this practical consideration as is natural, the curve predominates. It should, however, be understood that the

rectilinear street will be adopted, at later building periods, wherever the ground offers a plainer surface, and consequently involves no extravagant costs.

The Margarethe Krupp Settlement has no presumption of being a garden city. It is merely meant to be a quarter or suburb laid out and built on artistic principles, and later to be attached to the city of the Krupps, namely, Essen. Its unique position on the sloping hillside makes it beautiful, and the cheapness of its rentals offers the greatest advantage to those who wish to take the same.

Each inhabitant of the settlement is provided with a garden varying in sizes 70 to 300 sq. meters, and it is one stipulation in taking a house that the garden must be kept in good condition in order that each unit may add to the collective ideal.

In the making of the settlement various difficulties presented themselves, viz., the deep ravine between the city and its offspring, and a railway running on the slope. These conditions at once suggested the idea of overspanning the valley by a bridge, thus creating broad and easy access to the settlement.

The bridge is 170 metres long, 14 metres wide and 14 metres high, built of massive sandstone at a cost of 200,000 marks. Needless to remark, the bridge gives a noble and imposing entrance to the colony. At the entrance of the bridge, two pavilions have been erected, the one as a waiting room for the electric tram line, the other as a refreshment room. All houses have the so-called sitting room-kitchen,

annexed to which is a scullery, reserved for all kinds of work giving off steam and offensive smells. The scullery is to relieve the sitting room-kitchen and secure to the latter good hygienic conditions. Bath, sitting room-kitchen and sculleries have automatic ventilating arrangements.

In planning the bedrooms, the leading idea was to have one large bedroom, all the others to have smaller dimensions for the sake of economy, so that the bedrooms will be more numerous, but small, to make it possible to separate the children by sexes. In Germany the people are obliged to heat their



Entrance to Margarethenhohe, Essen, Germany.

rooms during seven months of the year, therefore particular attention has been paid to the heating arrangements, which are placed in the centre of the houses, so that from one single firing place all the apartments of the houses can be heated.

The kitchen range has been connected with a central stove, so that the waste heat, which ordinarily makes its way into the chimney, is taken to the central stove, where it is completely utilized before going



Inside Garden City, Margarethenhohe, Essen, Showing Mansard Roof Construction.

into the chimney. By this simple arrangement it is possible to heat the whole house during the seasons bordering on spring and winter.

A second reserve fireplace is lodged in the stove, and is supposed to be used during the severe cold of winter. The heat is taken up to the upper stories by sheet iron pipes, each of the rooms being provided with a throttle valve by which the flow of the heat into the room can be put on or off.

A water reservoir is placed in the stove so as to keep the air humid. The heating apparatus is so calculated that in cold weather the temperature of bedrooms can only be raised 12° centigrade, so that the occupants do not get accustomed to too high temperatures. If one of the bedrooms is to be warmed to a higher temperature, other bedrooms have to be cut off.

Successful trials have been made with clothes-drying compartments or wards in which clothes hung up may be dried by the heat of the stove.

To such inhabitants of the settlement who are desirous of obtaining cheap and durable furniture, money is loaned free of interest on the condition that the furniture purchased is good, lasting and artistic in appearance.

The houses of this Krupp Settlement are let at the rate of 200 to 500 marks per year. The calculation is based on the rate of 68 to 100 marks per room.

The cost of building of the several houses, not counting the laying out of the streets, is between 3,500 and 7,000 marks. The building and erection of this colony makes one of the very many steps which are being taken by the Germans to house their people.

Solving the House Problem at Ulm.

In connection with the Krupp improvements at Essen it is interesting to note how the German city of Ulm solves its housing problem.

The United States consular agent at Coburg, Germany, reports that Prof. Atwood, secretary of the American Association of Commerce and Trade, Berlin, has made an interesting report on the housing problem as solved by the German city of Ulm, in Wurttemberg. The city is an important manufacturing centre with about 56,000 inhabitants, and the municipality now owns 80 per cent. of all real estate in and around the city.

When the old fortifications were sold to the municipality in 1902, the authorities immediately seized upon the opportunity to organize a very liberal city planning and housing system. When the inner walls were transferred to the city the ground outside these limits naturally rose in value. In view of the city's great undertaking, combined with the large outlay in buying the fortress, for razing and removing the walls, and for the building of many new streets, the authorities had decided that these improvements could be made on the sole condition that the city treasury and not the former proprietors of the land should benefit by the great rise in real estate. With

this object in view the town council began buying up land as early as 1891. At the close of the year 1908-9 nearly 1,210 acres had been purchased at a total cost of \$1,389,640. Of this land 405 acres had been sold for \$1,623,924, so that the municipality had profited \$234,284 and still owned 805 acres. In addition, the disused fortress, covering 172 acres, was bought for \$952,000, and \$595,000 was spent in purchasing houses in the old part of the town in order to improve sanitary conditions. In all, the city to-day owns 4,942 acres.

The principal points in the plan for developing the city were: To make direct roads from the gates of the old wall to the main roads leading to all parts of the country; to connect the suburb Soeffingen by direct new thoroughfares with the city proper; to build boulevards within the walls; and to build a freight station west of Ulm within easy reach of the city.

It then remained to divide and parcel out the land, which was done as follows: The valley between Ulm and Soeffingen was reserved for all kinds of trade, small industries, and dwelling houses for the general population. In order to economize space, it was decided to build in rows, with space between the buildings. For large manufacturing plants, land was reserved east of Soeffingen, connected with the freight station by a railway line constructed by the town. The same will be done east of Ulm. For workpeople and peasantry of the suburb Soeffingen, land was allotted in the northeast of Soeffingen—the houses to be built at intervals of 17 feet; for ordinary family houses, the hill in the south of Soeffingen—the houses to be 23 feet apart; for villas and more pretentious houses, the hill west of Ulm with houses at intervals of 33 feet; for people of the more prosperous class, the "Michelsberg," a sunny hill north of Ulm—distance between houses to be 47 feet. The woods east of Ulm afford ample opportunity for recreation and sport. Land east of Friedrichsau, near the Danube, has been reserved for a future harbor.

Extensive ownership of land enables the city to keep prices within reasonable limits and to furnish land at a very moderate rate for undertakings of public interest for manufacturing purposes, houses for workmen, etc. Persons purchasing land of the city must agree to build on it within a given number of years, the city having the right to buy back such land at the price originally paid for it, including 3 per cent. interest. Ground for the erection of workmen's houses can always be had at a very moderate price, but solely on conditions excluding personal profit or speculation.

The city itself has built 175 houses with 291 flats for 1,367 inhabitants on the following conditions: The city builds the houses and the purchaser pays the net price, 10 per cent. down and the rest at 3 per cent. interest and 2 per cent. on mortgages. In order to secure for the future low prices for the houses and low renting, the city is authorized within 100 years to take back the houses at the original purchase price if the owner is unable to pay the

interest; if he does not live in the house, but sublets it; or if he wishes to sell the house.

Other houses built under the foregoing conditions have been erected by companies, societies, etc. The Society Anonyme Wohnungsverein has constructed 18 buildings, with 62 flats, at a cost of \$53,274. Flats of two rooms rent for \$41.65 per year, while three-room flats, with kitchen, etc., bring \$57.12. Shareholders are restricted to 4 per cent. interest on their capital. In houses built by the Savings and Building Co., two-room flats rent for \$52.36 and three-rooms, with kitchen, etc., bring \$59.50 to \$90.44. The Unlimited Building Co. builds houses for letting to members. The ground remains the property of the city, which after 70 years is obliged to buy the houses for 80 per cent. of the building value. The houses contain 5 to 10 rooms and cost \$3,808 to \$7,140 without ground. The Kingdom of Wurttemberg, the postal administration, and several industrial works have built houses for employees. Altogether, since 1891, 388 buildings, with 1,006 flats for 5,000 inhabitants, have been built on condition that the letting price can not be increased whenever the price of land rises.

Workmen's Dwellings in New Zealand.

In accordance with an act passed in December, 1910, the Government of New Zealand is now putting into operation a plan for the sale to workmen, in cash installments, of dwellings especially suitable to their use. The new houses, whether of wood, concrete or brick, are intended to be substantial, comfortable, and inexpensive, but not without ornamentation of a quiet character. The following is a description of five types of houses as planned by the Government architect:

In addition to this plan of constructing houses for workers, the Government has had in operation since 1894 a plan of advancing to settlers, either agricultural or suburban, money on first mortgage of lands and improvements, and since 1906 the same plan has been extended to include a system of advances to workers desiring to provide themselves with homes, and offering first mortgages on their homes as security. In 1909, in the State-Guaranteed Advances Act, there were some important extensions and improvements, and the advances to settlers and workers were all put in charge of a special department of the Government called the state-guaranteed advances office. This office has power to raise money for advances to settlers and workers up to the amount of £1,500,000 (\$7,299,750), during any one financial year.

1. A dwelling of four rooms with conveniences, a scullery 7 by 12 feet being counted among the latter. There are two front rooms about 12 feet square, a living room 16 feet 4 inches by 15 feet 4 inches which contains the range fitted with hot-water apparatus, a bedroom 12 feet by 9 feet 6 inches, and a reasonably large bathroom. The front door leads to a hall 4 feet wide and at the back is a lobby containing a coal bunker under shelter. The wash-house, with copper, has two fixed tubs. Price, \$1,380 to \$1,825.

2. Five rooms, planned similarly to the first type, but with an additional bedroom at the back 8 by 9 feet, and slightly more generous proportions. The front elevation is made

attractive with a gabled porch and ornamental glass door. There is a corner fireplace in the front room. Price, \$1,450 to \$1,900.

3. Four rooms; this is distinctive in having a veranda along the whole front, and it will probably be popular because it is of the familiar "square" type of architecture beloved in the colonies. Three bedrooms (one with a fireplace and suitable for sitting room) are 12 feet square, while the dining room is 12 feet by 11 feet 4 inches. Price, \$1,350 to \$1,700.

4. Six rooms; this is the most elaborate of the set, but there is no waste room or over-ornamentation. Most of the money will go to provide actual accommodation. The front elevation shows the bay window of a sitting room 12 by 12 feet, having a corner fireplace, and a veranda 4 feet 6 inches by 16 feet. The hall, 5 feet wide, leads past an arch and then narrows to 3 feet, ending in a glazed door at the kitchen. The living room is 12 feet 6 inches by 15 feet and has a broad window, V-shaped, standing out from the side wall about 2 feet. The three bedrooms are 12 feet 6 inches square, 12 by 11 feet, and 12 feet 6 inches by 11 feet, respectively. The kitchen is 10 feet by 9 feet 6 inches and around it are grouped the washhouse, scullery, and coal bunker. Price, \$1,825 to \$2,200.

5. Three rooms with provision for extension of two rooms if required, at a cost of £75. A recessed corner of the house 3 by 7 feet serves as a modest porch for the front door, and there is a tiny hall 4 by 6 feet. The rooms comprise bedrooms 10 by 12 feet and 7 feet 2 inches by 9 feet 6 inches, and a living room 14 feet 4 inches by 11 feet. Hot water and a bath are provided. Price, \$850 to \$1,075.

Any person, rich or poor, may secure a Government loan for the building of a home, under the plan of advances to settlers, but such loans can not be for less than £25 (\$121.66) or for more than £3,000 (\$14,600). Applications for loans not exceeding £500 (\$2,433) have priority over applications for larger sums. Mortgages are repayable by half-yearly payments of principal and interest combined. They may also be repaid in whole or part at any time. Interest is charged at the rate of 5 per cent., reducible to 4½ per cent., provided payment is made not later than 14 days after due date and no arrears in respect of installments or other payments under the mortgage remain outstanding. Loans are granted on freeholds up to three-fifths of the value of the security, but in the case of first class agricultural freeholds they are granted up to two-thirds of the value. On leaseholds loans are granted up to three-fifths of the value of the lessee's interest in the lease. The loans mature between periods of 20 to 36½ years.

Workers of either sex engaged in manual or clerical work not in receipt of an income of more than £700 (\$973) per annum, and not the owner of any land other than that offered as security, may obtain advances up to £450 (\$2,190) and not exceeding three-quarters of the total value of the security in case of freehold land, or three-quarters of the value of the lessee's interest in the case of leasehold land, and in no case are advances granted which exceed the values of the dwelling houses, nor to applicants who do not take up their permanent residence under security. As in the case of advances to settlers, interest is at the rate of 5 per cent., and reducible to 4½ per cent. if payment is not over 14 days overdue, and the loans run from 20 to 36½ years. The valuation fee is 7s. 6d. (\$1.82).

MARKED ACTIVITY IN BUILDING LINE

Continued from page 113.

however, with the possible exception of those of London and Fort William, detract but little from the general investment. On the other hand, Hamilton emulates her past achievement by recording a total of \$771,000, which is a gain of 134 per cent. or \$500,000 more than was invested in the previous September. Ottawa advanced 72 per cent., and Peterboro' registered an increase of 306 per cent. Other increases noted are: Windsor, 29; St. Thomas, 39; and Port Arthur, 77 per cent. It might be pointed out in this connection that despite their setbacks, London and Fort William made investments of \$114,463 and \$147,500 in order named.

Extensive developments were also experienced in a large number of Western cities other than the three previously mentioned; although respective decreases of 65 and 21 per cent. were noted at Brandon and Prince Albert. Aside from the gains already noted in the case of Vancouver and Nelson, Victoria has an increase of 103 per cent., while North Vancouver undertook operations amounting to \$78,344. In Alberta, all principal centres are ahead. Calgary made a gain of 25 per cent.; Edmonton advanced 117 per cent., while Lethbridge and Medicine Hat annexed respective increases of 29 and 958 per cent. Substantial increases were also made in the three principal Saskatchewan cities, viz., Moose Jaw, 440; Regina, 209; and Saskatoon, 80 per cent., the amounts in each case showing a heavy investment.

Of the three eastern cities, St. John, which notes a gain of 16 per cent., is the only one ahead; Halifax and Sydney both registering respective declines of 86 and 16 per cent. The somewhat optimistic comment on the situation volunteered by Building Inspector Thompson of St. John, that "nothing since Confederation and inauguration of the National Policy looked brighter," indicates that the eastern section has a large volume of important work in prospect. This statement is quite typical of the optimism that prevails in general, and it is quite safe to assume that no serious check in the situation will be felt for some little time to come.

ONLY SECOND TO THE VAST improvements undertaken at Fort William are those projected for Port Arthur, which is the Canadian Northern terminal. The "largest elevator in the world," as it has been called, is to be enlarged to double its size to hold fourteen million bushels of grain, with docks and warehouses commensurate with the increase in trade which this enlargement indicates—will be built. The harbor is one of the best on the Great Lakes and gives ample opportunity for the establishment of docks, in connection with which an immense shipbuilding plant and dry dock is one of the certainties of the future. It has been officially announced that the foundry and blast furnace plants that are located at Port Arthur will be largely extended. The furnace capacity will be doubled and a foundry for manufacturing the product will be

established. In the growth of commercial Canada this lake terminal at Port Arthur and Fort William seems to be destined to lead; its commanding position between the east and west being its most significant feature.

MESSRS. BOND & SMITH, 18 Wellington street W., Toronto, have been engaged as consulting architect by the Niagara Power Company, which, at the present time, is adding a 300 foot extension with a central feature to its plant at Niagara Falls, Ont. The new portion of the building will contain the general offices and the main switch board controlling the general power equipment. It is being carried out in Queenston stone to correspond with the existing structure, and will have a Ludowici tile roof.

A **CONSULTING** structural engineer is necessary to any city, as the majority of architectural firms do not carry on a business sufficiently large or varied to warrant the employment of a structural engineer in their office equipment. Mr. C. R. Young, Lecturer in Structural Engineering in the University of Toronto, and late of Barber and Young, structural engineers, Toronto, has opened an office as consulting structural engineer at 318 Continental Life Building, Toronto. Mr. Young will give special attention to bridges, buildings and foundations.

TRADE NOTES

NO DISCOVERY or development in cementitious materials since the invention of Portland Cement, it is claimed by the manufacturers, equals in importance that which resulted in the production of "Alca" Limes. Modern methods of building construction require that all materials to be used in the work shall be ready for such use without special or lengthy preparation at the building site. With the sole exception of lime, each cementitious material as now placed on the market is thus ready. The invention of "Alca" Lime enables the lime manufacturer to place lime on the market in this ready-for-use form, with the further advantage that "Alca" Lime can be used for making every mortar required in ordinary building construction, as it gives entire satisfaction in all classes of work, giving strength approaching that of Portland cement when used in the laying of the stone foundation walls, plus greater water-proofing qualities, which is also true in the laying of brick work, the cost of laying which is greatly reduced by the ease of working of "Alca" Lime mortars. In interior plastering it is far superior to ordinary limes, or gypsum plasters, while for exterior plastering or stucco, it excels all other materials, being more water-proof, less subject to attack by the elements, or to contraction and expansion through changes in temperature and moisture. With "Alca" Lime these conditions are entirely overcome, and they have the additional advantage of lending themselves to any color scheme

from a pure white to any tint desired, in contradiction to cement stuccoes, which are usually cold and unpleasing in their tint. "Alca" Lime is a mixture of hydrated lime and an aluminous accelerating material in the proportions of approximately 85 per cent. lime and 15 per cent. of aluminous accelerator. This is a combination practically of the old, reliable lime element, plus the active cement element (Calcium Aluminate), and it can be used in any work where cement or lime-gauged mortar is needed. This product is being placed on the Canadian market by the Stinson-Reeb Builders' Supply Company, of Montreal, and is another evidence of this firm's progressive policy which has resulted in the building up of a large and constantly increasing trade.

THE MASTER BUILDERS' COMPANY, with offices in New York, Philadelphia, Cleveland and San Francisco, have established offices in Toronto and engaged A. D. Dame as general sales agent for the introduction and conduct of the Master Builders' Co. method of repairing and resurfacing



A. D. DAME,
General Sales Agent for Master Builders' Company.

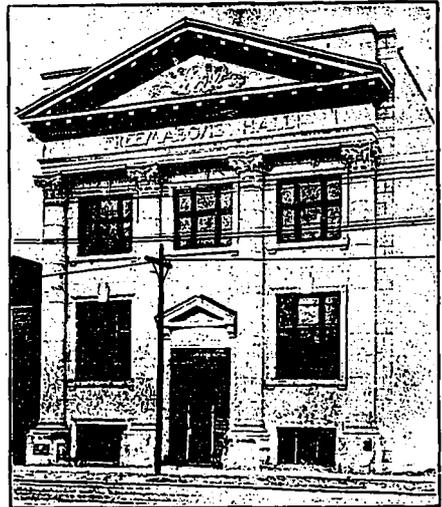
defective or worn concrete floors, and also of laying new floors which are absolutely wearproof, dust-proof and waterproof.

The Master Builders' Co. has been experimenting, manufacturing and testing this method for nine years, and during that time it has been successfully used by many of the largest concerns in the United States, under conditions which were considered impossible. Realizing the enormous field opened in Canada, Mr. S. B. Newman, a member of the company and general sales manager, has spent considerable time investigating conditions and also ascertaining the attitude of those connected with the building interests toward his company's cement surfacing material. Having found a general appreci-

ation, the services of Mr. Dame were engaged, and in the few weeks in which he has devoted his time to the work, a long list of substantial sales have been made to leading Canadian concerns.

The securing of Mr. Dame's services is opportune for he is thoroughly in touch with the building interests throughout the country, his former well-known connection with steel products branch of Steel and Radiation, the Expanded Metal and Fireproofing Co., the Galt Art Metal Co., and the the Metal Shingle and Siding Co., during the past twelve years, eminently qualifying him for his new position. Mr. Dame will make his headquarters in Toronto.

ROMAN STONE has so rapidly gained favor that its substitution for sandstone of the finer grades has become quite general. In the description in **CONSTRUCTION** of last month the facade of the new Freemasons' hall at Toronto was stated erroneously to be "white sand stone," when the material of the facade is Roman stone furnished by the Roman Stone Company, Limited. It meets every struc-



Freemasons' Hall, College St., Toronto. Edwards & Sounders, Architects.

tural and artistic requirement of the architect equal to the best grades of natural stone, and in the case referred to was not found different in texture under casual inspection. It speaks well for the effective quality of Roman stone as its use in so important a structure is a comment upon its stability.

A CHANGE IN DIRECTORY of an important Hamilton concern, the B. Greening Wire Company, the wire rope and wire cloth manufacturers, makes the son of the former President, the late S. O. Greening, who has been acting as Managing Director, President of the company. The company is now officered by H. B. Greening, President and Managing Director; R. H. Merriman, Secretary; F. J. Maw, Superintendent. Mr. Maw is a son of John Maw, who was superintendent on the incorporation of the company in 1889, and retired from active management, but is still on the Board of Directors.

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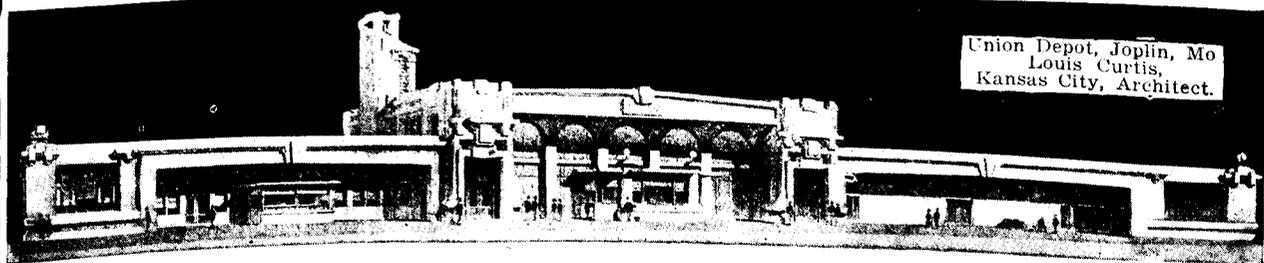
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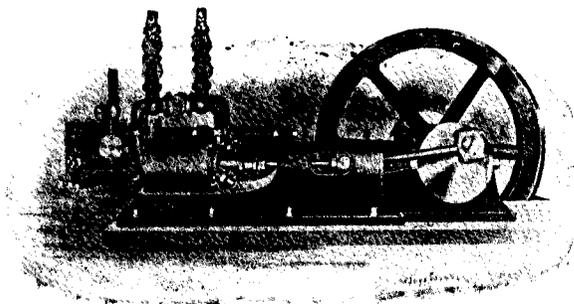
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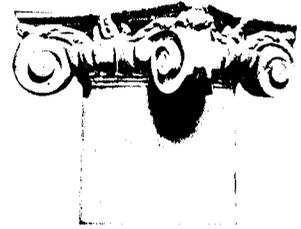
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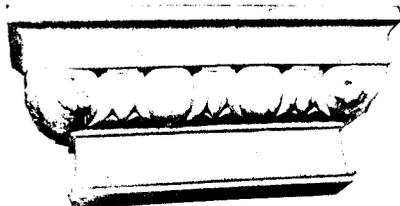


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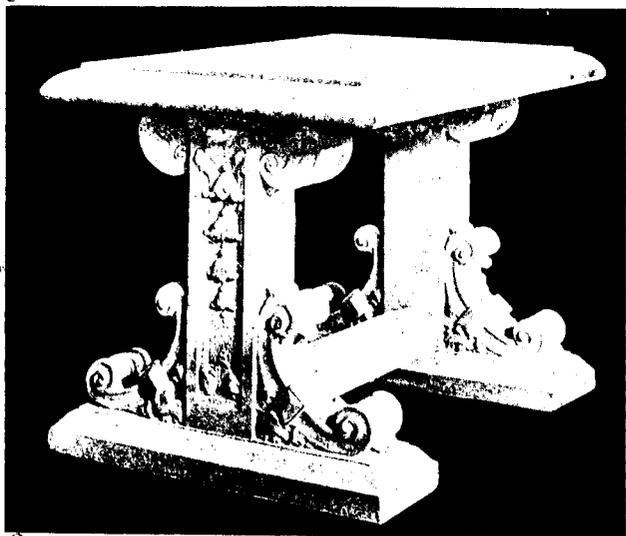
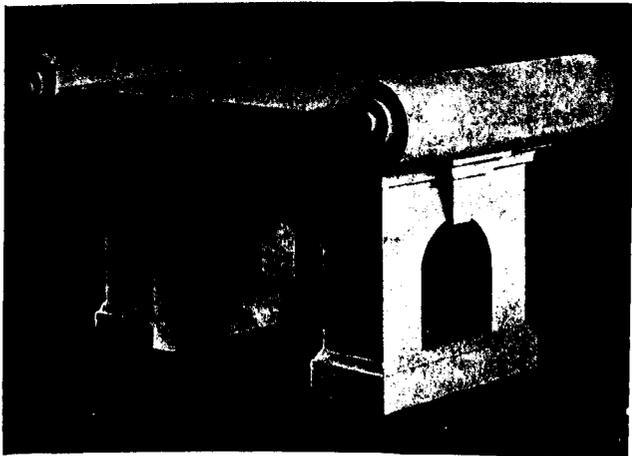


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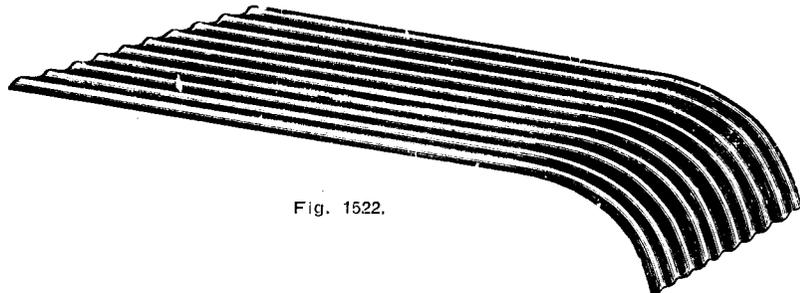


Fig. 1522.

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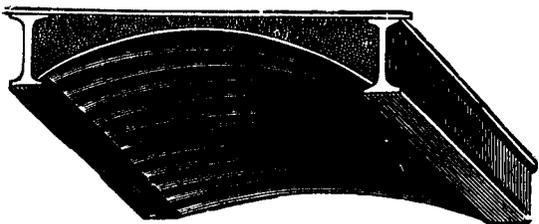


Fig. 1521.

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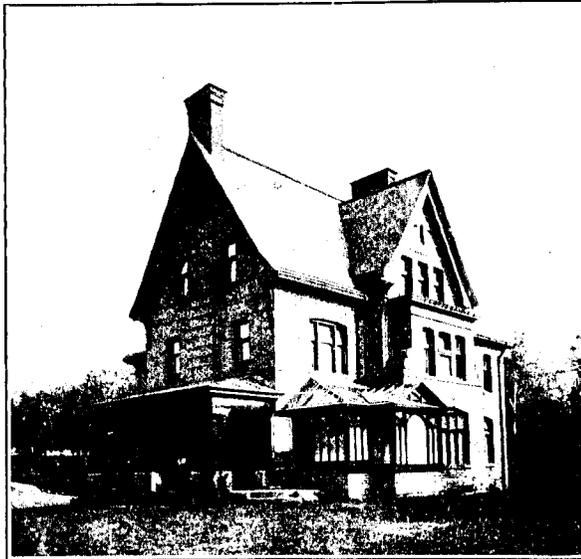
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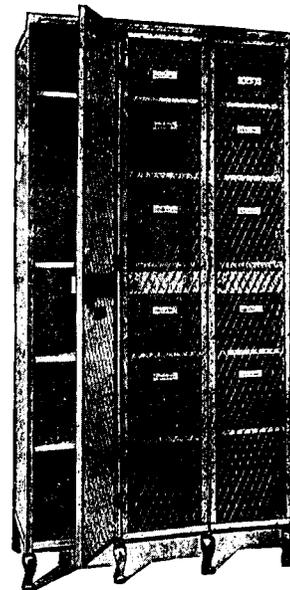
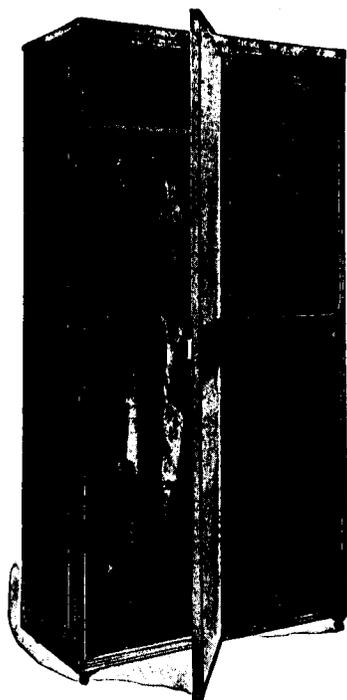


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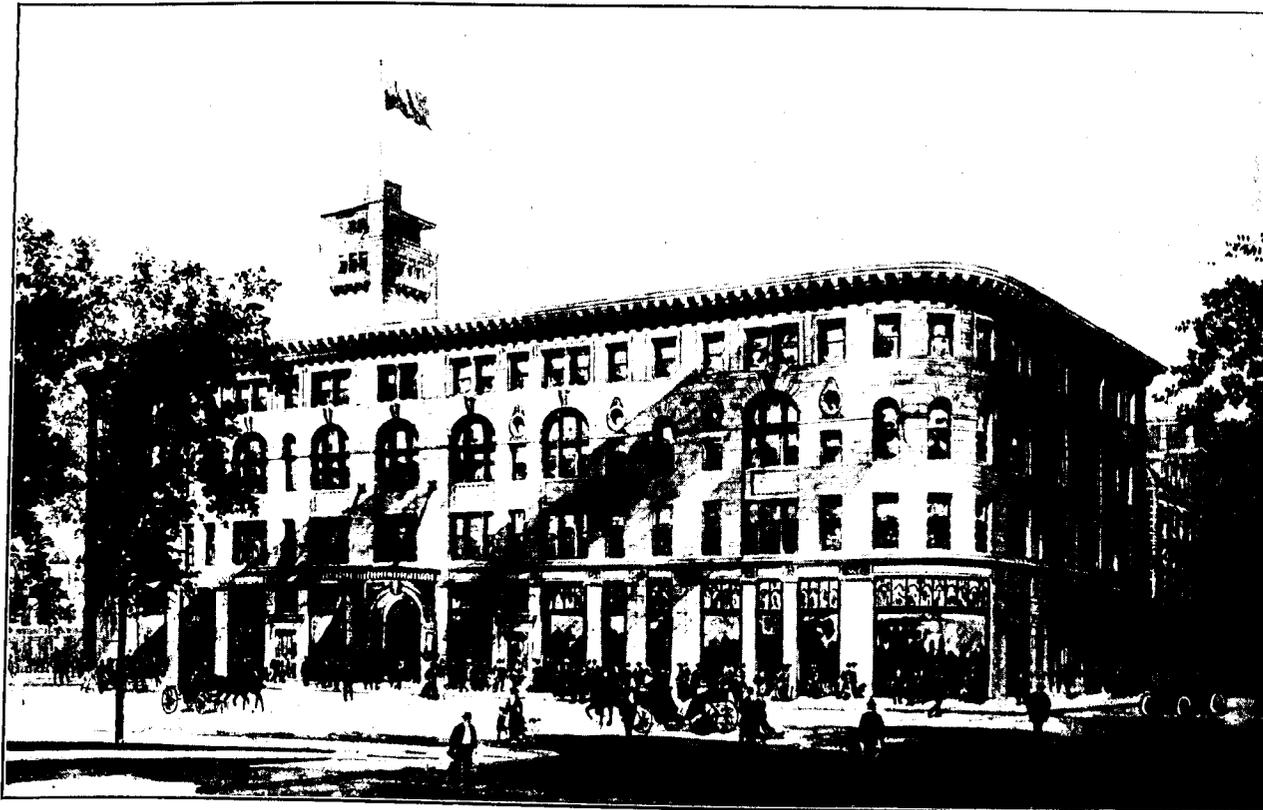
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Downstairs they were pretty particular about the materials used; the fact that Pedlar Metal Lath was used in the ceiling of the ground floor shows just how particular they were.

But upstairs they weren't quite so particular; in fact, they "economized" a little and used ordinary wood lath for the ceilings and partitions.

Shortly before Christmas—just when everything was ready for the biggest business season of the year—the inevitable fire occurred. It broke out somewhere upstairs and gutted everything above the first floor.

The Montreal Fire Department poured in tons of water, every gallon of which, seeking its own level, ran down to the ceiling of the first floor.

In addition to its ordinary capacity of some 50 lbs. to the square foot, every square foot of that

ceiling must have carried some 300 or 400 lbs. additional weight in water.

Then the firemen chopped some holes and allowed the overflow to drain away.

After the fire and in spite of the complete devastation of the upper floors of the building, the ground floor was left in such excellent condition that Henry Birks & Sons, Limited, were able to go right ahead and do without a hitch the big Christmas business they had anticipated.

Some three weeks later the architects were called in and a careful examination was made of that first floor ceiling that had been put up on Pedlar Metal Lath.

Except for the few holes that had been cut to let the water out, the ceiling was pronounced perfectly sound. The holes were patched.

That fire occurred some years ago, and to-day Henry Birks & Sons, Limited, are still doing business under the same ceiling that was put up on Pedlar Metal Lath, and was subject to so severe a test by fire and water.

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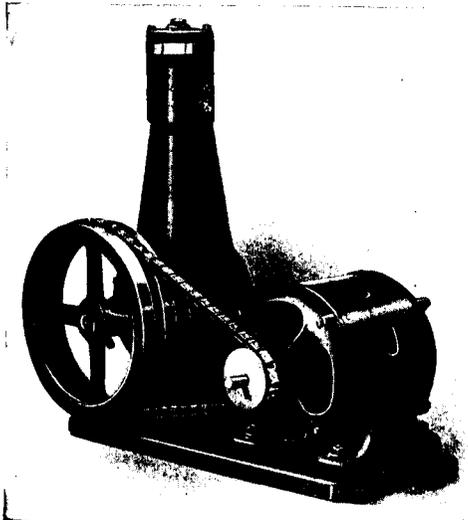
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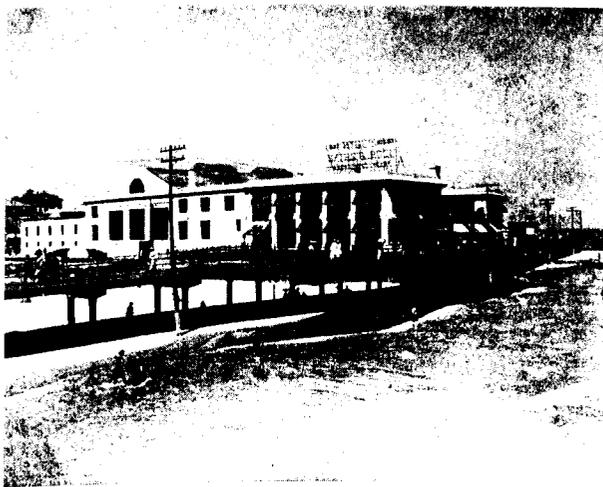
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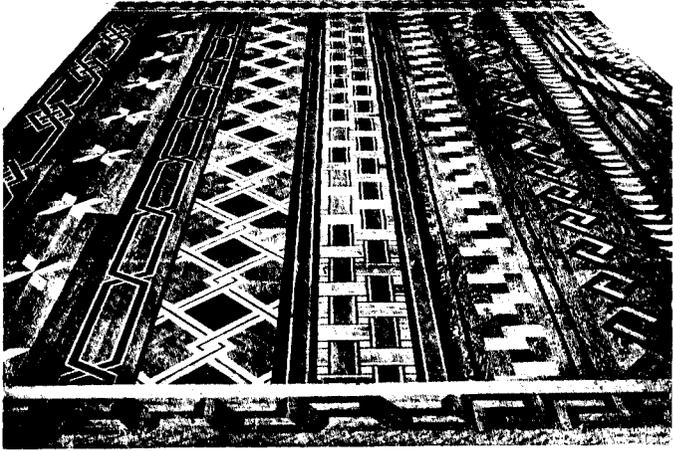
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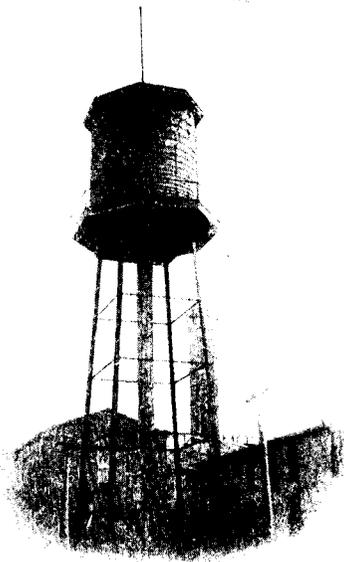
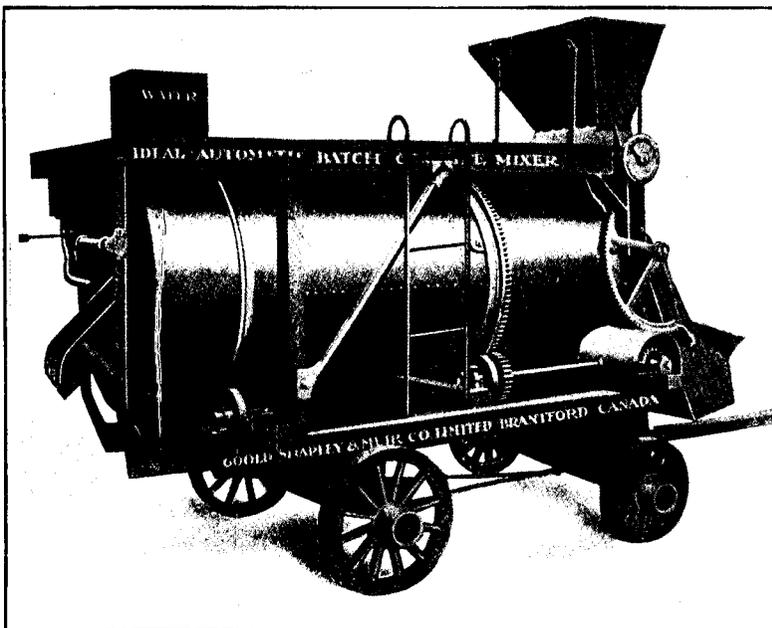
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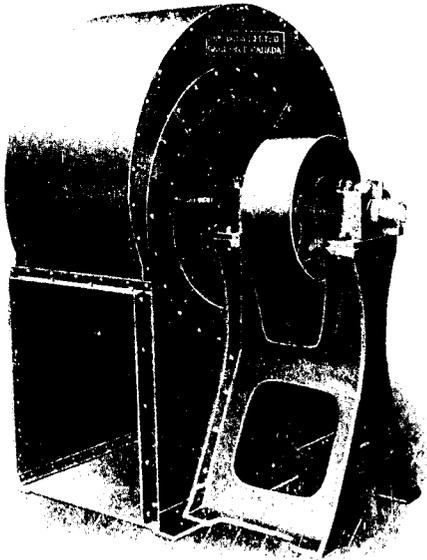


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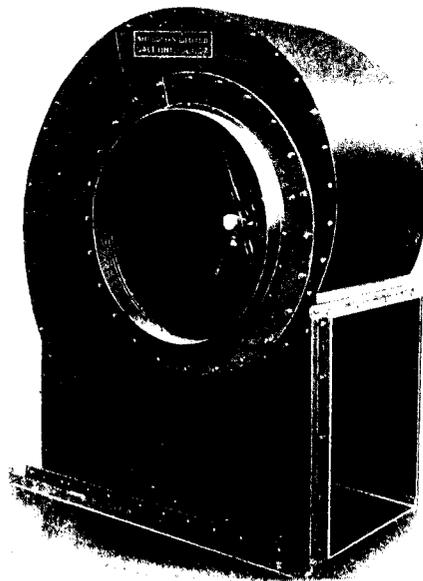
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The
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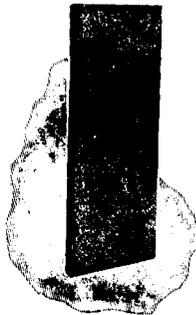
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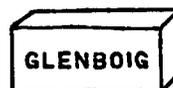
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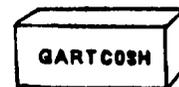
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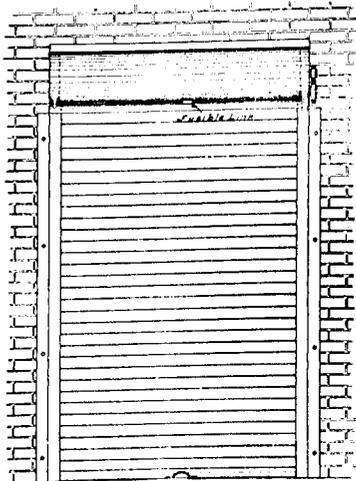
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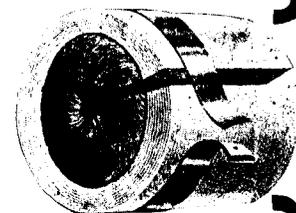
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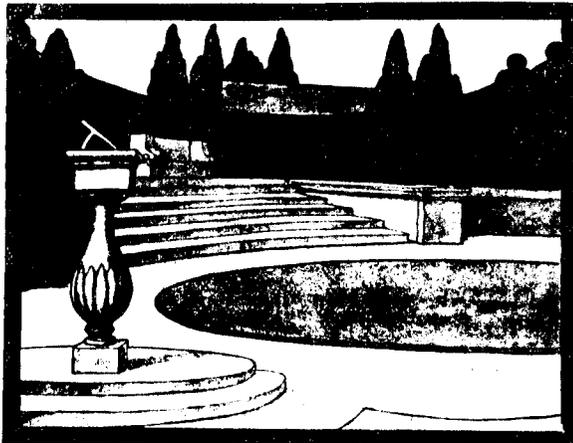
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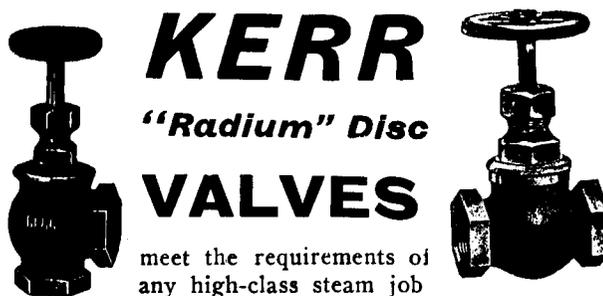
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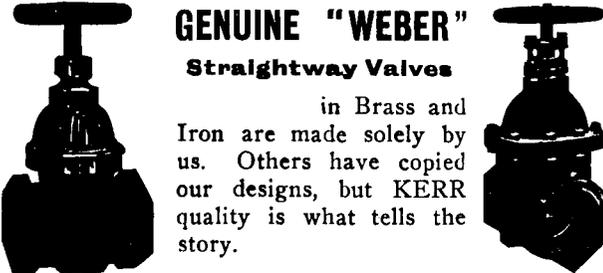


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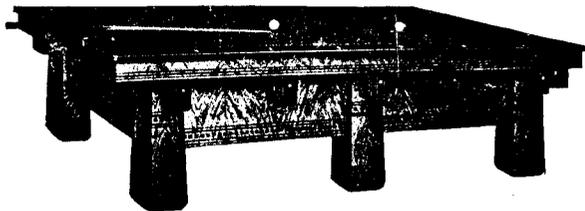
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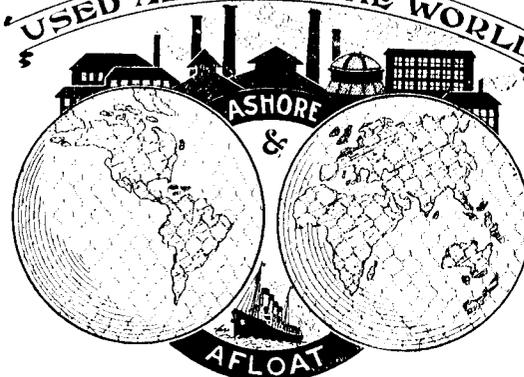
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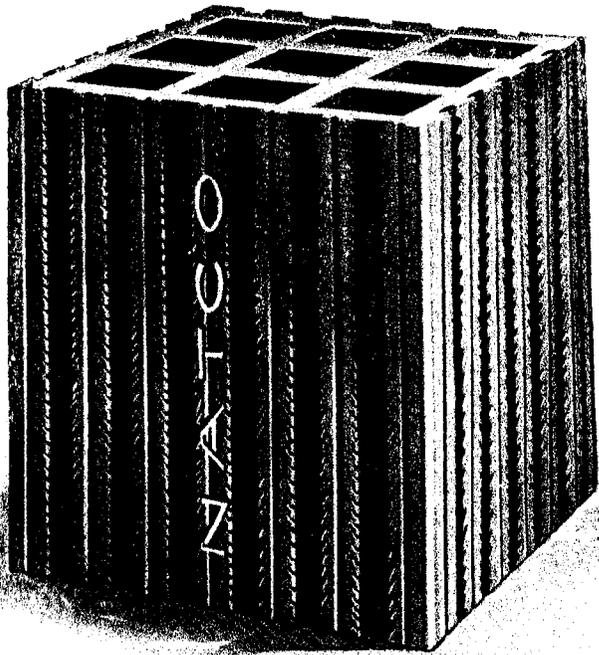
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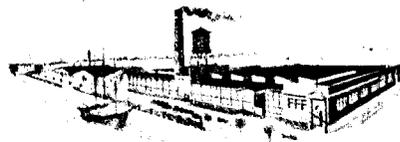
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(a) Regularly inspected and
labeled under the supervision of
Underwriters' Laboratories. (Inc.)

(b) Inspected by Underwrit-
ers' Laboratories (Inc.) under
the direction of the National
Board of Fire Underwriters.

(c) Included in the list of ap-
proved Electrical Fittings issued
by the Underwriters' National
Electric Association.

(d) Inspected and labeled un-
der the direction of the Under-
writers' Laboratories. (Inc.)

(e) Included in the list of con-
duits examined under the stan-
dard requirements of the National
Board of Fire Underwriters, by
the Underwriters' National Elec-
tric Association after exhaustive
tests by the Underwriters' Lab-
oratories and approved for use.

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