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# CONSTRUCTION

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



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You are specifying flat toned oil paints for this purpose. But—

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Do you know Fresco-Tone? It is not merely another in a long line of "same things." It is distinctive. It was deliberately withheld from the market until we were satisfied that it was the *best* for its *purpose*.

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It gives velvety depths of softness to the finished surface. It is decorative in the highest sense. For durability we honestly believe that it has no equal; it may be wiped or washed without its beauty being marred in the slightest degree.

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Please specify Fresco-Tone on an early job. Watch results carefully. We urge you to do this *now* for we believe Fresco-Tone offers you valuable decorative possibilities beyond the ordinary.

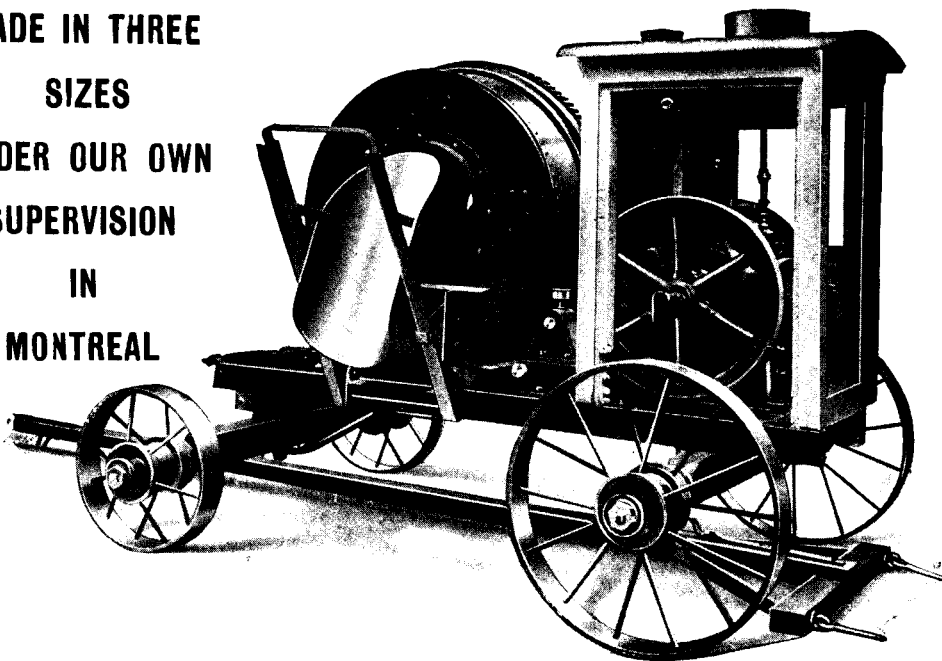
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# Chicago Concrete Mixer

MADE IN THREE  
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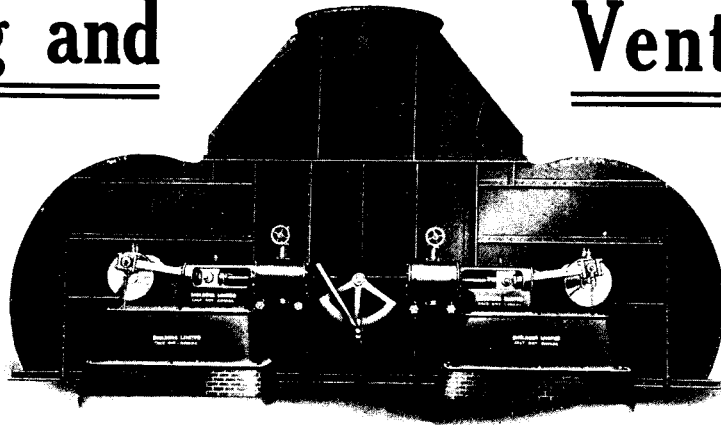
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Sunbeam Lamp Co., Limited, Toronto.  
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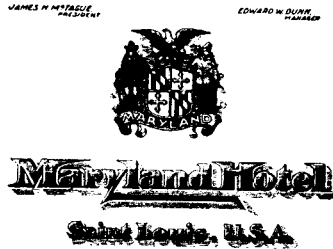
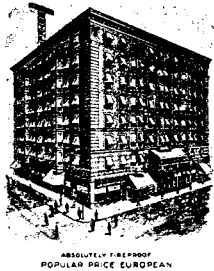
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# Kewanee WATER HEATING Garbage Burner Reduced Hot Water Cost from \$10 to 65 cents per day



January 19, 1912.

Kewanee Boiler Co.,  
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Dear Sirs:-

The Thos. J. Sheehan Plumbing Co. installed one of your #40 Water Heating Garbage Burners in the Maryland Hotel about one year ago---the hotel has two hundred and fifty rooms with 120 baths and 275 Wash Stands and kitchen facilities for feeding 1000 persons daily.

Your Garbage Burner heated all of the water for the entire hotel and kitchen purposes, and also incinerated during the summer months all the trash coming from the building.

We find the expense for operating the Garbage Burner under the above conditions was about sixty-five cents per day, and the installation is perfectly satisfactory.

Yours very truly,

MARYLAND HOTEL CO.  
*E. W. Dunk* Mgr.

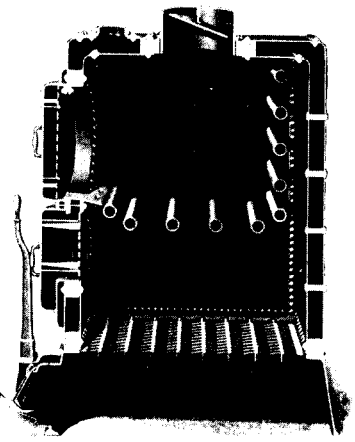
There is a Kewanee Water Heating Garbage Burner just right for the biggest hospital or hotel or apartment, down to the smallest. Write us TO-DAY and we will send you a catalogue describing them fully.

## A LETTER---and some facts about the installation

The Maryland Hotel has an accumulation of about 20 barrels of garbage and refuse every day. This is now burned in a No. 40 Kewanee Garbage Burner. Cost for fuel, 65 cents per day.

Sufficient water is heated for entire hotel, including restaurant (1,000 meals capacity), barber shop, saloon, and several stores.

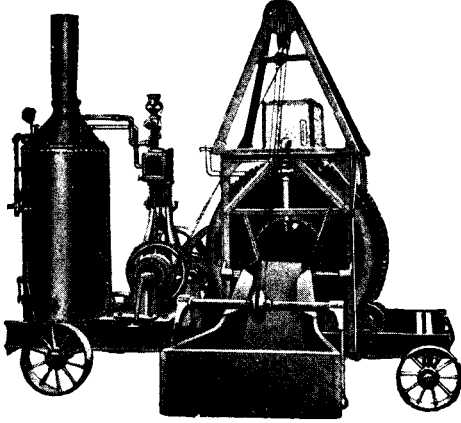
This Garbage Burner replaced two gas water heaters that cost to operate from \$10 to \$12 per day.



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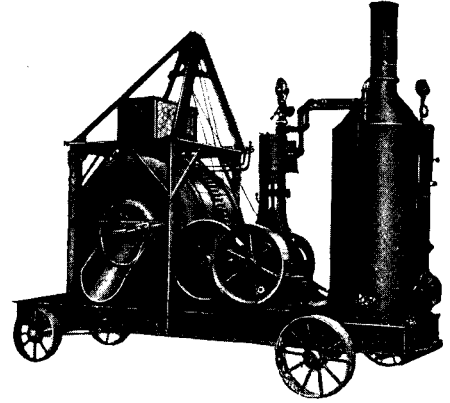
Toronto Montreal Winnipeg Hamilton Calgary Vancouver St. John

## Concrete Mixers Must be Built Strong and of the Best Material



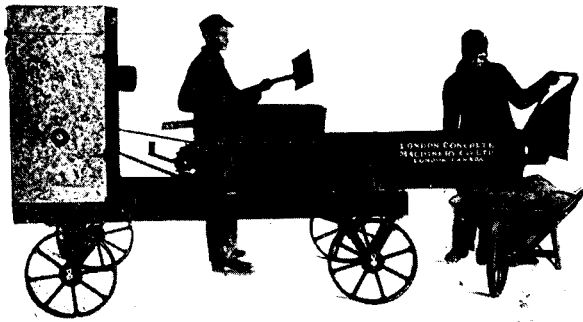
London Standard Drum Batch Mixer

The First Cost  
of a Concrete  
Mixer is only a  
small item if it  
is continually  
breaking down



London Standard Drum Batch Mixer

## The London Mixers are Built up to a Standard---Not Down to a Price

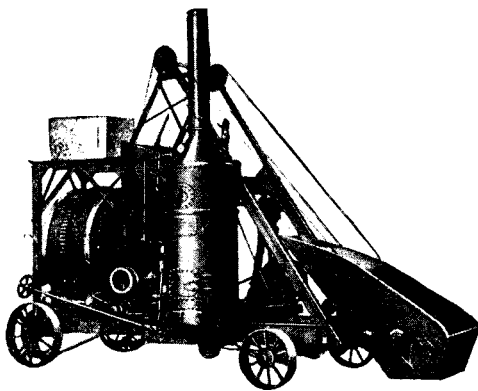


London Mortar Mixer



London Automatic Batch Mixer, No. 1

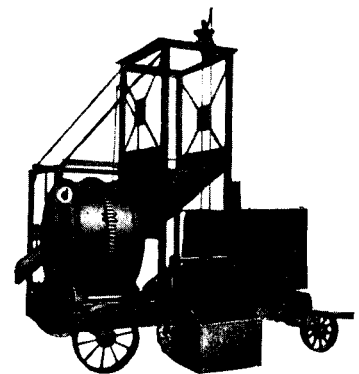
By manufacturing on a large scale we have been able to sell High-Grade Machines at Remarkably Low Prices



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We manufacture a  
Complete Line of  
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for every contractor



London Special Paving Mixer, with  
Front Loader and Rear Discharge

## The London Concrete Machinery Co., Limited

Cabell St. and Kitchener Ave., London, Ont., Canada

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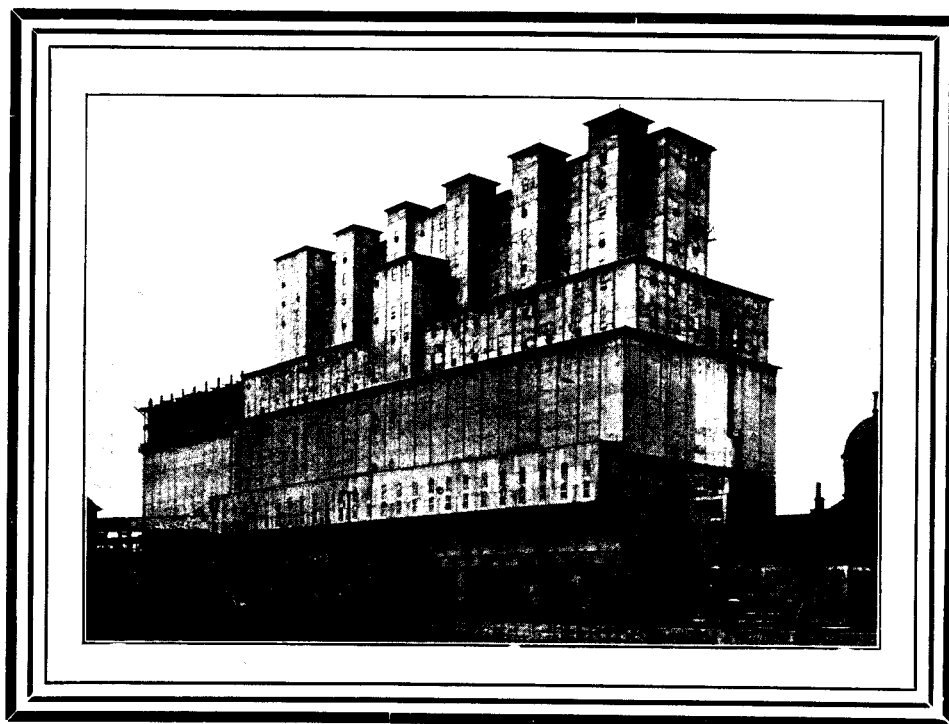
AGENTS

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HAMILTON MACHINERY CO., Calgary, Alta.  
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**T**HE new grain elevator, just completed by the Harbor Commissioners of Montreal, is one of the largest in the world.

It stands as one of the greatest monuments to Canadian progressiveness, and also to reinforced concrete, which material was used throughout.

Only a cement that fulfils the most exacting requirements could have satisfied the Montreal Harbor Commissioners for this great structure.

Canada Cement satisfied every requirement. Every one of the thousands of barrels used was up to the high standard specified.

Yet it was the regular product of our mills—the same kind of cement that is in every bag and barrel bearing our label.

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## CANADA CEMENT COMPANY

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We are prepared to suggest and exhibit outfits for houses, schools, offices, factories, warehouses and public institutions of every character.

We pride ourselves on having the most up-to-date showroom in Canada.

***Let us show it to you.***



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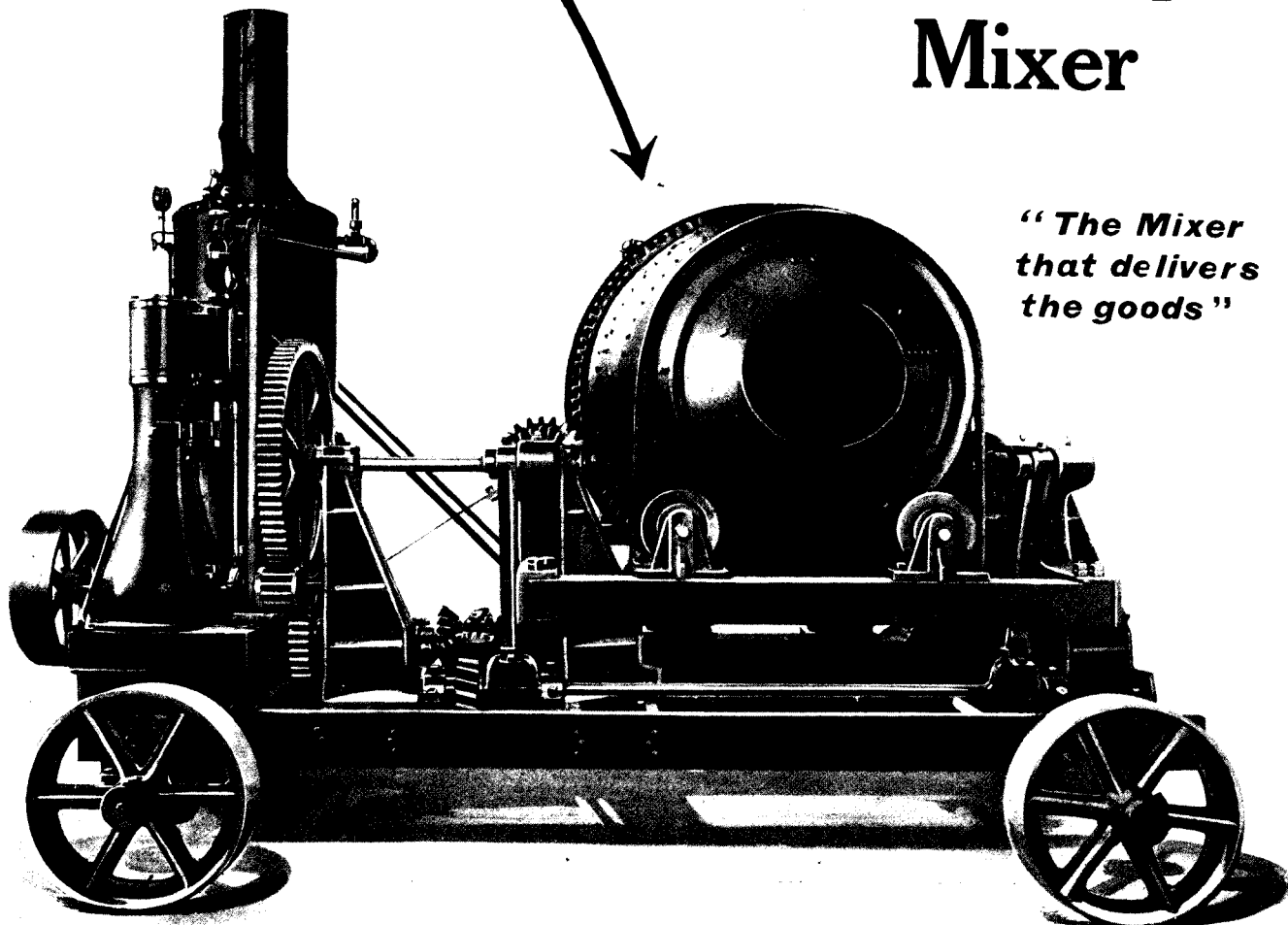
ST. JOHN  
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WINNIPEG  
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**WETTLAUFER  
HEART-SHAPED  
MIXER**

# This is the Heart-Shaped Mixer

*"The Mixer  
that delivers  
the goods"*



## "WETTLAUFER"

If you have never seen the Wettlaufer Heart-Shaped Mixer at work, you have no idea of what a money saver it is.

In all our showrooms we are daily showing contractors how quickly, smoothly and accurately it does its work and the number of machines we have already sold for this season proves that practical tests back up all our claims.

Our specially constructed Heart-Shaped Drum gives a more even mixture in a shorter space of time than any other type. Every bit of machinery is built to withstand the hardest kind of usage. On road work some of our machines have worked for a whole season without laying up once for repairs, and as they require no expert handling, it will be easily seen where they save money in labor costs. Have our nearest agent demonstrate them for you.

We will send you our catalogue on Hoists, Pumps, Stone Crushers and Tile, Block and Brick Machines.

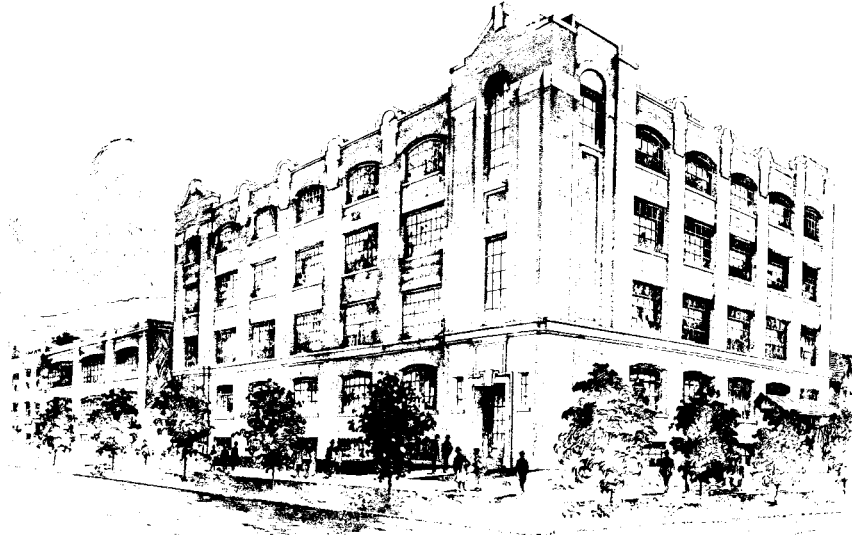
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# Turnbull Elevators



COPP CLARK CO., LTD.  
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Wickson & Gregg  
Architects

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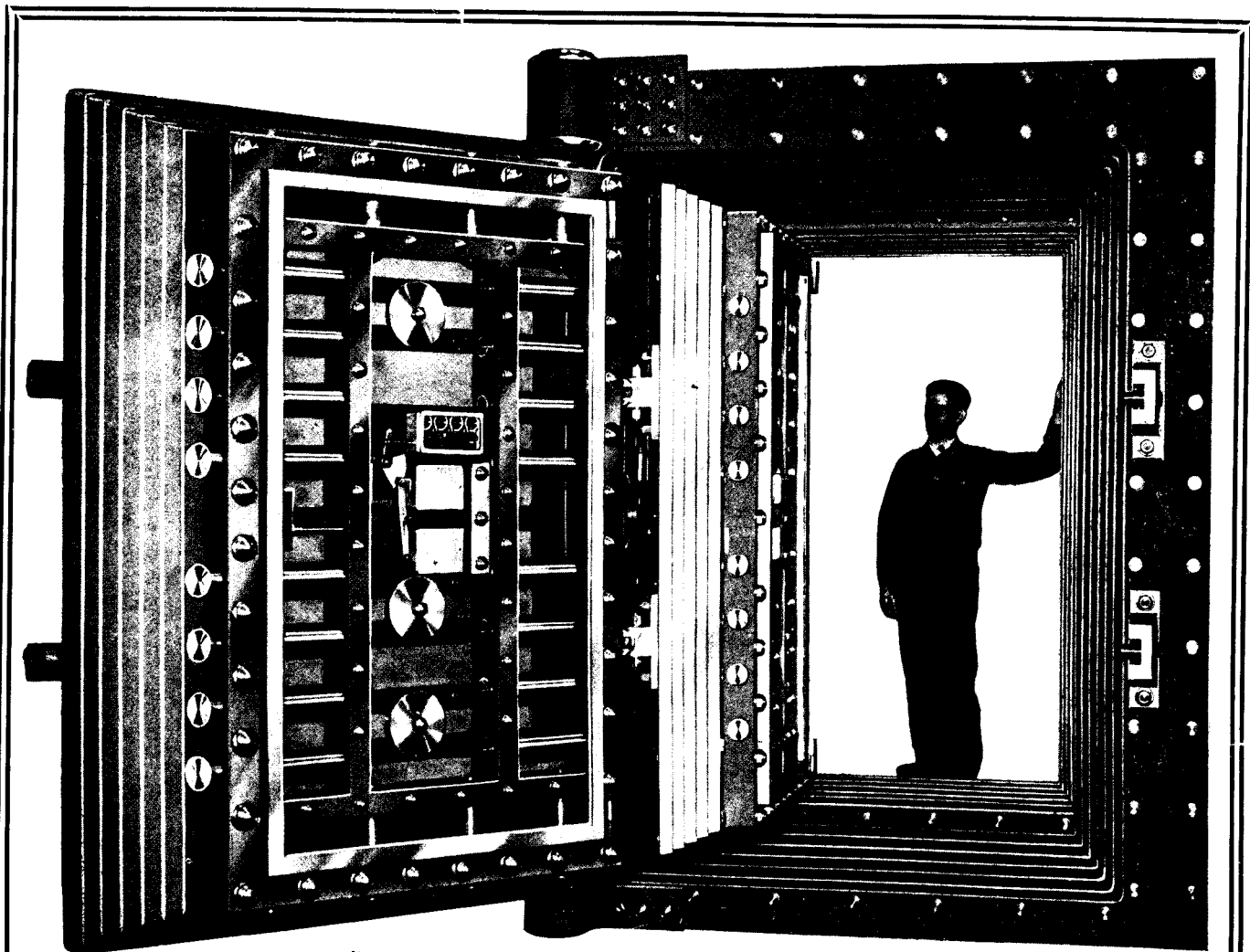
This new factory building is equipped  
with "Turnbull" Freight Elevators.

This is our specialty —      tors  
for warehouses and factories.

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**The Turnbull Elevator Mfg. Co.**  
TORONTO, ONT.

Represented by—A. R. Williams Machinery Co., St. John, N. B.; General Supply Co., Ottawa; Wm. Kenney, 405 Nanton Block, Winnipeg;  
Northwestern Electric Co., Regina; Cunningham Electric Co., Calgary; Geo. E. Brennan & Co., Vancouver.



Doors as set up in Toronto Factory before shipment.

Descriptive article on Bank of Montreal, Winnipeg, including vault construction, will be found on page 130.

## 50 Ton Entrance Vault Doors

Two sets of the above vault doors were recently installed in the Bank of Montreal, Winnipeg. When completed these were the **HEAVIEST VAULT DOORS ON THE CONTINENT.**

The following details may be of interest :—

Outer door,	18 inches thick,	weight 18 tons
Inner	“ 8 “ “ “	8 “
Vestibule	“	24 “

Total weight of steel in vault doors and steel vault lining, 450 tons.

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Established 1855

# Some Recently Erected Toronto Apartment Houses in which DON VALLEY Products Were Used

**A**PARTMENT HOUSES always represent a considerable investment of money both in the cost of site and structural outlay, and as their sole object is to produce revenue, it is necessary that they be erected and occupied with the least possible delay.

Buildings of this type are a comparatively new development in Toronto, but such as have already been constructed have in the most notable cases been built with Don Valley Products.

The texture and structural stability of Don Valley Bricks places them in big demand for buildings of any class and the large scale on which they are produced, enabling speedy deliveries of the largest orders, is a feature that commends them for Apartment House building.

Don Valley bricks and porous Terra Cotta Fireproofing are not excelled by any clay products on the American continent. Used by Canada's foremost architects and builders, they have produced buildings that are creditable productions of Canadian architecture.



"College Heights" Apartments. St. Clair Ave. and Oriole Road. Edwards & Saunders, Architects. Wm. Hall & Sons, Mason Contractors.

Head Office  
36 Toronto St.  
TORONTO

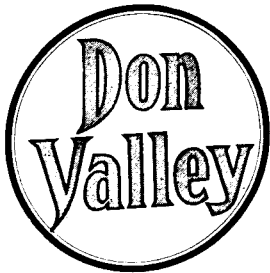
# DON VALLEY



Westminster Apartments, Jarvis Street. Langley & Howland, Architects. H. M. Dancy, Mason Contractor.



Wellsboro Mansions, Jarvis St. Redmond & Beggs, Architects. F. W. Weale, Mason Contractor.



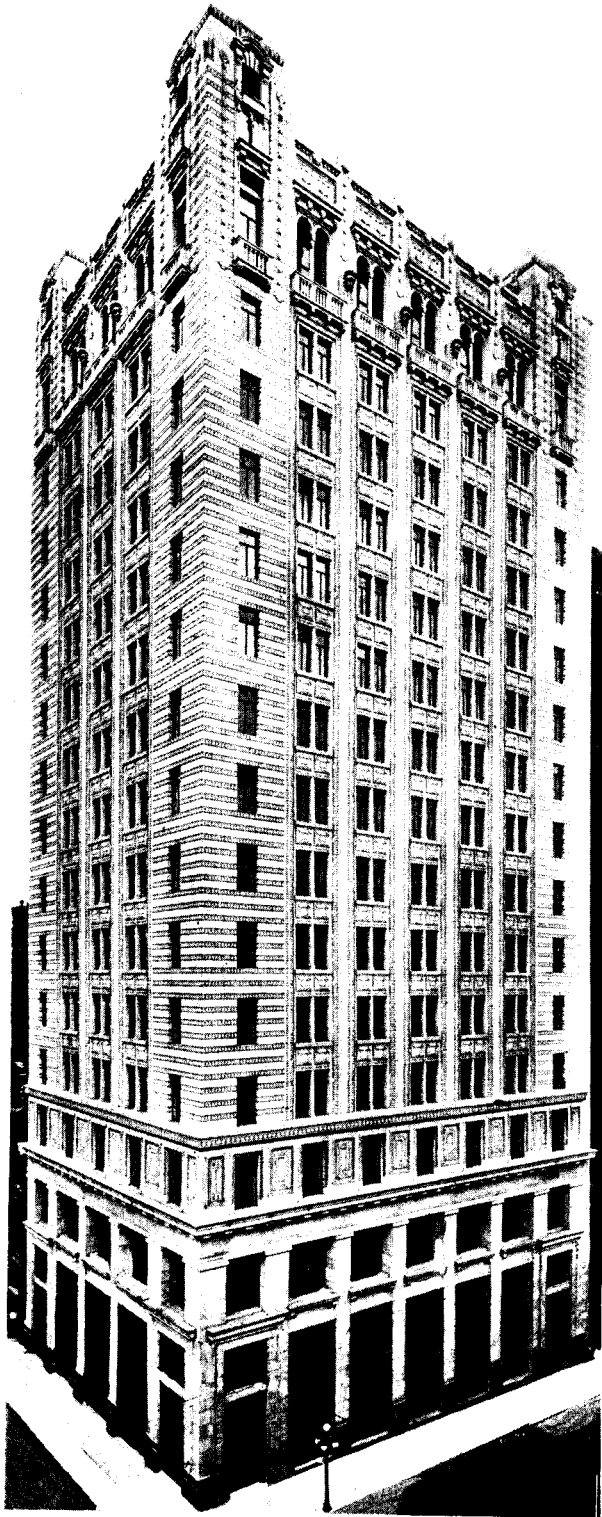
Park Apartments, Winchester and Metcalf Sts. Henry Simpson, Architect. Jas. Wickett, Ltd., Mason Contractors.



Willard Apartments, King St. and Triller Ave. Henry Simpson, Architect. Holtby Bros., Mason Contractors.

# BRICK WORKS

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The finest examples of modern construction in Canada are almost universally supplied with

## PEDLAR'S METAL LATH and CORNER BEAD

for the plaster work. The lath may be had in several gauges and materials. The Corner Beading for angles, arches, etc., may be had in several special forms to suit the project.

The Canadian Pacific Railway Building uses the above Pedlar specialties exclusively in all plaster work on the building where the specifications call for metal lath and corner beading.

Prompt deliveries may be had on any fire-retardant specialties for building: Pedlar Brick Wall Plugs, Brick Wall Bonds, Metal E and T Studs, Metal Track, Clinton Fabric, Metal Reinforcement, Vents, Skylights, Shingle, Ferro-Dovetail Plate for concrete roofs and false ceilings in concrete, etc.

*Write for Specifications to meet Construction you have in hand or planned.*

C.P.R. Building, Toronto. Darling & Pearson, Architects.

# THE PEDLAR PEOPLE LIMITED Est'd 1861

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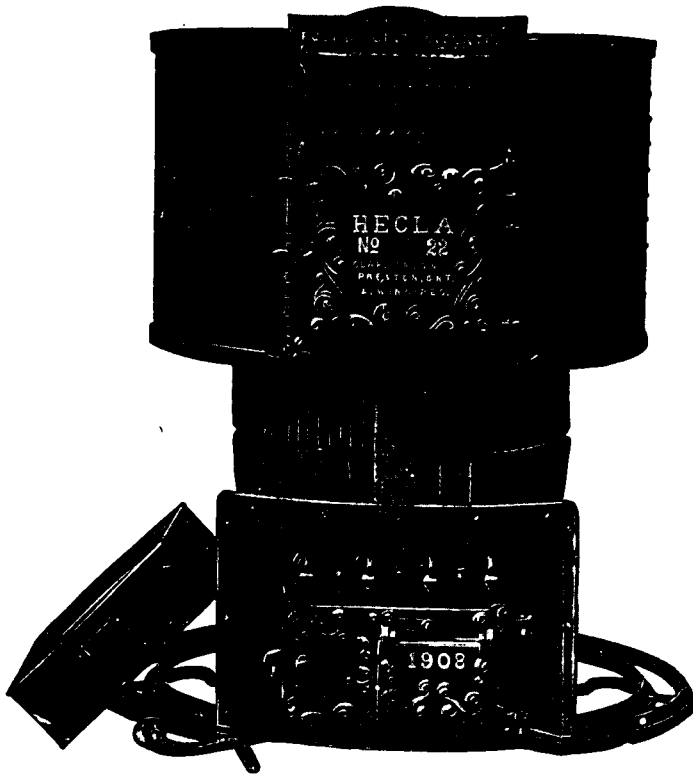
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## FOR COAL OR WOOD



The requisite for a successful Warm-Air Heating System is a good furnace; one that will not only supply an abundant quantity of pure warm air; but will, in addition, be economical in the consumption of fuel, easy to operate, safe from dust and smoke, and that will give the greatest length of service. Some cheap furnaces fulfil one or more of these conditions, but the furnace you want must fulfil all. That is what the HECLA does.

### "HECLA" FEATURES

- Automatic Gas Damper prevents gas puffs.
- Gravity Catch locks door every time you shut it.
- Double Feed Door for convenience when burning wood.
- Damper Regulator enables you to operate the dampers without going to the basement.
- Dust Flue carries all the dust up the chimney.
- Water Pan in the best position for effective service.
- Large Ash Pan with handle.
- Double Tin and Asbestos Lined Case to prevent the loss of heat in the cellar.

**STEEL RIBBED FIRE POTS**  
**INDIVIDUAL GRATE BARS**

**PATENT FUSED JOINTS**  
**CAST IRON COMBUSTION CHAMBER**

# Clare Bros. & Co., Limited

## PRESTON, ONTARIO

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# "Standard Sanitary"

## Porcelain Enameled Lavatories

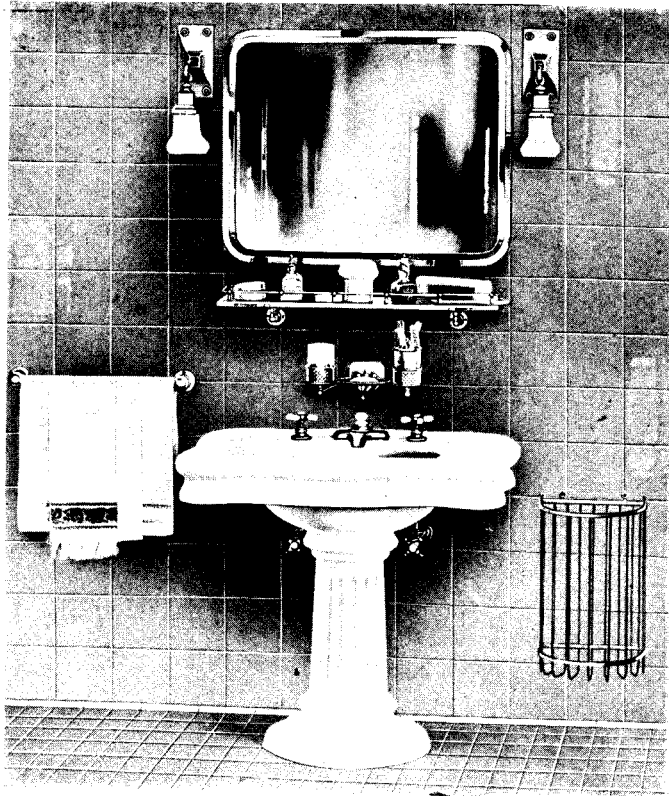


Plate P 3070 X

"Standard Sanitary" Porcelain Enameled "Dallas" Lavatory with Slab, Oval Bowl and Rear Outlet and Apron all in one piece, supported on Porcelain Enameled Fluted Column Round Pedestal, fitted with P-10251 "Alton" Compression Combination Supply and Waste Fitting: 1/2 in. P-10427 Supply Pipe and 1/2 in. P-10463 "P" Trap. Lavatory furnished enameled all over only.

THE "Standard Sanitary" line of porcelain enameled Lavatories comprises the largest assortment of designs on the market, all of which are of first quality of manufacture, highly sanitary and warranted against defects in material and workmanship.

Every genuine "Standard Sanitary" Lavatory bears the "Standard Sanitary" Green and Gold guarantee label. Without this label it is an inferior substitute and should be rejected.

For the convenience of architects, plumbers and prospective builders, we maintain Showrooms at Toronto and Hamilton, where "Standard Sanitary" Lavatories and plumbing fixtures for every requirement may be inspected and information regarding their efficiency and adaptability obtained.

### Standard Sanitary Mfg. Co.

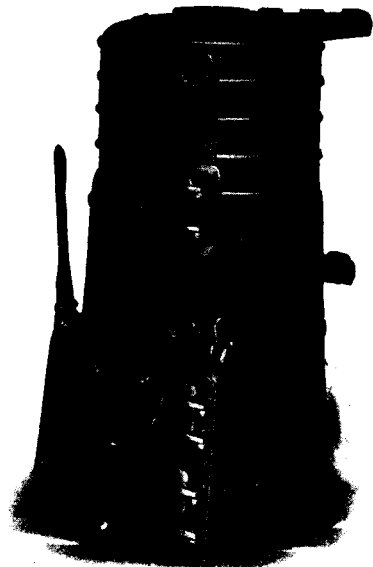
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TORONTO STORE  
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HAMILTON STORE  
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# STEEL AND RADIATION, LIMITED



NO. 6 H. B. "KING"

OUR PRODUCTS :

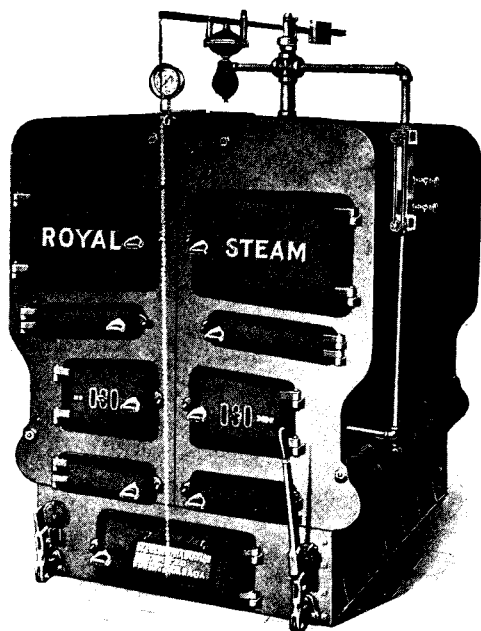
- "KING" HOT WATER BOILERS
- "ROYAL" ROUND STEAM BOILERS
- "ROYAL" SQUARE STEAM AND WATER BOILERS
- "ROYAL" TANK HEATERS
- "KING" AND "IMPERIAL" RADIATORS

Specify our products as outlined above and insure for your client "Satisfaction" and "Prompt Shipment".

From present indications the demand for Boilers and Radiators will be greater than last year.

We are better equipped to meet this demand than any other manufacturer, with our new and modern plant at St. Catharines together with our Toronto Plant running night and day. Our output has been more than doubled.

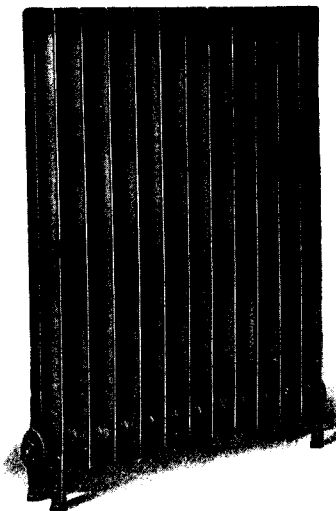
The "KING" Hot Water Boiler is favored and accepted everywhere as representing Efficiency of the highest type at lowest coal consumption of any boiler on the market.



S-48 7 "ROYAL" STEAM

Our "ROYAL" Round Steam and Square Sectional Steam and Water Boilers are already repeating the success of The "KING" Boiler.

"KING" Radiators are so well and favorably known that it is only necessary to mention them.



"IMPERIAL" ONE-COLUMN

We would draw attention, however, to our New "IMPERIAL" Radiator made only in one and two column plain, in every height. See Cut showing clear cut lines and clean smooth castings.

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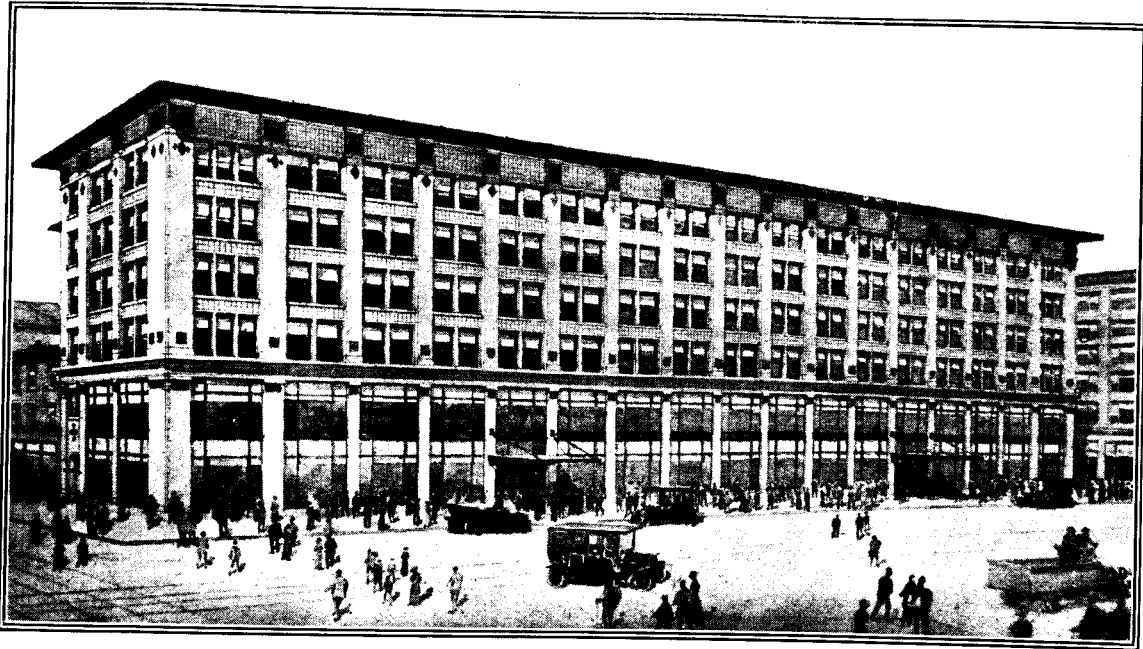
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Agencies In All The Leading Cities of Canada.

# KAHN SYSTEM



## The Scroggie Building, Montreal

(Belgo-Canadian Company)

Now in course of construction, according to plans prepared by Mr. D. J. Spence, architect.  
P. Lyall & Sons Construction Co., Ltd., General Contractors.

**L**IKE practically all important structures now in course of erection in Canada, it is being constructed according to the *Kahn System* of reinforced concrete.

It will pay you to investigate why *Kahn System* is used in this and many other prominent buildings in Canada.

### Our Products Include—

*Kahn Steel Sash,  
Hy-rib, Rib Metal,  
Kahn Bars, Rib Bars,  
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*Truss Con. Chemical Products for Waterproofing and  
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## Trussed Concrete Steel Co., of Canada, Ltd.

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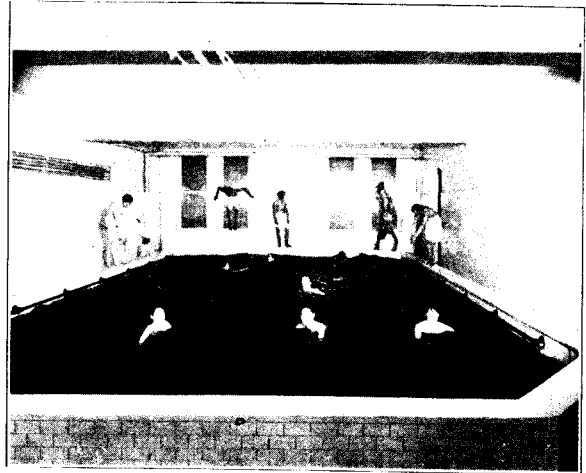
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***In Western Canada***

**Medusa Waterproofing is used with great success.**

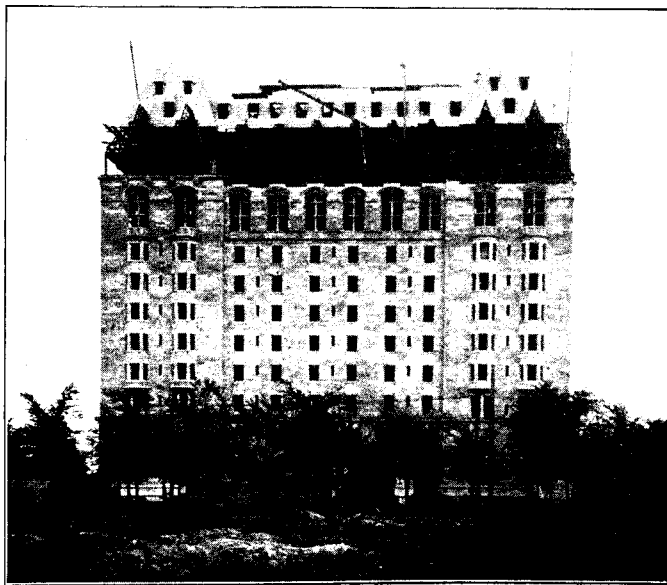
The immense amount of building now in progress in Western Canada and the comparative scarcity of suitable building materials has created a great field for the practical application of cement construction.

Medusa Waterproofing, by correcting cement's worst fault, its tendency to absorb moisture, makes it the ideal building material for use in that country and it will increase in popularity as it becomes more widely known.



Y.M.C.A. Swimming Pool, Port Arthur  
Waterproofed with Medusa Waterproofing

# MEDUSA WATERPROOFING



Fort Garry Hotel, Winnipeg  
Architects, Ross & MacFarlane      Contractors, Geo. A. Fuller Co., Ltd.  
30,000 lbs. "MEDUSA" Waterproofing used in this building

**Reliable, Permanent  
Waterproofing Re-  
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MEDUSA Waterproofing is supplied in 40 lb. sacks in any quantities desired. Special prices will be quoted in lots of one ton or over. But a small quantity is necessary to make concrete waterproof under ordinary conditions and a slight increase in the quantity will make swimming tanks, reservoirs, or work subject to heavy water pressure, absolutely impervious to dampness, to say nothing of water.

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Manufactured by

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Tenth Floor, Eastern Townships Bank Bldg., Montreal, Que.



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## Vancouver's New Apartments

The "Caroline Court," Vancouver's new apartments, were erected at a cost of \$140,000.

J. P. Matheson & Sons designed this building, which is thoroughly modern in all its appointments.

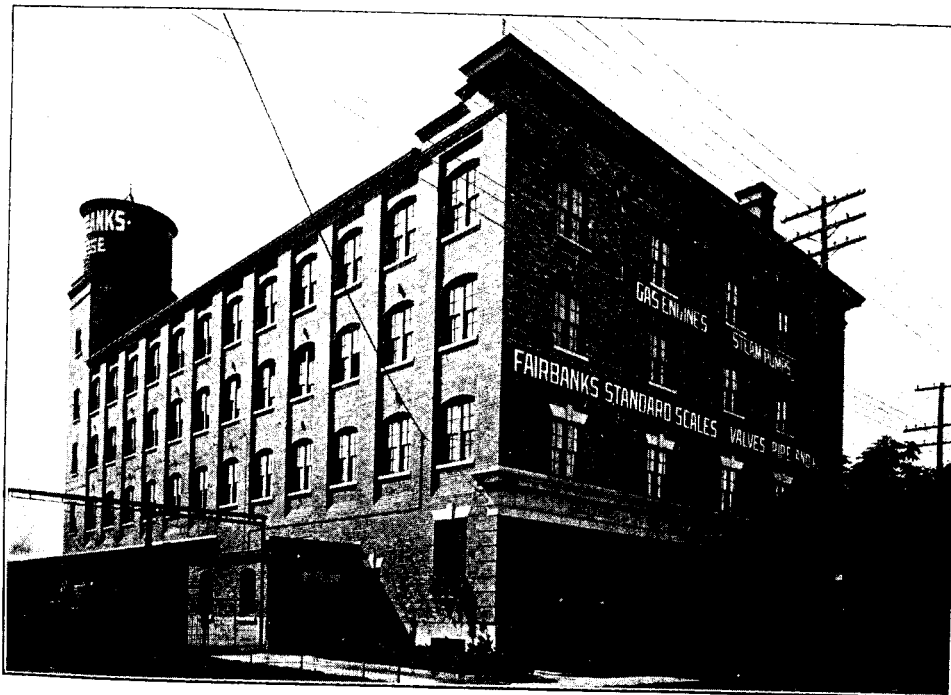
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Architect, T. Pringle & Son, Ltd.

## WIRE CUT AND PRESSED BRICK

Our plant has a capacity to meet any order.

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## ACORN QUALITY FIRE-PROOF WINDOWS



**W**E claim for this window that it is the only one on the market to-day that is absolutely **wind-proof** as well as **fire-proof**. This is accomplished by the flange setting into the rabbit  $\frac{7}{8}$  inch, which not only forms a perfect wind break, but does not interfere with the working of the sash.

The whole window is stamped by steam power, with steel dies, so that all parts are uniform.

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We feel sure of your decision.

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of metal ceilings, corrugated iron, metal sidings, plasterers' corner bead, eave troughs and sundries; also a full stock of galvanized flat sheets is now being carried in our new ware-rooms.

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**LINDE-BRITISH  
REFRIGERATION  
COMPANY LIMITED**

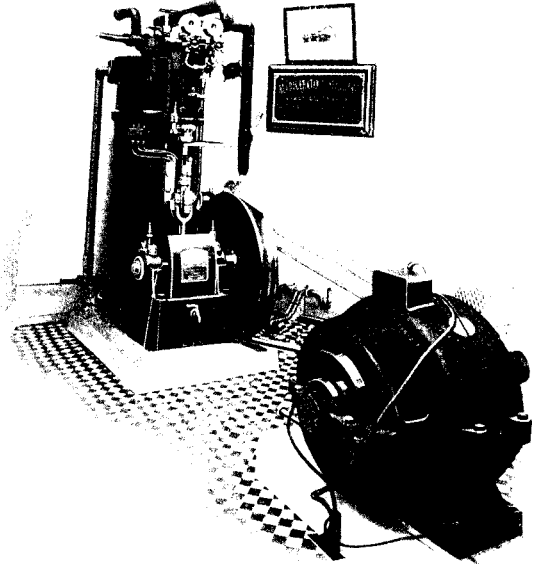
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"The Modern Method"**

- Temperature as desired.
- Ice-making if required.
- Need only unskilled attention and small floor space.
- Clean and absolutely safe.
- Always available.
- Delivery of most sizes from Montreal stock.

The illustration shows the Linde British Carbonic Acid Refrigerating Plant as installed in

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**ESTABLISHED**  
In Great Britain 27 years - In Canada 18 years  
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**A Stucco Uniform in Texture**

J-M Asbestos Stucco, being composed of Asbestic (which consists of ground asbestos rock and fibres), combined with Portland Cement, forms an exterior finish which is uniform in texture. This stucco also possesses elasticity, which prevents chipping, cracking and crumbling.



Residence of Mr. J. S. Stehlin, Long Beach, L.I. Covered with J-M Asbestos Stucco. Kirby, Pottit & Green, Architects.

**J-M Asbestos  
STUCCO**

dries with a pleasing gray-white effect that does not tarnish or discolor with age. Water or the most severe climatic changes do not affect it.

It can be worked in many texture effects.

The covering capacity of J-M Asbestos Stucco is greater than that of any other exterior finish. It contains no sand to cause discoloration or prevent the proper setting of cements, as in ordinary stuccos.

J-M Asbestos Stucco weighs considerably less than other stuccos, spreads more evenly and can be applied at a less cost of labor.

It is the most weather-proof and fire-proof stucco on the market.

In prepared form it can be furnished in various shades of gray, buff and brown.

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Manufacturers of Asbestos  
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Asbestos Roofings, Packings,  
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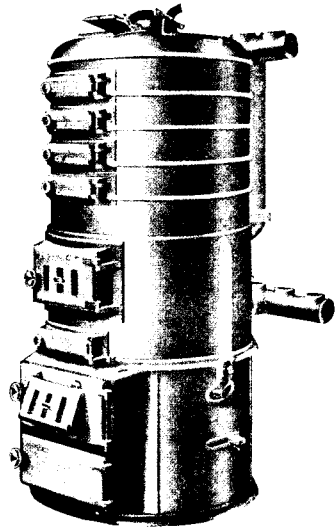
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"Sovereign"  
Hot Water Boiler.

## Efficient Heating Systems

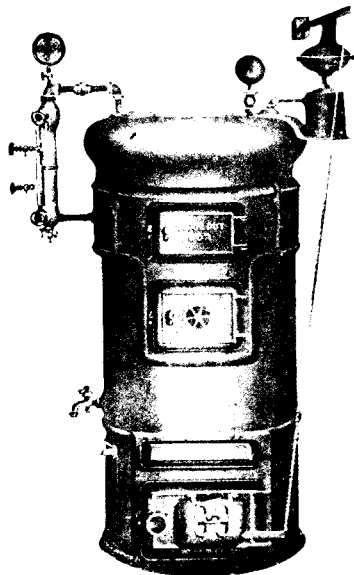
THE "SOVEREIGN" Hot Water Boiler has all the improvements and new features that are necessary to make an efficient heating apparatus:

**Larger First Section**  
**Deeper Corrugated Flared Fire Pot**  
**Bell Mouthed Flues**  
**Baffled Fire Travel**  
**Individual Clean-out Flue Doors**  
**Modern Rocking Grate**  
**Made for Hard and Soft Coal**

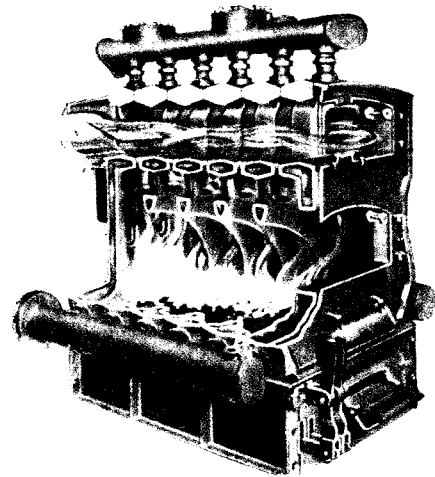
Each of these points in construction improve the heating capacity of the "Sovereign" Hot Water Boiler, and reduces worry of excess furnace attention. Yet the "Sovereign" is the only boiler in which these combined features are to be found. In fact the "Sovereign" is the original "deeper fire pot" and "larger first section boiler," and the only boiler having individual clean-out doors.

TAYLOR-FORBES Canadian Steam and Hot Water Square Sectional Boilers of Header type construction are of great efficiency for heating residences, schools, public buildings, etc., being made in five series, or width of grate, and listed in twenty-eight capacities.

All Canadian Steam and Water Boilers are connected with running thread lock-nut nipples and equalizing headers. The large variety of sizes offers a wide range of capacities suitable for heating all sizes of buildings, and the given capacity can be increased at any time by adding additional sections.



"Western Jr."  
Low Pressure Steam Boiler.



"Canadian"  
Steam Boiler.

The prominent feature of these boilers is the *drop tube construction*, which presents an immense amount of *self-cleaning fire surface* directly to the hottest portion of the fire.

THE "WESTERN JR." is a steam or water boiler for house heating. The choice between installing a "Sovereign" or a "Western Jr." boiler depends entirely upon the kind of fuel available in the locality where you reside.

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(DEPT. "A")

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**Comes Ready for Application**

*Prevents all rust and corrosion on iron, steel wood, concrete, and stone surfaces — on bridges, roofs, sidings, girders, water tanks, gasometers, ties and foundations.*

## Saving Foundations

### At Slight Cost

Bitunamel will preserve and strengthen foundations and the other exposed parts of a building subjected to corrosion.

Bitunamel provides an impervious coating which makes corrosive action of any kind impossible.

The average cost of painting a surface with Bitunamel is about half a cent a foot, so great is its covering capacity. The film it gives is highly elastic and will last for many years. It practically doubles the life and value of any surface to which it is applied.

**Contains no Coal Tar**

**Send for the "Bitunamel Pamphlet"**

*Bitunamel is specified by leading architects for foundation and all iron work.*

*Bitunamel is water-proof, weather-proof, acid-proof, alkali-proof and gas-proof.*

**The Ault & Wiborg  
Co., of Canada, Limited**



**Varnish Works  
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**Cincinnati Philadelphia  
New York Buffalo  
Chicago Minneapolis  
San Francisco London Paris**

## Structural Water-Proofing

To provide against the dusting of concrete floors, and to make them traffic-resisting, specify the

## Ferrolithic Method

**Makes Floors Last !**

The **DEHYDRATINES**—Bituminous Liquids for all purposes of Damp-proofing or Water-proofing under what is called "the Membraneous Method."

**HYDRATITE**—Paste or Powder, for water-proofing Concrete by mixing with the mass.

**SYMENTREX**—King of Cement Coatings, made in colors, adaptable for all masonry exteriors and concrete floors—is water-proof.

**SYMENTRIN**—Water-proof finish for interior plastered surfaces, all shades. Applied as readily as paint, but more artistic and durable.

**FERRO-FAX**—Mixed with cement to make concrete floors dustless, wear-proof and water-proof under "the Ferrolithic Method."

*Submit your Water-proofing Problems to us.  
We can suggest the remedy which will be  
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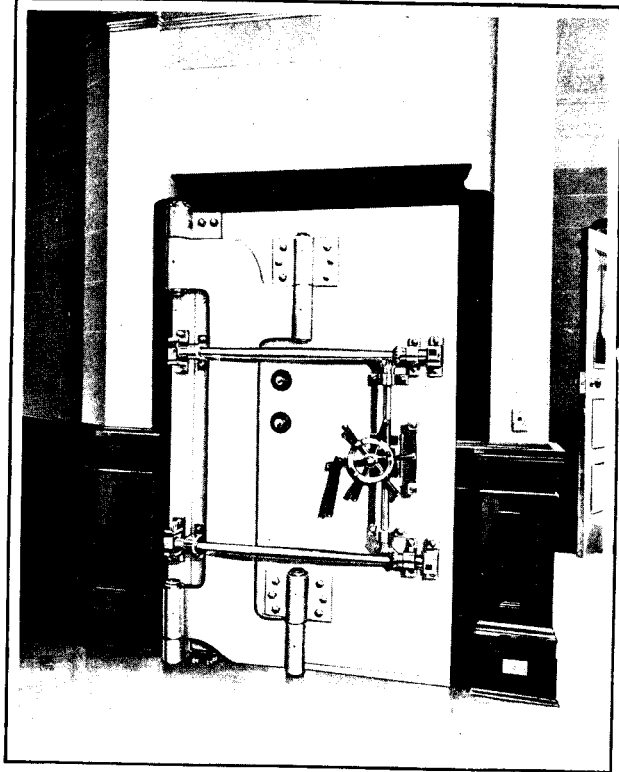
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without a loss, a Record of which  
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**G. & McC. Safes and Vault Doors  
Will Positively Protect Your Valuables**

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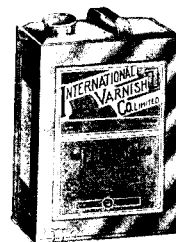
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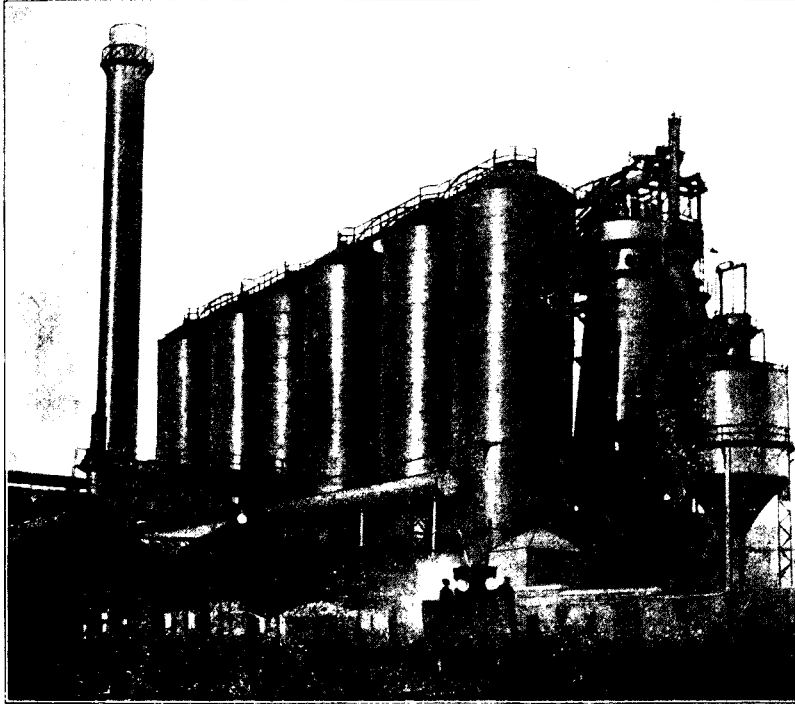
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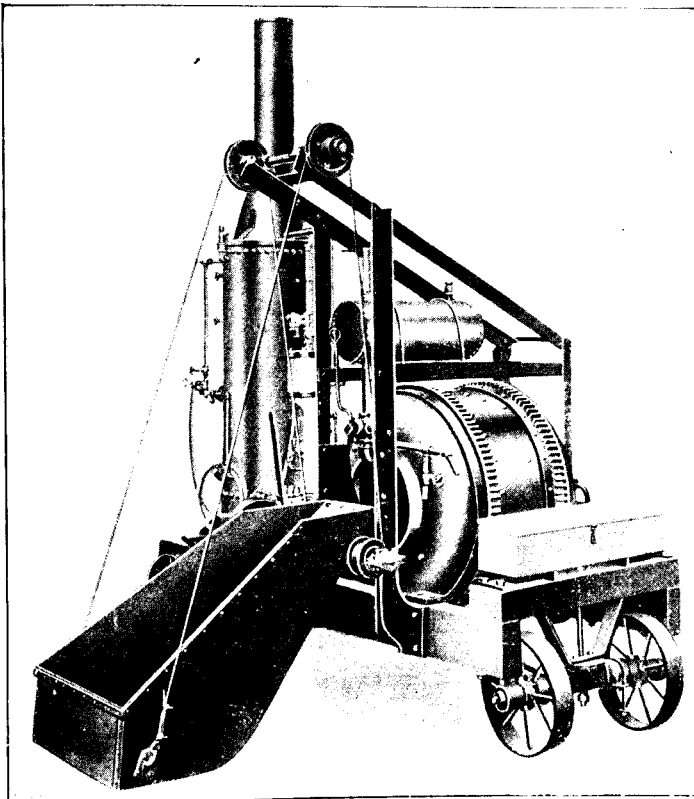
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**Are Best Because :**

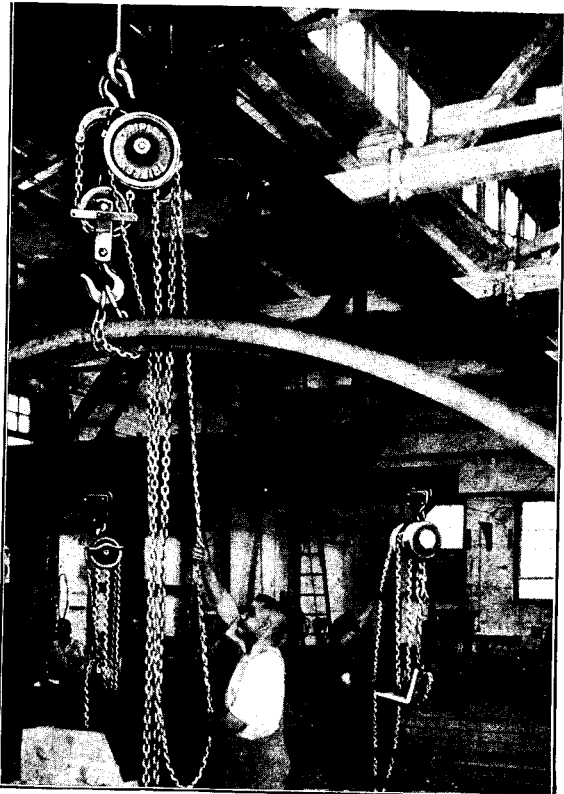
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Our Catalogue Illustrates This  
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Hundreds of industries manufacturing heavy materials are using hoisting machines, and conveying apparatus in connection therewith so efficiently that workmen scarcely realize that the loads they are moving single handed, thousands of pounds every hour of the day, are any more than trifling loads of a few score pounds.

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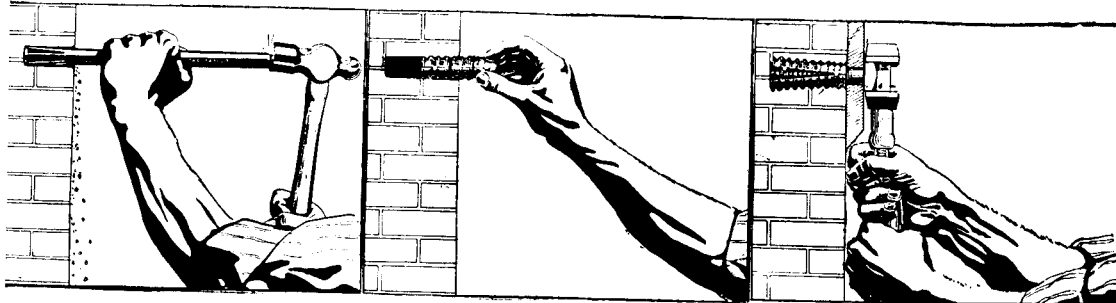
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If you have any proposition where you think mechanical refrigeration would pay, write us and we will give you full particulars as to cost, operating expenses, etc.



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The nearest approach to daylight that human skill has yet devised.

Note the light on the floor in this picture. No dark corners where Alexalite diffuses its soft, even light.

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Have us submit plans and specifications for the installation of our system on your next job.

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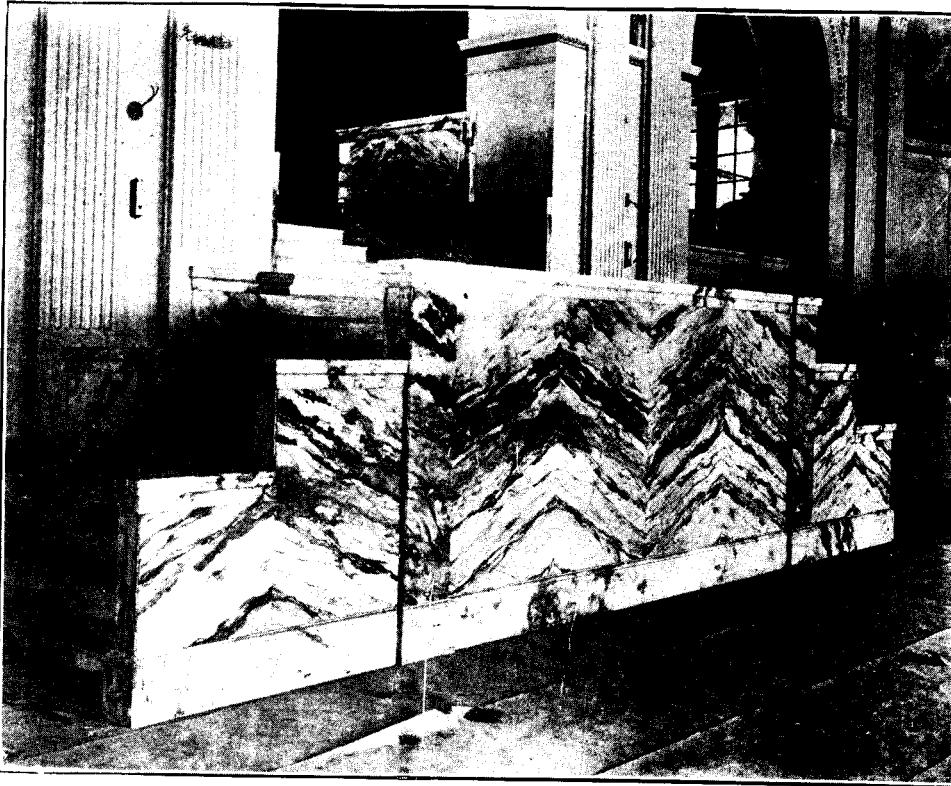
Construction Daily Report Service does not create opportunities, but it points out where the opportunities are. It acts as your personal representative in digging up prospective business.

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in our  
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**GIRDERS      COLUMNS      TRUSSES      PLATES**

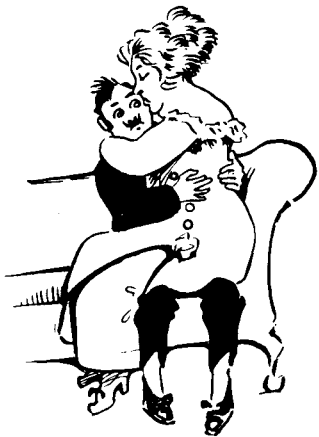
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**THE KIND WITH  
THE SELVAGE EDGE**



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The selvage edge of a Herringbone sheet is always true.

These selvage edges make a perfect joint between sheets. They make unnecessary all lapping of the lath and wiring between studs.

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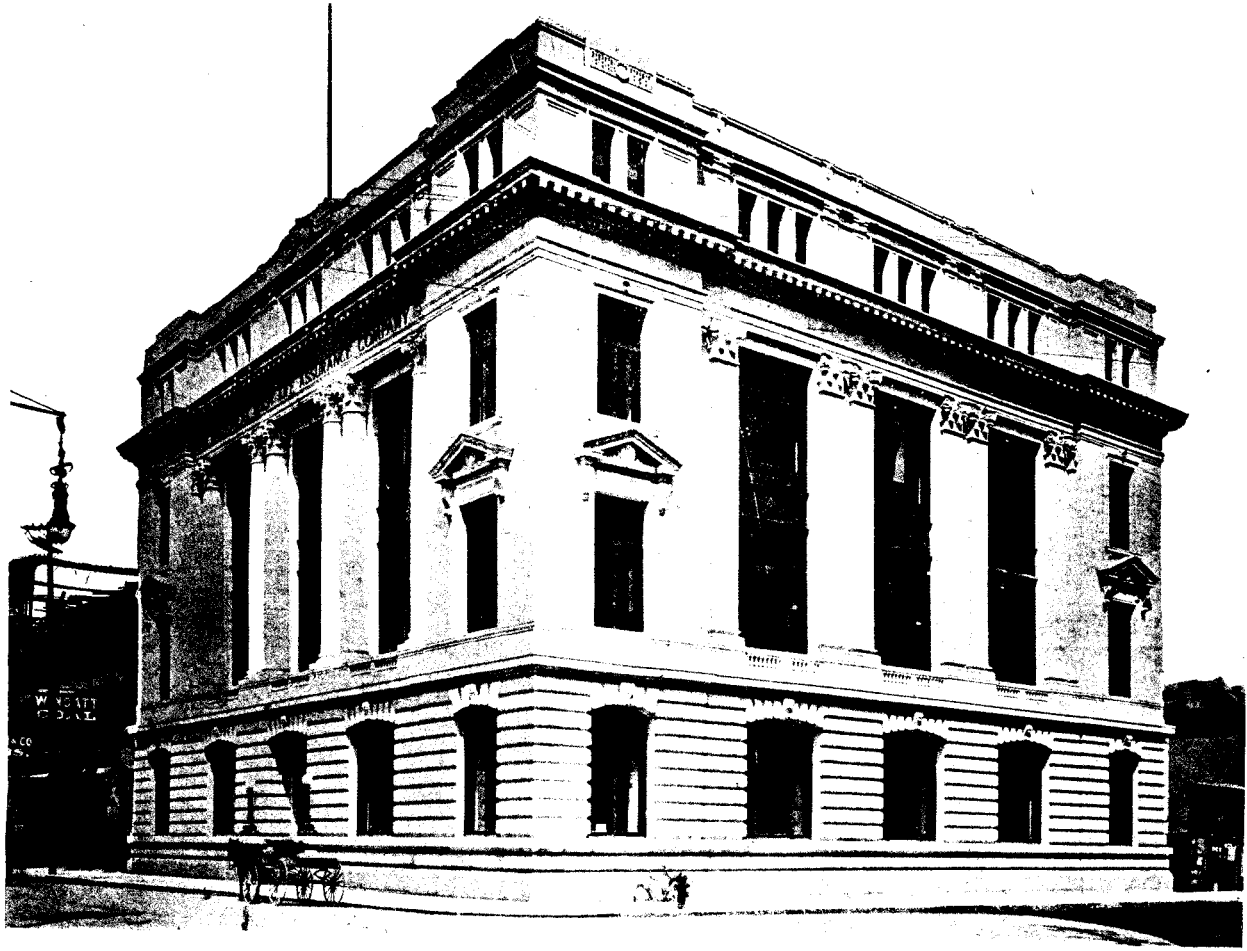
Winnipeg, Man.

Vancouver, B.C.

St. John, N.B.

# Great West Life Assurance Company's Bldg., Winnipeg, Man.

John D. Atchinson, Architect



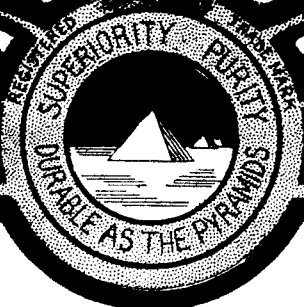
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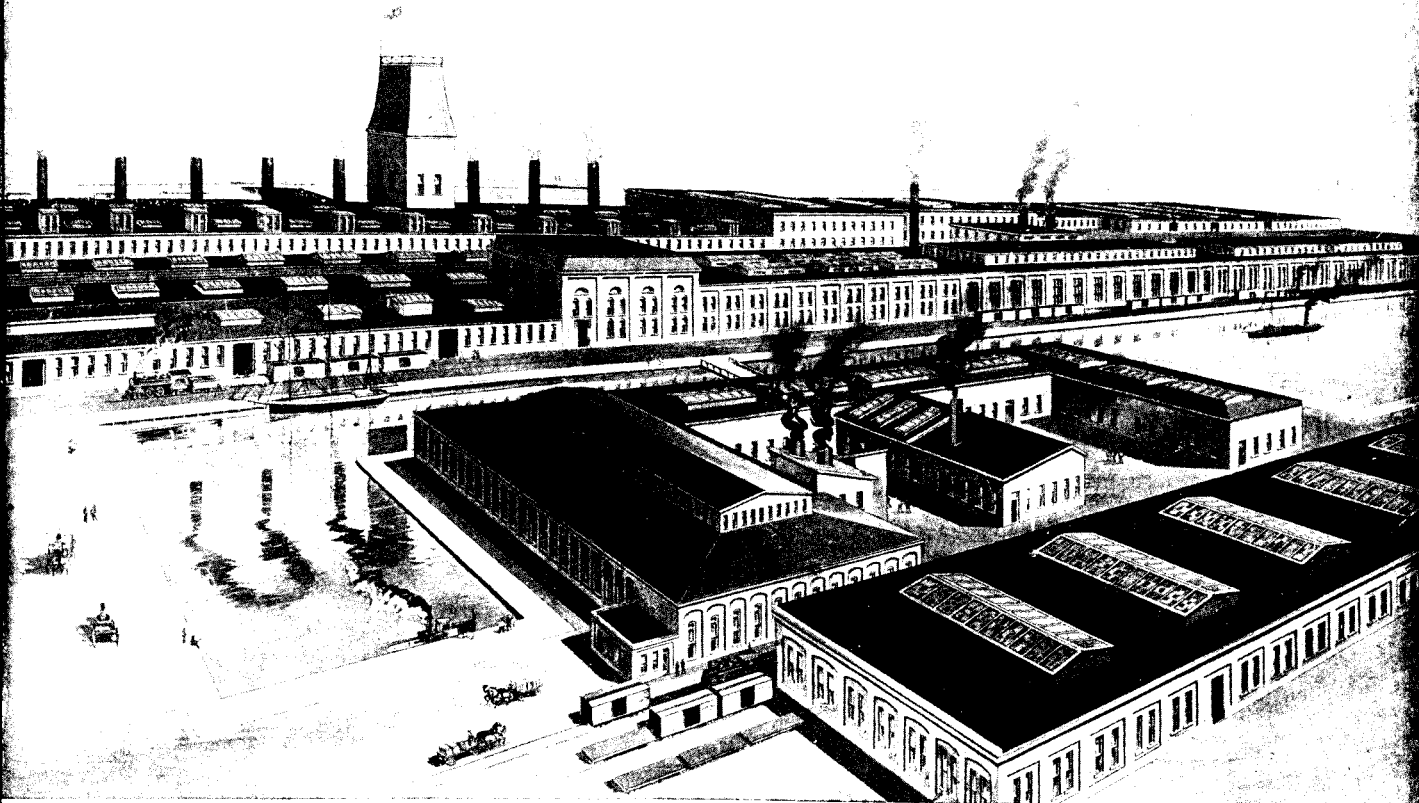
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ALEXANDRA  
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# CONSTRUCTION

VOL. VI

No. 4

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BRANCH OFFICES :

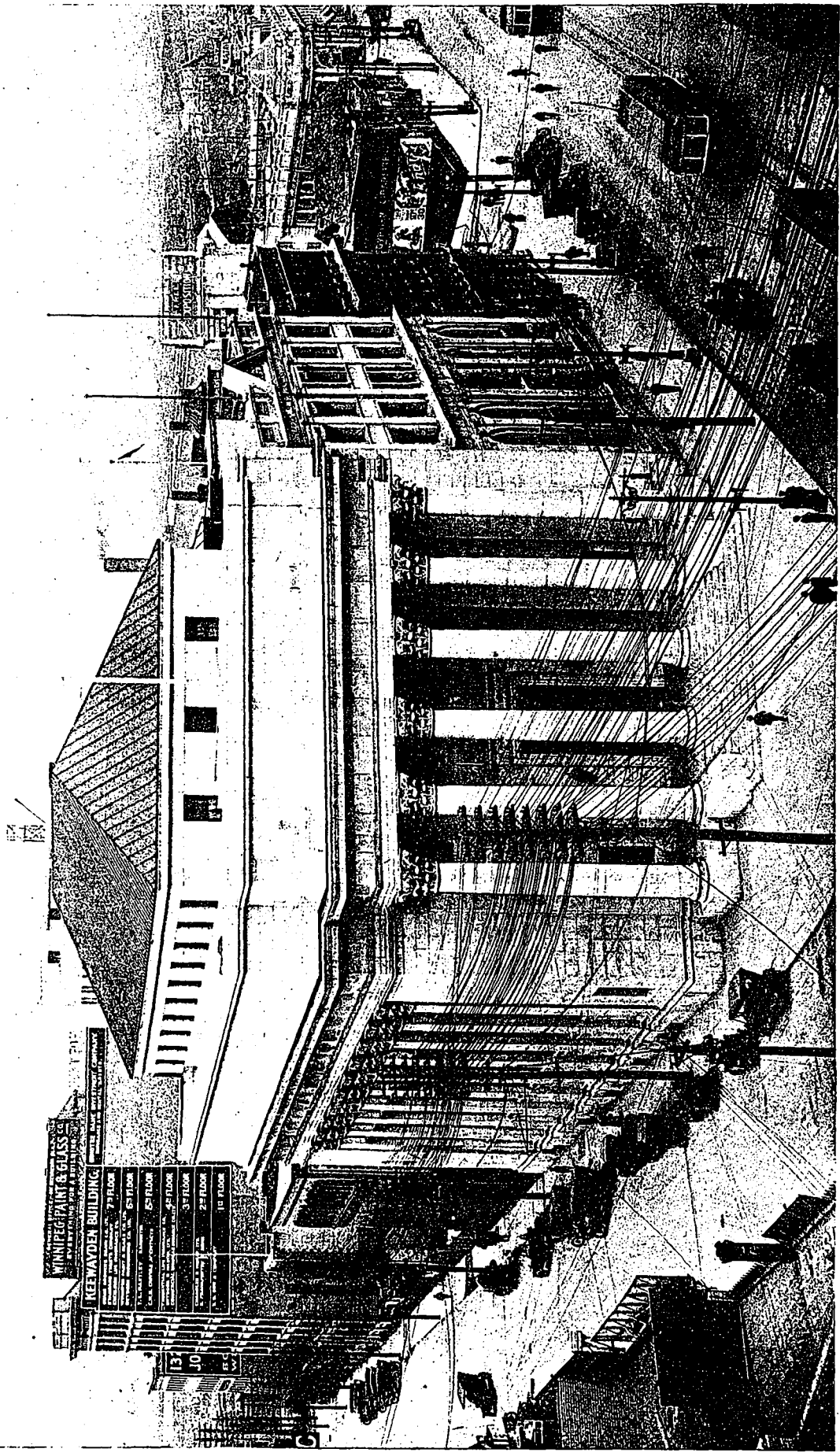
MONTREAL

WINNIPEG

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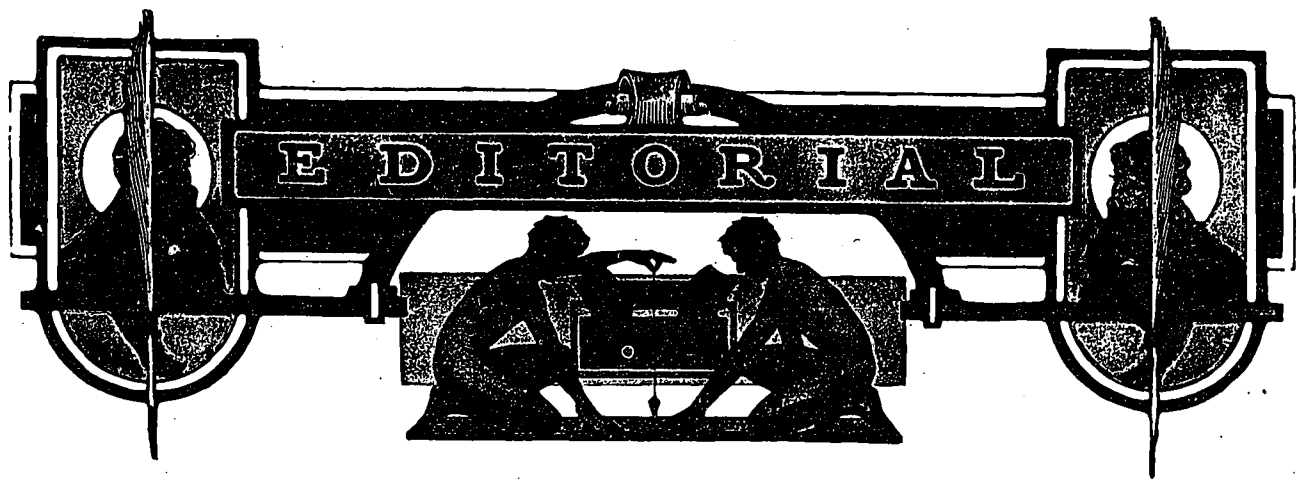
NEW YORK



MCKIM, MEAD & WHITE,  
ARCHITECTS.

BANK OF MONTREAL, WINNIPEG, MANITOBA.

J. N. SEMMENS,  
ASSOCIATE ARCHITECT



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**Q** *Canada in relation to atelier work—The great need of such advantages to men unable to benefit by a university course.*

---

Atelier work organized on a broad and sane basis is one of the crying needs in the architectural field of Canada. Surely the men prominent in the profession must give heed to this work. A personal sacrifice is not sufficient in itself, but a genuine enthusiasm must prompt their efforts. When this spirit prevails then the young draftsman will become imbued with a longing to study and emulate the best styles of architecture in all countries and of all ages. Canada like other nations has, and will continue to produce young men of exceptional talent who are not in a position to benefit from the various schools of architecture. They have exceptional ability and should have the same opportunities provided so extensively elsewhere. How often are draftsmen compelled to burden other responsibilities besides their own, and to deprive such persons of a chance to grow is unfair. He should be encouraged, helped and recognized for his worth. In analyzing the list of successful architects the world over we are forced to admit that a very large number never enjoyed the benefits of a university course. But they have had the careful attention of capable men either in the office where they worked or in some private club. The chief function of atelier work is to give the draftsman who cannot afford school instruction the proper grasp of good art and at the same time enable the student himself to further the principles already implanted by special teachers. It is indeed gratifying to see the class of work being done by the members of the ateliers in England, France and the States. The membership is open to everybody; the universities encourage their efforts, and the men highest in the realm of art are the patrons. Let such a condition prevail throughout our provinces and the future architecture will be after the designs of Canadian architects and there will be no further cause for complaint against our neighbors securing the best work throughout the Dominion.

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**Q** *The Lincoln Memorial—A bitter fight which resulted in a glorious victory for the artistic tastes of a commercial people.*

---

The commercialistic spirit so rampant in the States has finally succumbed to the true artistic sentiment of the people. For some time the House of Representatives has argued the best scheme for the proposed \$2,000,000 memorial to the memory of Lincoln. One of the most ardently advocated plans was to build a boulevard connecting the Capital with Gettysburg. This would have overridden the comprehensive arrangement of L'Enfant and established a precedent most dangerous to the future development of the city along wholesome and æsthetic lines. And it is worthy of note that the House finally adopted by a vote of one hundred and fifty-three to thirty-one the design submitted by Henry Bacon for a Greek temple to be erected at the west end of the Mall on a line with the Capitol building and the Washington monument. This result was brought about by the insistent demand of more than thirty art associations who voiced the will of the people. The site of the memorial was selected by the Park Commission ten years ago, composed of such prominent men as Burnham, McKim, Olmsted and Saint-Gaudens. The structure is designed to surmount a series of terraces, of which the lowest will be circular in form, with a diameter of one thousand feet; while the topmost will be reached by thirteen steps typifying the original thirteen States. The memorial is to consist of a white marble colonnade of thirty-six columns, each forty feet in height, and six feet nine inches in diameter, enclosing the hall proper. In this selection sentiment has won and in its winning reveals the true nature of the people. Commercialism may dominate in certain projects, but when it comes to commemorate the qualities and character of a great man, or a lofty principle, then the finer instincts assert themselves. The work will stand as an everlasting tribute both to the memory of Lincoln as well as the æsthetic tastes of the vast majority who insisted on an appropriate memorial.

**Q** *The Sphinx—An incredible claim to the discovery of a temple in its head—Time to discountenance such absurd theories.*

Considerable anxiety has been caused by the statements credited as coming from Prof. Reisner. In them he claims the discovery of a temple 24 by 64 feet in the head of the Sphinx. The absurdity of such a statement is quite evident when we take into consideration the fact that the Sphinx is 120 feet long and 60 feet high, and the head only 14 feet wide. Prof. Reisner would hardly stake his reputation upon such an impossibility. It is to be hoped the source of such rumors will soon be traced and proper means taken to prevent the rise of similar falsehoods coming from men of high authority. The desire of many people to eliminate all reverence for ancient and authenticated works of art is deplorable. They seem determined to discountenance every feature which has proven a valuable source of inspiration. To make the Sphinx of Gizeh a curious type of building with temples, banks or lodging quarters would please the dyspeptic critic and cast discredit on many venerated structures. All antiques are surrounded with mystery, but teeming with truths concerning the people who underwent so many sacrifices to make them possible. It hardly seems reasonable to find within this ageless wonder the tomb of the first king of Egypt when the inscriptions only relate back to the fourth dynasty. It is high time for the thinking people to accept the truth and refuse to entertain the sudden explosion of ridiculous theories.

**Q** *The engineering mistakes in the modern commercial building—An existing need for a closer alliance between architect and engineer.*

Many irreparable and expensive blunders in commercial structures being erected demonstrate clearly the great need of a closer alliance between the architect and the consulting engineer. The architect's field is too broad, his work too demanding, and his responsibility too big, to permit of a comprehensive grasp of all the up-to-date theories necessary in the way of heating, ventilation, illumination, and sanitation. This is an age of specializing and the architecture of to-day is worthy of all the time and ability the members of the profession can muster. The expert advice of engineers is absolutely essential. No excuse, whatever, can be offered by any well-known firm of architects who allows a structure to be built whereby the various engineering problems are not as carefully studied as the design itself. Un-sightly vistas of pipes, unsymmetrical treatment of ceilings, improper installation of heating and lighting fixtures, lack of proper ventilation; these and many others evidence the need of consultation at least, with men who have made these problems a matter of conscientious study. It will eliminate the disagreeable features which discountenance the archi-

tect and remain an eyesore to the owner; it will prove most economical to the client, and at the same time permit of the work being finished within the appointed time.

**Q** *The sore need of economical homes to house the workingman—What has already been accomplished and what should be done.*

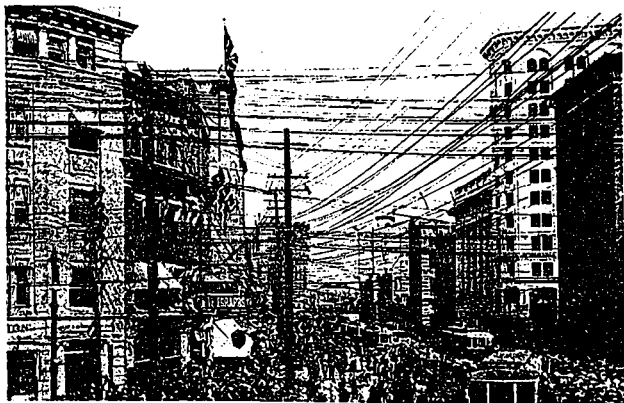
The question of housing the workingman is assuming large proportions. It is not so much a problem of room as cost. The sore need in practically every city is the comfortable and sanitary home which will allow of a reasonable rental. How many small houses are built every year which are beyond the reach of the average person simply on account of the materials entering into the construction, together with the low assessment of vacant land. The chief argument against wood has been the lasting qualities and continual expense of protecting same—now it is the rapid advance in price of lumber. Other materials must be employed which will be thoroughly sanitary and of a more economical nature.

Inquiries from various sources prompt us to mention the large number of cement houses which are being erected for approximately \$1,800 with a monthly rent of \$16 or \$18. In this type the walls, partitions, floors, stairway and roofs are made of cement, while care is taken to have continuous air cavities, guarding against dampness and cold. Another plan is the erection of a series of buildings constructed with brick, roughcast, and shingle roofs. In order to reduce the expense to a minimum and furnish the man making from \$15 to \$18 a week an opportunity to occupy them, arrangements are being made to secure the necessary capital at an extremely low percent. It is hoped to make the rental of these houses from \$15 to \$20.

The Ontario Homes Association has enlisted the co-operation of Berlin's citizens to erect a series of homes in that city ranging from \$1,800 to \$3,000.

The Town Planning Association of Montreal has laid out schemes for several model towns on the outskirts of the city. Certain properties are to be handled by artists and architects on the most approved plans. Cottages will be erected on wide lots with ample room for gardens, etc., which will be rented or sold on easy instalments, the cost ranging from \$1,000 to \$2,500. The association is quite confident of the outcome, having studied similar conditions prevailing in Europe.

The nature of such a proposition makes it practically imperative for Government influence to be back of the project. Extensive areas of land, large quantities of material, capital at a very low rate of interest and the elimination of graft is the only remedy. The cities are sorely in need of improvement in this direction, and it is to be hoped that some carefully considered scheme will be evolved which will give to the workingman a home, sanitary in every respect, of an artistic taste and within the limit of his financial possibilities.



VIEW OF THE MAIN STREET, WINNIPEG.

**Q** Our public thoroughfares in relation to their artistic merit as compared with the busy streets in the principal cities of other countries.

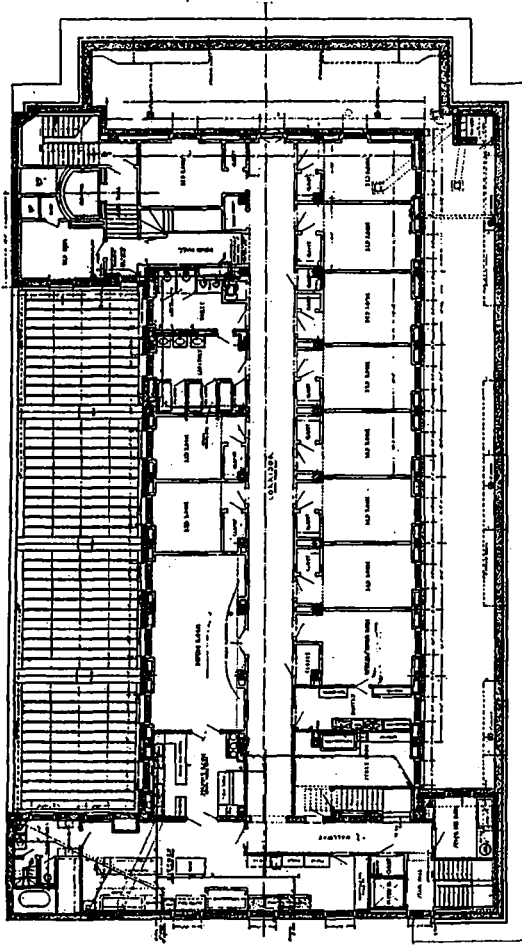
THE QUESTION ARISES, can we afford to sacrifice the artistic value of our streets? The accompanying views are typical and tell better than words how deeply rooted the mercenary spirit is in Canada. The elimination of street wiring would not only enhance the value of our monumental centres, but would prove a proper incentive to the architect in making each succeeding structure a forward step in the realm of true art. It is encouraging to note that the Bell Telephone Company of Montreal is rapidly burying its wires in conduits and we hope that this spirit will prevail throughout the Provinces. Then our cities will compare favorably with the charm and wholesomeness of London and other cities which allow nothing to detract from their civic beauty.



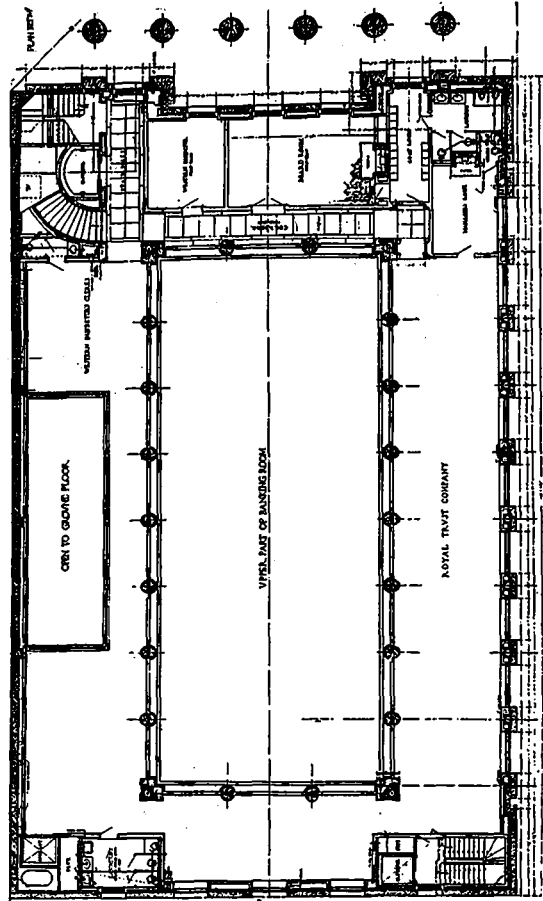
VIEW OF NOTRE DAME STREET, MONTREAL.



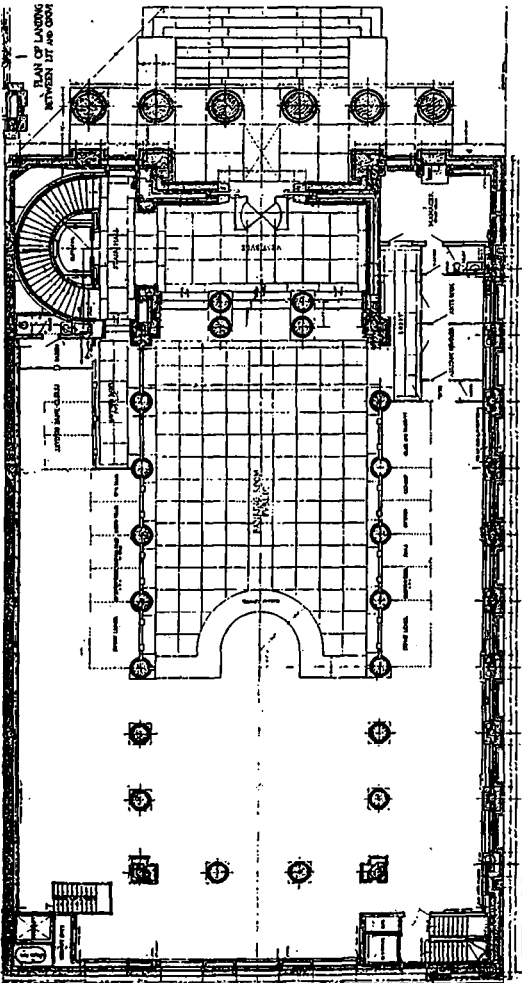
THE BANK AND ROYAL EXCHANGE SQUARE, LONDON.



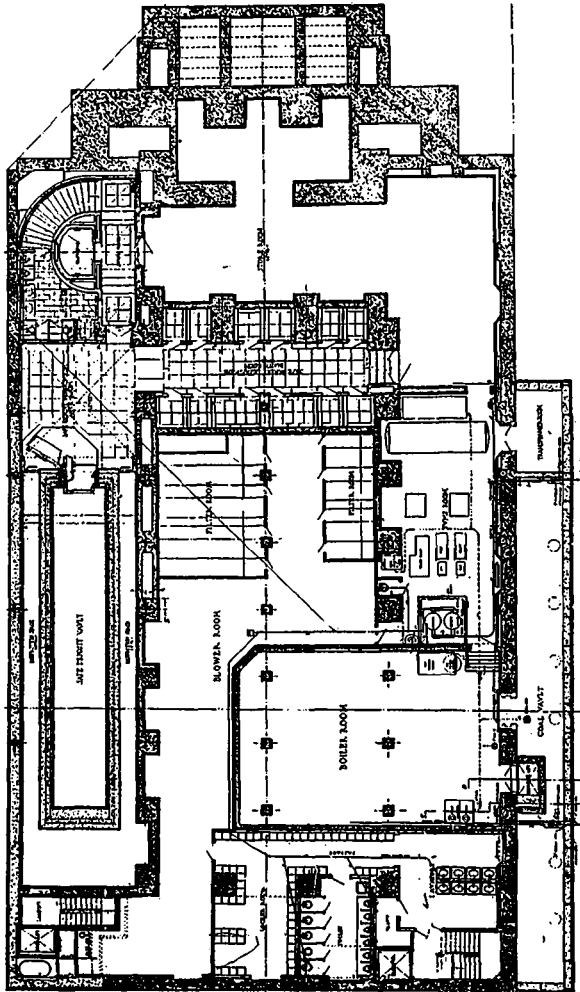
SECOND FLOOR PLAN.



FIRST FLOOR PLAN.



GROUND FLOOR PLAN.



BASEMENT FLOOR PLAN

BANK OF MONTREAL, WINNIPEG, MAN.

MCKIM, MEAD & WHITE, AND J. N. SEMMENS, ARCHITECTS.

## Two New Buildings, Winnipeg, Man.

THE progressive Western spirit is praiseworthy in that it possesses the true commercial spirit coupled with a just appreciation of the artistic. We find this exemplified in the Bank of Montreal and the Great West Life Assurance Company building, of Winnipeg.

During a recent visit to that city Leonard Stokes, R.I.B.A., of London, commented enthusiastically on the high standard set by Canadian architects. He spoke of their successful attempts to adopt pure design in relation to the practical local conditions. He felt that the commercial work was commendable and led us to feel that in this line of building we were far in advance of similar attempts in European countries.

The new building of the Winnipeg branch of the Bank of Montreal, is derived from purely classical models. The building is rectangular in plan, the exterior being built of a very white granite. The design consists of a Corinthian portico of six columns on the front, and a side treatment of Corinthian pilasters with windows between them, the whole being surmounted by an attic. Above and behind the attic rises a rectangular roof house in which the quarters of the staff are located, taking the place of the domical form so frequently adopted on square buildings.

The property on which the building is placed is triangular and a study of the ground floor plan shows that the portico and steps were designed for the maximum amount of projection permissible within the property lines. By this treatment the building has been given the greatest possible prominence, throwing the triangular portion of the front part into sidewalk and street, thereby creating a public space, or square, at a busy part of the city. In this way the bank building becomes

not only an incident in a long street, but one of the distinguishing features, or landmarks which help to divide a city into familiar districts.

The interior of the building is in the form of a basilica. The design consists of superimposed Ionic colonnades, the central or main portion of the room going through two stories with a gallery on all four sides, to be used by the Royal Trust Company. The entire banking room is treated in practically a monotone, with columns and side walls of light buff Botticino marble imported from Northern Italy; and

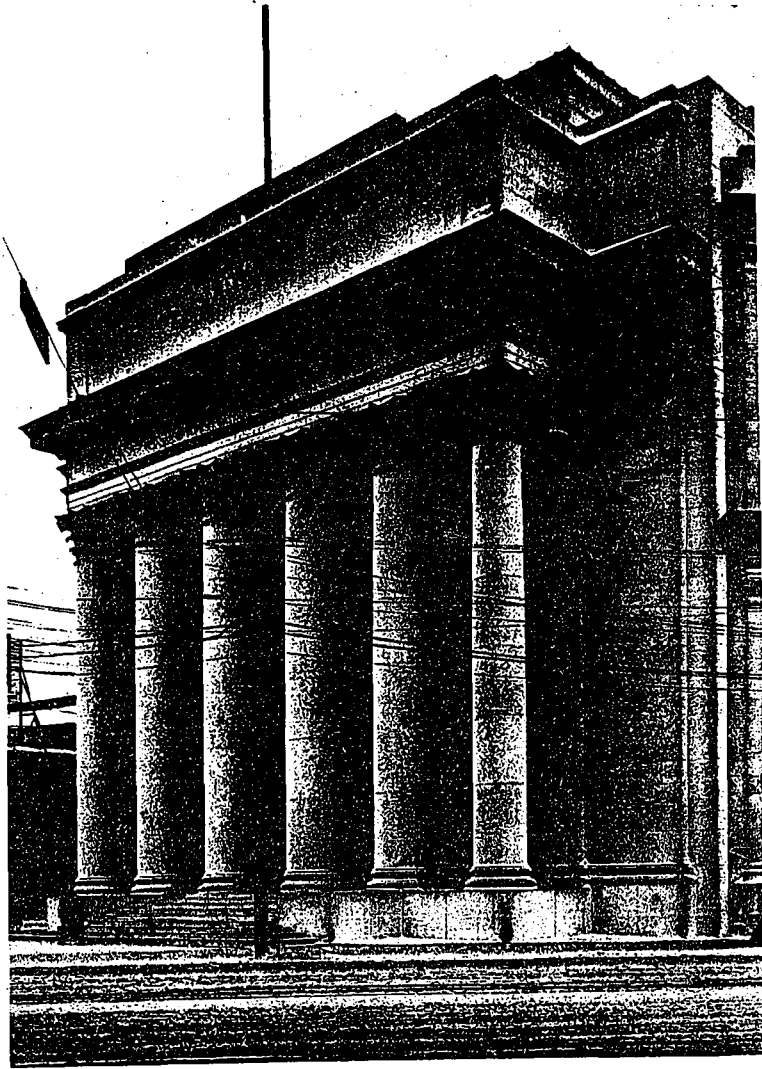
ceiling painted with light colors in a classical manner. The use of one material gives the largest possible expression to the room, while the neutral buff tone of the marble is conducive to a warm, cheerful, sunny effect during the long Winnipeg winters.

In the basement are located extensive vaults, safe deposit, coupon and storage rooms, clerks' lavatories, boiler room, etc. Above the main banking room are two floors given up to quarters for the staff and janitor, with sitting rooms, bed and bath rooms, kitchen, lunch and dining rooms, conveniently arranged for serving all those connected with the bank.

The Great West Life Assurance Company's build-

ing is designed in Kootenay, B.C., marble, with cast iron window spandrils. Upon the interior the halls and corridors are finished in white Italian marble. The elevator fronts are bronze with polished wire glass. The wood finish throughout is quarter-cut oak with the exception of the board-room, designed in mahogany. The building cost fifty cents per cubic foot.

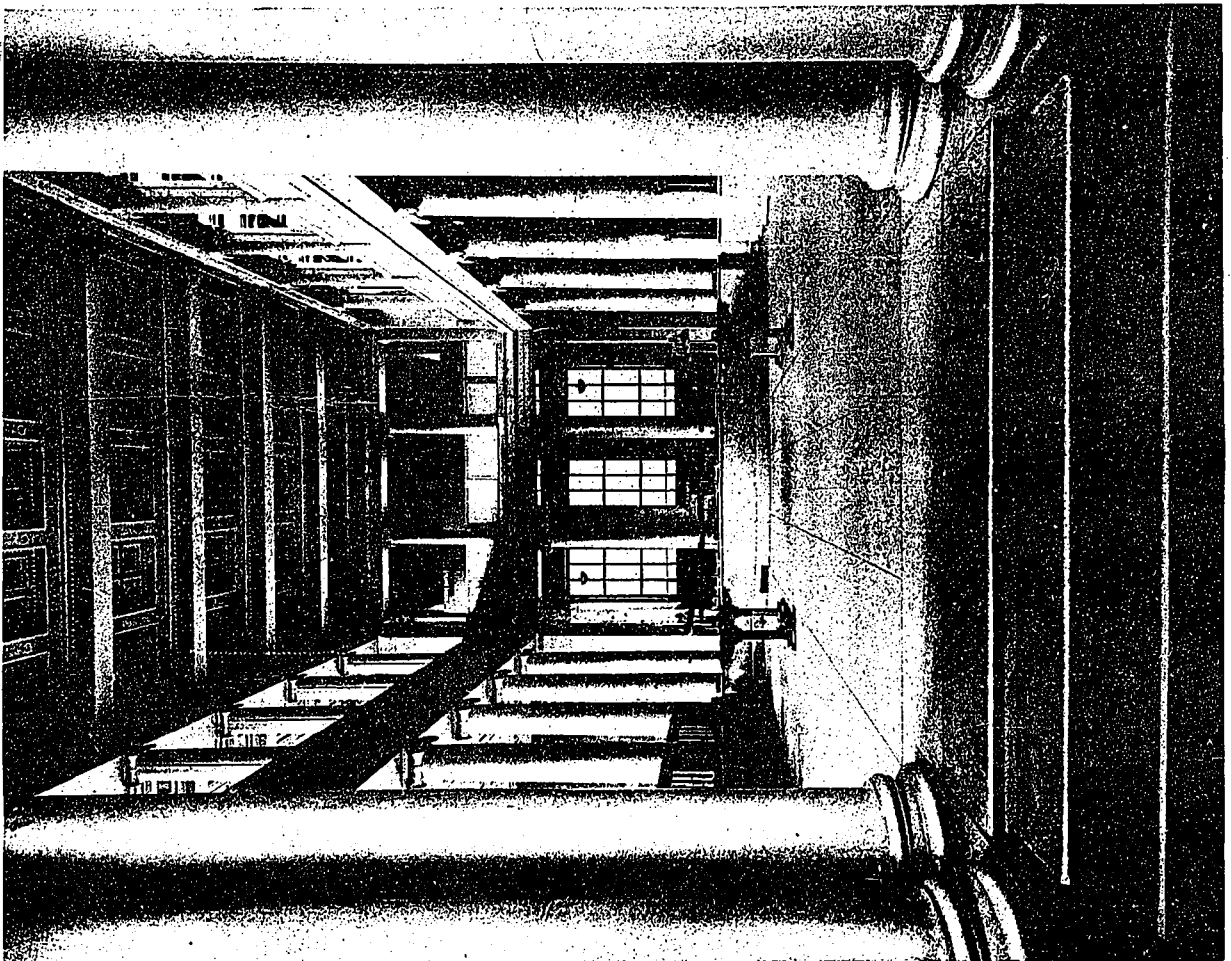
The general effect of such structures can hardly be estimated. They are a source of pride to the people; a tribute to the spirit of architecture.



DETAIL OF ENTRANCE PORTICO.



SAVINGS DEPARTMENT.



SAVINGS DEPARTMENT.

BANK OF MONTREAL, WINNIPEG, MANITOBA.

NICKIN, MEAD & WHITE, AND J. N. SEMMENS, ASSOCIATED, ARCHITECTS.

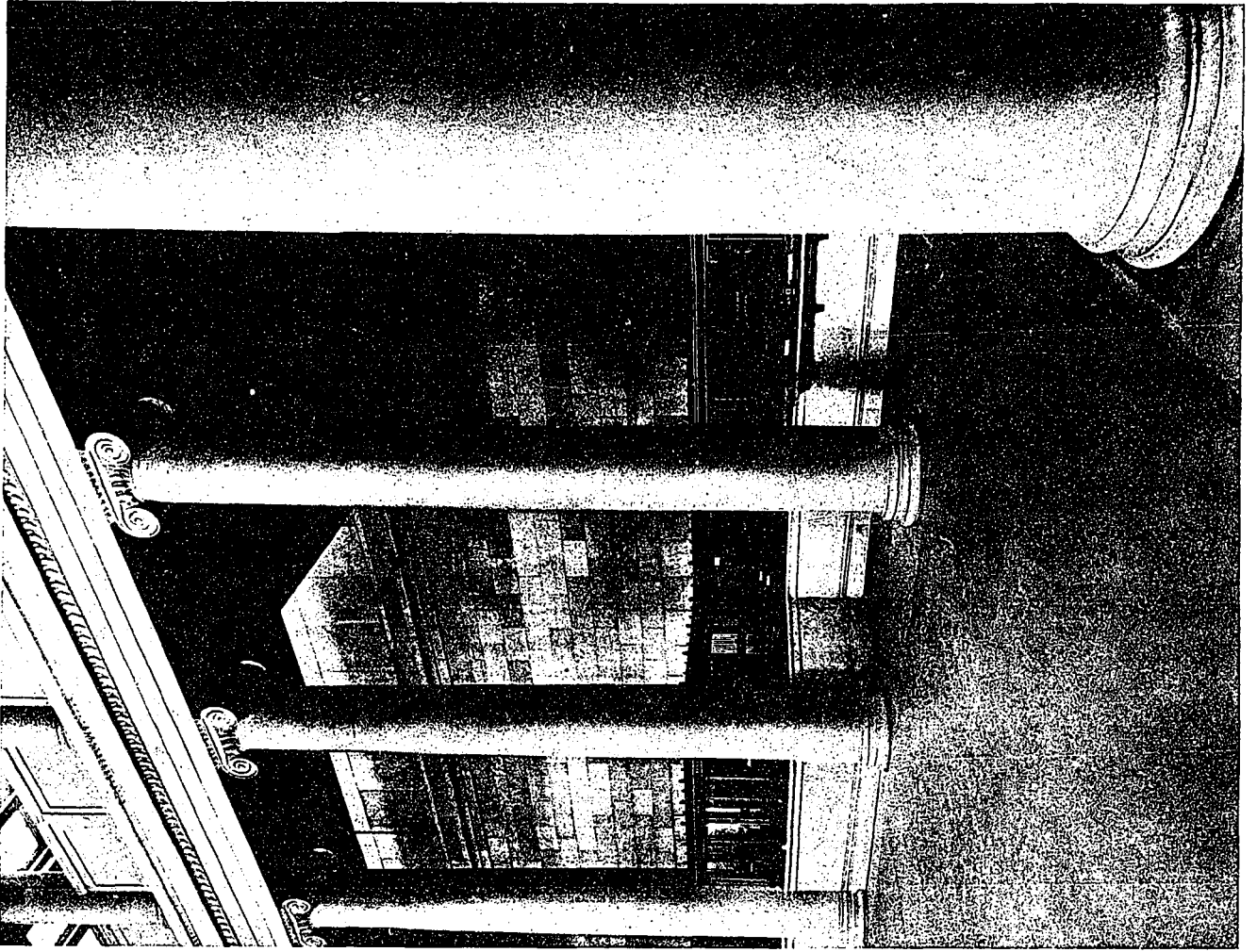




VIEW FROM GALLERY.

BANK OF MONTREAL, WINNIPEG, MANITOBA.

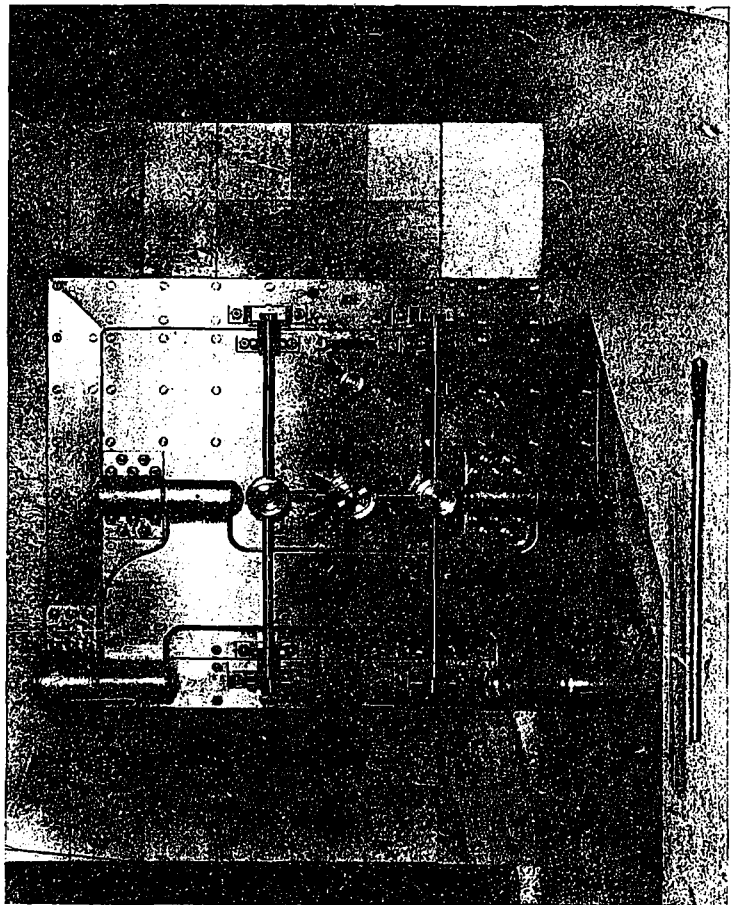
MCKIM, MEAD & WHITE, AND J. N. SEMMENS, ASSOCIATED, ARCHITECTS.

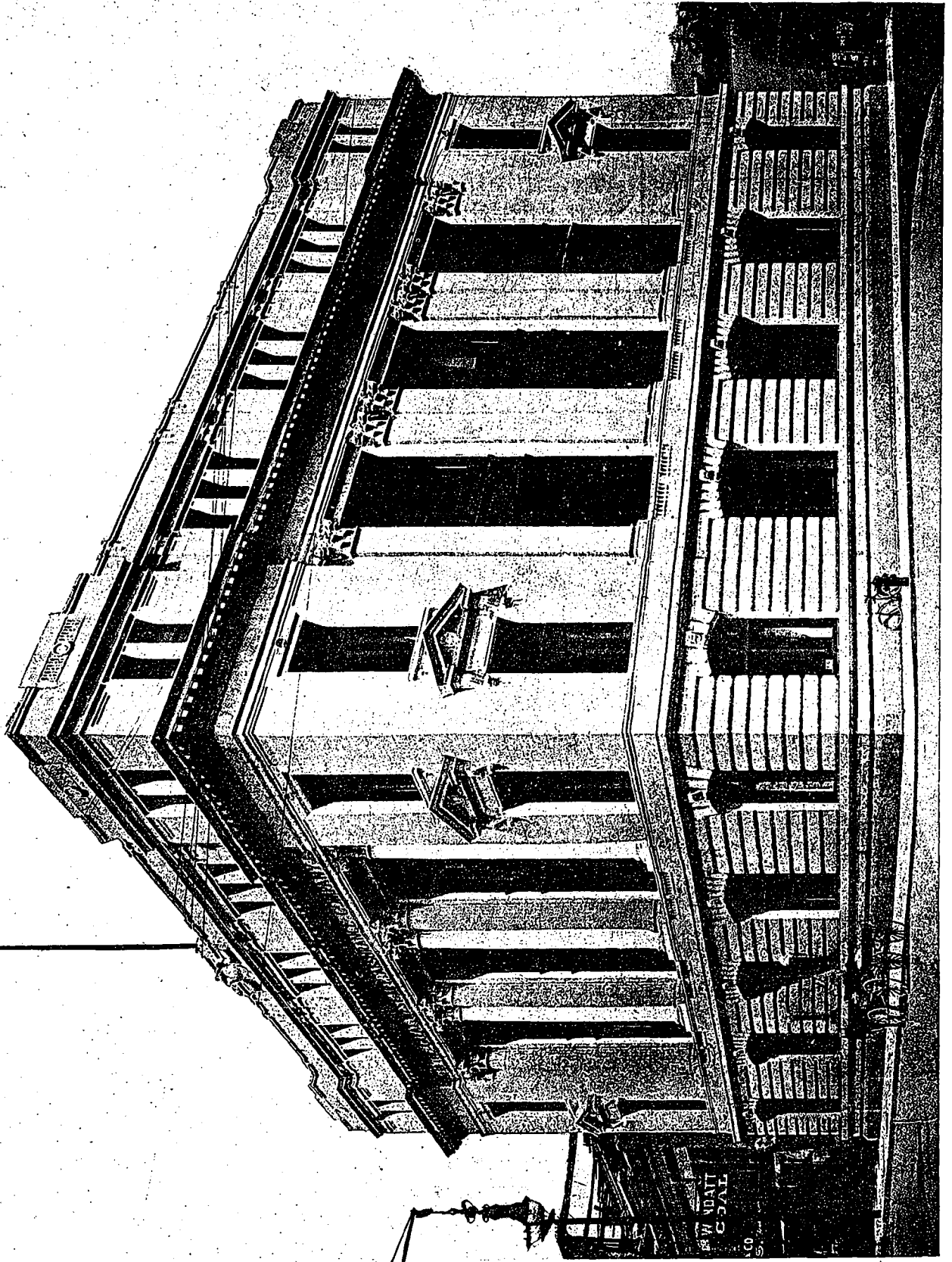


INTERIOR DETAILS.

BANK OF MONTREAL, WINNIPEG, MANITOBA.

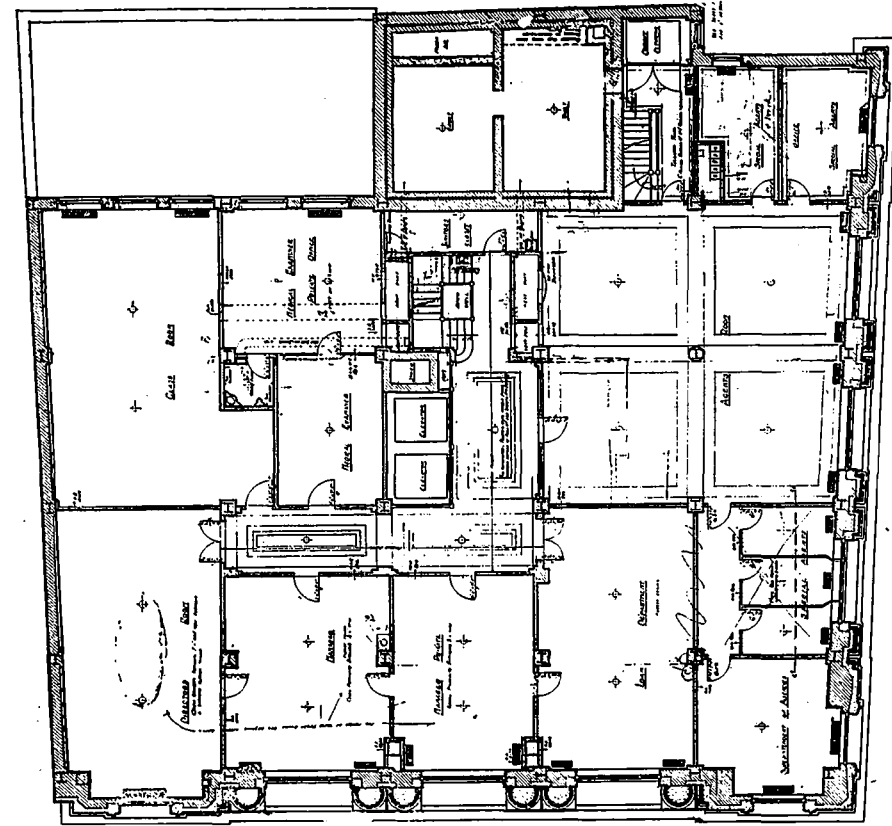
MCKIM, MEAD & WHITE, AND J. N. SEMMENS, ASSOCIATED, ARCHITECTS.



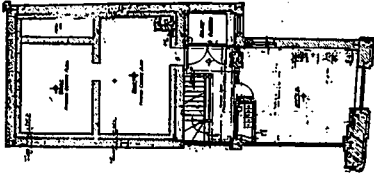


THE GREAT-WEST LIFE ASSURANCE COMPANY BUILDING, WINNIPEG, MANITOBA.

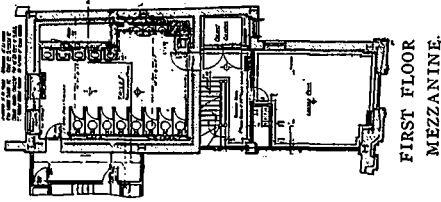
JOHN D. ATCHISON, ARCHITECT.



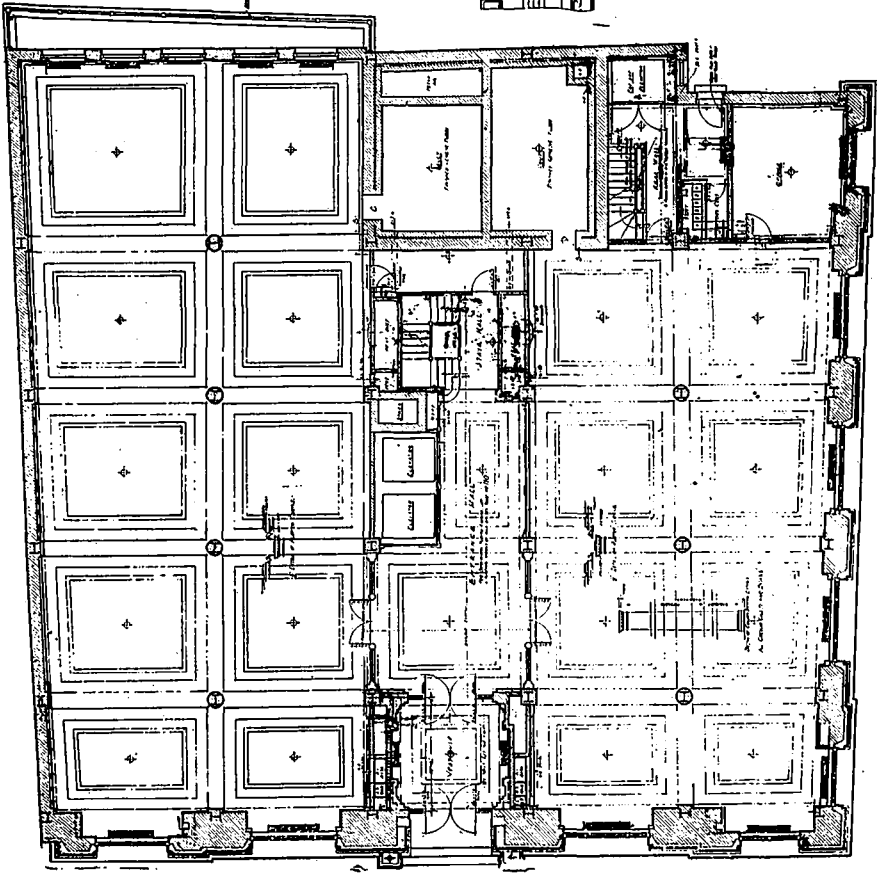
SECOND FLOOR PLAN



SECOND FLOOR MEZZANINE.



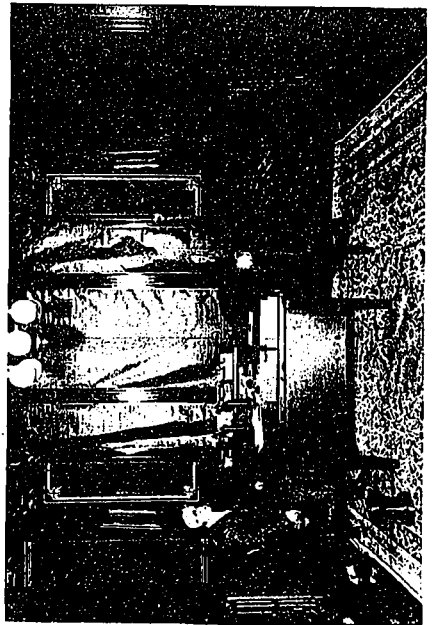
FIRST FLOOR MEZZANINE.



FIRST FLOOR PLAN.



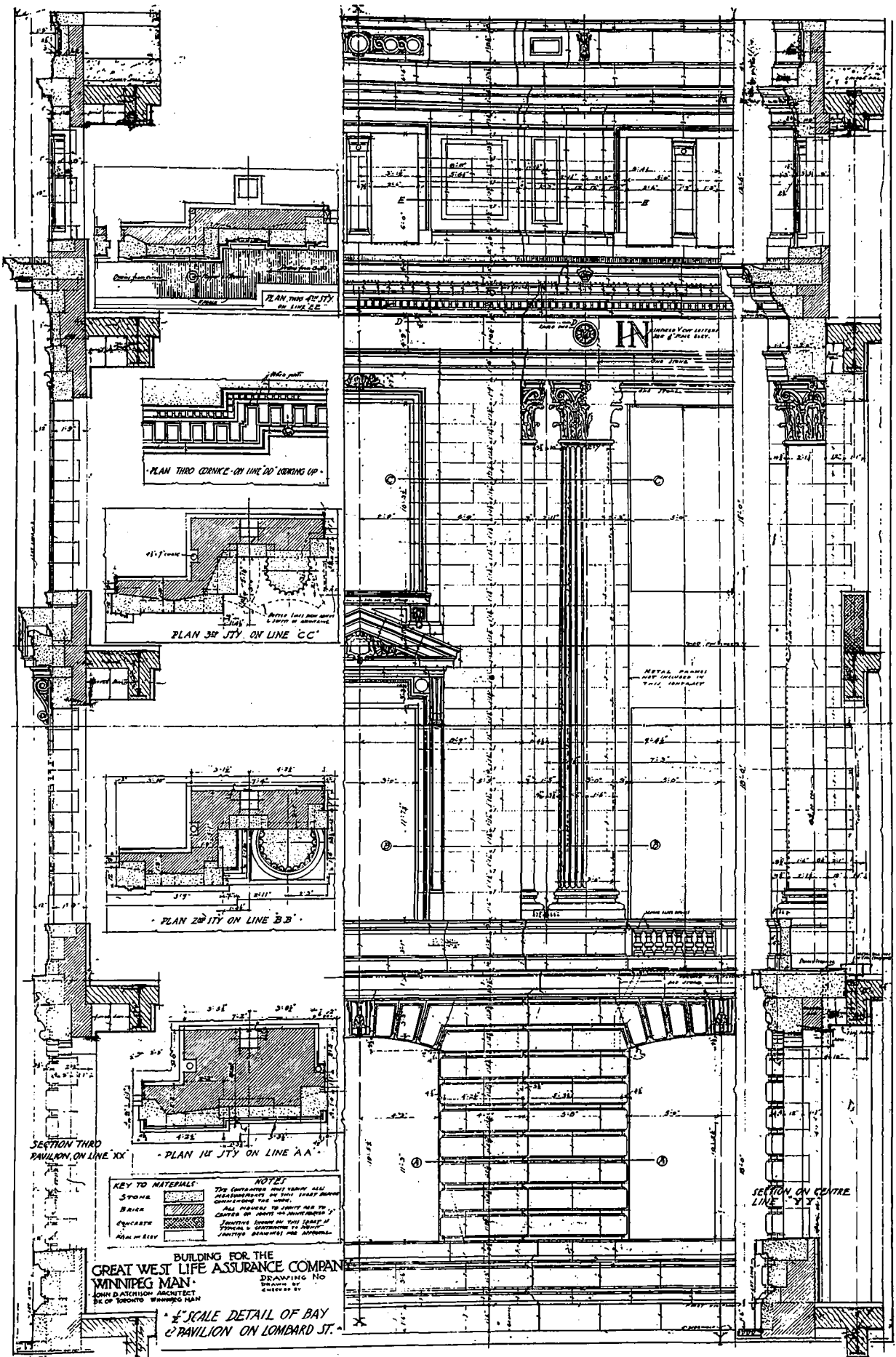
ANTE ROOM.



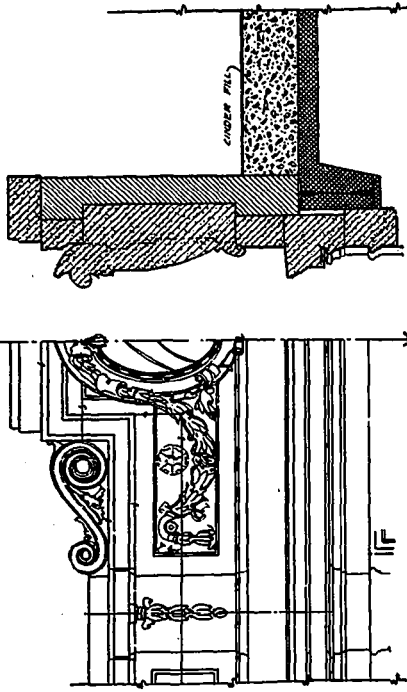
PRIVATE OFFICE.

PLANS AND INTERIOR VIEWS,  
 GREAT WEST LIFE ASSURANCE COMPANY BUILDING,  
 WINNIPEG, MANITOBA.

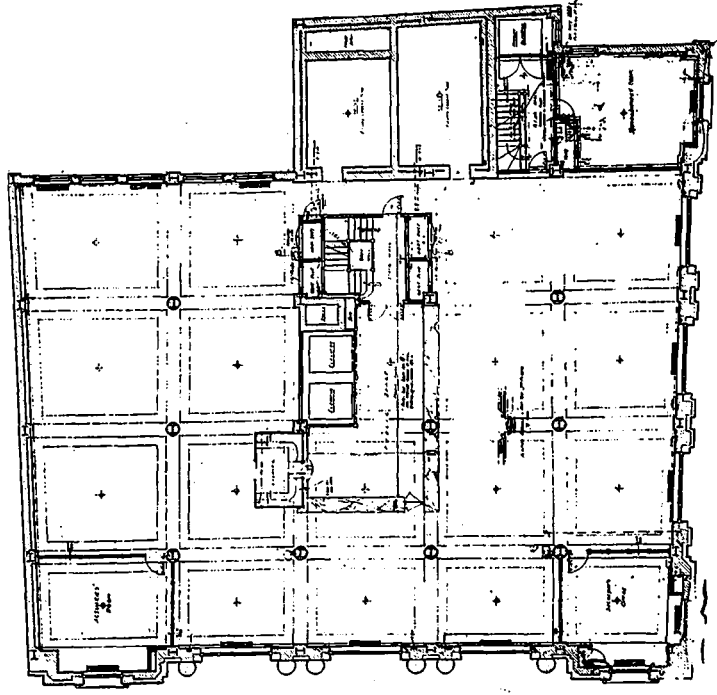
JOHN D. ATCHISON, ARCHITECT.



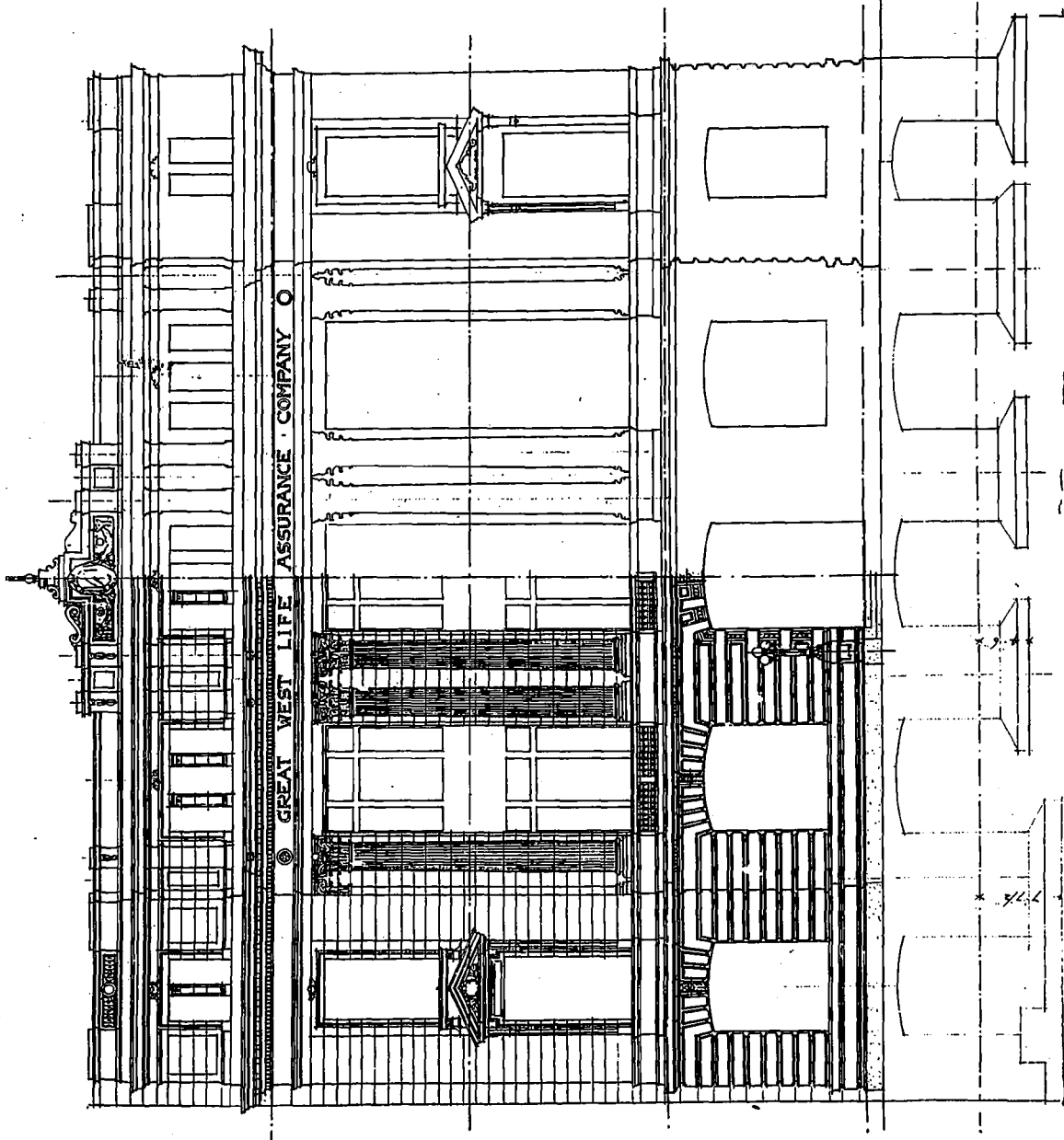
EXTERIOR DETAIL, GREAT WEST LIFE ASSURANCE COMPANY BUILDING, WINNIPEG, MANITOBA. JOHN D. ATCHISON, ARCHITECT.



ORNAMENT ABOVE FOURTH FLOOR OF CENTRE LINE.



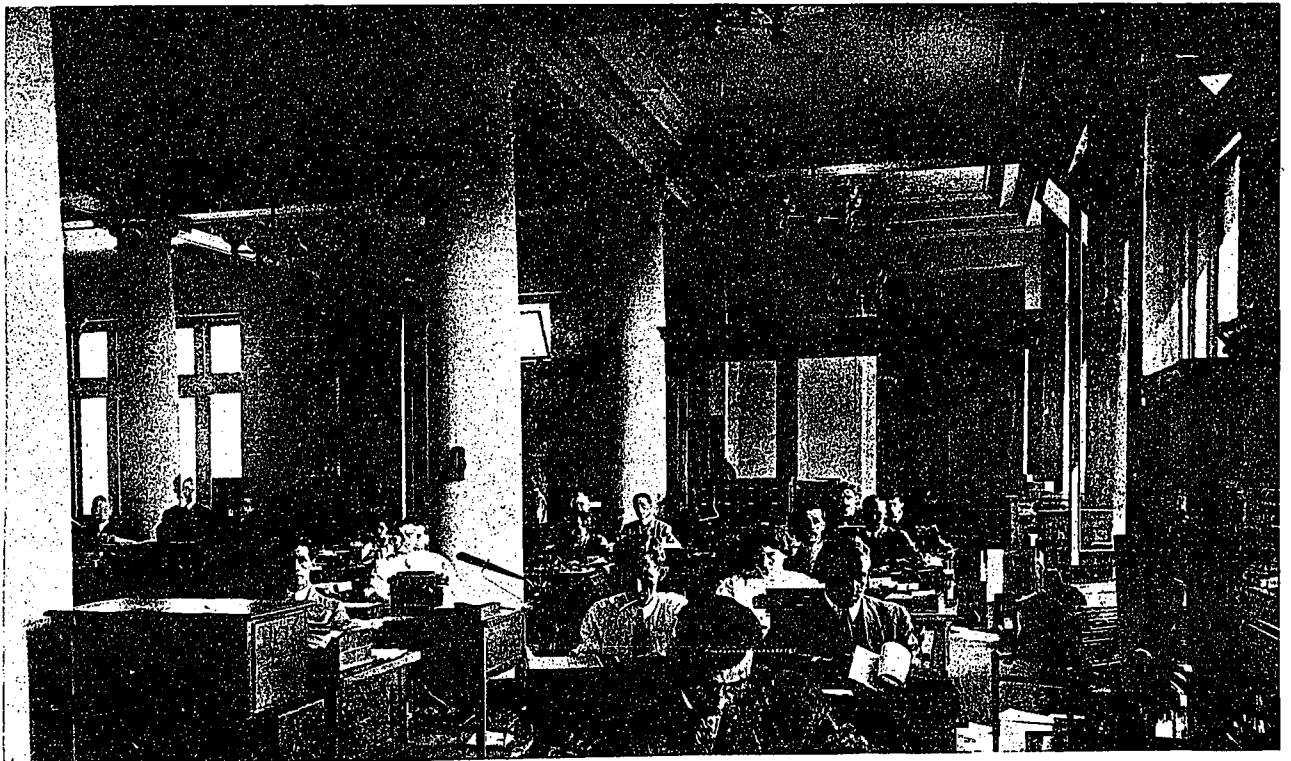
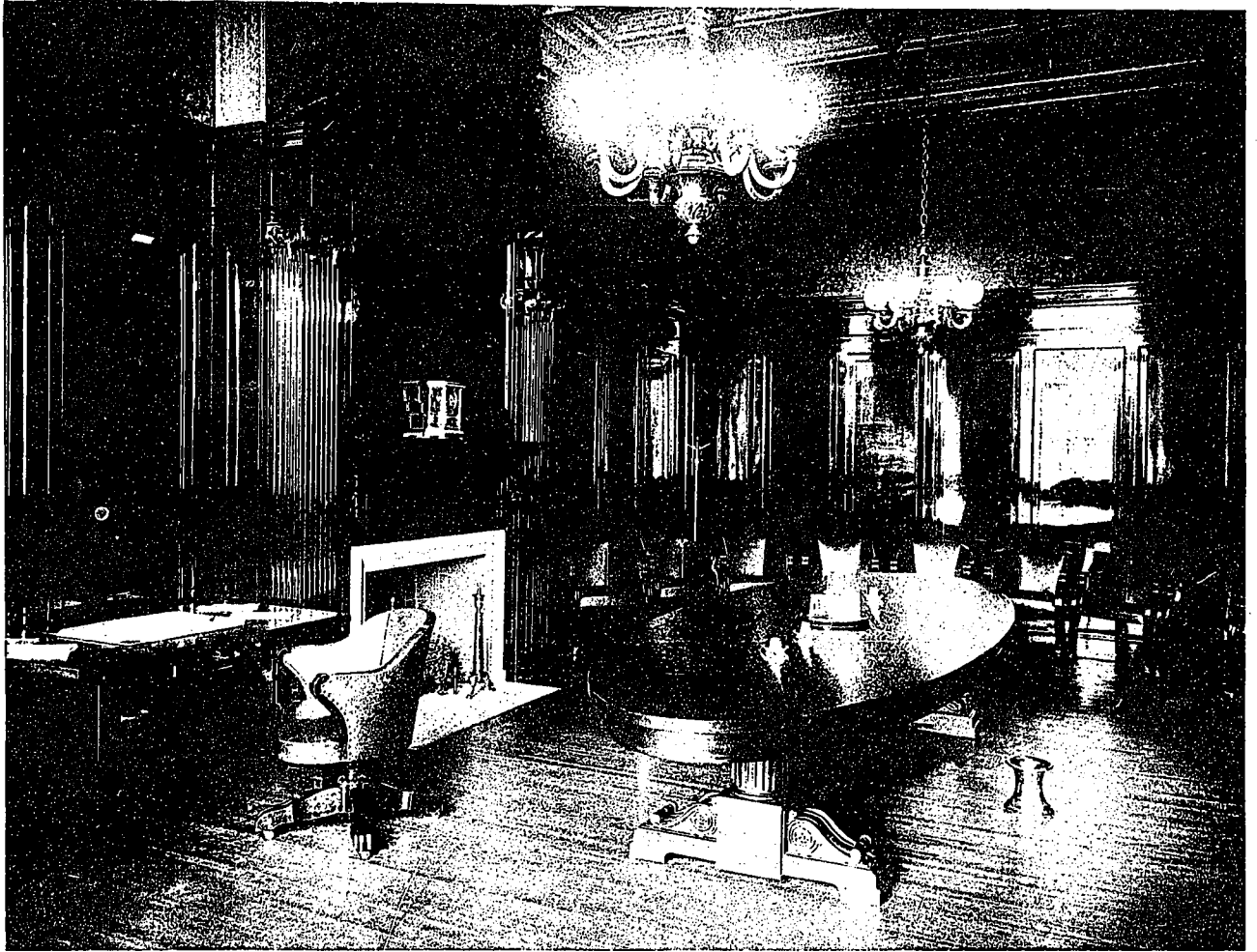
THIRD FLOOR PLAN.



LOMBARD STREET ELEVATION.

DETAILS AND PLANS, GREAT WEST LIFE ASSURANCE COMPANY BUILDING, WINNIPEG, MANITOBA.

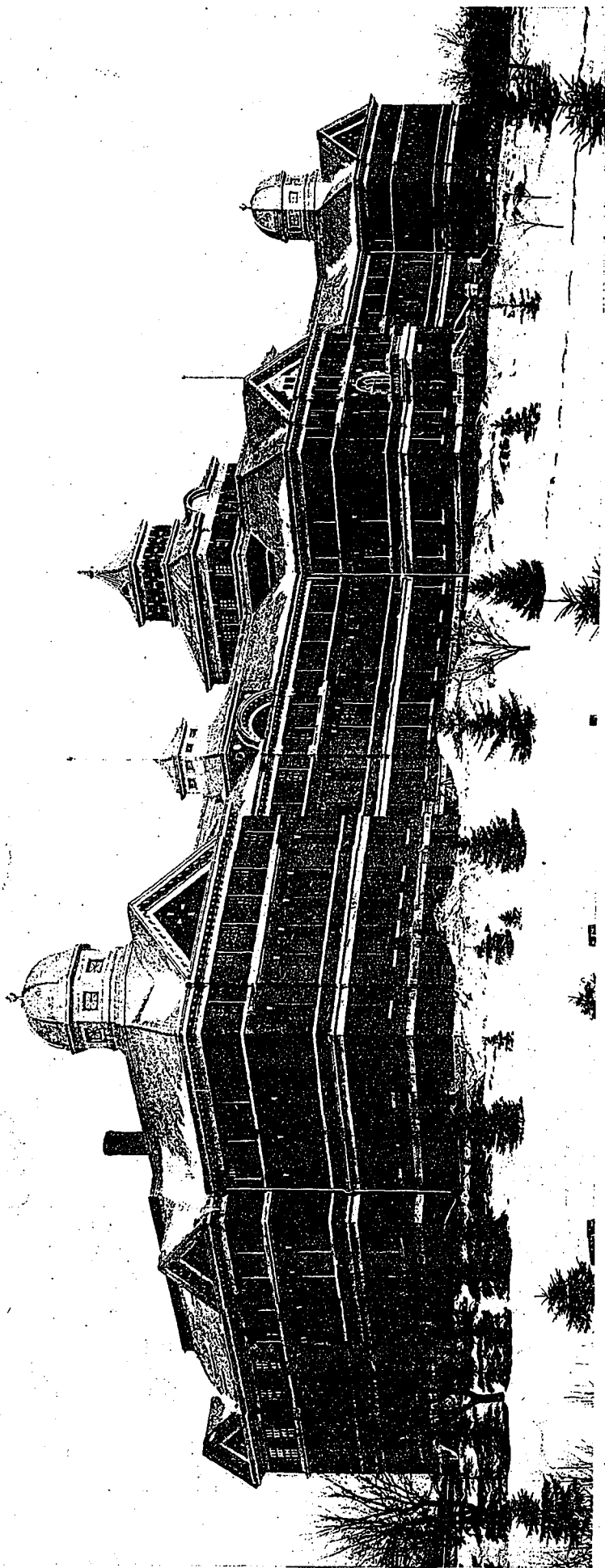
JOHN D. ATCHISON, ARCHITECT.



BOARD ROOM.  
MAIN OFFICE.

GREAT WEST LIFE ASSURANCE CO. BUILDING,  
WINNIPEG, MANITOBA.

JOHN D. ATCHISON.  
ARCHITECT.



HOSPITAL FOR THE INSANE,  
BRANDON, MANITOBA.

V. W. HORWOOD,  
PROVINCIAL ARCHITECT.



# Hospital for the Insane, Brandon, Manitoba

M. V. HORWOOD, Provincial Architect

ON one of the Brandon hills stands the Hospital for the Insane, overlooking Brandon City, and the winding Assiniboine with the fertile fields below. Here the unfortunates of the West are cared for in the splendid institution provided for by the Provincial Government, at a cost of over one million dollars.

The group of buildings consists of the hospital proper, with executive and administration wings; and outside, the power house which supplies heat, light and power; the laundry building, abattoir, farm building, and root house. The farm is an immense one, supplying all the roots and meat, and the inmates, if their condition allows, are permitted to partake in the work of producing their food. The grounds around the building are being laid out as a park.

The building has a frontage of over four hundred

feet, with wings extending back one hundred and fifty feet. The exterior is of rich red brick with buff Tyndal stone base and trim. It is of reinforced concrete construction and fireproof, the staircases being of steel and marble, the floors of terrazzo. Every precaution has been taken against sudden panic.

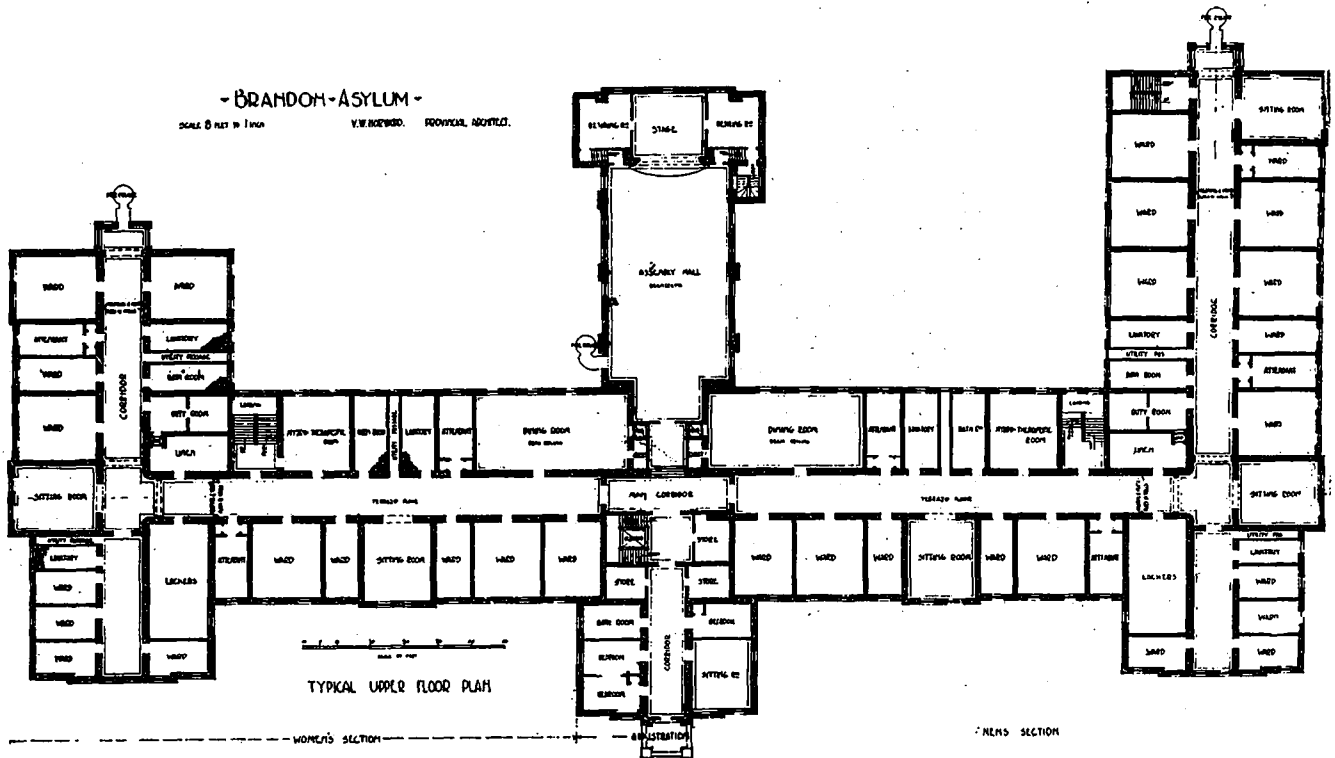
Entering the administrative portion by a flight of stone steps, you pass into a spacious entrance hall, from which access is gained to the general offices and consulting rooms, and thence to the heart of the building. From this central point run the corridors 12 feet wide, communicating with the several rooms, offices and wards. The elevators are conveniently placed in each division, and the dining rooms off each ward are served directly from the kitchen by electrical lifts. The assembly room is used as a recreation room and chapel, and no expense has been



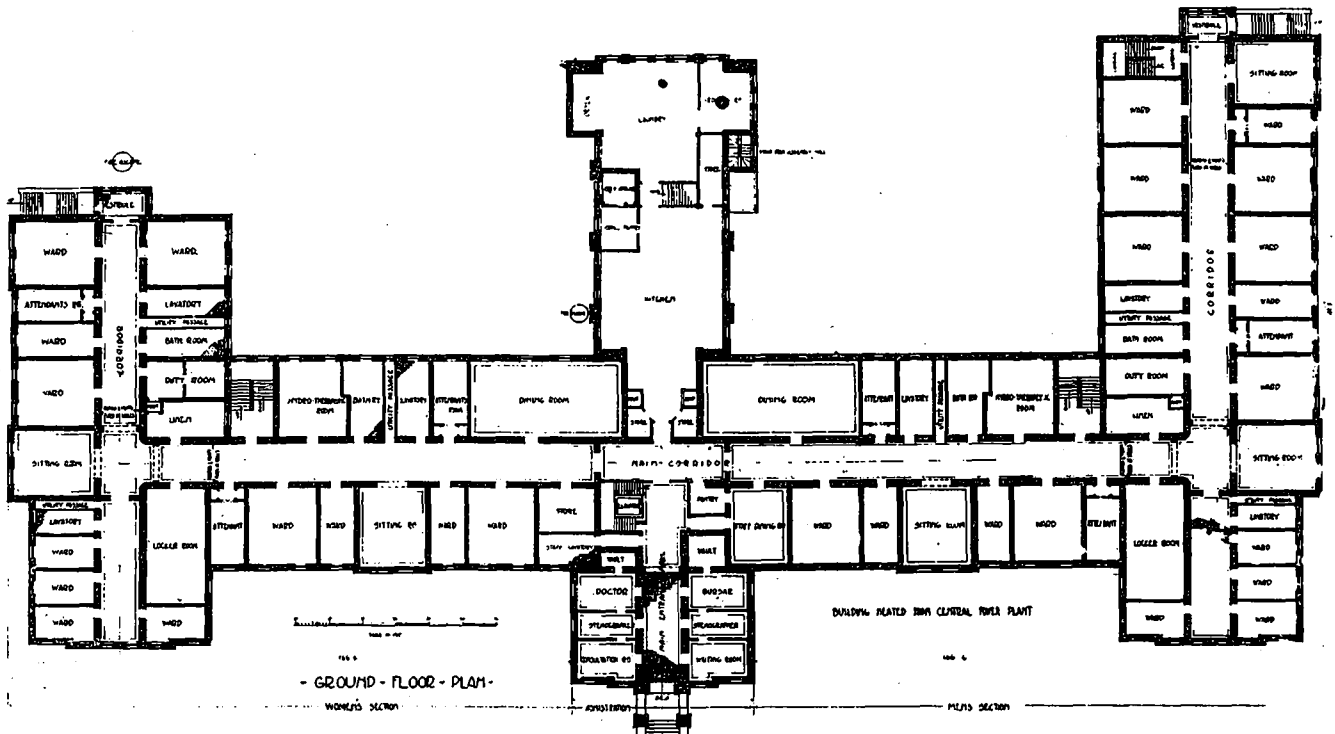
CORRIDOR.

spared to make the lives of the unfortunate inmates bearable and conducive to their final recovery. The sanitary appliances throughout are of the most modern.

The building was carried out under the Provincial Architect, V. W. Horwood; the Minister of Public Works, Hon. C. H. Campbell; and Hon. G. R. Coldwell.



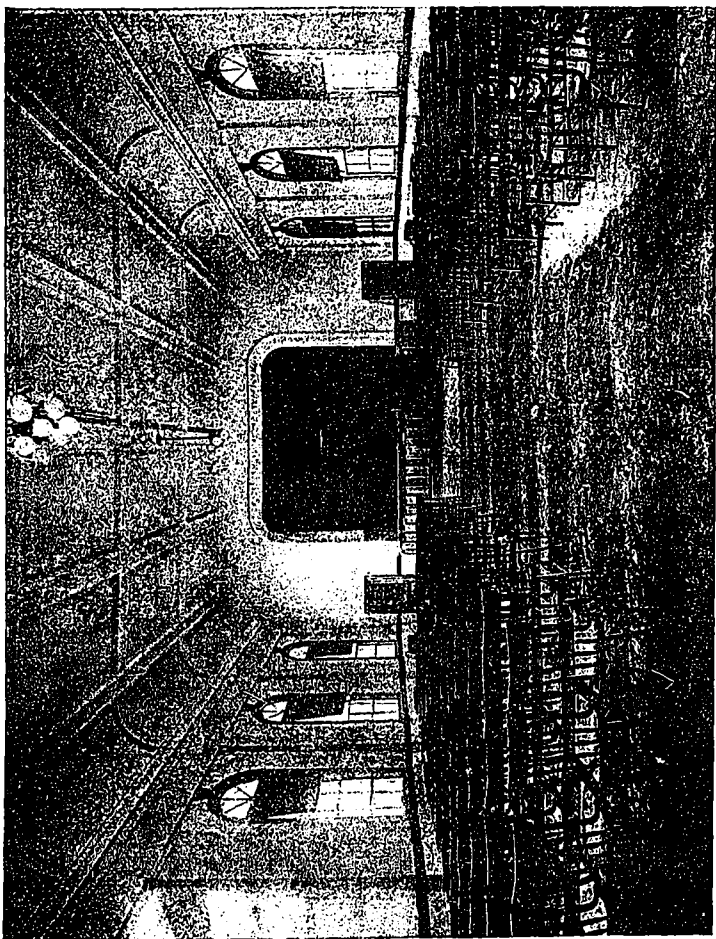
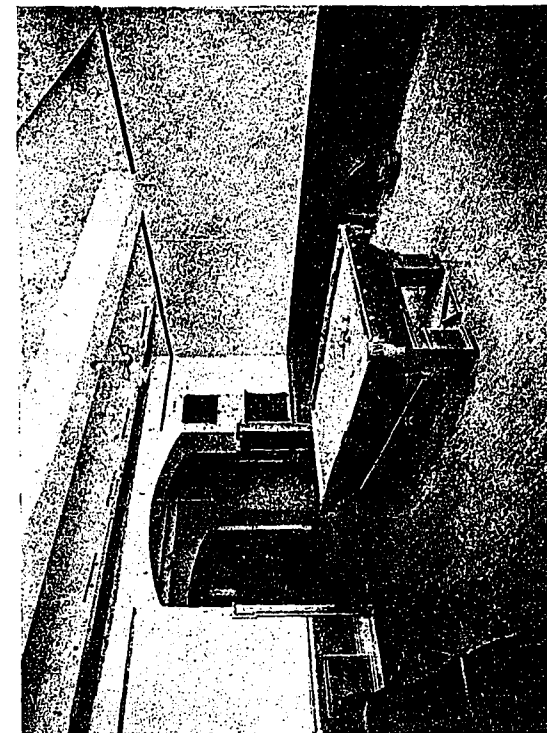
TYPICAL UPPER FLOOR PLAN.



GROUND FLOOR PLAN.

HOSPITAL FOR THE INSANE, BRANDON, MAN.

V. W. HORWOOD, PROVINCIAL ARCHITECT.

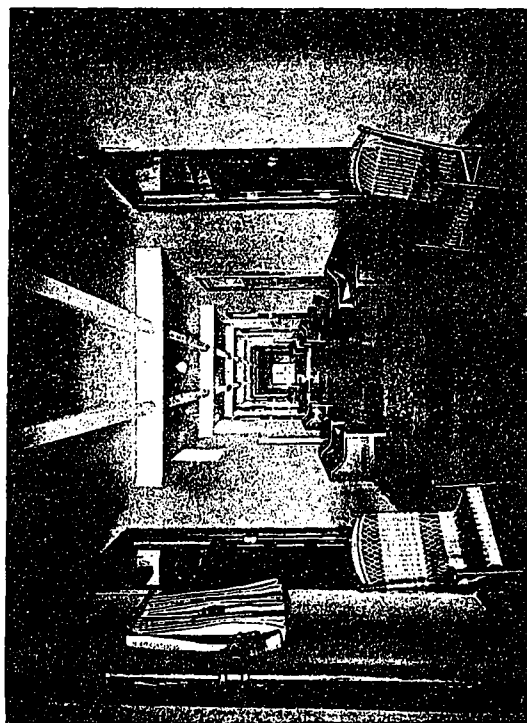


SEATING ROOM.

ASSEMBLY HALL.

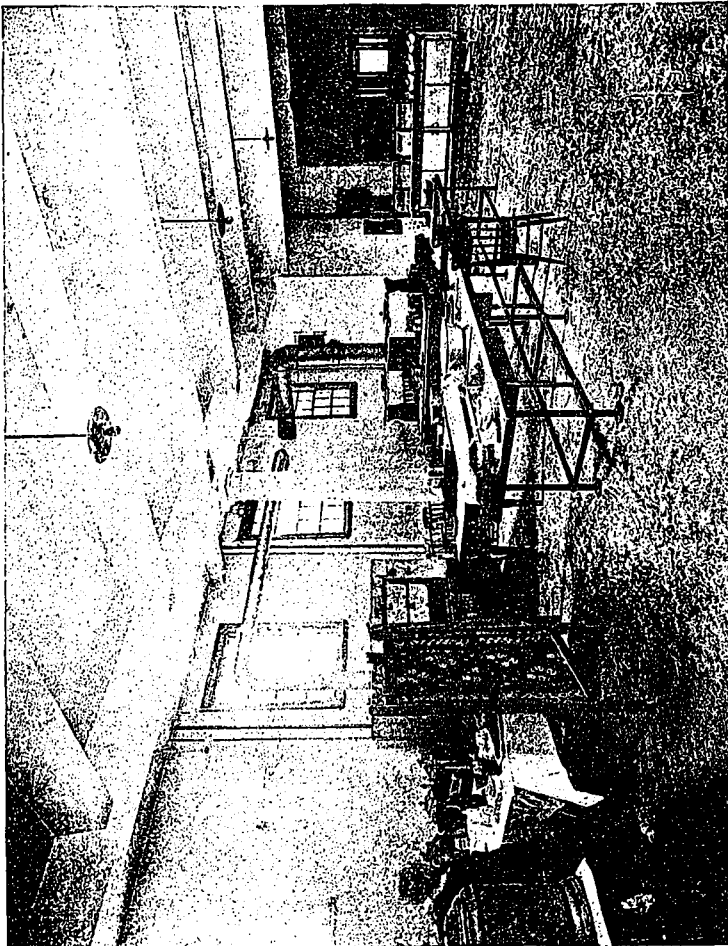
HOSPITAL FOR THE INSANE,  
BRANDON, MAN.

V. W. HORWOOD,  
PROVINCIAL ARCHITECT.

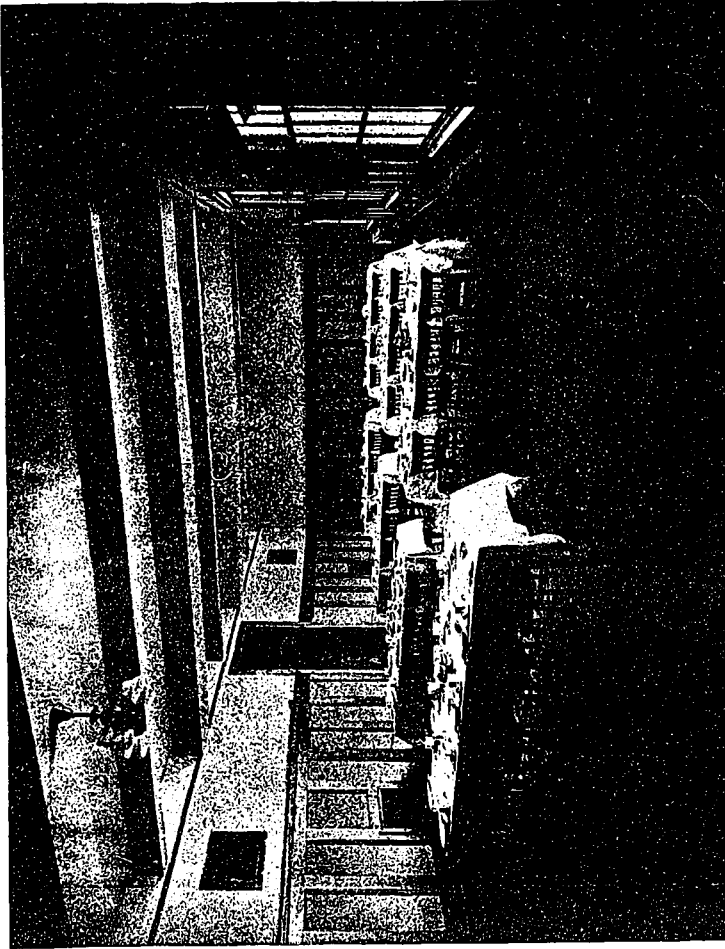


POOL ROOM.

CORRIDOR.



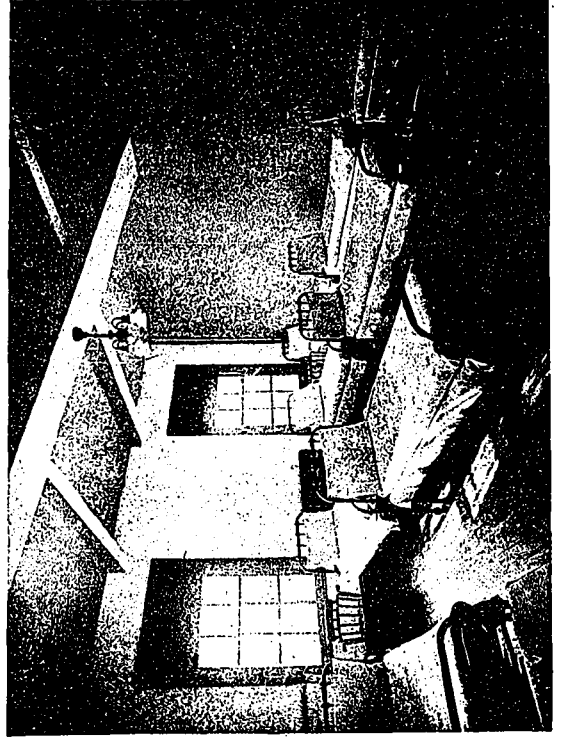
KITCHEN.



DINING ROOM.



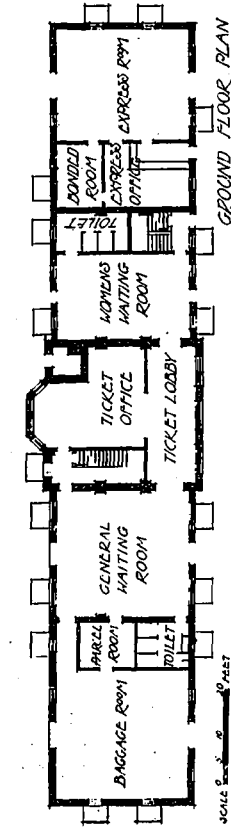
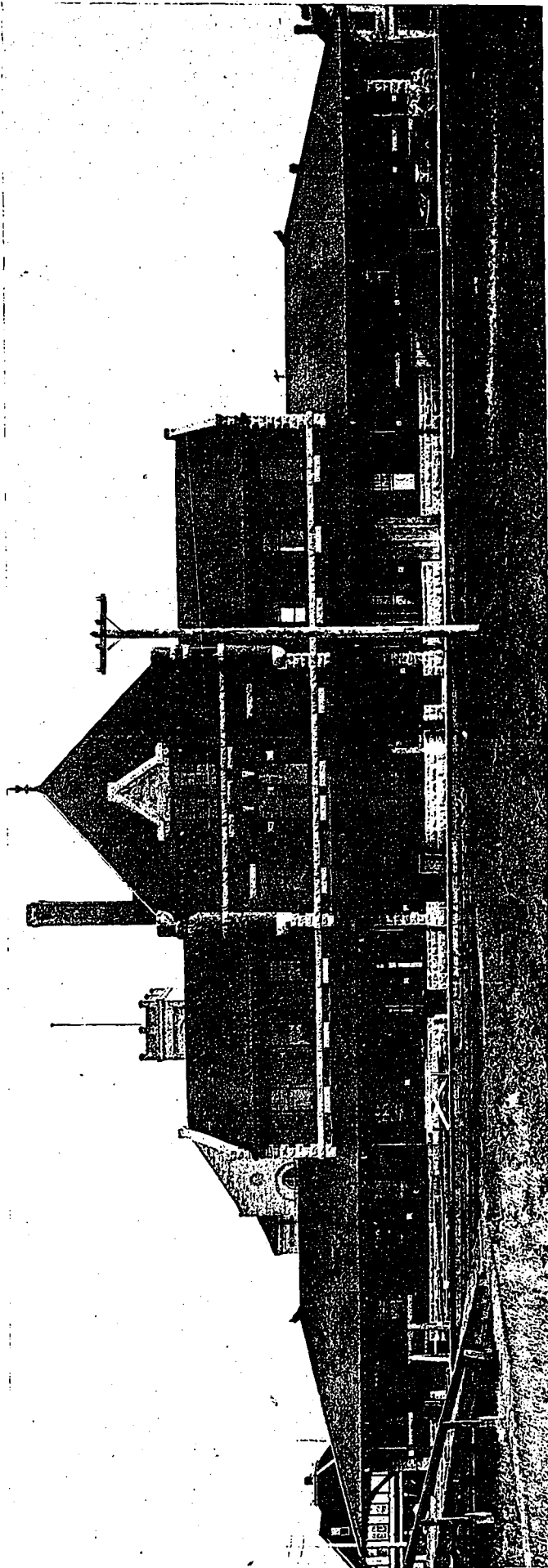
HYDROTHERAPEUTIC ROOM.



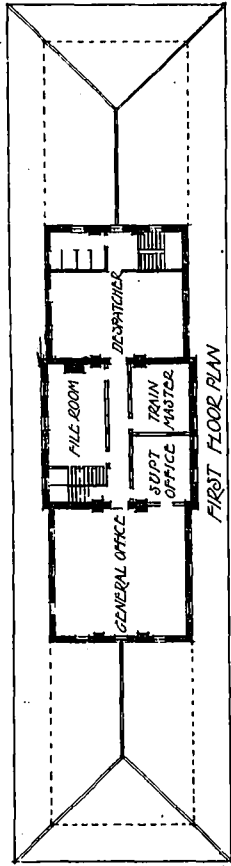
MALE WARD.

HOSPITAL FOR THE INSANE,  
BRANDON, MAN.

V. W. HORWOOD,  
PROVINCIAL ARCHITECT.



GROUND FLOOR PLAN



FIRST FLOOR PLAN

NEW C.N.R. STATION, DAUPHIN, MANITOBA.  
PRATT & ROSS, ARCHITECTS.

The building represents the outgrowth of Dauphin's phenomenal progress in the past few years. It is the third structure to be erected in fifteen years. The exterior is of red brick with stone trimmings. Upon the interior the finish is in oak and consists of a ground, first and attic floor plan. The superintendents office adjoins that of the chief clerks and staff, at the end of the corridor on the first floor, and

at the opposite end are offices of ample room for the trainmaster, roadmaster and bridge-building supervisors. The office of the despatchers contains two sets of instruments. On the top floor are rooms for records and stationery.

The platforms are arranged for both roads. The main platform will be extended another 100 feet upon the removal of the old depot. Ample lighting

has been installed with ten ornamental five-globe electric standards and candle power electric lamps all around the veranda.

The whole is fitted with steam heating and all the latest sanitary appliances, and offers accommodation that will be greatly appreciated by the travelling public. The cost of the completed structure was \$50,000.

# CONSTRUCTION

A JOURNAL FOR THE ARCHITECTURAL  
ENGINEERING AND CONTRACTING  
INTERESTS OF CANADA



FREDERICK REED, Editor

H. GAGNIER, LIMITED, PUBLISHERS

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**CONTRIBUTIONS**—The Editor will be glad to consider contributions dealing with matters of general interest to the readers of this Journal. When payment is desired, this fact should be stated. We are always glad to receive the loan of photographs and plans of interesting Canadian work. The originals will be carefully preserved and duly returned.

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**Vol. 6 Toronto, April, 1913 No. 4**

## CURRENT TOPICS

**HUGH STEWARD**, architect, has entered into partnership with the firm of R. G. Bunyard, located at Moose Jaw, Sask.

\* \* \*

**EDMONTON** will erect a ten-story office building for the Bank of British North America, fire stations amounting to \$150,000, and new Sherman theatre for \$270,000, G.T.P. Railway shops.

\* \* \*

**THE FOLLOWING** Toronto architects have removed their offices: Sproatt & Rolph, from 90 Yonge street to 36 North street; Curry & Sparling from 90 Yonge street to 105 Bond street; Chapman & McGiffin from 59 Yonge street to the Tyrrell building, 95 King street east.

**C. F. MARTIN** has opened an office for the practice of architecture in the Tyrrell building, 95 King street east, Toronto.

\* \* \*

**THE SITE** for the monument to his late Majesty King Edward VII. will be on the heights between Wellington street and the East Block, overlooking Confederation Square and the Rideau Canal, Ottawa. The monument will cost \$40,000, and add greatly to the historical atmosphere of the square.

\* \* \*

**THE MOST STRIKING** illuminated electric cross in the world will be erected in connection with St. Augustine's Seminary, situated at Scarborough Bluffs, Toronto. The cross will be 16 feet in height with a horizontal arm of 7 feet, containing 125 electric lights. The top of the perpendicular portion of the cross will be 480 feet above the lake and will be visible on a clear night from the Niagara side.

\* \* \*

**AN EXPLOSIVE** of tremendous force made from liquid oxygen is the result of an experiment by Prof. Charles Nordmann, of Paris. A new solution of economic lighting is assured by the result of this discovery. Tubes of neon containing the property of electric luminosity are provided which produce a soft red light. This new method is especially commended for the extremely low cost in manufacturing same.

\* \* \*

**THE PRESENT YEAR** will undoubtedly prove a record year for Regina in the building field. Prospective structures to the amount of \$12,000,000 are practically assured, which figure surpasses the total permits of last year by \$4,000,000. The city council has passed an ordinance to the effect that the tallest building will be limited to ten stories. Such a move places a ban on the skyscraper and augurs well for the artistic appearance of the city.

\* \* \*

**FIFTY-NINE MODELS** were submitted in the competition for the memorial to be erected at 106th street, Broadway and West End avenue, New York city, in honor of the late Mr. and Mrs. Isador Straus, who perished on the Titanic. The successful competitors are Augustus Lukeman, sculptor, and Evarts Tracy, architect. The design, which is to cost \$20,000, will be in the form of a basin occupying the centre of a triangle on the south end of which will be a low pedestal four feet in height, with a reclining figure looking into the water. The rules for the competition specified that the fountain should present an object of beauty without containing an allegorical expression of any particular theme or subject. The committee in reaching its decision accepted the artist's suggestion of embodying in the park a scheme of peaceful contemplation over a sheet of water, leaving the meditative public to muse over the sacrifice made.

# Competitive Design for the City Hall, Winnipeg, Man.

THE SUCCESSFUL competitors for the new City Hall at Winnipeg are as follows: First prize, Clemesha & Portnall, Regina; second prize, Woodman & Carey, Winnipeg; third prizes, Brown & Vallance of Montreal, Hugh G. Jones of Montreal, and John D. Atchison of Winnipeg. Leonard A. Stokes, F.R.I.B.A., in submitting his report, said:

"It gives me much pleasure to be able to state that the response to your invitation to architects to submit designs for your new City Hall has been in every way satisfactory. Thirty-nine designs—many of the most exceptional merit—having been submitted in competition. After careful examination, I unhesitatingly place No. 18 first, as it is undoubtedly the best. No. 11 I place second, and Nos. 26, 30 and 34 the three designs coming next in merit, after the two above named awards have been made. The five prizes should therefore be awarded accordingly, and I feel confident that de-

sign No. 18, placed first, will make a handsome addition to the city architecturally, besides being in every way a well arranged and serviceable building."

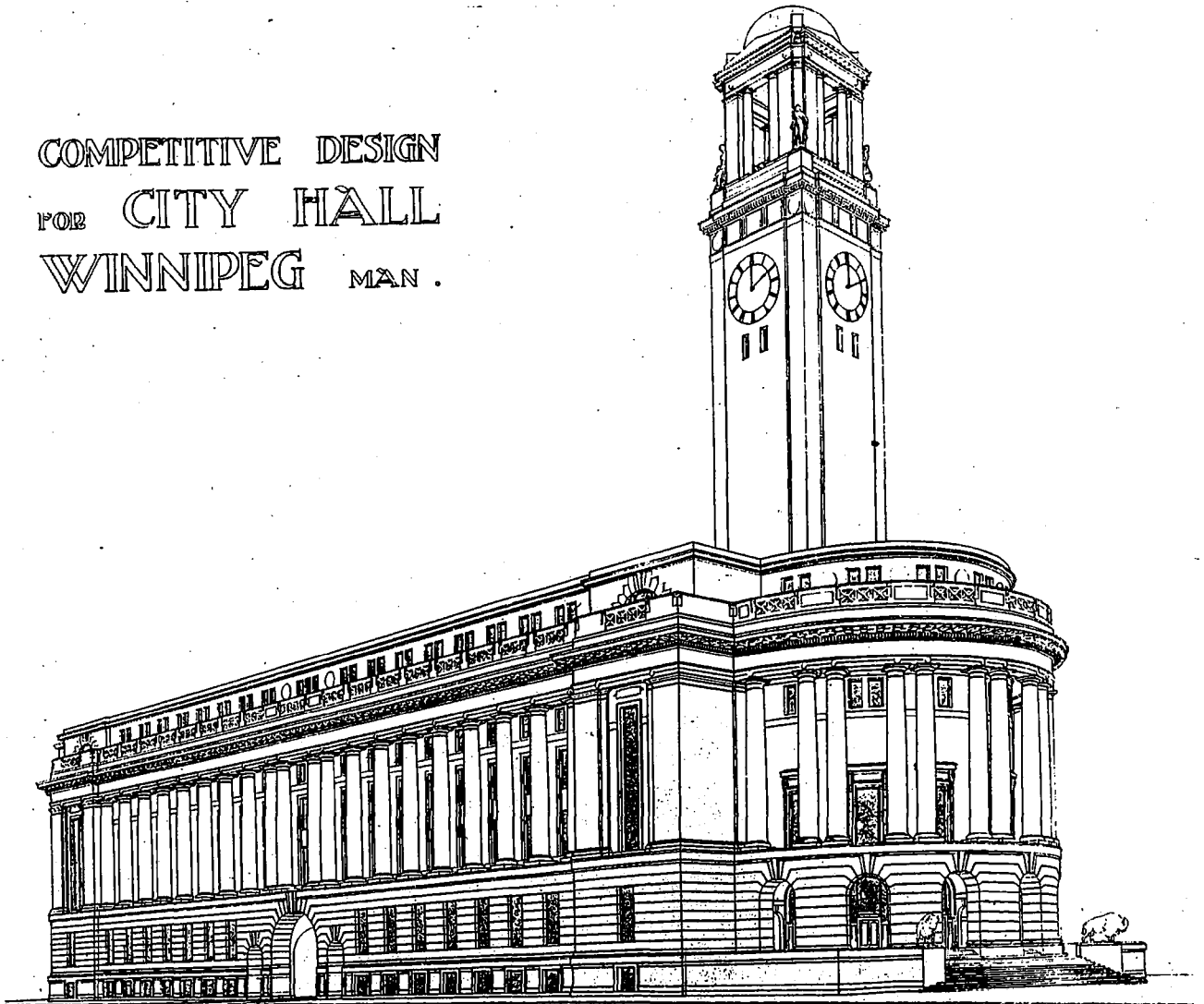
The reports submitted with the various successful competitions are given, with the exception of the first, prize, which we were unable to secure.

## *Second Prize Design—Woodman & Carey.*

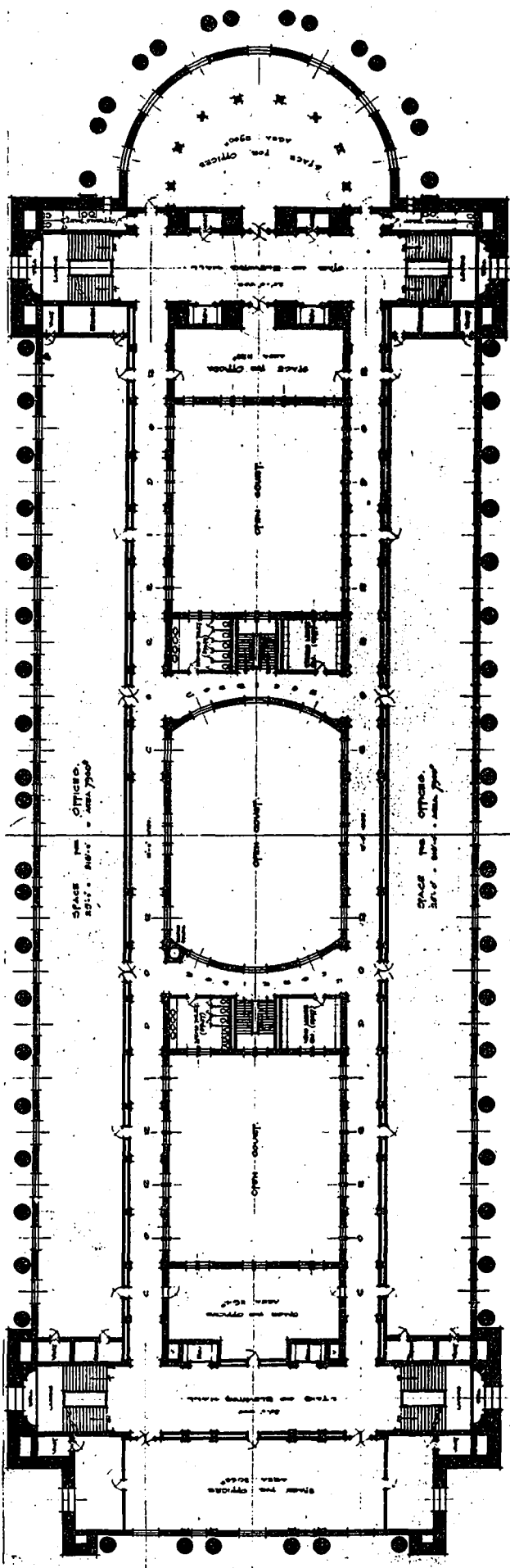
The style of the building is Greek Ionic, six stories in height, including basement. Economy in design being required by the conditions, it was therefore considered advisable to omit large open spaces which require height in proportion.

The council chamber is placed in the centre of the building with due regard to its importance, the main staircase leading directly to it, subsidiary staircases leading to the conference room and mayor's quarters, whilst all three are united by a spacious ante hall lighted overhead, also by direct light over the council

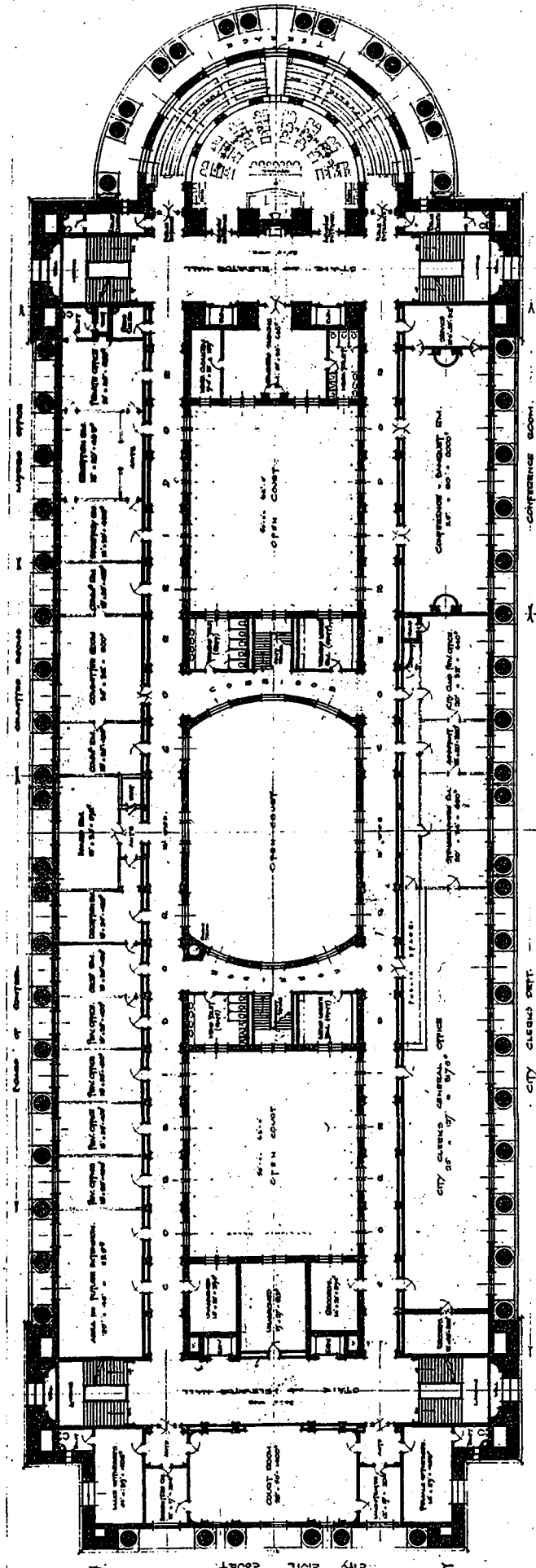
COMPETITIVE DESIGN  
FOR CITY HALL  
WINNIPEG MAN.



WINNING DESIGN, CITY HALL, WINNIPEG, MANITOBA.  
CLEMESHA & PORTNALL, ARCHITECTS.



TYPICAL FLOOR PLAN

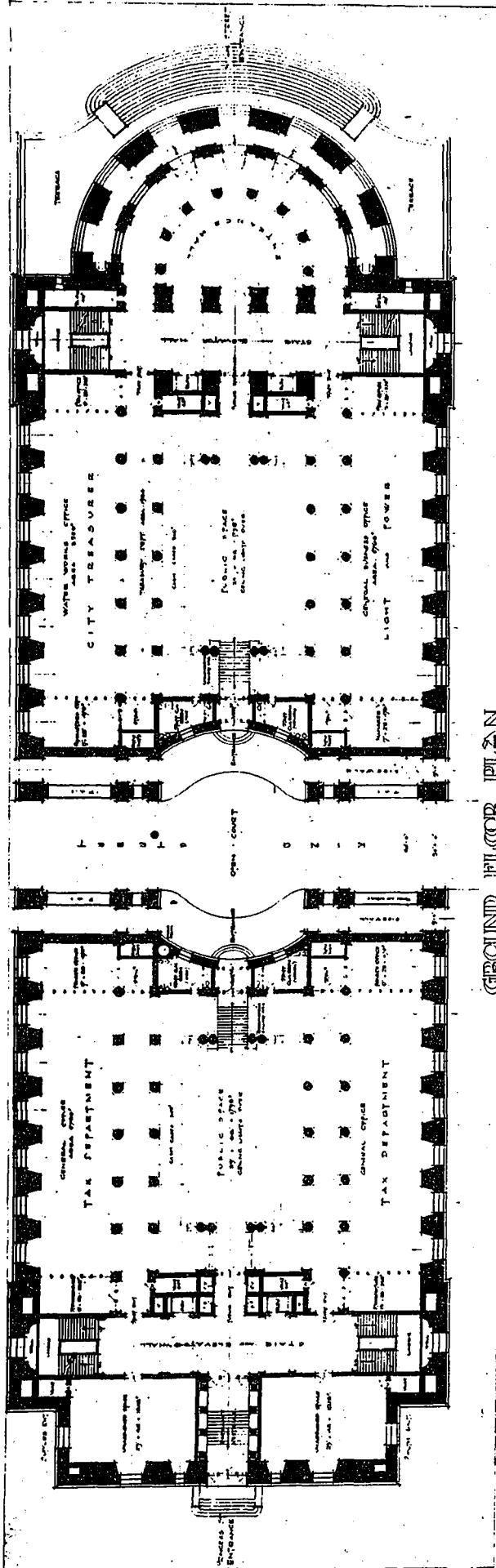


SECOND FLOOR PLAN

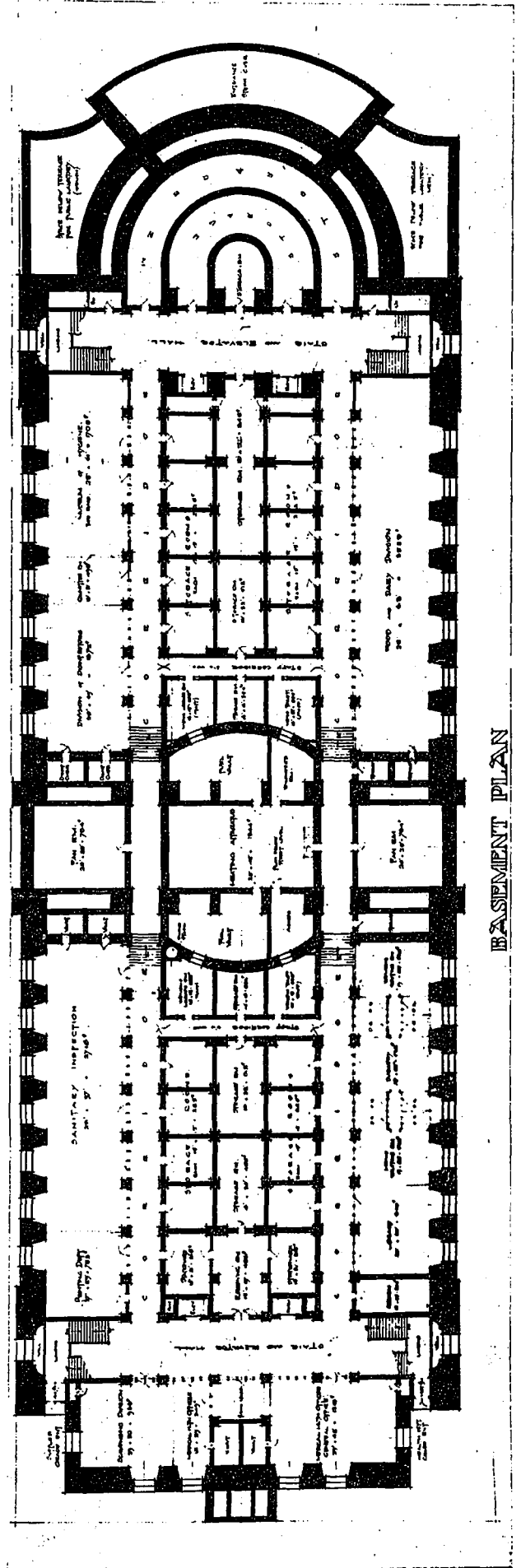
WINNING DESIGN, CITY HALL, WINNIPEG, MANITOBA.

CLEMESHA & PORTNALL, ARCHITECTS.





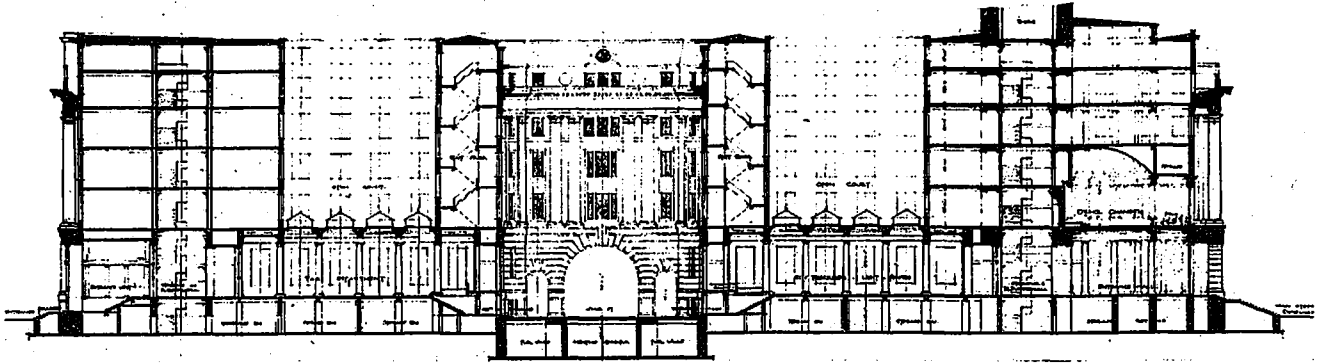
GROUND FLOOR PLAN



BASMENT PLAN

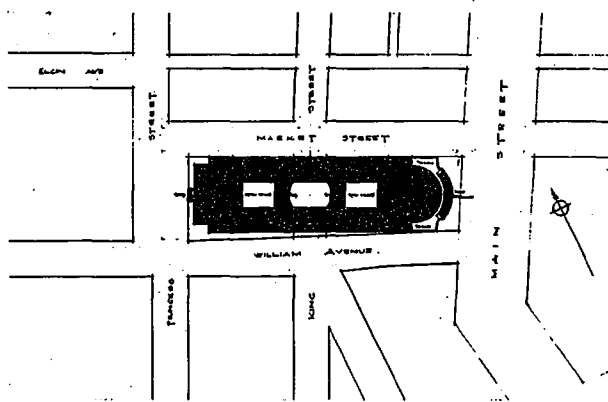
CONSTRUCTION

LONGITUDINAL SECTION



chamber. The city clerk is within easy access to the public, and at the same time adjoining the mayor's quarters.. The record room is on a mezzanine floor, convenient to the city clerk's office, and with direct access from that office. The board of control is planned on the south side of the building, the secretary of the board being placed immediately above the city clerk's office, adjoining the staircase. Committee rooms are conveniently located on the north side of the council chamber; a members' entrance and staircase being provided for the council, while staircases for public use lead directly to the galleries of the council chamber. Ample lavatories are provided throughout the building, all ventilated by air shafts, the foul air being withdrawn by mechanical means

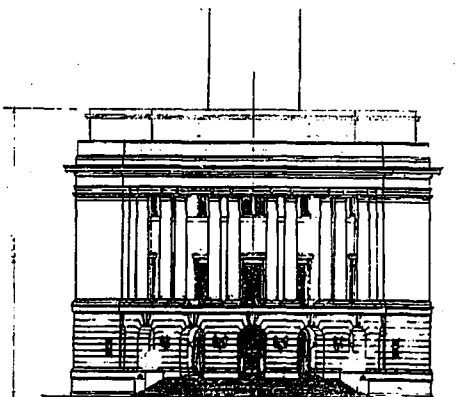
and fresh air forced in through air ducts which are carried along the main corridors, having inlets into all offices. The civil court and scavengers' department have outside entrances which have been considered advisable, at the same time both departments are within direct access to the main building. The engineer's department is placed in the west end of the building, with an easy access to the public.



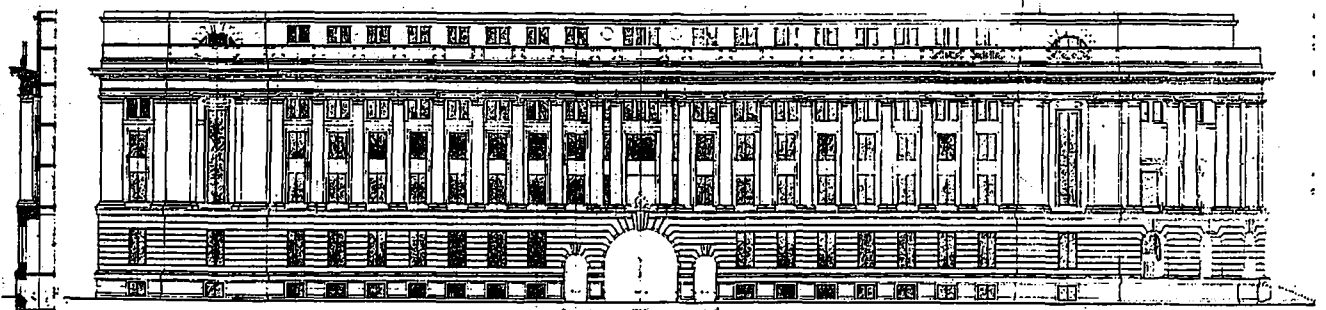
The plan filing room, of fireproof construction, is immediately below the city engineer's office, with a separate staircase leading directly therefrom.

The drafting rooms of this department are placed on the top floor above the main office, all of which have a north light. Freight elevators are located centrally in the building adjoining the large vaults and communicating with the

ELEVATION TO MAIN ST.



ELEVATION TO WILLIAM AVE.



SECTION, BLOCK PLAN AND ELEVATIONS OF WINNING DESIGN.

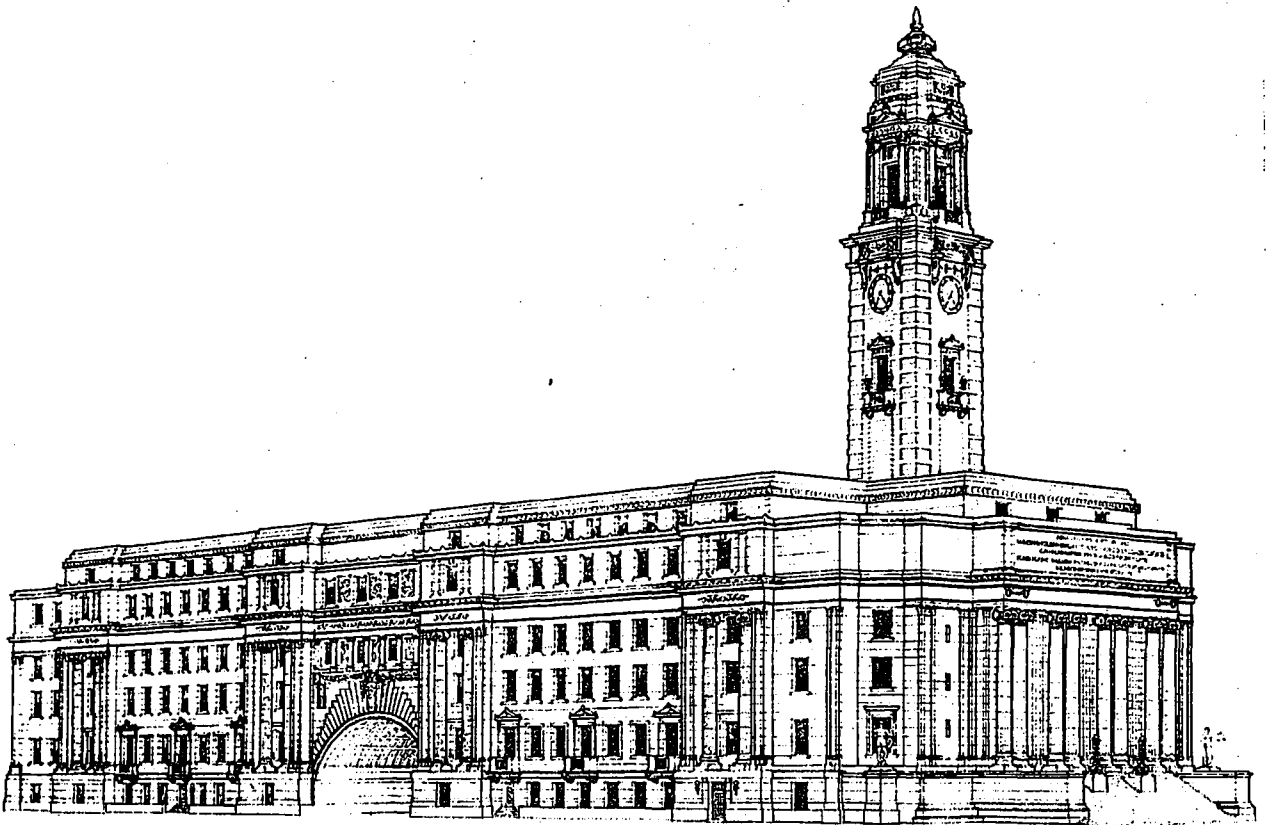
receiving rooms, which open directly, at a convenient level, on to the roadway between the bridge.

The health department is arranged, as suggested, in the basement, which is three feet below the ground level, giving ample light to all departments. The animal room of the bacteriological department, planned at the west end of the front portion of the building adjoining the receiving room, is isolated, except to its immediate department. Provision for the heating plant has been made centrally adjoining King and Market streets, convenient for the delivery of fuel and disposal of ashes.

The building is to be of grey Kenora granite, or native stone. The decoration of the interior of the

the areas less than given in the requirements; second, that all other areas somewhat exceed the requirements, but this excess has not been added to the additional space required for future extension; third, that the space asked for future extension is 30,098 square feet.

The following are the cubical contents, which have been taken in a liberal manner: Boiler room, coal storage, fan rooms in sub-basement, 78,000; basement, ground floor, first floor, second floor, third floor and fourth floor, 4,897,840; tower above roof, 221,056, making a total of 5,196,896 cubic feet. Allowing 78,000 cu. ft. at 25c., 4,897,840 cu. ft. at 50c., 22,056 cu. ft. at \$1, \$100,000 for extra



SECOND PRIZE DESIGN, CITY HALL, WINNIPEG,

WOODMAN & CAREY, ARCHITECTS.

building will be of the simplest—color being employed in the Greek manner in many cases.

The spare room, which is distributed as seems advisable, in the entire building, amounts to 30,314 sq. ft., and is divided up as follows: Ground floor, 1,976; second floor, 1,456; third floor, 10,559; fourth floor, 15,880; basement, 443.

The cubic contents of the building are 4,785,852—the cost being two million three hundred and ninety-two thousand, nine hundred and twenty-six dollars.

*Third Prize Design—Brown & Vallance.*

In presenting the accompanying plans for your consideration, the following points might be drawn to your attention: First, that in only two cases are

finish in vestibules, halls, conference room and council chamber, and \$200,000 for architects' and engineering fees, the total amounts to \$2,989,476.00.

*Third Prize Design—Hugh G. Jones.*

The conditions of the programme indicate the following requirements, which we have endeavored to work out:

In plan it seems essential that the space for departments should be so disposed as to allow the maximum latitude for rearrangement of departments as conditions require, and that the principal department, such as the offices of the mayor, board of control, the council chamber and the conference chamber, should be placed so as to have a monumental approach. The general communication should be by

means of direct and well lighted corridors, with stairs and elevators to the ground level at each end, and for communication between floors; the public toilets convenient to these means of communication, and the soil stacks built in at alternative outside columns so as to allow department toilets and basins to be built in as required. The service elevators for the handling of material from the stationery room and vaults in the basement to the various departments should be at the centre of the building.

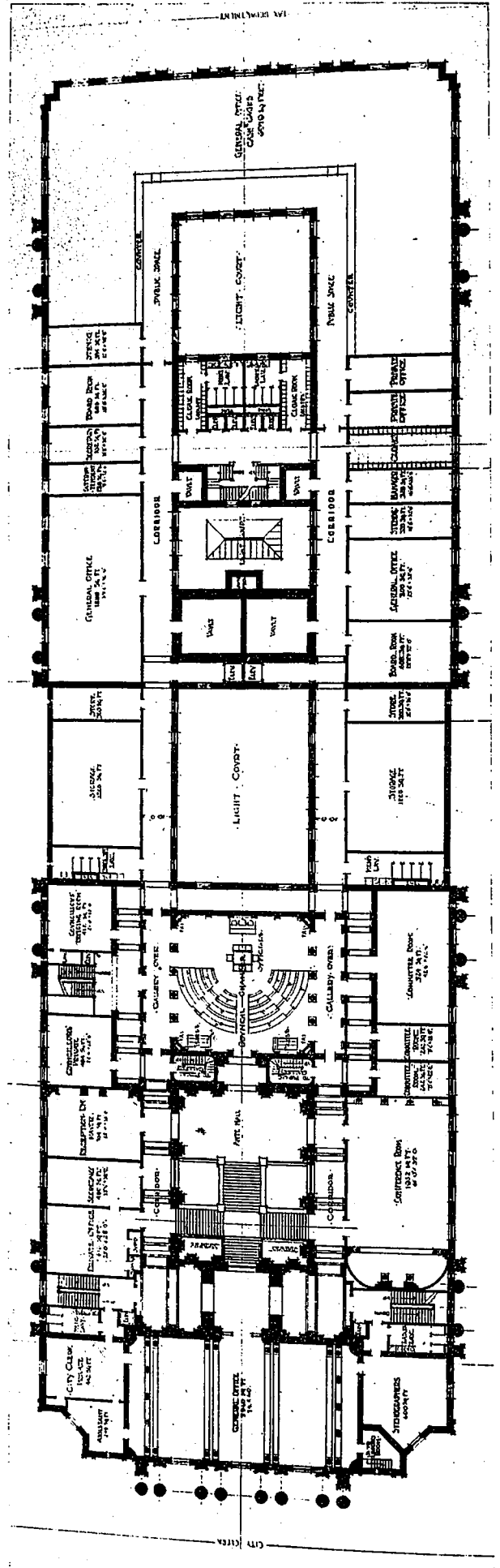
The exterior of the building should be arranged so as to get the maximum amount of light consistent with a dignified public monument. A pilaster treatment suggested itself, both because of the opportunity offered by the long frontage and as being the best means of obtaining a reasonable solidity of effect without loss of window area, also colonnades to be used only where the heavy reveal would not darken the interior. A tower should be placed so as to form a commanding feature on the axis of Main street, and in order to place the clock at a proper height.

In working out the above, the first question was whether to follow the lot lines on William street or to square the building. The latter course would unquestionably simplify the plan and be somewhat cheaper in construction. We, however, decided to follow the lot lines for the reason that to our mind a building in a central city block and following the lot line on one side and end, and touching the lot line at Main and William avenue, would not present an architectural appearance if the building were to be placed 10 feet away from the lot line at the corner of Princess street. Further, the space is desirable, although not absolutely necessary in the treasurer's and tax departments on the ground floor, rear of building.

The best solution would be the purchase by the city of sufficient ground to place the whole front of the building visibly on the axis of Main street, and allow the width of the City Hall site to be either increased at Main street frontage, or decreased at Princess street, and so as to form a square site with the building parallel with those on opposite sides of William and Market streets. In case the purchase of the extra ground is impracticable, the height of the building on the plot should be restricted so as to render it impossible to obstruct the view of the City Hall tower.

In this connection we are very firmly of the opinion that because of the narrow width of William avenue and Market street making impossible the view of the whole building except in very sharp perspective, any considerable projections of recesses in these elevations would result in the appearance of a series of separate buildings and a total loss of the dignity expected in a building of this character and possible through repetition of motive along a 500 ft. frontage.

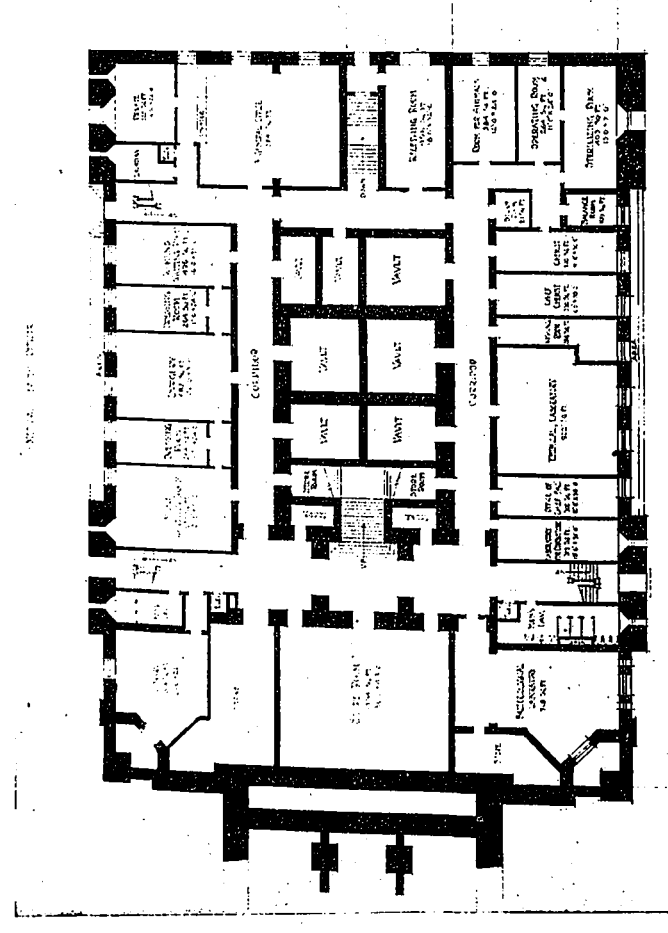
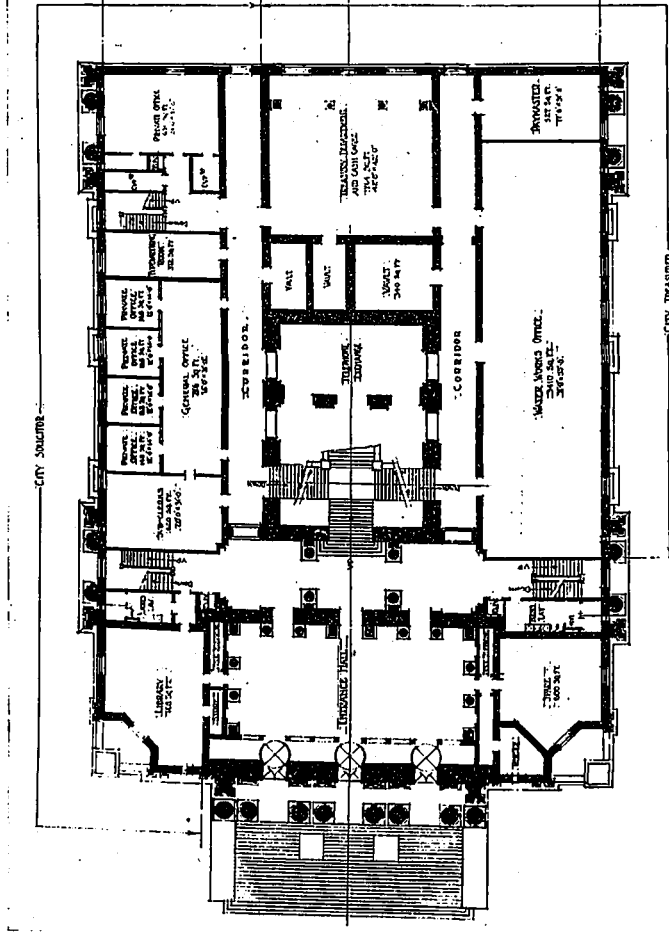
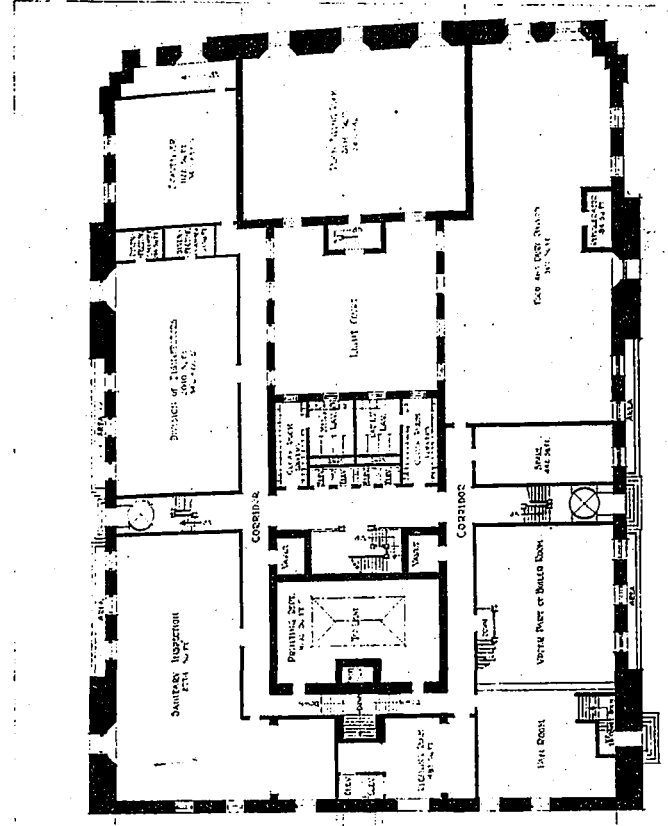
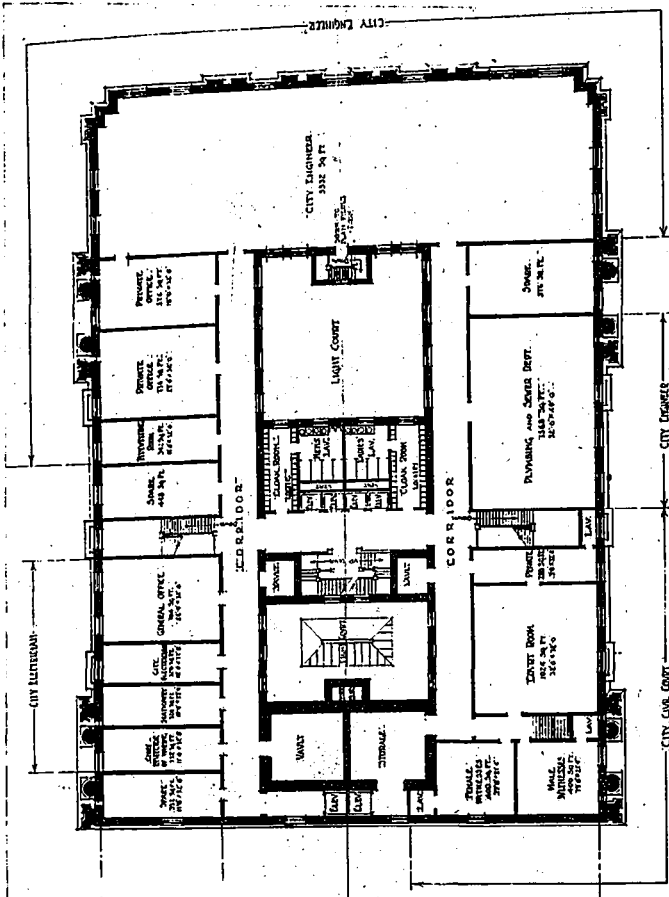
The offices of the mayor and board of control, also the council chamber and conference room, are all placed around the monumental rotunda and at a higher level so as to enjoy a degree of privacy. The



WOODMAN & CAREY, ARCHITECTS.

SECOND PRIZE DESIGN, CITY HALL, WINNIPEG.

FIRST FLOOR PLAN.

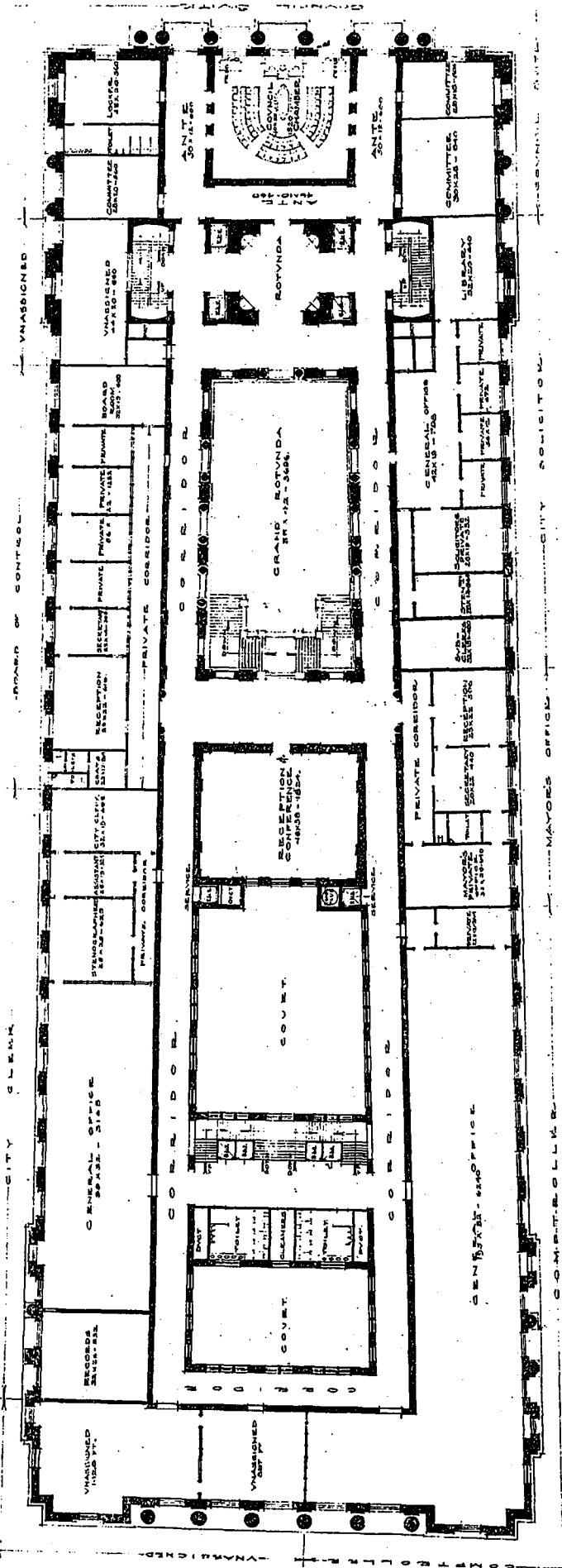


WOODMAN & CAREY ARCHITECTS.

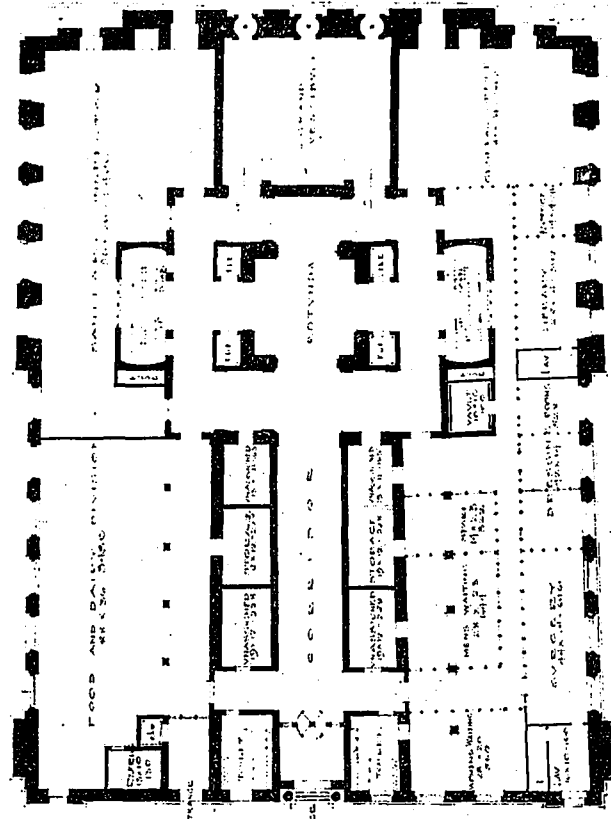
SECOND PRIZE DESIGN, CITY HALL, WINNIPEG, MAN.

GROUND FLOOR PLAN BASEMENT PLAN.

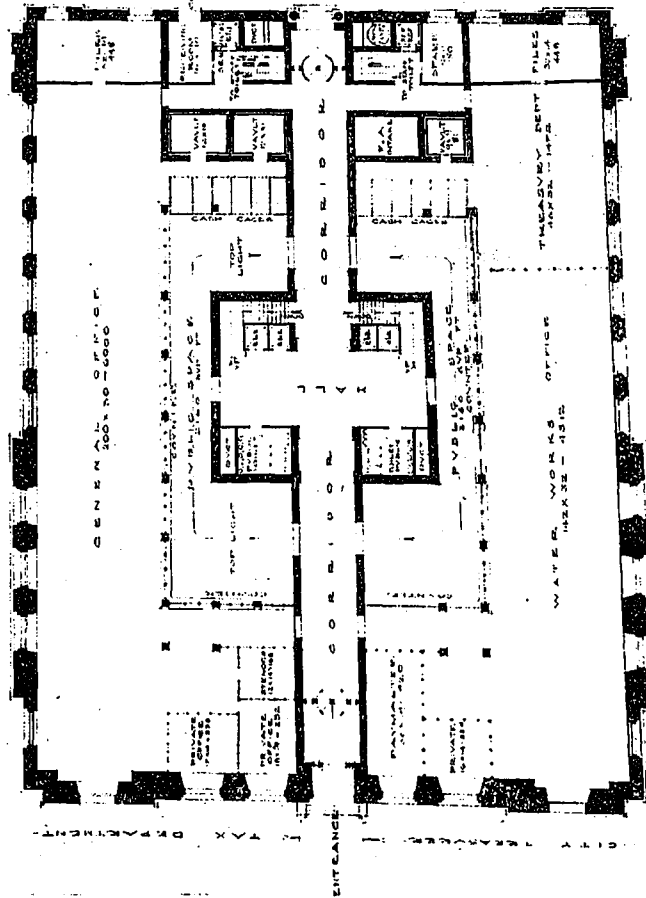
CONSTRUCTION



PRINCIPAL FLOOR

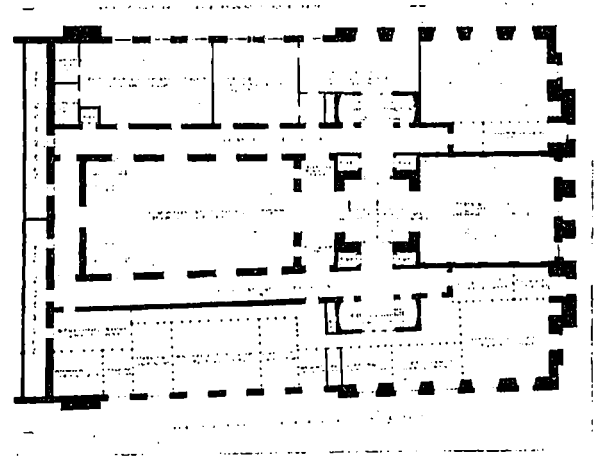
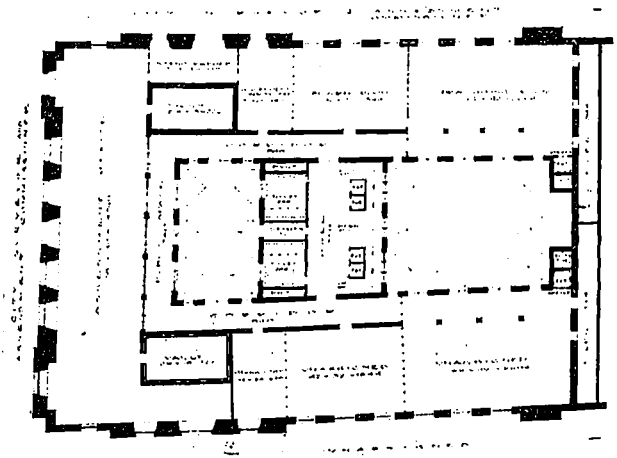
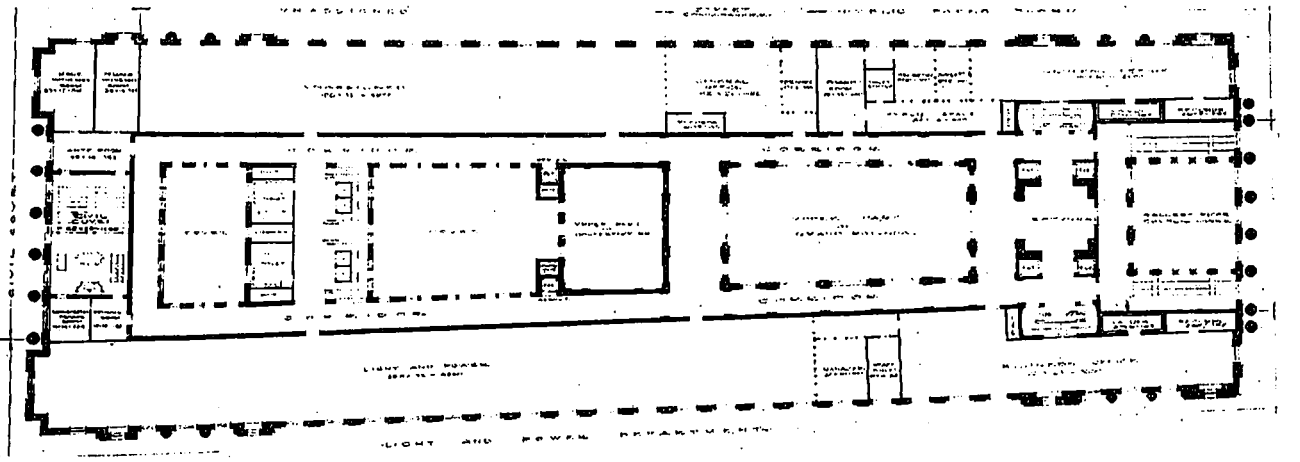
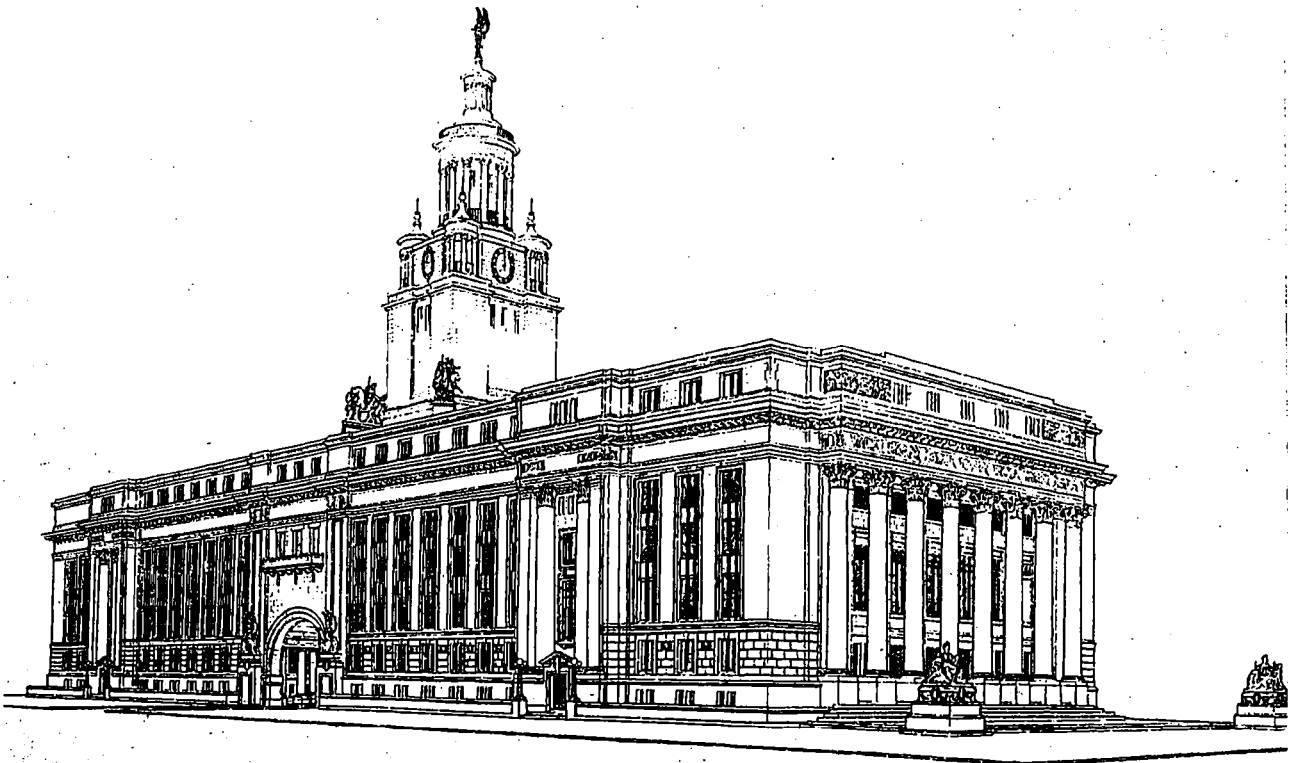


GROUND FLOOR



THIRD PRIZE DESIGN, CITY HALL, WINNIPEG, MAN.

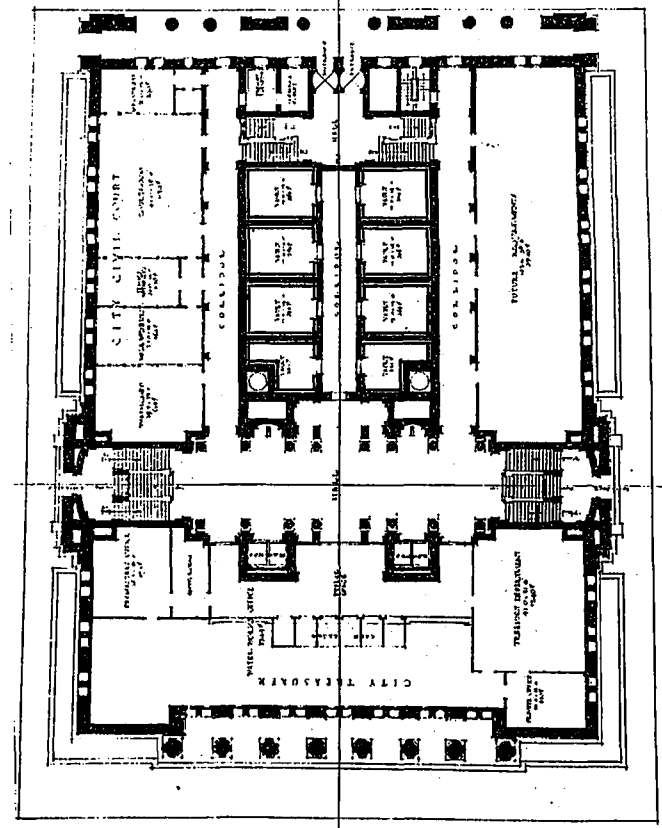
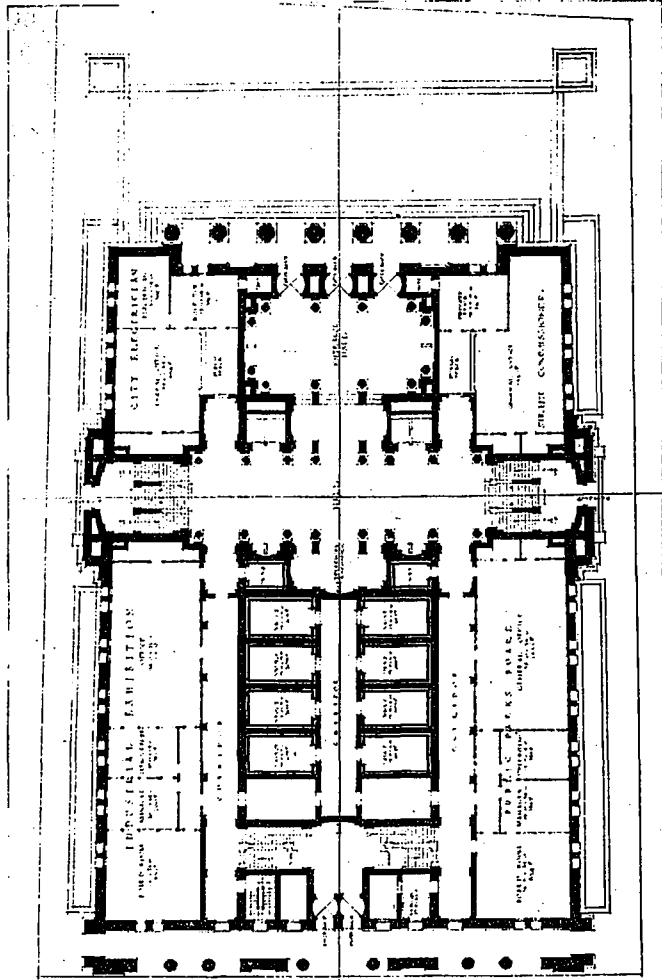
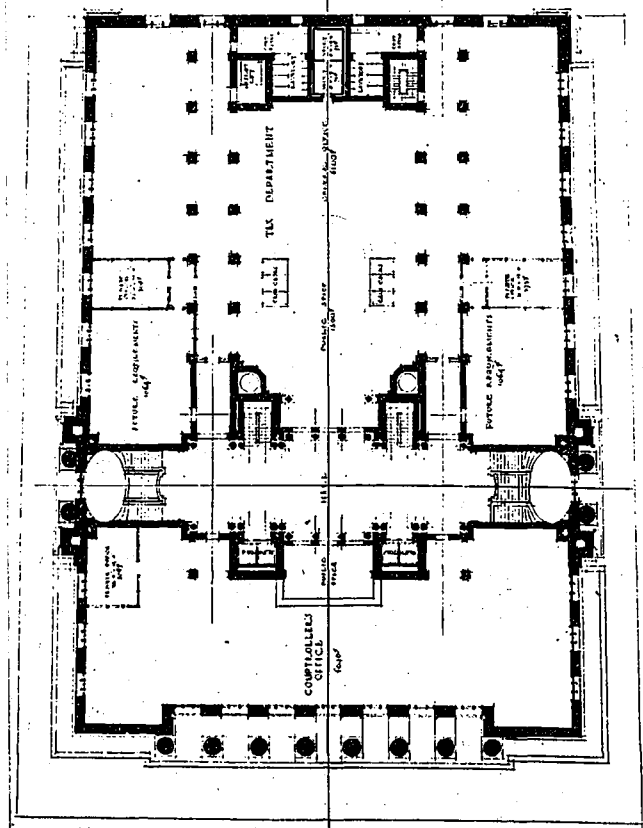
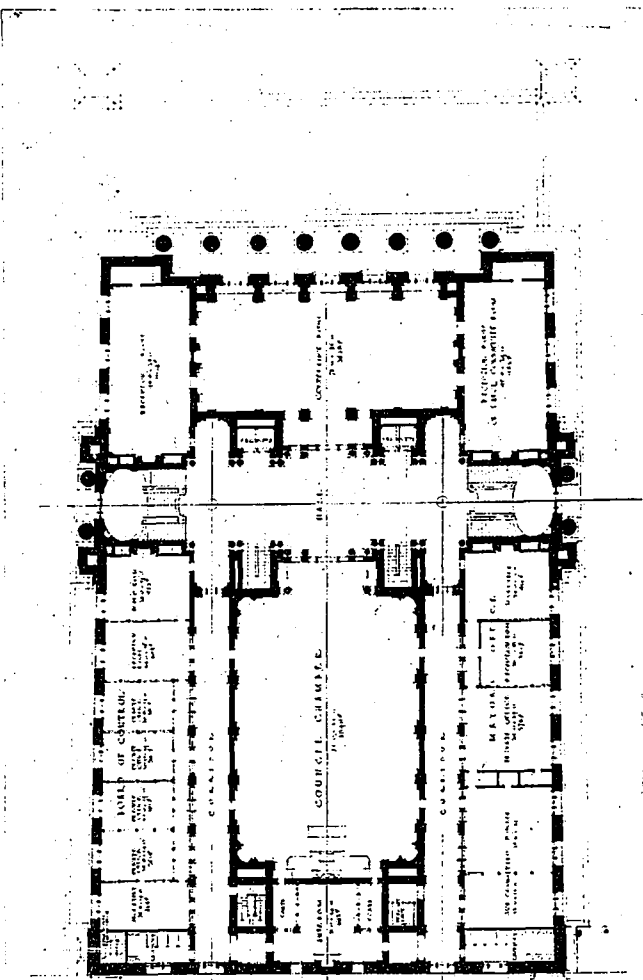
BROWN & VALLANCE, ARCHITECTS.



SECOND FLOOR  
FIRST FLOOR

THIRD PRIZE DESIGN, CITY HALL, WINNIPEG, MAN.

BROWN & VALLANCE,  
ARCHITECTS.

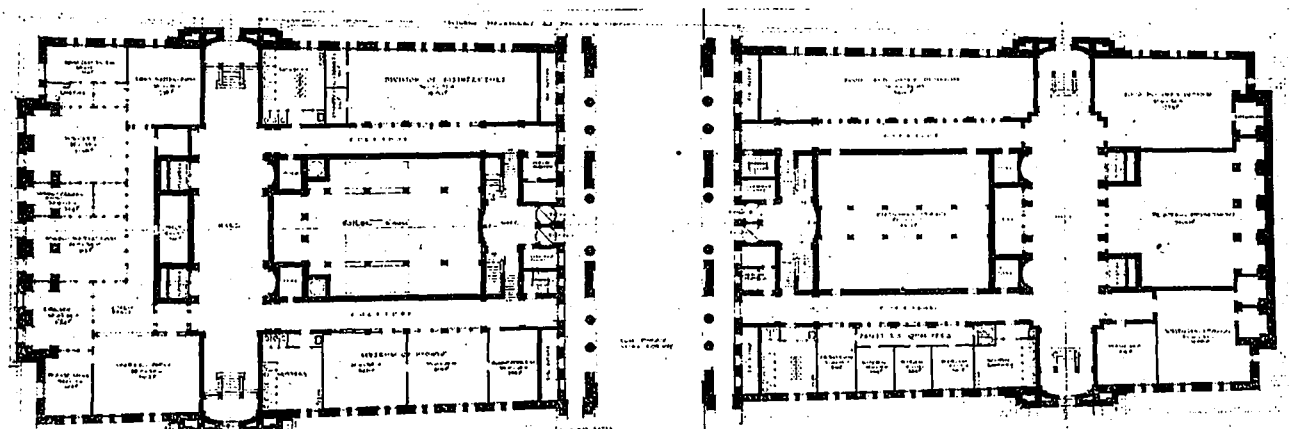
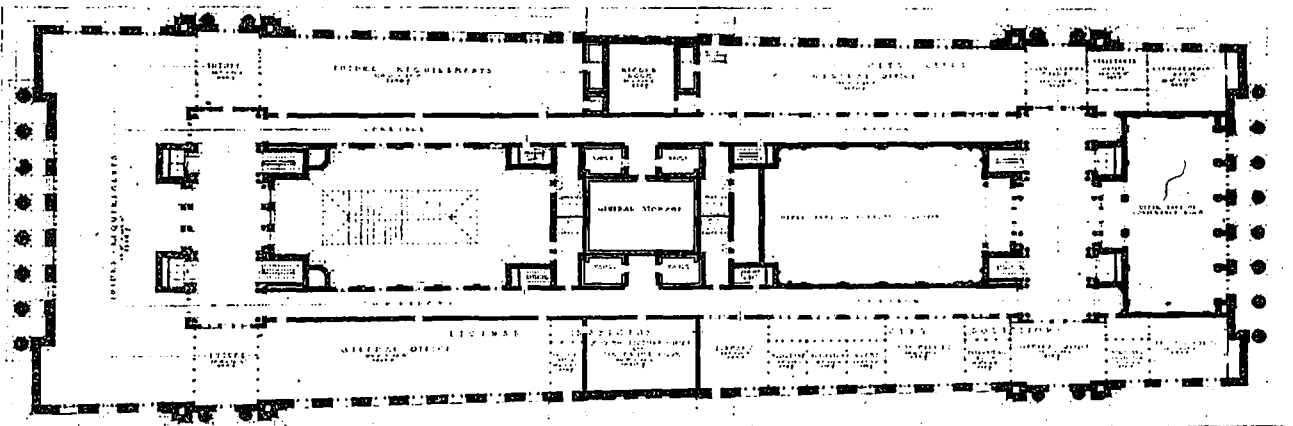
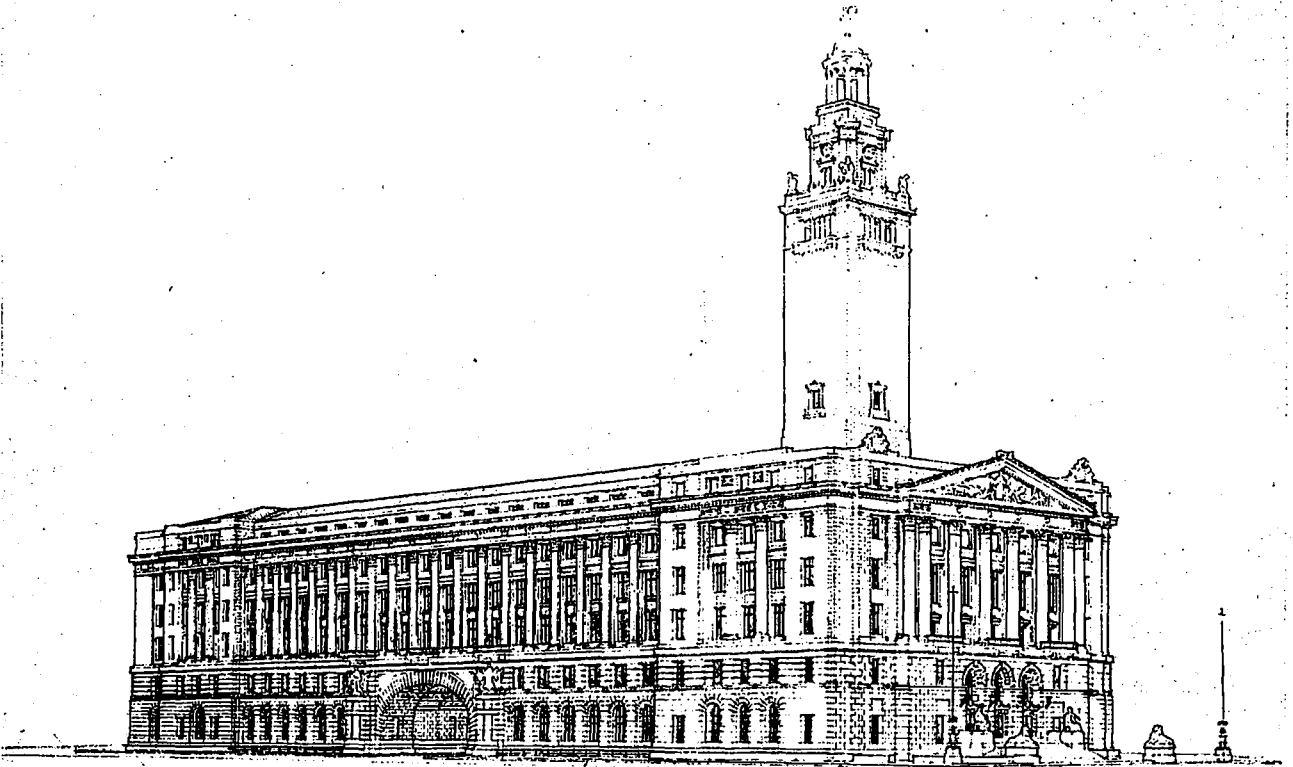


HUGH G. JONES,  
ARCHITECT.

THIRD PRIZE DESIGN, CITY HALL, WINNIPEG, MANITOBA.

FIRST FLOOR PLAN.  
GROUND FLOOR PLAN.

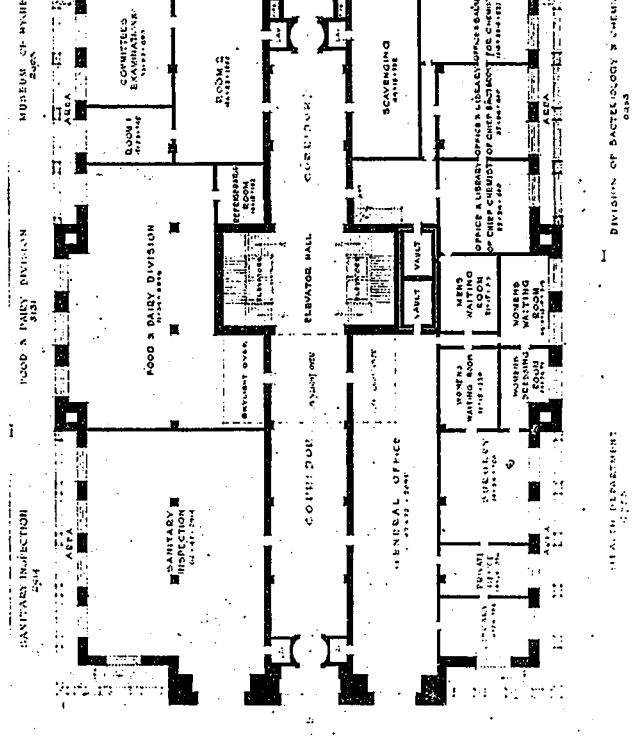
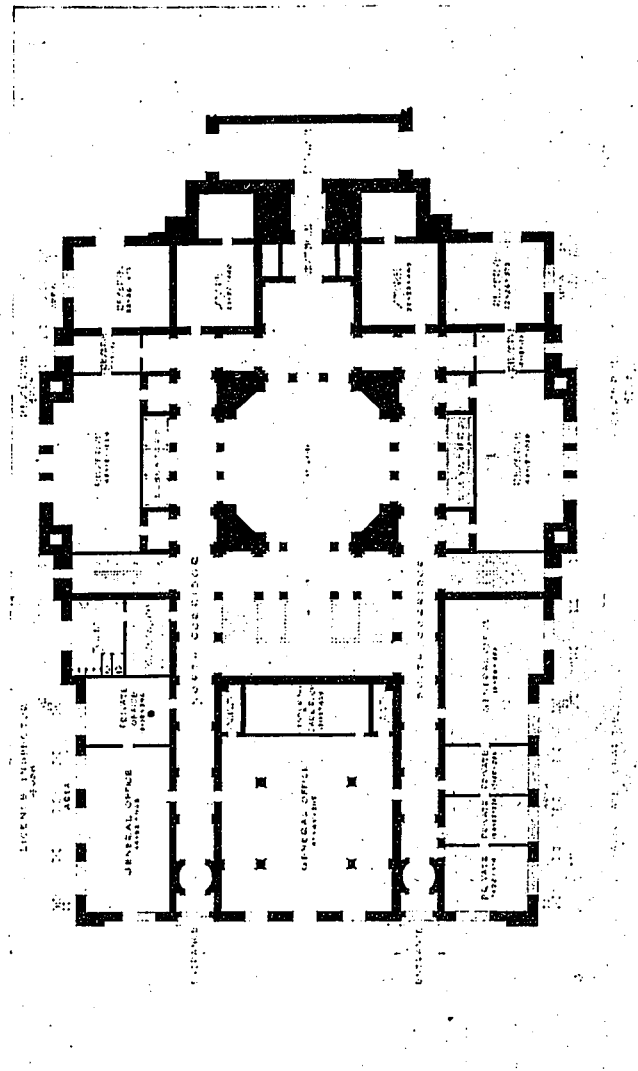
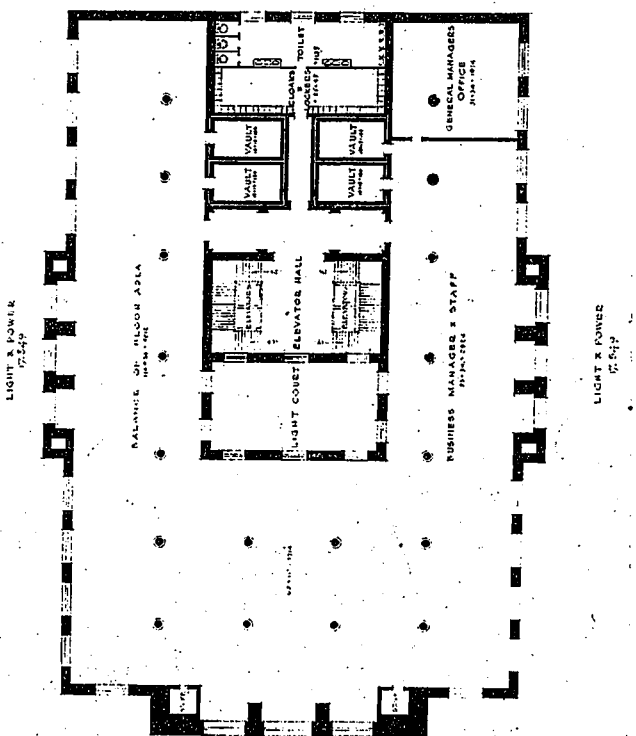
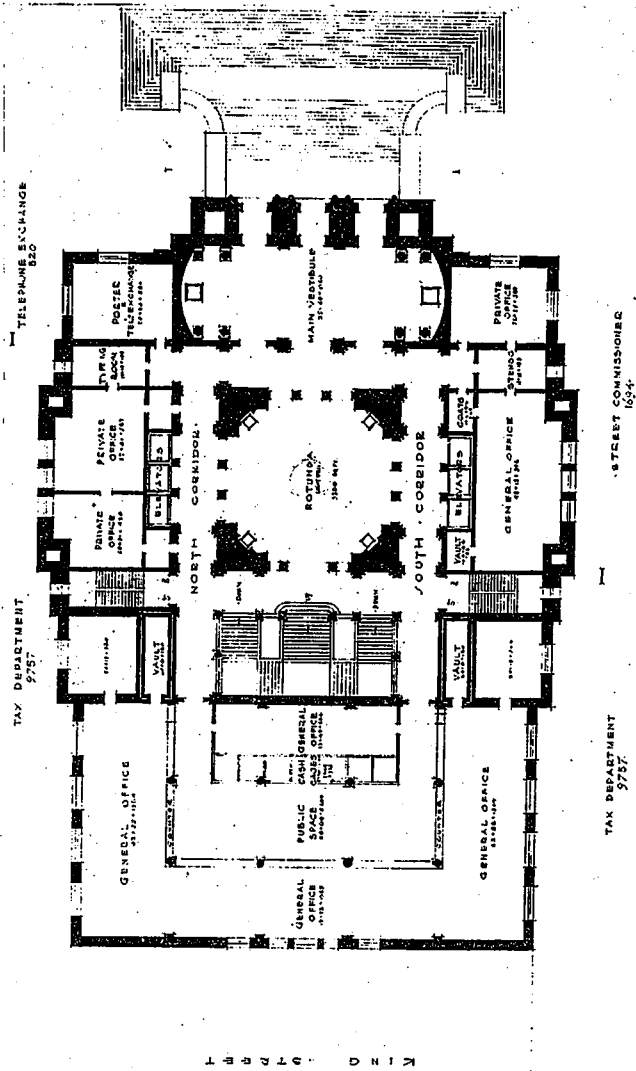




SECOND FLOOR.  
BASEMENT FLOOR.

THIRD PRIZE DESIGN, CITY HALL, WINNIPEG, MANITOBA.

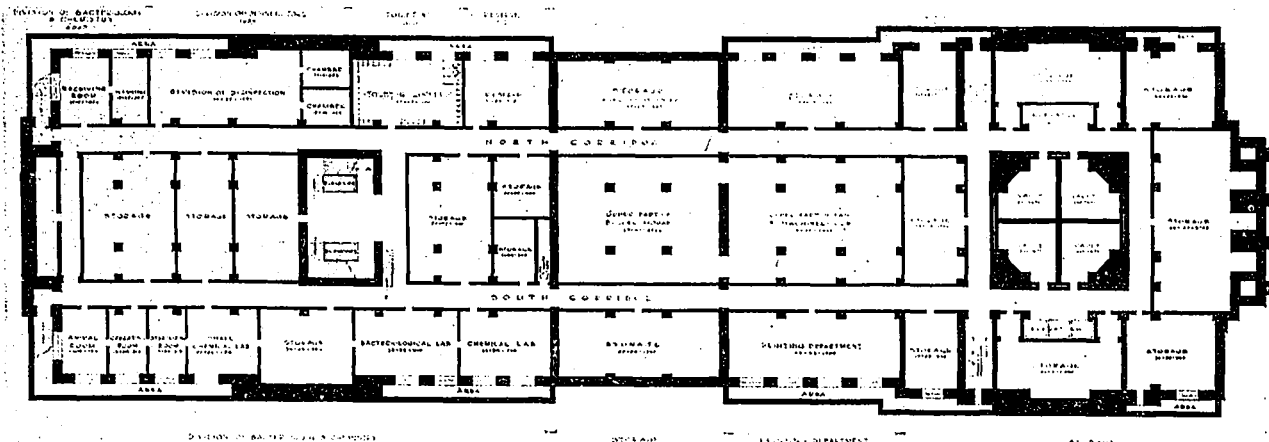
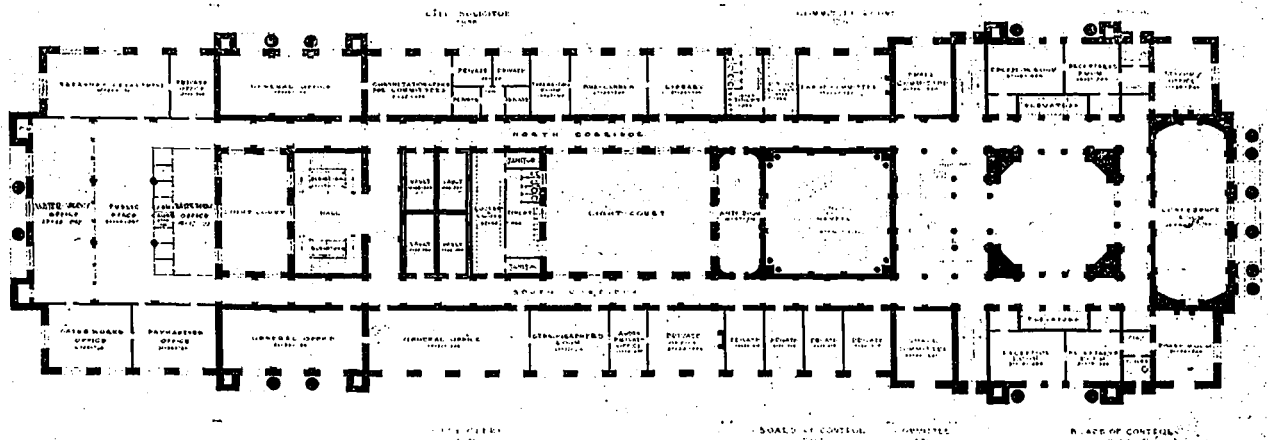
HUGH G. JONES.  
ARCHITECT.



JOHN D. ARCHISON, ARCHITECT.

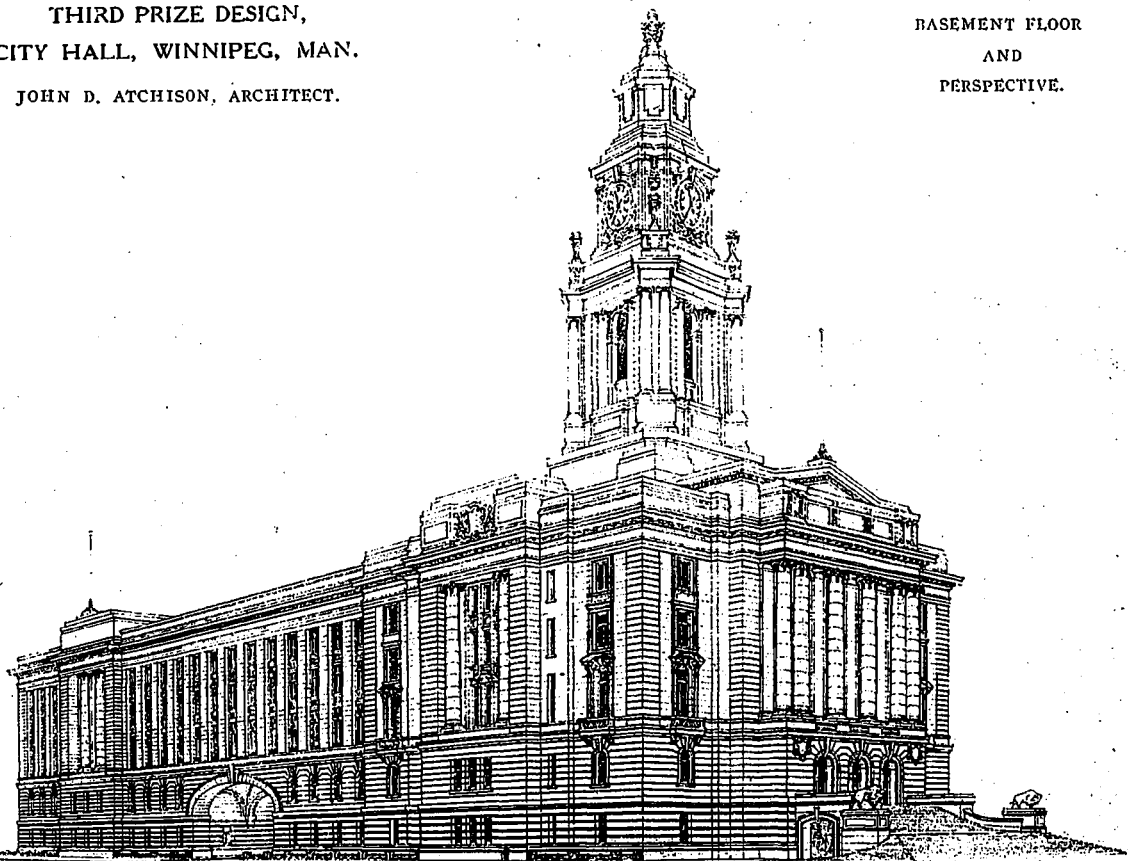
THIRD PRIZE DESIGN, CITY HALL, WINNIPEG, MAN.

FIRST FLOOR PLAN. GROUND FLOOR PLAN.



THIRD PRIZE DESIGN,  
CITY HALL, WINNIPEG, MAN.  
JOHN D. ATCHISON, ARCHITECT.

SECOND FLOOR  
BASEMENT FLOOR  
AND  
PERSPECTIVE.



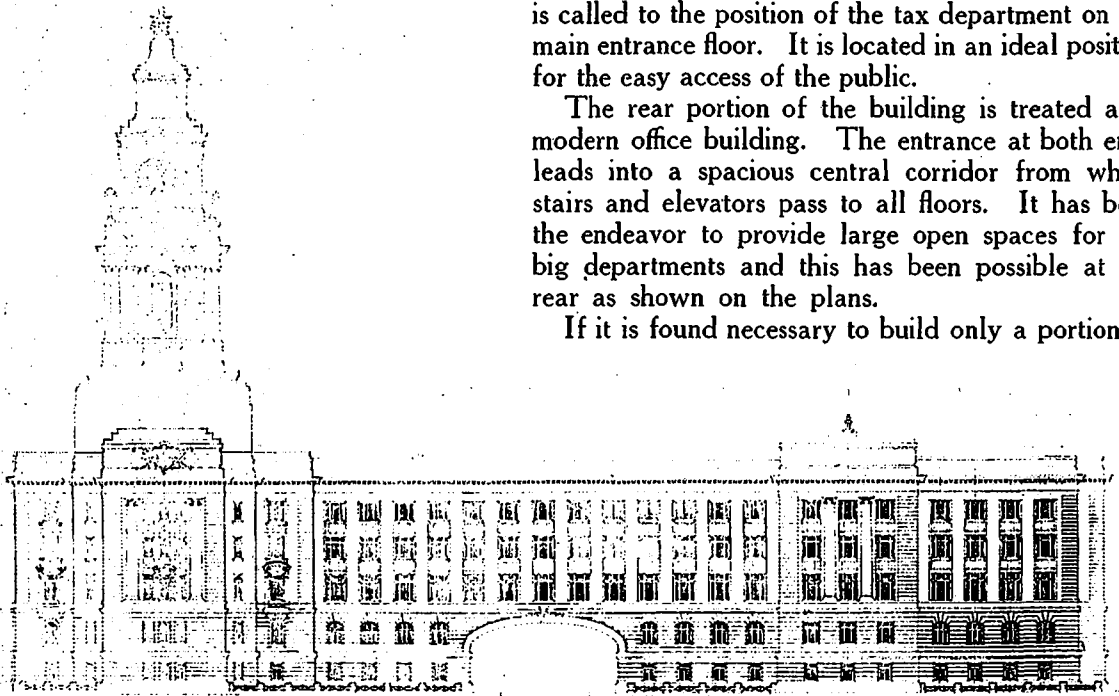
monumental staircases approaching these rooms are entirely independent of the elevator and staircase service intended for the ordinary transaction of business. Attention is called to the uninterrupted office space extending entirely around the building; this offers the maximum elasticity in the rearrangement of the departments.

In a general way the exterior is of light grey stone with a copper roof; the entrance halls and rotunda in light grey stone; the conference room, council chamber and court room in wood with very little ornament and a considerable amount of mural decoration. The price will allow considerable choice in the selection of materials and will require extended study to get the best results. There are 6,071,584

ground floor to the second floor, and gives the necessary dignified and direct approach to the conference room, council chamber, and executive offices. The conference room is placed in a commanding position at the front of the building with balcony leading from same, and is given this prominence because it will be the room used for all civic receptions, and is of the first importance. The council chamber is on the same floor as the above with ante-room and gallery for public. It is monumental in design and surrounded by committee rooms and retiring rooms for the aldermen. The office of the mayor and board of control are also placed on this floor and with easy access to the conference room and council chamber. The plans explain fully the disposition of the remainder of the departments, but attention is called to the position of the tax department on the main entrance floor. It is located in an ideal position for the easy access of the public.

The rear portion of the building is treated as a modern office building. The entrance at both ends leads into a spacious central corridor from which stairs and elevators pass to all floors. It has been the endeavor to provide large open spaces for the big departments and this has been possible at the rear as shown on the plans.

If it is found necessary to build only a portion of



THIRD PRIZE.

SIDE ELEVATION.

JOHN D. ATCHISON, ARCHITECT.

cu. ft. from basement floor to middle of roof, which, figured at 50 cents per cu. ft., gives \$3,035,792. The tower at 35 cents amounts to \$48,875.

#### *Third Prize Design—John D. Atchison.*

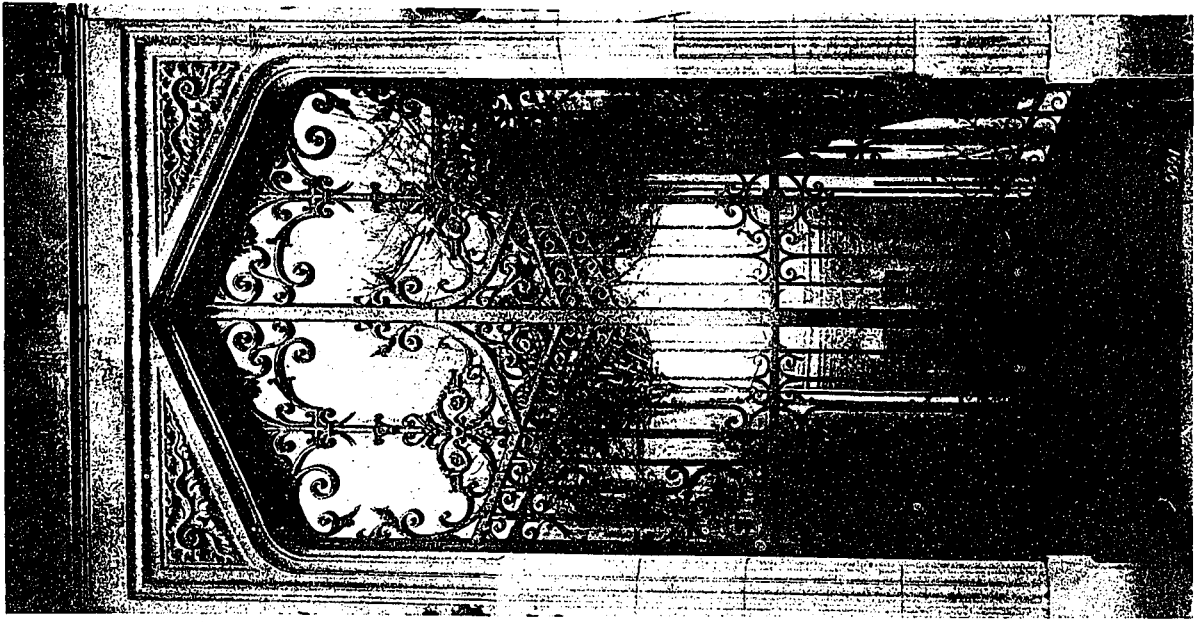
The building shown is designed to cover the whole site available. The main idea of the design is to produce a City Hall which shall combine both monumental and modern commercial design in one building without losing any sense of dignity and harmony between the parts. The side elevation shown will explain this at once.

The approach to the main entrance floor is by an imposing flight of steps and leads through a spacious vestibule to the rotunda. From this rotunda direct access is obtained to the main staircase and to the elevators on each side in groups of three, which arrangement gives immediate service to any person requiring them. The main staircase runs from the

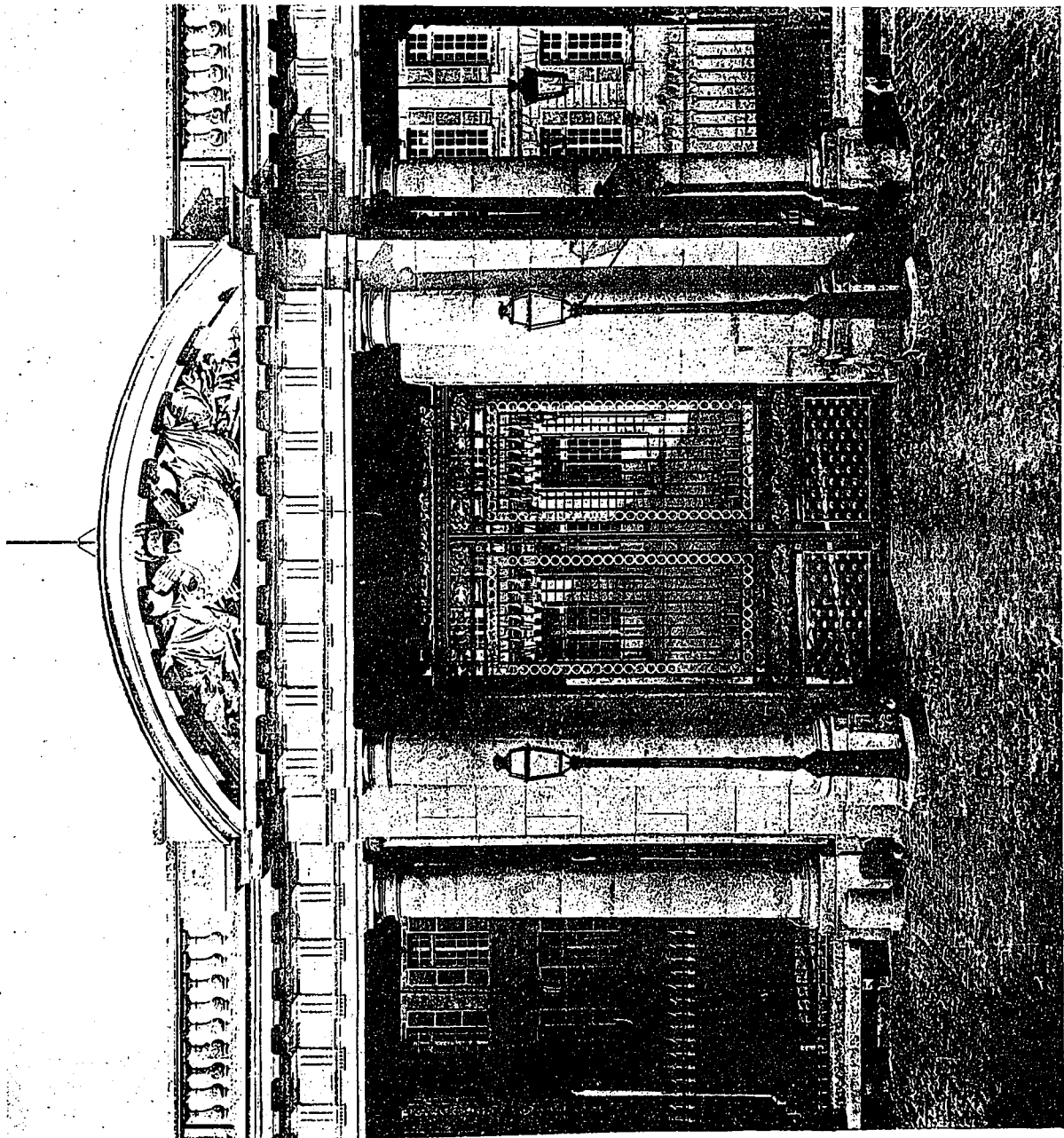
building at present, this rear portion is entire in itself and could be constructed independent of the remainder. An attic storey is provided which will accommodate the extra space required under the conditions. The plan of this is not shown.

King street passes through the building and is made 60 ft. wide and unobstructed as required by the conditions. A light well is placed over the street which relieves it from becoming dark and objectionable. The tower is placed on the main axis of the front portion of the building and is carried to a height which will give it a commanding position over all buildings in the city.

The first story will be of dark grey granite and the upper stories of Manitoba limestone. The spandrels to windows on side elevations will be bronze. The cubic contents of the building is 5,933,000 feet, which at 50 cents a cubic foot amounts to \$2,966,500.00.

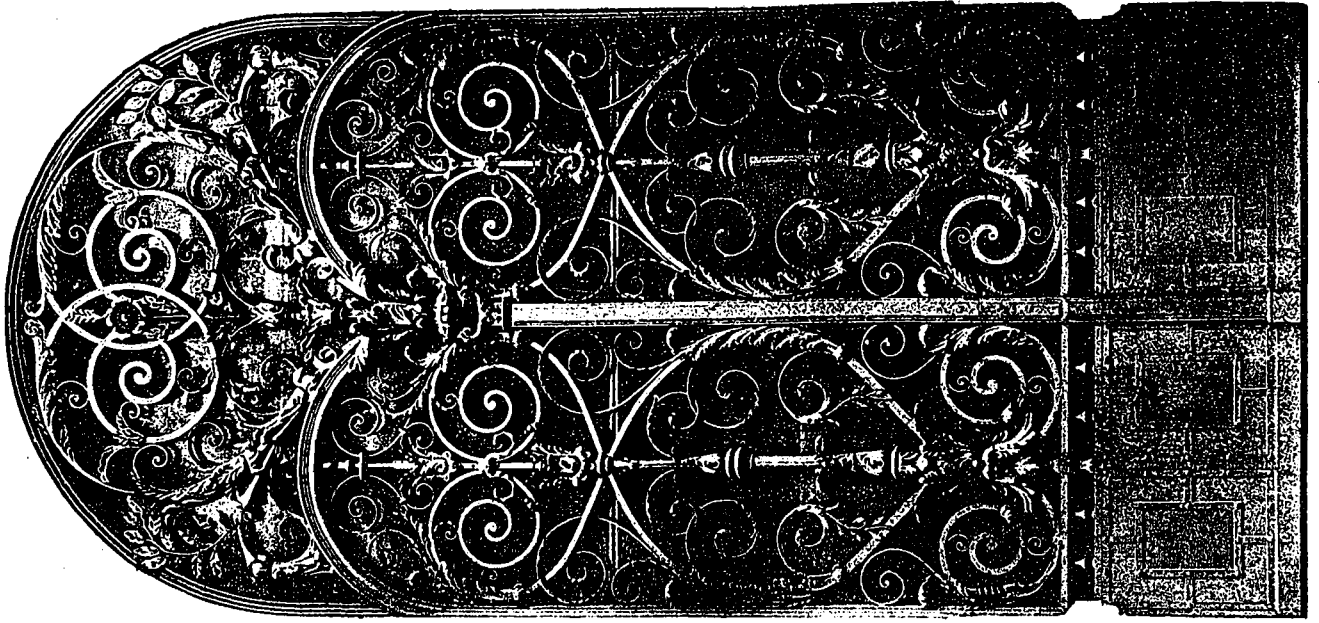


ENTRANCE TO AN APARTMENT, PARIS.

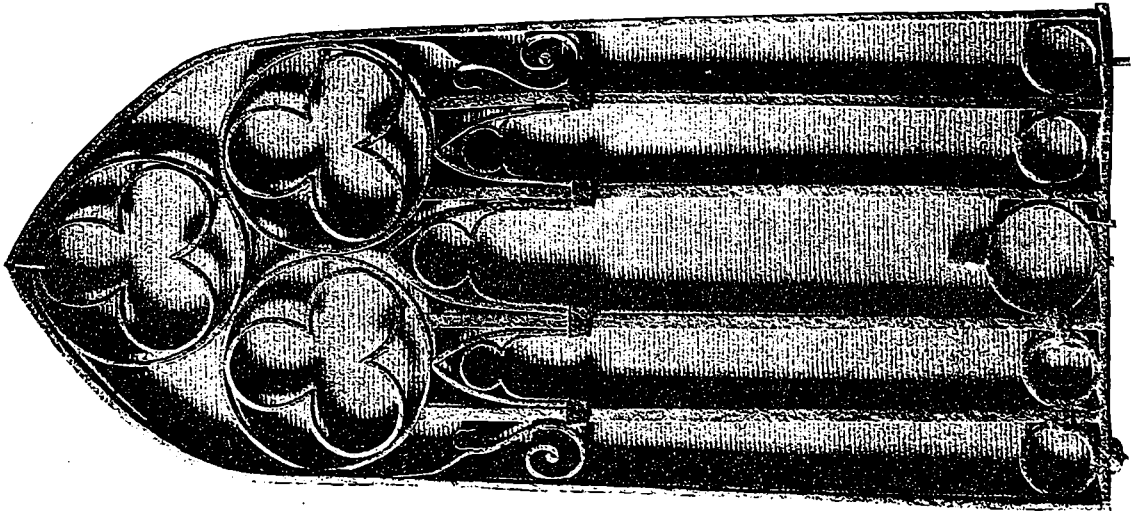


ENTRANCE TO THE COURT OF HONOR, COMPIEGNE.

EXAMPLES OF IRON WORK, FRANCE.

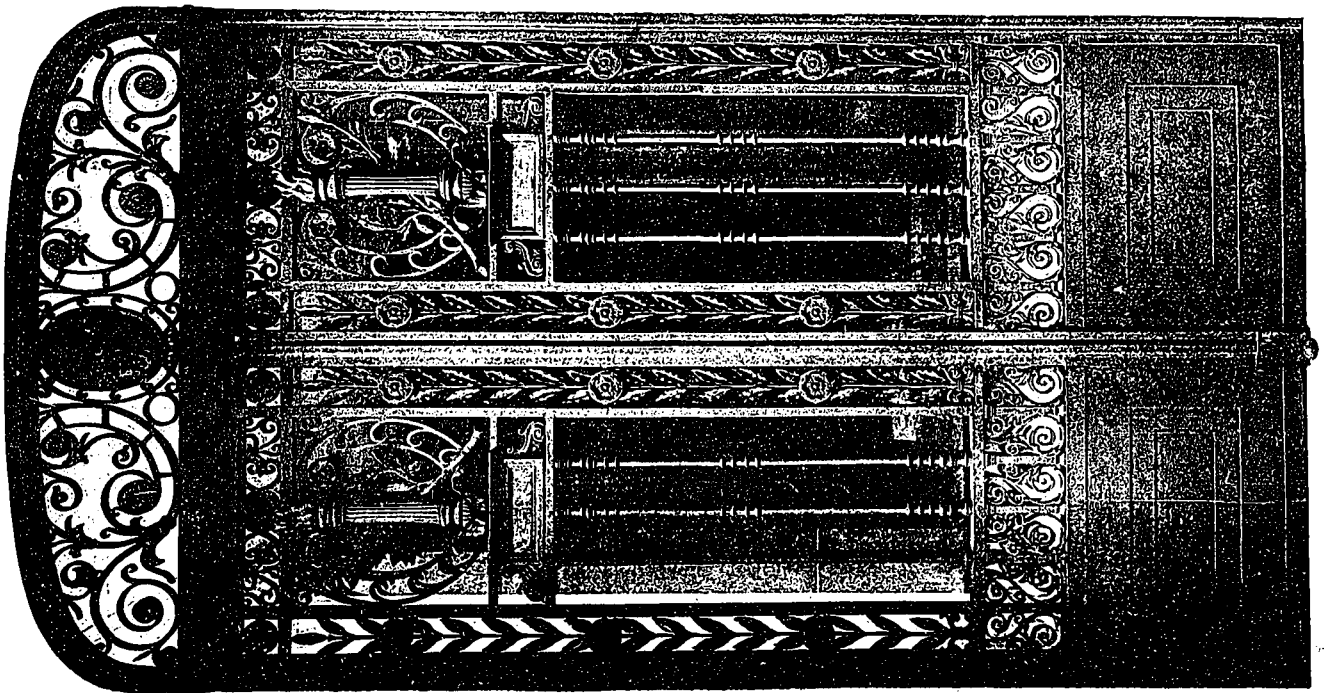


A MODERN ADAPTATION.

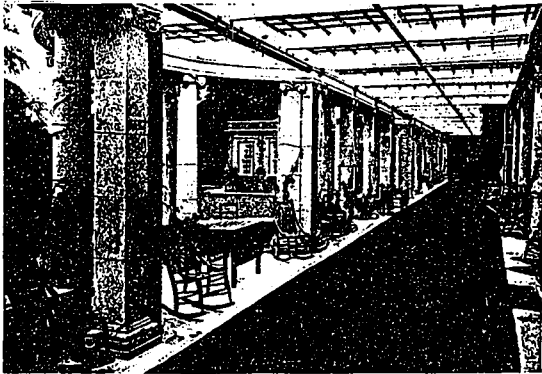


THIRTEENTH CENTURY.

EXAMPLES OF IRON WORK,  
PARIS, FRANCE.

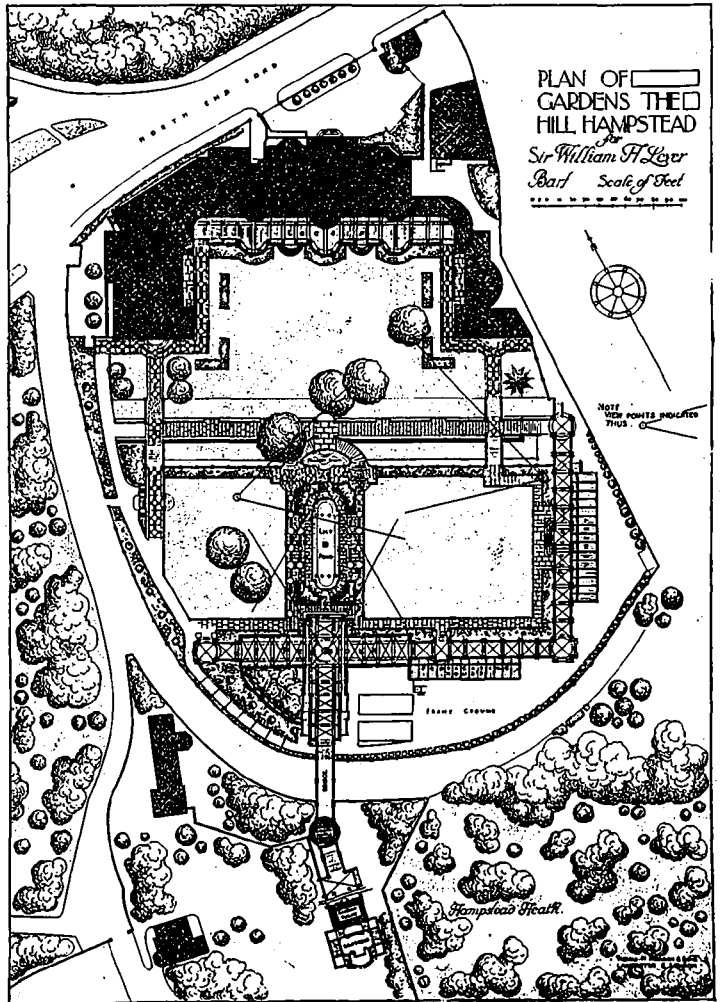


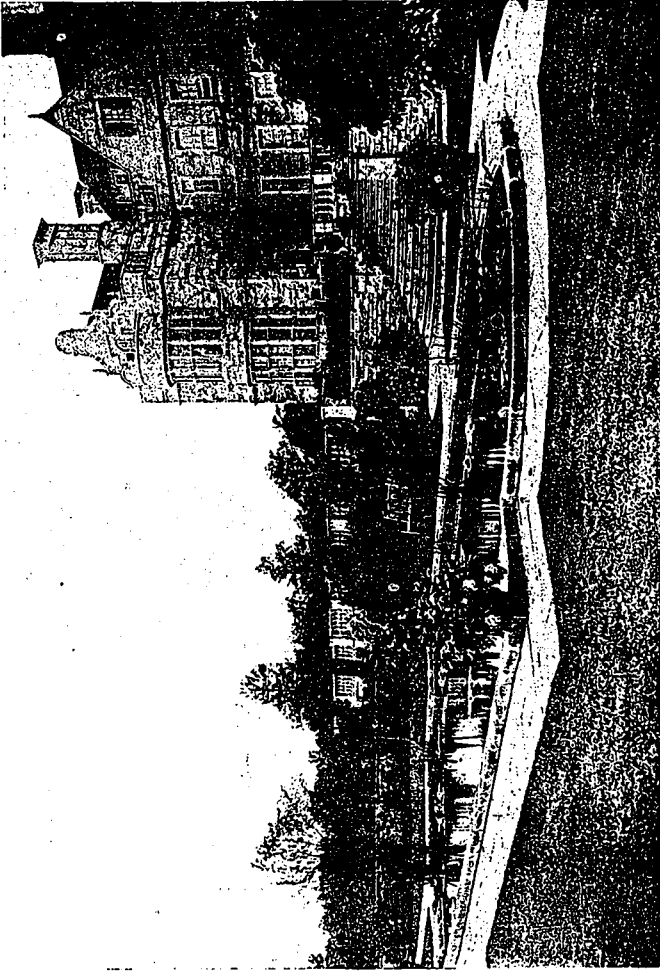
EIGHTEENTH CENTURY.



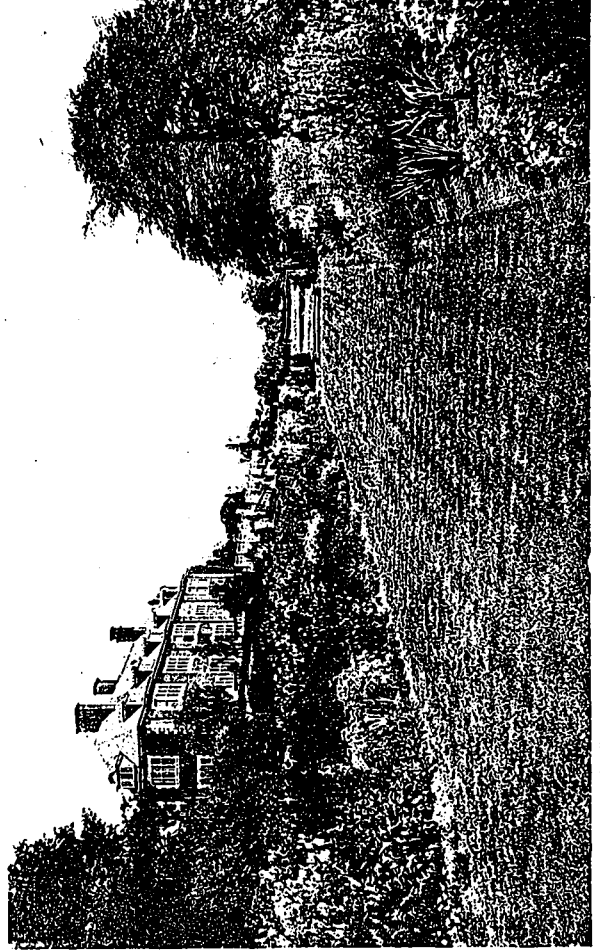
"THE HILL," HAMPSTEAD,  
ENGLAND.

(From "The Art and Craft of Garden Making.")

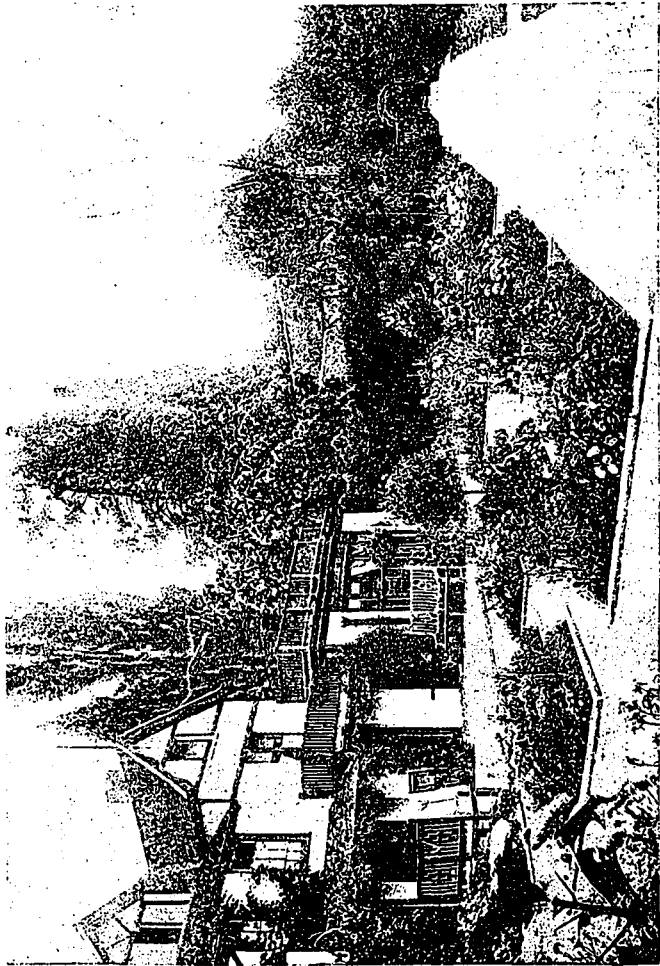




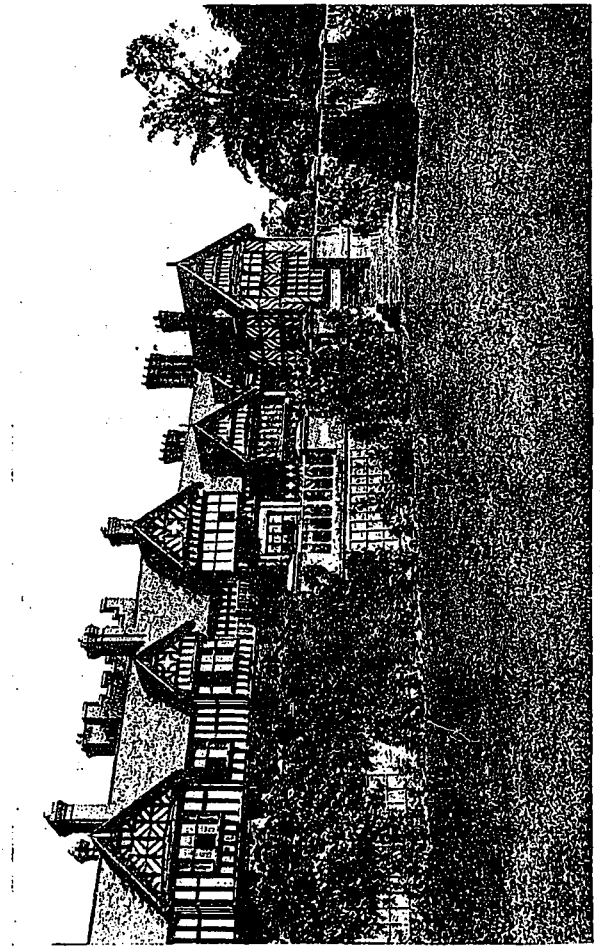
WYCH CROSS PLACE, SUSSEX.



DUNCHURCH LODGE.



THE GRANGE, WRAYSBURY.

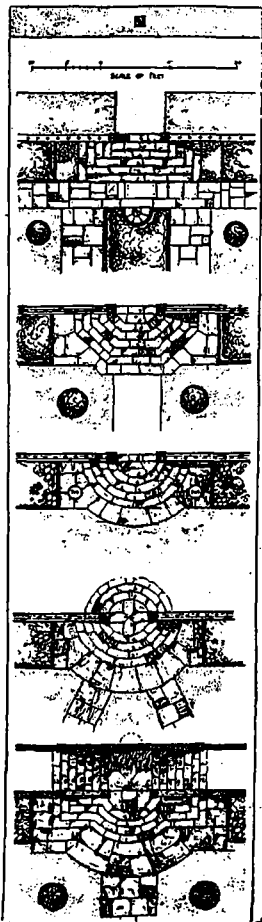
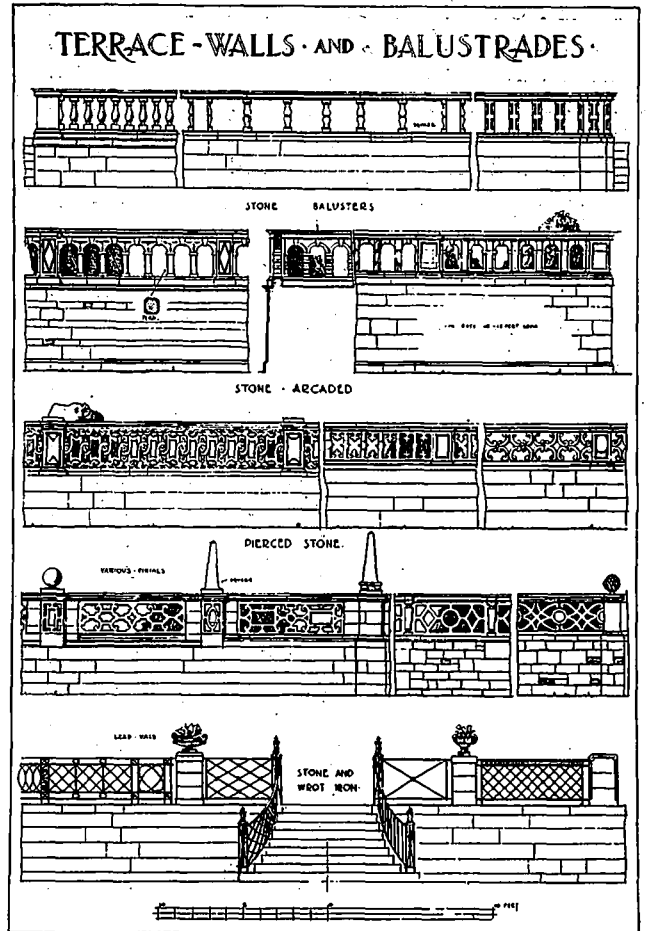
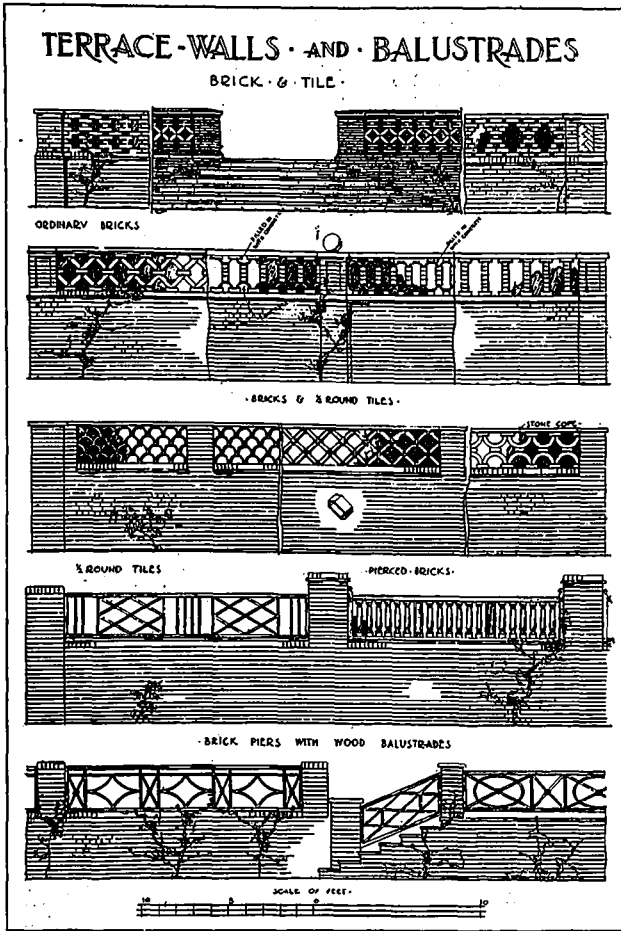


WRIGHTWICK MANOR.

GARDEN MAKING IN ENGLAND.

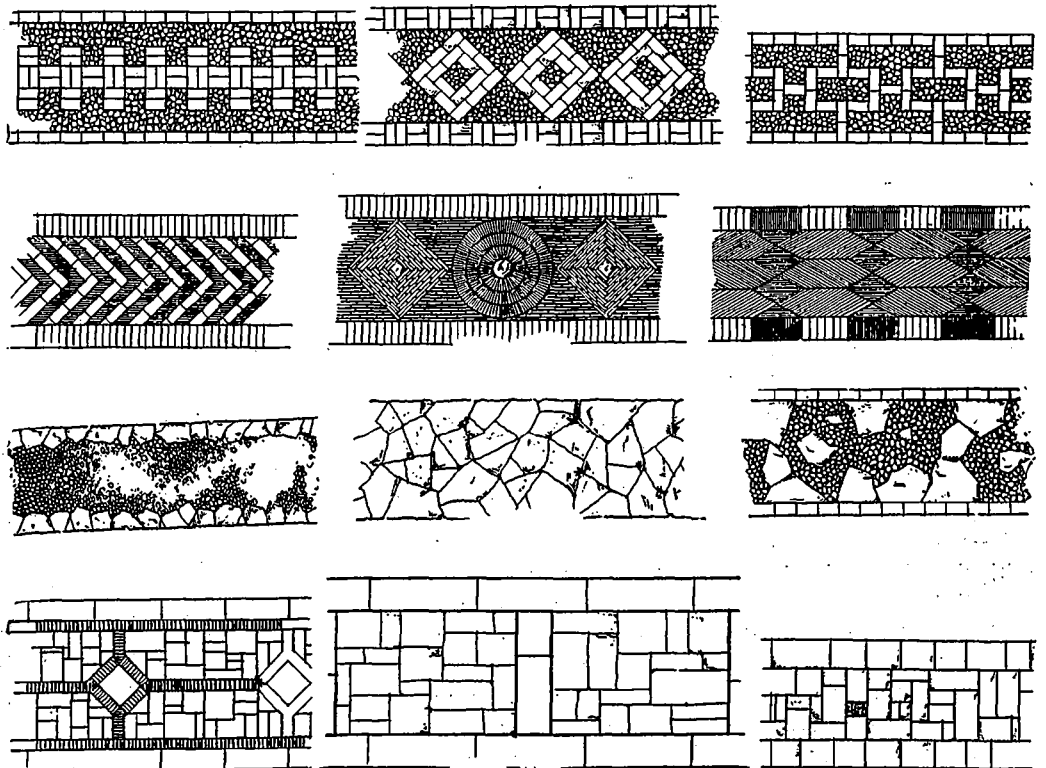
(From "The Art and Craft of Garden Making.")





### EXAMPLES OF BALUSTRADES, STEPS AND PAVED WALKS, ENGLAND.

(From "The Art and Craft of Garden Making.")



*THE FOURTH EDITION* of "The Art and Craft of Garden Making," by Thomas H. Mawson, shows a carefully compiled volume on the various features essential to modern gardens. The revision is far-reaching owing to the new conditions in every phase of the work. Mr. Mawson has grasped the spirit of change and presents forcibly and minutely the practical requirements accruing from this growing tendency in beautifying the general surroundings of the home. An example of the drastic revision is seen in the portions dealing with drives, entrances, lodges and carriage courts made necessary through the rapid progress of the motor car. A two-fold object has been kept in view by the author: the subjects are discussed so as to provide interesting consecutive reading, while each chapter deals with a special branch of garden making, complete in itself, giving the work some of the uses of a book of reference. The illustrations are especially attractive and made chiefly from photographs taken from the author's own work, introducing practical problems successfully solved. Several of the illustrations are shown in this number and will give the reader an idea of the artistic value running throughout the volume. The work is published by B. T. Batsford, 94 High Holborn, London. 404 pages, illustrated by 435 plans, sketches, and photographs, together with seven full page plates in color. Crown folio (15 ins. by 10 ins.), bound in art canvas, gilt. Price £2 10s. net (\$12.15).

\* \* \*

"*HOW TO ESTIMATE*" is the title of a very compact volume by J. T. Rea, dealing with the principles and practice of estimating in a logical and comprehensive manner. It covers a wide field and is indispensable to the builder, contractor, architect and surveyor as a handy reference for prices on all phases of building as well as a complete analysis of the methods for obtaining same. It explains the fundamental principles upon which all estimating is based in order to be of continued practical service even though the present values may change materially. The book is published by B. T. Batsford, 94 Hilborn, London. 530 pages, 400 illustrations. Fourth edition, revised and enlarged by 200 pages. Price, 7s. 6d. (\$1.80).

\* \* \*

*A REPORT* on the Building and Ornamental Stones of Canada, by Wm. A. Parks, B.A., Ph.D., has been issued recently from the Department of Mines under the direction of Eugene Haanel, Ph.D., Director of the Mines Branch. The volume deals with the chemical, physical and geological features of building stone; the methods of quarrying, testing, and preparing stone for the market; and a systematic description of the various stones found in the Ontario district south of the Ottawa and French rivers. This report is of extreme value to the architect and builder and can be secured from the Department of Mines, Ottawa.

*AFTER A THOROUGH TEST* of J-M asbestos roofing and a siding known as J-M Asbestoside, the Northern Electric Heat and Power Co., of South Porcupine, Canada, has adopted these materials in their rebuilding operations. A copy of a recently published booklet describing this remarkable roofing in detail will be forwarded by the H. W. Johns-Manville Co., New York, to anyone interested in difficult roofing problems.

\* \* \*

*AT THE BOARD MEETING* of Oshawa Hospital, held recently, a deputation consisting of Drs. Kaiser, McKay, and Carmichael, waited upon the board with an offer of \$10,000, from Mr. and Mrs. George H. Pedlar, to be used in the construction of a new surgical wing to the Oshawa Hospital, in connection with the proposed addition to the present building. This handsome donation was immediately accepted with the heartfelt thanks of the board. The surgical wing was presented by Mr. and Mrs. Pedlar as a memorial to their son, the late George H. Pedlar, jr., after consultation through Dr. Kaiser with the other doctors of the town, as to the type of equipment most urgently needed.

\* \* \*

*THE CITY OF MONTREAL* has awarded to the John McDougall Caledonian Iron Works two twelve-million imperial gallon pumping units, at Company, Limited, of Montreal, the contract for a price of \$50,046.00. The units consist of two 20-inch three-stage Worthington turbine pumps directly connected to 750 brake horsepower Browett-Lindley High Speed Engines, running at 350 r.p.m. and operating against a water pressure of 92 lbs. The three-stage pump of the John McDougall Company was selected as a type that already had given the city very satisfactory service for a number of years, operating 24 hours per day. This makes the thirteenth pumping unit furnished to the city of Montreal by this company and Henry R. Worthington, aggregating a total pumping capacity of over one hundred million imperial gallons.

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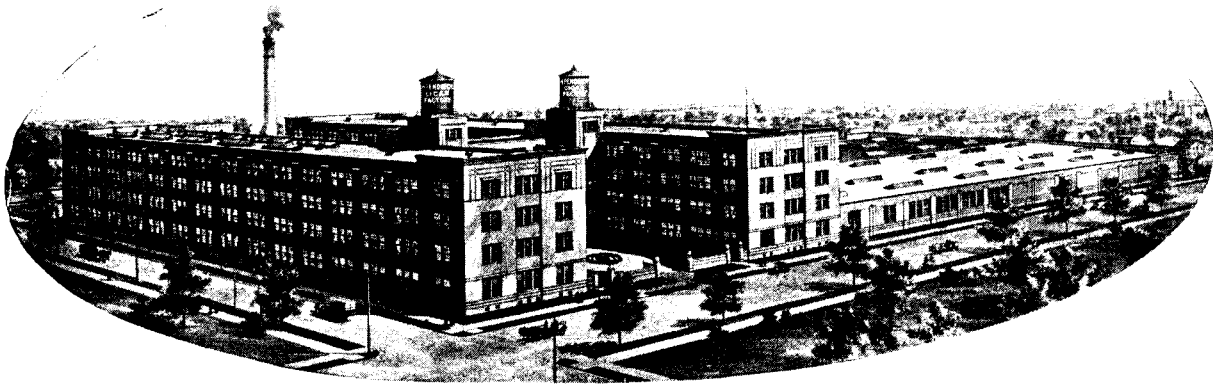
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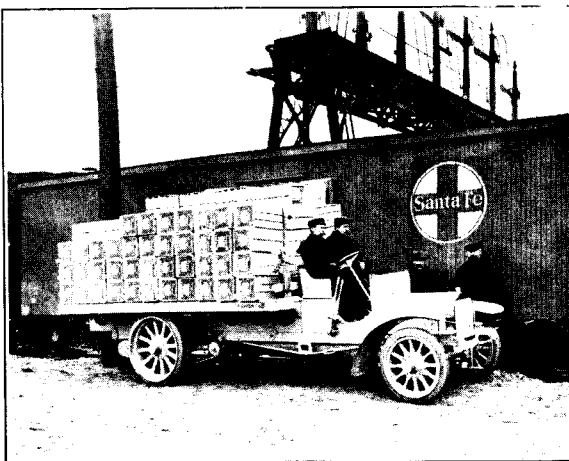
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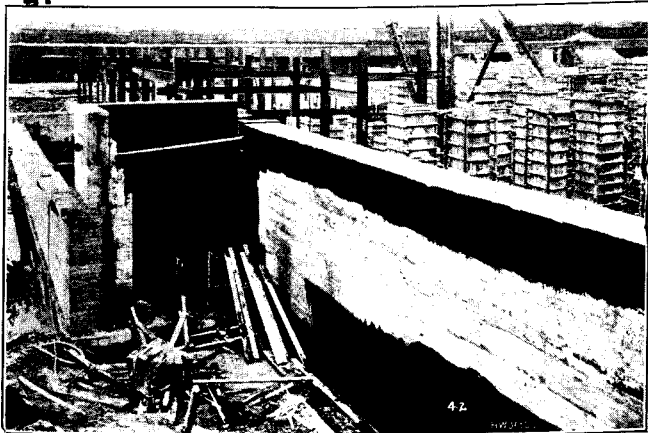
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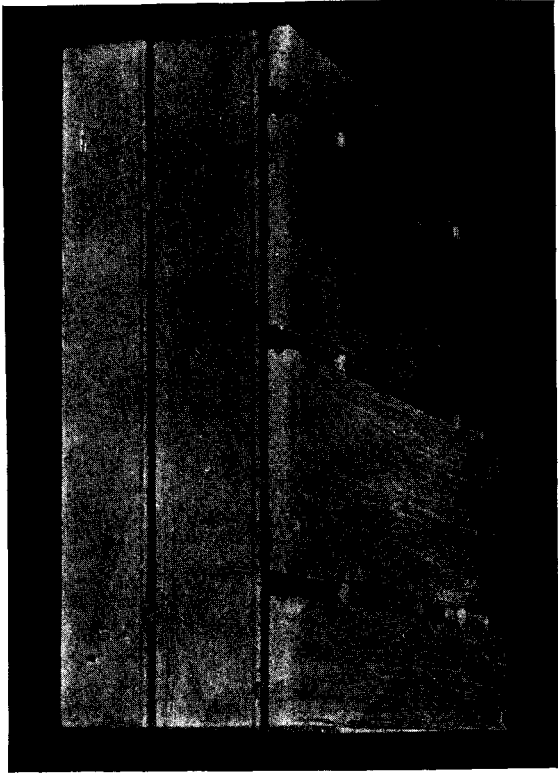


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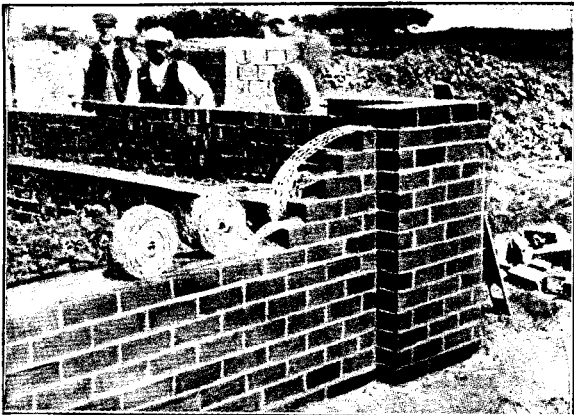


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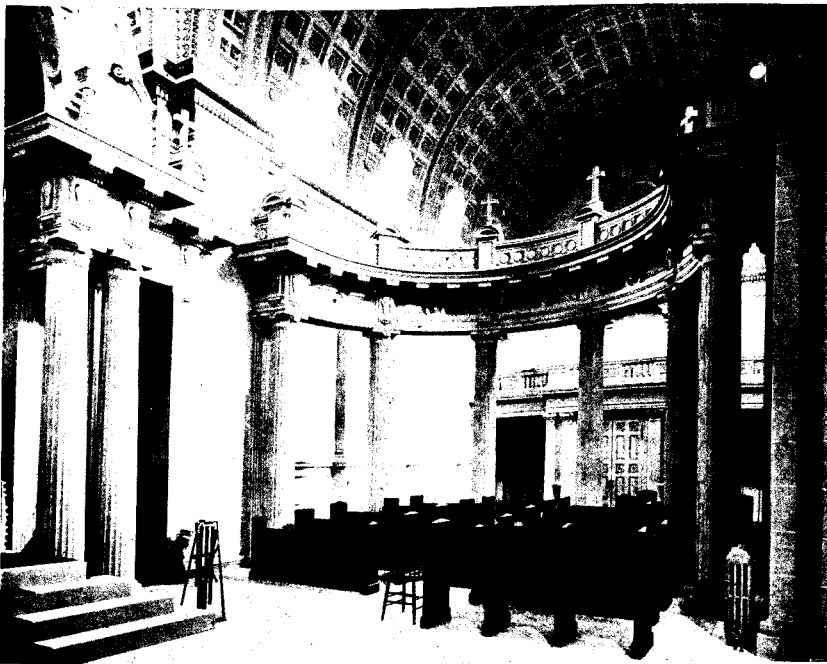
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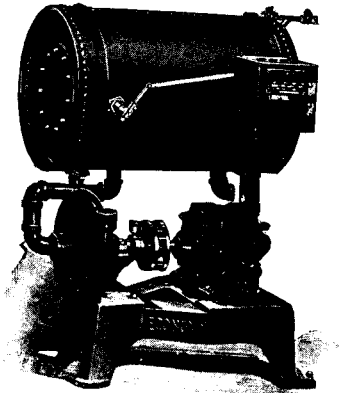
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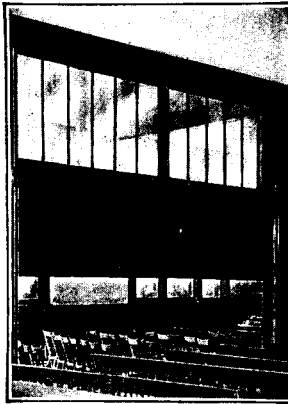
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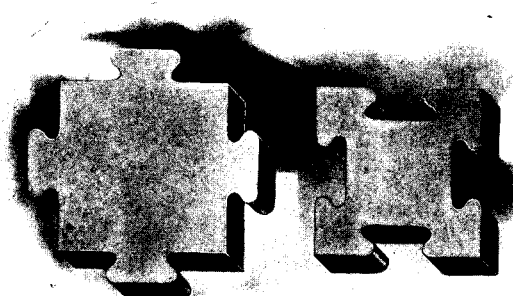
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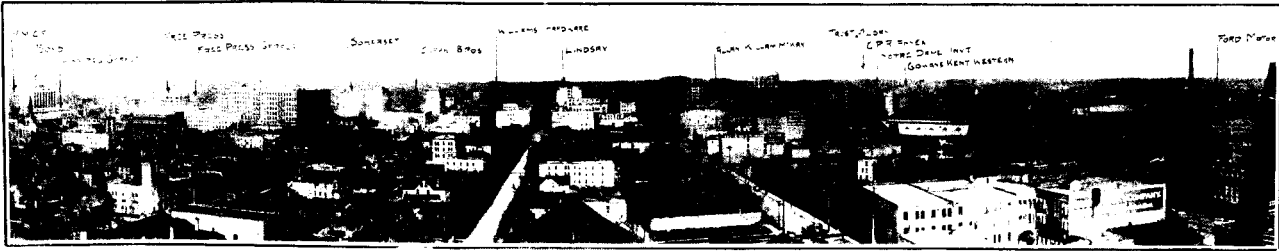
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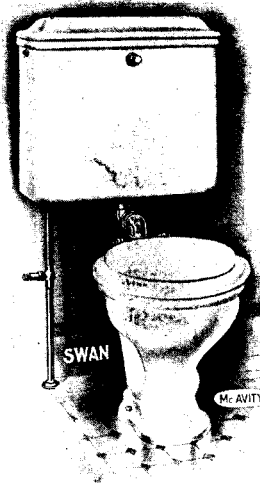
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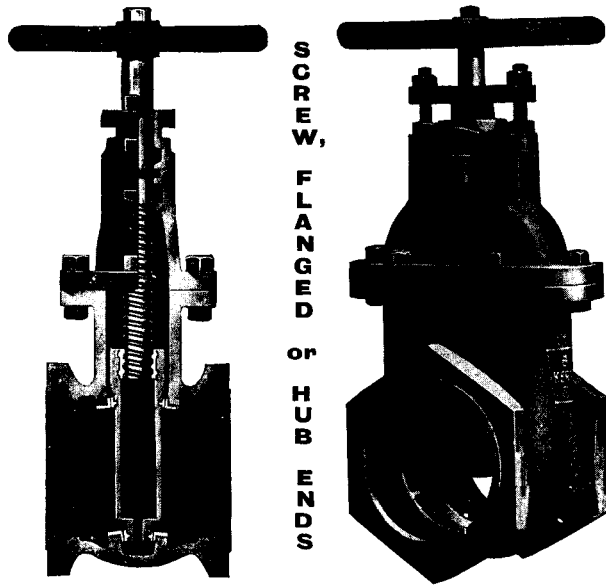
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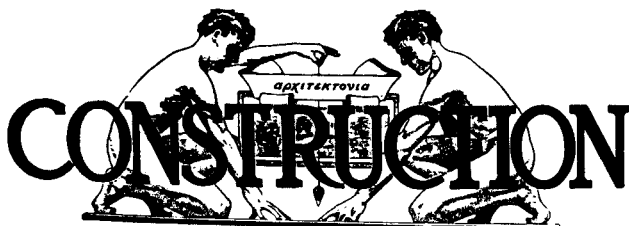
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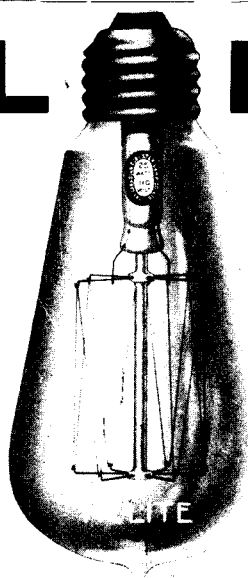
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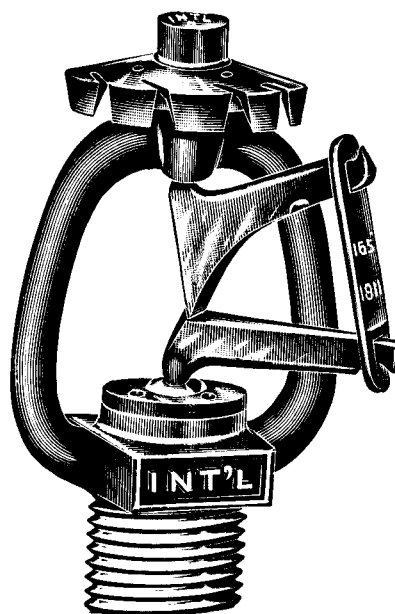
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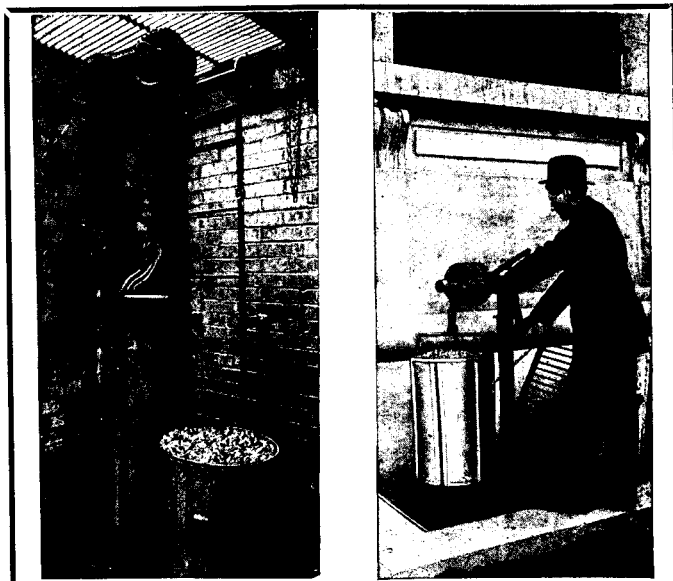
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