

JOURNAL

ROYAL ARCHITECTURAL
INSTITUTE OF CANADA

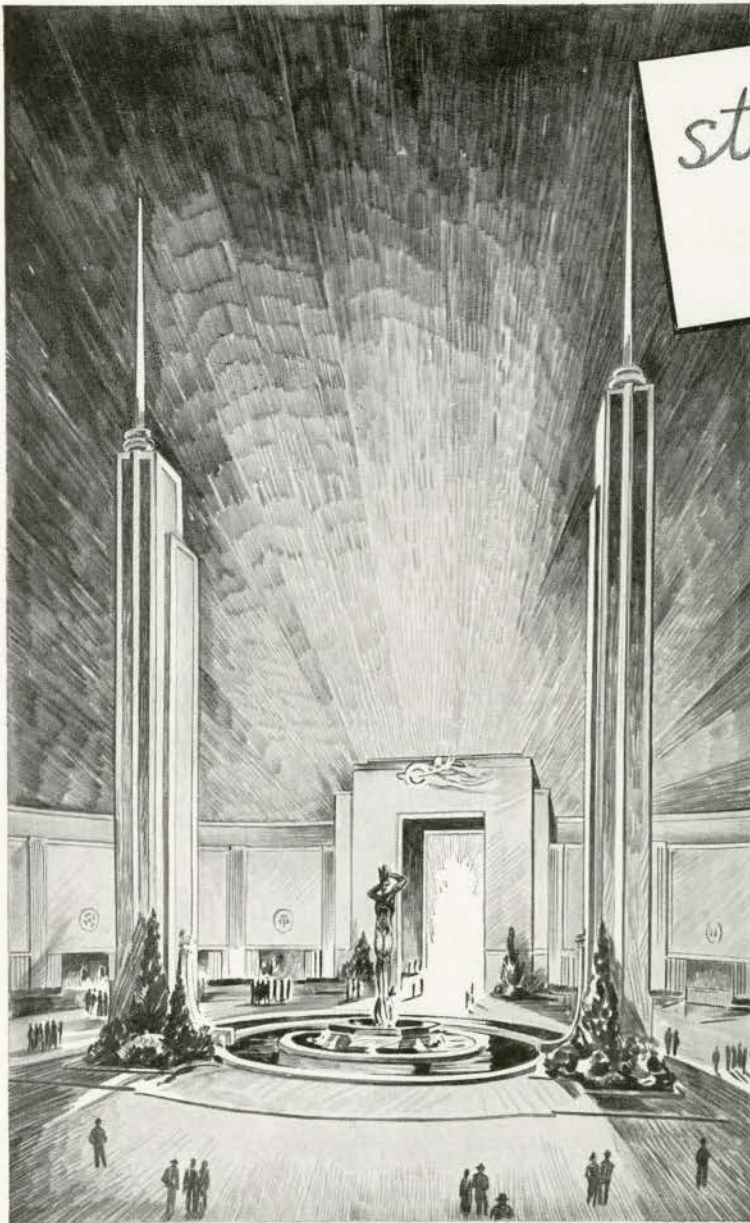


VOL. 16

JUNE, 1939

NO. 6

LARGEST BUILDING AT THE WORLD'S FAIR



*started with
a pencil*

TO THE genius of those who design such remarkable buildings as this, add one simple tool and you have the beginnings of every great architectural achievement of modern times. From inception to finished drawings, that important tool is the pencil . . . And almost invariably it is Venus Drawing.

For, in Canada and principal foreign countries, the most widely known and favored pencil for architectural and engineering design is Venus. Its 17 shades of black provide enormous range. Each is precisely graded. All give you the smooth flow of colloidal lead*!

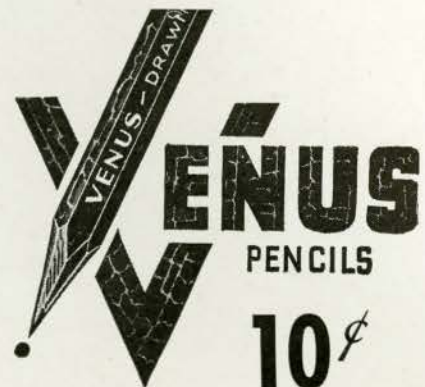
As you know—if you've ever used an inferior pencil—the only real satisfaction lies in the precise performance that Venus Drawing alone gives.

So we suggest you standardize on Venus Drawing. Be assured of a pencil that literally becomes a part of yourself—helps you put ideas on paper precisely as you want them.

"RAILROADS ON PARADE"

The huge Railroad Building will occupy sixteen acres of land! It will include an open-air theater seating 4,000. It will contain 3,600 feet of outdoor tracks, a life-size locomotive and a complete railroad in miniature . . . plus many other exhibits and pageants of leading American and foreign railroads.

The Railroad Building, of which Railway Plaza (illustrated) is but a section, was designed for the New York World's Fair 1939, by Eggers and Higgins, architects.



VENUS PENCIL COMPANY LTD., *Toronto.*

*Can. Pat. No. 352,959.

Announcing a new improved Johns-Manville Rock Wool Batt . . . a better, easier-to-handle Home Insulation, now available at no increase in cost . . .



Part 6 in the Story of Johns-Manville

A GAIN, a definite advance in Rock Wool Batts for Home Insulation—from Johns-Manville, recognized by architects as *Home Insulation Headquarters* . . .

This new J-M Rock Wool Batt is improved three ways. It is more rigid, for easier handling—has greater moisture resistance—and highest insulating efficiency. Yet, in line with Johns-Manville's consistent



MORE RIGID: As shown in this picture, the new J-M Batts are more substantially constructed—have greater rigidity—will stand even rough and careless handling.

policy, this new, improved Batt is offered at no extra cost!

EASIER TO HANDLE: Installation is a fast, simple job when these new J-M Batts are used. For due to new, semi-rigid construction, they "stand up" under rough handling . . . can be lifted from the carton without risk

of breakage . . . can be bent without damage . . . won't tear loose from the backing paper . . . are easy to cut and fit.



WON'T TEAR LOOSE FROM THE BACKING: The stronger felt is securely cemented to the water-resistant backing—it can be handled without fear of separation.

GREATER MOISTURE RESISTANCE: The new J-M Batts have greatly enhanced resistance to moisture penetration. A new, water-resistant compound surrounds each individual fibre of the Rock Wool Felt—repels moisture more efficiently than anything previously used.



EASY TO INSTALL: Due to their semi-rigid construction, the new J-M Batts can be lifted, bent and applied in awkward places without damage. Application is speeded up.

HIGHEST INSULATING EFFICIENCY: Johns-Manville standards of quality and construction—higher than ever in the new Batts—give definite assurance of room temperatures as much as 15° lower in hottest summer weather, with savings up to 30% on winter fuel bills!

And thanks to the moderate cost, architects can specify these new, greatly improved J-M Rock Wool Batts even for low-priced houses . . . and they can do so with the fullest confidence that no *better* Home Insulation can be obtained today at any price.

CANADIAN
JOHNS-MANVILLE
 Co., Limited
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OF PIPE...
for EVERY
TYPE OF JOB!**

In every type of industry and home, pipe forms the vital arteries that convey water, steam, oil and gas, and it must be good pipe. Page-Hersey is always good pipe. It is made from the finest steel or Genuine Wrought Iron of exact chemical and physical analysis for clean, uniform quality of greatest strength.

Page-Hersey quality pipe is supplied in 3 processes of manufacture and 6 types of pipe—a pipe for every type of job. You buy wisely and accurately when you specify "Page-Hersey Pipe" through your wholesaler.

3 PROCESSES

BUTTWELD—In a complete range of sizes from 1/4" to 4".
LAPWELD—Recommended for sizes 2" and over. Made in sizes 1" to 12" inclusive.
WELDLESS—A super-pipe recommended where exceptionally high pressure or strains are encountered. In sizes 1/4" to 6".

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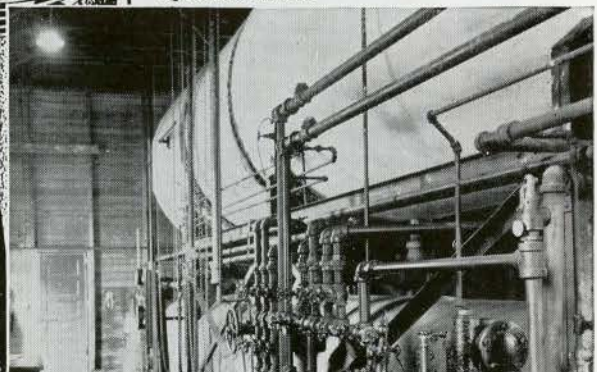
Specify Page-Hersey for all sizes of pipe
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Reliability is the essential factor in steel pipe that serves a community. Page-Hersey Pipe is used in hospitals, water lines and gas mains where safety and strength are of first importance.



For use in overland or buried gas, oil or water lines, Page-Hersey Steel Pipe is the answer to piping that withstands vibration and high pressures. It is a sound investment in safe, dependable service.



For all industrial purposes—mills, heating plants, conveyor lines and boiler equipment, Page-Hersey Pipe offers long-lasting and trouble-free service—a range of types and process for every specification. PH-49

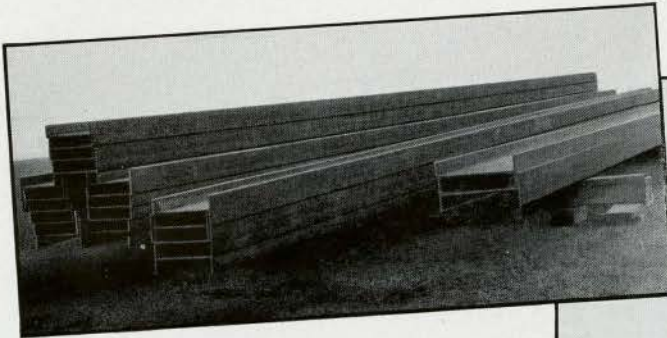
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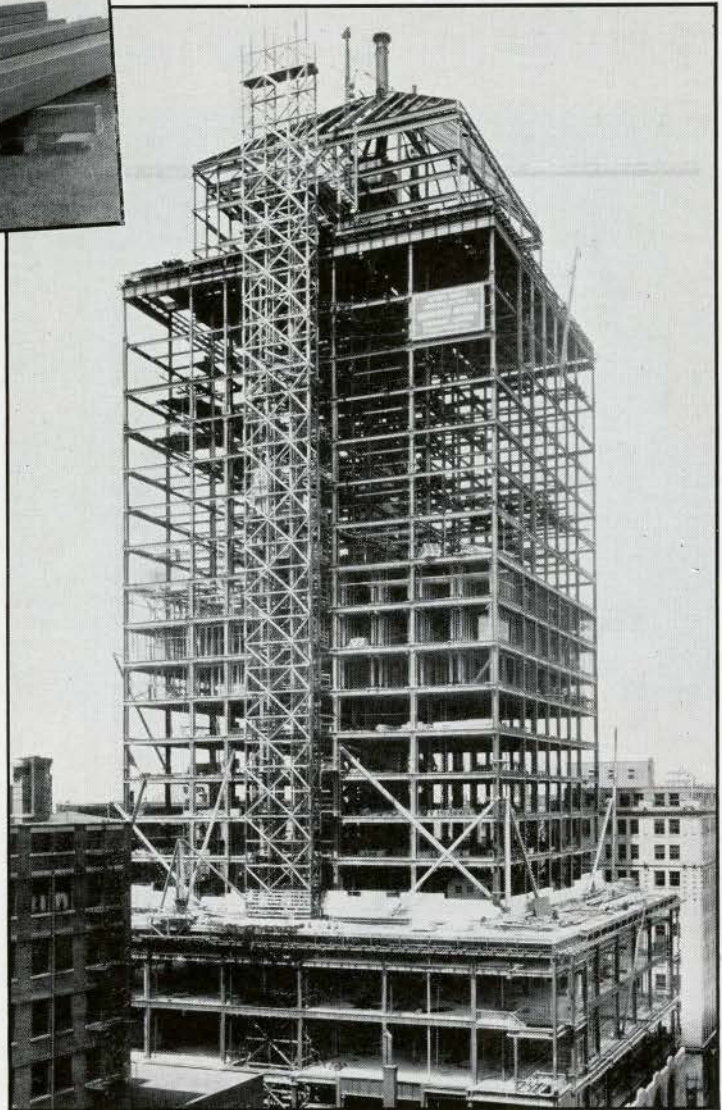
From **BEAM** ————— ————— *to* **BUILDING**



● From the engineer's design, through the various phases of fabrication and erection, every operation is marked by the scrupulous attention to detail characteristic of Dominion Bridge service.

With complete engineering and plant facilities, erection equipment and field forces located at strategic points across Canada, Dominion Bridge is always in a position to promptly and adequately serve Canadian industry with practically every type of steel structure and equipment.

Your enquiries will be appreciated.



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For That Extra-Special Office

DESIGN A
CORK TILE FLOOR



NEXT time you plan a room where quiet, dignified luxury is the keynote, consider Armstrong's Cork Tile for floors and walls.

Cork offers a combination of quietness, comfort and distinctive texture found in no other material. Armstrong's Cork Tile is quiet and restful because it provides an air-cushion floor. Each cork cell encloses a dead-air space that makes the tile resilient and quiet under impact.

Armstrong's Cork Tile is available with either squared or bevelled edges—the latter often preferred for its decorative effect and because it requires no sanding when installed on uneven sub-floors. Discover the advantages of using Armstrong's Cork Tile for your needs. Write for further details.



ARMSTRONG CORK & INSULATION
COMPANY LIMITED
MONTREAL TORONTO WINNIPEG QUEBEC

OLENTANGY VILLAGE, Columbus, Ohio

402 Apartment Project — Raymond E. Snow, Arct., Washington, D. C.



MODEX POWDERED CASEIN PAINT
for Interiors • • Sold Through
HANNA PAINT MFG. CO., Columbus, Ohio

Want to Know Why **MODEX Was Selected** **for This Project?**

There's plenty of competition for paint business when a major project like Olentangy Village is at stake. Modex—the concentrated casein paint in powder form—was selected because it thrives on competition. When the chips are down, Modex has the selling features which really count. It's well to keep these Modex superiorities in mind for future reference—they are important whether you are considering a multiple dwelling project or a simple bungalow.

- ✓ **Costs 25% Less Than Any Paste Casein Paint**
- ✓ **Self-Sizing — Requires No Primer**
- ✓ **High Light Reflectivity**
- ✓ **Easy to Mix and Apply — Dries Fast**
- ✓ **Spoilage-Proof — No Odor**
- ✓ **Washable and Exceptionally Durable**
- ✓ **Soft Color Harmony**

Send for **MODEX Folder**
THE REARDON COMPANY LIMITED
146 ST. PETER ST., MONTREAL, QUEBEC

Modex



THE CONCENTRATED CASEIN PAINT IN POWDER FORM

Webster Moderator System of Steam Heating installed

IN MAIN BUILDING 1933
— IN NEW WING 1938!



Montreal Convalescent Hospital, completed 1933. New wing opened October, 1938, by His Excellency Baron Tweedsmuir, Governor-General of Canada.

Joint Architects: Grattan D. Thompson, Archibald & Illslev.

Consulting Engineer: Walter J. Armstrong.

General Contractors: Bremner Norris & Company Limited.



The outdoor thermostat, which automatically provides MORE or LESS heat according to the weather, forms an integral part of the Webster Moderator System.

Five years ago the Webster Moderator System of Steam Heating, employing an outdoor thermostat to provide "Control-by-the-weather", was installed in the main building of the Montreal Convalescent Hospital. The operation of this system proved thoroughly satisfactory, the steam consumption was at the minimum possible, and the cost of maintenance of the mechanical equipment was negligible, with the result that a similar system was ordered for the extensive new wing. Balanced heat distribution to every radiator insures perfect comfort under all weather conditions, with no overheating in the coldest weather and no overheating during mild weather.

DARLING BROTHERS LTD.

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HALIFAX • SAINT JOHN • QUEBEC • OTTAWA • TORONTO • TIMMINS • NORANDA
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The Lighting of Tomorrow

- ▶ AT THE WORLD'S FAIR THIS YEAR
- ▶ READY FOR YOUR OFFICE TODAY

THE most advanced commercial lighting of today is the closest approach to natural outdoors light . . . *Ainsworth Magna!* Already adopted by leading business organizations and institutions, selected by the New York World's Fair (see view of Administration Building, inset), Ainsworth lighting can be installed in your office or building *now* to provide restful, healthful illumination from this day on.

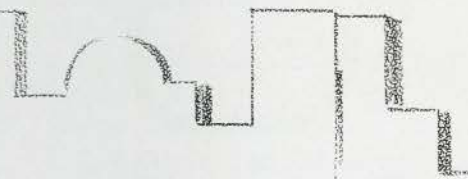
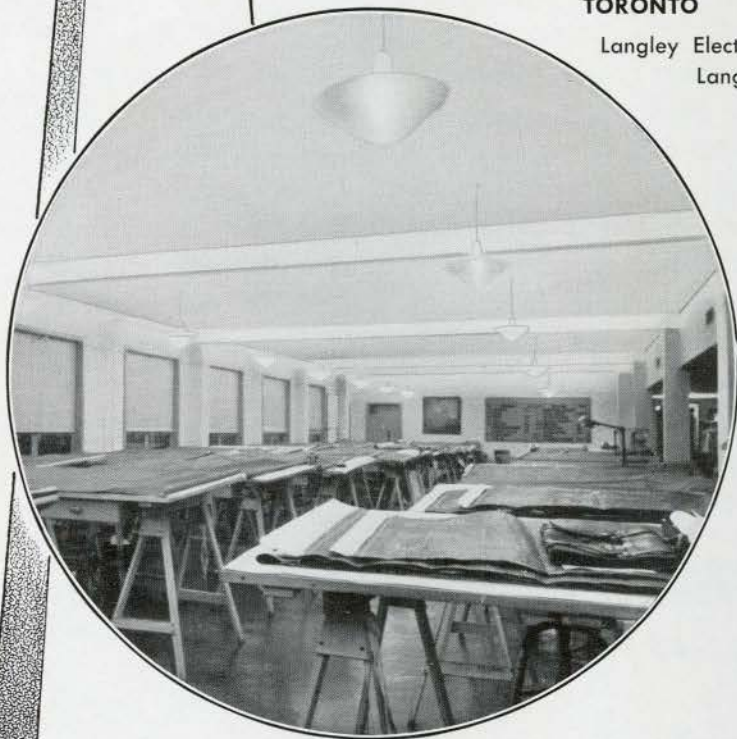
The special glass alloy used in the Softlite bowl of the Ainsworth Magna Luminaire gently diffuses the light over a wide shadow-free area; the lighting source itself blends inconspicuously with the reflecting surface, eliminating distracting "glare spots" . . . simulating the natural lighting conditions of a clear Summer day!

Would you like to know how and why Ainsworth Magna Lighting will bring "Nature's Lighting" indoors for you? . . . will bring new ease of vision for all within your walls? . . . will bring new natural beauty to your interiors? Call or write any branch office today.

AMALGAMATED ELECTRIC CORPORATION LIMITED

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Langley Electric Manufacturing Co. Ltd., Winnipeg
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The **AINSWORTH MAGNA**
LUMINAIRE BRINGS . . .
'NATURE'S LIGHT' INDOORS



ROYAL TRUST BUILDING

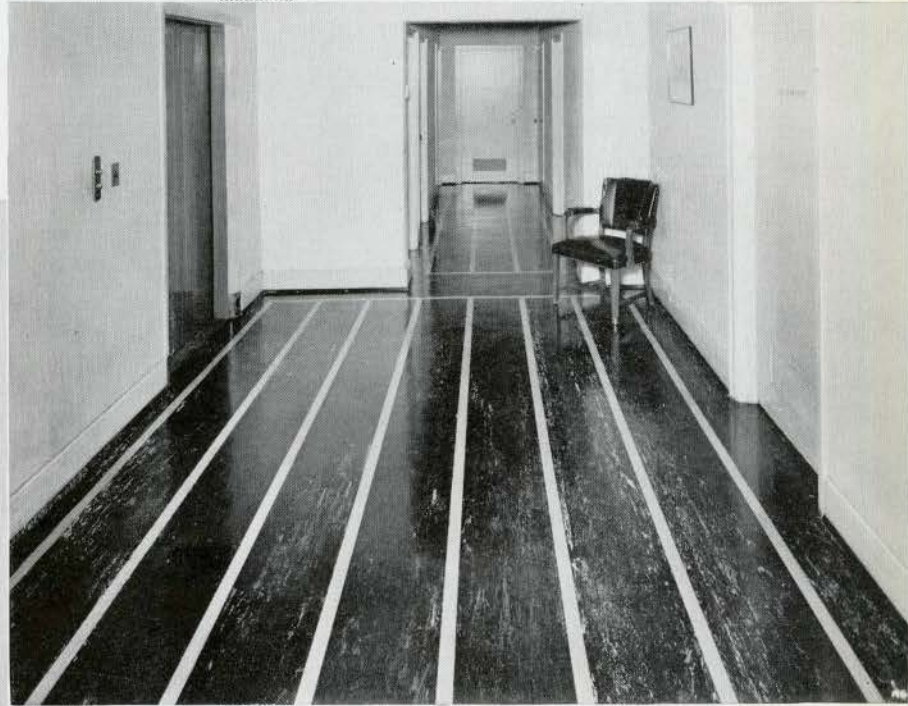
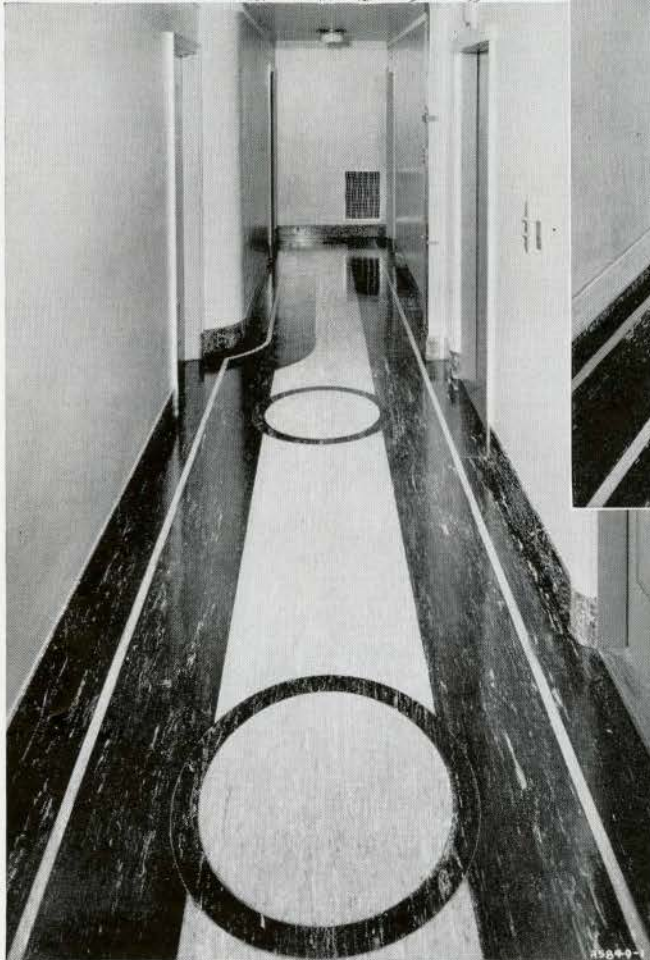
66 King Street West
Toronto, Ont.

Architects:

Allward & Gouinlock, Toronto, Ont.

Building Contractors:

Anglin-Norcross Ontario Limited, Toronto, Ont.



"LENDs itself exceptionally well to new designs and colour combinations."

... writes Mr. F. H. Bacque of Bacque, Hay & Company about the DOMINION ROYAL-ITE TILE FLOORING installed in the elevator corridors, lobbies and corridors of the Royal Trust Building, Toronto. Mr. Bacque adds: "We have had the utmost satisfaction from the installation of this material ... We believe that it is by far the most satisfactory type of flooring for use in office buildings."

Dominion Rubber Royalite Tile Flooring lends lasting distinction to all types of buildings. Architects like the decorative adaptability of its wide range of solid colours and marble effects, which afford opportunity for effective individual designs. And owners prize its exceptional wearing qualities — their assurance of low maintenance costs.

Dominion Rubber Company is also the leader in the manufacture of attractive perforated mats, also corrugated matting and runners in attractive colours.

A Dominion flooring specialist will be glad to work with you on your next flooring job. Write our nearest Sales Branch for complete details.

DOMINION ROYALITE TILE FLOORINGS by



Dominion
RUBBER COMPANY
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HALIFAX - SAINT JOHN - QUEBEC - MONTREAL
OTTAWA - TORONTO - LONDON - WINNIPEG - REGINA
SASKATOON - CALGARY - EDMONTON - VANCOUVER

"SERVICE BEYOND PRICE AND SPECIFICATION"



for some lucky lady . . .

1. The "Kitchen Queen" Sink. Every modern convenience: double 16" x 18" sink compartments; removable strainers; double depressed drainboards; "comfort-angle" fixture panel. Low 4" back, recessed sub-base, etc. Made of ACID RESISTING porcelain enamelled cast iron in white or colour.

2. The Breakfast Bar, newest kitchen innovation — economical in space but generous in conveniences. Easy-to-clean top. Storage facilities, etc.



THE ARCHITECT has anticipated *all* milady's wishes in this carefully planned kitchen. With the Crane "Kitchen Queen" Sink he has not only saved her time in food preparation and storage, but brought her countless modern conveniences as well. With a Breakfast Bar he has provided a place for informal meals. And around these two fixtures he has built not just a streamlined workshop, but a comfortable livable room also.

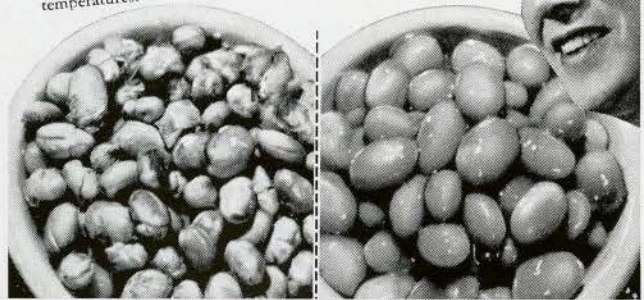
In addition to Kitchen Sinks of every type and size, Crane also supplies a *complete* range of plumbing and heating materials. Why not make a point of seeing them at the Crane Display Rooms? Better still, bring your client along with you.

CRANE

Crane Limited; Head Office: 1170 Beaver Hall Sq., Montreal
Branches in 19 Cities in Canada and Newfoundland

BOTH UNCOVERED FOR 7 DAYS BUT LOOK AT THE AMAZING DIFFERENCE!*

* Reproduced from certified, unretouched photographs of identical foods, refrigerated, uncovered, at comparable temperatures.



ONLY FRIGIDAIRE HAS THE "COLD-WALL"...NEW FOR 1939!
An Entirely New Kind of Refrigerator!

THE NEW "Cold-Wall" Frigidaire is built years ahead . . . to stay modern for years! Because of its advanced design, and because of savings made possible by its superior food-keeping, home builders see it as the logical choice to protect refrigerator investment for many years to come.

With the new "Cold-Wall" Frigidaire, food is not dried out by moisture-robbing air currents. Thus food retains its rich nutritional values. Original freshness is prolonged.

Yet, with all its startling advancements, the "Cold-Wall" costs no more than ordinary "first line" refrigerators. Acquaint yourself with this sensational new Frigidaire. See the new Frigidaire refrigerators and new Frigidaire electric ranges, in order to be fully informed of the most mod-

ern developments in electric kitchen appliances. FRIGIDAIRE DIVISION, GENERAL MOTORS SALES CORPORATION, LEASIDE, ONTARIO.

FRIGIDAIRE Electric Range

"Custom-Built" to the Design of 7550 Women

Designed for women . . . by women! 7550 practical homemakers helped Frigidaire build this range. And in a few short months it has become Canada's cooking and baking sensation!

Beautiful, well-planned, economical, the new Frigidaire Electric Ranges offer the latest advances of electric cooking for modern kitchens.

The Super-Freezer freezes ice and makes cold here... as usual.

How "Cold-Wall" Principle Works

- 1. NEW "DEW-FRESH SEAL"**—A SOLID GLASS PARTITION—DIVIDES CABINET INTO 2 COMPARTMENTS, and
- 2. LOWER COMPARTMENT IS REFRIGERATED DIRECTLY THROUGH THE WALLS BY CONCEALED REFRIGERATING COILS.**

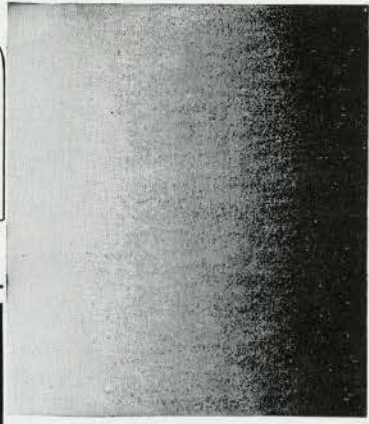
Provides: 1. Uniform Low Temperatures. 2. High Humidity. 3. No Moisture-Robbing Air Circulation.

FRIGIDAIRE
MADE ONLY BY GENERAL MOTORS

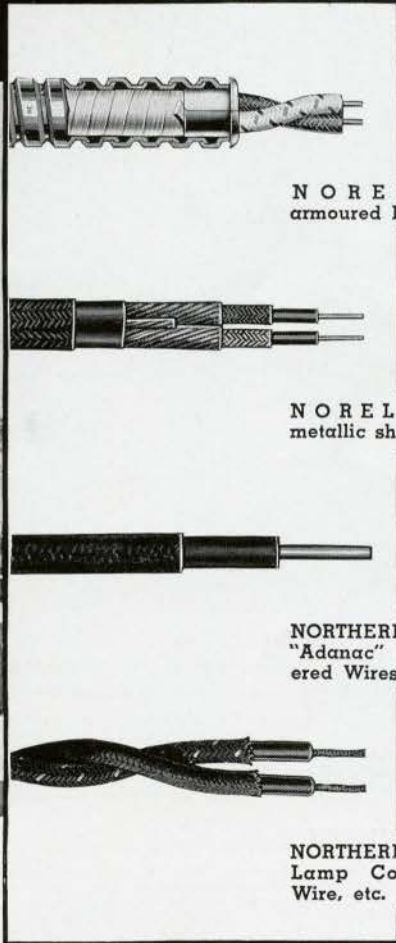
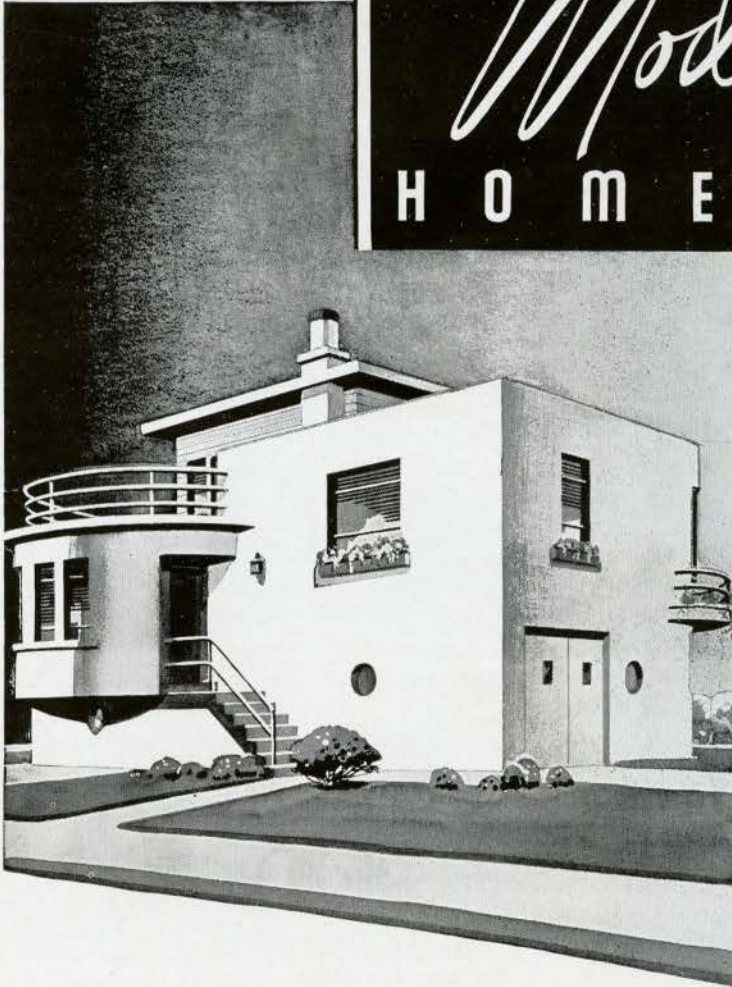
MODERN

WIRING

FOR THE *Modern* HOME



Wiring is the nervous system of the modern home. It supplies light and energy. To assure that this vital system maintains permanently the highest peak of efficiency, specify Northern Electric quality wires for every home requirement.



● NOREL - A. B. C. armoured bushed cable.

● NOREL - X non-metallic sheathed cable.

● NORTHERN ELECTRIC "Adanac" Rubber Covered Wires and Cables.

● NORTHERN ELECTRIC Lamp Cord, Fixture Wire, etc.

● Northern wires and cables meet all requirements of the H.E.P.C. and the Canadian Electrical Code. Consult our nearest branch for complete details.

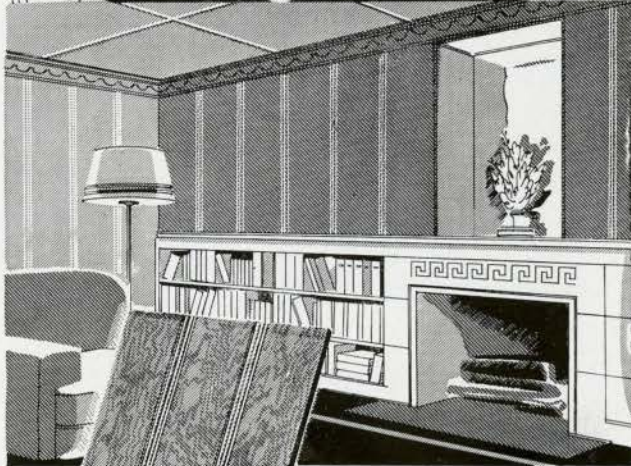
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A NATIONAL ELECTRICAL SERVICE

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all **3** ✓ REAL WOOD,
ALIVE & WARM
✓ NATURAL GRAIN
✓ PATTERNED SURFACE

Now embodied in
SYLVA-CRAFT
WALLBOARD*



Demonstrating the craftsmanship of SYLVA-CRAFT Wallboard—lines, in series, impressed lengthwise on the panels.

THIS newest advance in the manufacture of plywood brings to the surface of regular SYLVAPLY Panels the relief of dignified line-patterns — definite, yet light and delicate in treatment. They are particularly effective in finishes which soften but do not obscure the warmth and beauty of the natural grains.

Such color-tone finishes are obtained by thinned-out paint brushed on and wiped off, followed by coats of white shellac and flat varnish. The result is a combination of harmonizing color, decorative line and beautiful grain — all on the same panel.

New SYLVA-CRAFT Folder Explains . . .

Just off the press, this smart brochure gives full technical details of these panels, with reproductions of typical line treatments and color finishes, also examples of SYLVA-CRAFT Panels embodied in ultra-smart yet practical, modern interiors. Our nearest office will gladly supply you with copies of this informative folder.

*SYLVA-CRAFT Wallboard is another product of

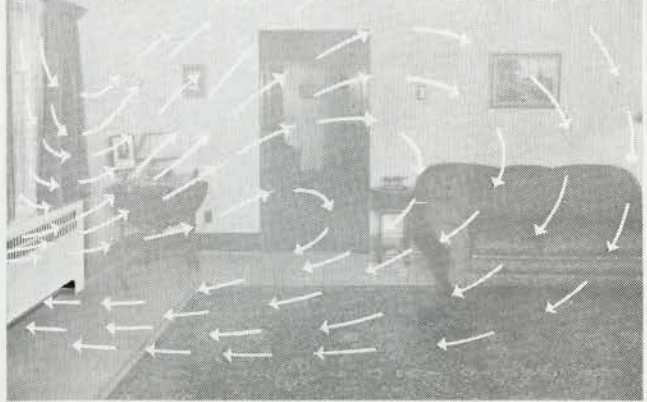
SYLVAPLY

(Giant Panels of Douglas Fir Plywood)

Manufactured By
BRITISH COLUMBIA PLYWOODS LIMITED
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Toronto Office and Warehouse: 26 Ernest Avenue—KENWOOD 8545.
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Trane Convector circulate heat throughout the LIVING ZONE!

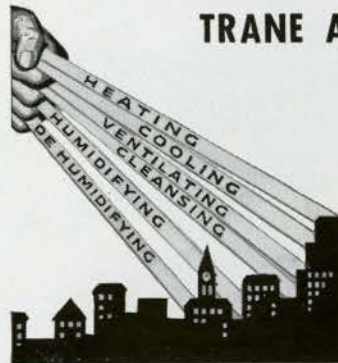


The illustration above explains the first FOUR of the SIX advantages listed below

- 6** ADVANTAGES
- Less House Cleaning
 - Warmer Floors
 - More Uniform Temperature
 - Natural Air Circulation
 - Better Appearance
 - Manufacturing Responsibility

• Enquiries from coast-to-coast prove that Trane advertising is helping to sell Trane Convection Heat Cabinets. Couple this and the advantages listed above, with the fact that these cabinets, including heating element, cost no more than free standing cast iron radiators . . . that their fractional comparative weight reduces labour costs and hazards of damage during installation, and you have every logical reason why you should specify Trane Convector on every heating installation.

TRANE AIR CONDITIONING



In addition to a range of standard model "Climate Changers" . . . Trane engineers and produces "specials" for every air-conditioning need for comfort or product control. Enquiries entail no obligation.

TRANE AIR[™]

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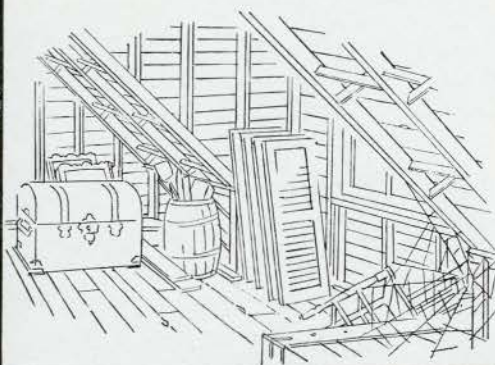
4 MOWAT AVE.

TORONTO, ONT.

MARBOLEUM

-with the Beauty of Marble
and the Economy of Linoleum

WORKS Magic!



It's easy and inexpensive to transform waste space . . .

In houses already built and in houses under construction, attic or basement space often goes begging. Yet this space may be transformed into desirable rooms at very reasonable cost. The decorative scheme in the attic-bedroom shown above was keyed to colourful Marboleum. Marboleum comes in a wide range of shades and effects, to be

laid plain, with border or with interesting Dominion Battleship Linoleum insets. Architects appreciate the decorative scope afforded by Marboleum and home owners find it a never-ending source of pride. It is permanent, easy to clean and needs no costly upkeep. Write us for samples and booklet on "The Care of Linoleum".

DOMINION OILCLOTH & LINOLEUM COMPANY LIMITED • MONTREAL

Install reliable plumbing fixtures, and put an end to repairs and unnecessary replacements. Better fittings are always far cheaper in the long run.



WALLACEBURG FIXTURES *are built* RIGHT

There are never any short cuts — never any skimping anywhere. They're right from the raw material up. No WALLACEBURG fitting has ever been designed to compete with cheap, inferior products.

All WALLACEBURG showers, faucets and other fixtures are built for a lifetime of completely satisfactory service. Of course they may cost more than some others. They're worth more.

DEPENDABILITY
FOR 34 YEARS

ASK YOUR
PLUMBER

WALLACEBURG

TORONTO MONTREAL WINNIPEG VANCOUVER

The **T/N**

THE ONLY REALLY QUIET TOILET!



PLUS

4

other

DESIRABLE FEATURES

- The T/N stands clear of the wall and is easier and less expensive to install.
- It is the *only* toilet having rim wash at city pressure.
- Because the float in the tank is lower than the rim of the bowl it is protected against overflow.
- Made of heavy vitreous china, it will not craze or discolour.

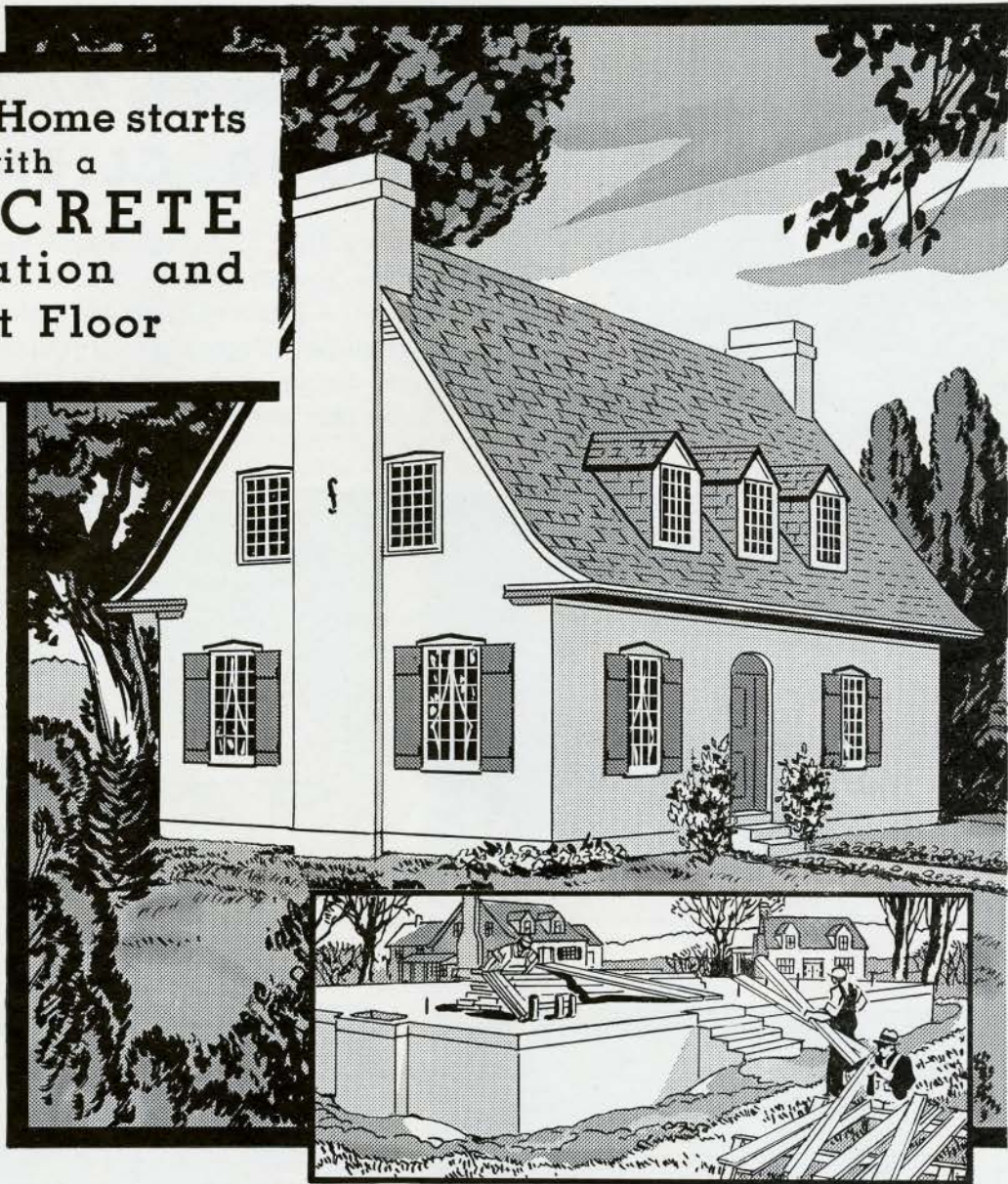
Unique in design and principle, the T/N is the toilet by which others are judged. Its quiet performance makes an immediate appeal to discriminating home-owners and its smart styling is in the best Canadian Potteries tradition. The T/N is available in white, black and a choice of six attractive pastel shades.

Complete specifications on request.

Canadian Potteries *Limited*

SAINT JOHNS ★ QUEBEC

A Good Home starts
with a
CONCRETE
Foundation and
First Floor



No matter what type of home is being planned, it should be built for permanence and fire-safety from the ground, up. It starts with a concrete foundation and first floor—to which any type of floor finish can be applied at reasonable cost. If it is decided to build the house itself

with concrete, there are many types to choose from, including reinforced concrete and concrete blocks, with or without stucco facing, all readily adaptable to period or modern architectural design. Write us for literature on concrete for home building.

CANADA CEMENT COMPANY LIMITED

Canada Cement Company Building — Phillips Square Montreal

Sales Offices at: MONTREAL

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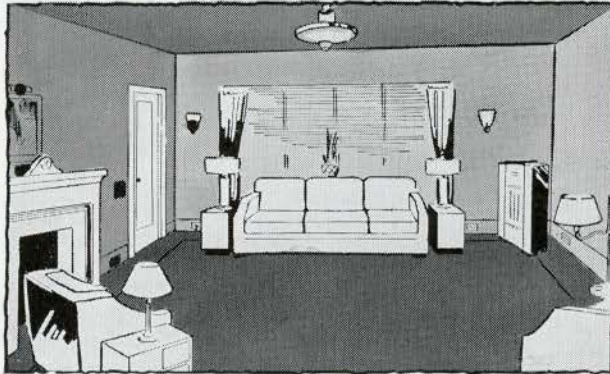
WINNIPEG

CALGARY

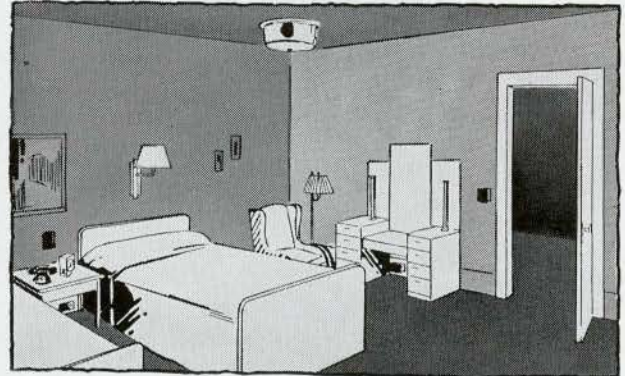


PLAN "Adequate Wiring" FOR YOUR CLIENTS

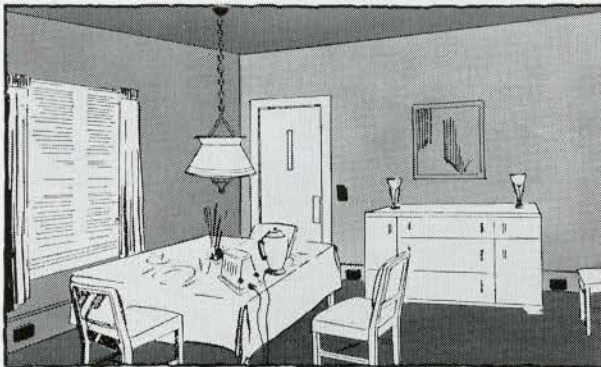
Plan a "Path of Light" throughout the home with switches at each door to turn on lights ahead. Provide for plenty of baseboard outlets to plug in lamps and appliances wherever your client pleases. Specify large enough wire to properly carry all the current that will be needed today and tomorrow.



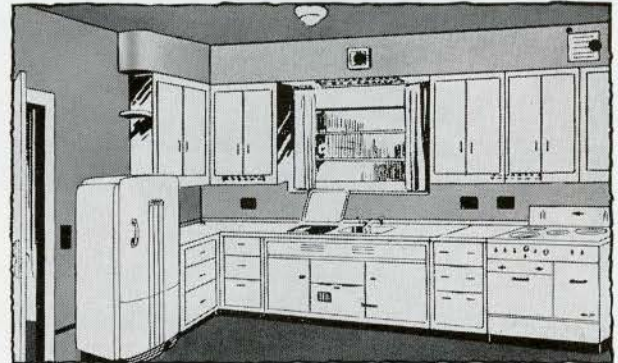
In the living room five or six baseboard outlets should be provided, allowing the use of shorter, tidier cords and the arrangement of furniture without being tied down by the location of outlets. And don't overlook the special radio outlets to provide ground and aerial wires.



In the bedroom enough outlets are needed for a bedside lamp and heating pad, regardless of where the bed may be placed . . . for heater, sunlamp, curling iron, etc., and an outlet for an extra radio. Don't forget an automatic door switch for the closet.



In the dining room specify "Two-Way" switches at each entrance for the "Path of Light" . . . the outlets essential for toaster, percolator, etc. . . . and a floor outlet for kitchen service bell.



In the kitchen plan "Two-Way" switches at all doors . . . plenty of light over working surfaces . . . and *lots* of outlets. This is the workshop of the home where electrical servants are concentrated. Provide for refrigerator, mixer, clock, exhaust fan . . . and another radio outlet.

CANADIAN GENERAL ELECTRIC C O M P A N Y L I M I T E D

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39-JB-11

JOURNAL

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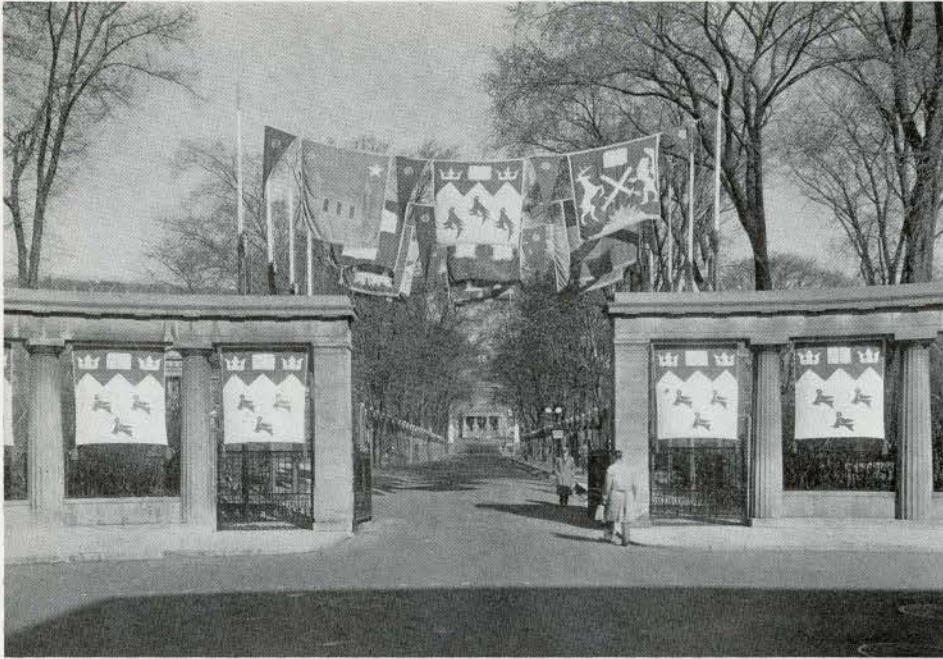
WHEN the Editorial Board decided to show in this issue of the Journal a number of buildings connected with the Royal visit, we did not realize that every illustrated magazine would be doing precisely the same thing. After a perusal of several fashionable magazines we discovered that not all the Lieutenant-Governors in Canada had residences like those of Quebec and Prince Edward Island; that City Halls were peculiarly ugly and incredibly similar, and that a review of legislative buildings across Canada would inevitably include those of Ontario by Mr. Waite of Blackpool and Buffalo. It was decided, therefore, to eschew Provincial Parliament Buildings and gubernatorial mansions except in one particular instance.

The result of our research is not a record of buildings, which Their Majesties will necessarily see, but rather a widely scattered collection of buildings closely connected with the growth and history of Canada. It is also a record of fine building in a period when refinement of taste was shared by soldier draughtsmen of the Royal Engineers, Hudson's Bay factor and the humblest citizen. We can only marvel at the universal good taste of 18th and early 19th centuries. It can be understood in the comparatively leisurely building of Government House, Charlottetown or Halifax, though even there ostentation might have over-ruled restraint, but no one can explain the serene beauty of the military buildings of Fort Lennox, or the masterly handling of masonry and buildings at Lower Fort Garry. On the one hand you have military engineers whose training in architecture was confined to structure and a superficial knowledge of the orders, and on the other, a Hudson's Bay factor with no special acquaintance with building engaged on a task wholly removed from his daily business of trading. That these buildings all have a stamp of competence and of their era whether built in a colonial town, on an island in the Richelieu or on the prairies of Manitoba, will always be, to us, a profound mystery.

We do not know what impression Their Majesties received of Canadian architecture. Our downtown sections generally were built by speculators and business men in periods of rapid growth and general prosperity. In such a condition of affairs people were too busy to consider beauty and, in any case, the standard of taste in the English-speaking world was at its lowest ebb. Since that time, new and fine buildings have appeared to take the place of obsolete ones, but the good is overwhelmed by the bad, and decay and parking lots are too familiar a picture. The Canadian takes pride in his home and his garden and in the old and the new domestic architecture of this country we have every reason for pride. Unhappily, the Royal route was through the Yonge Streets of Canada rather than the Pine Streets, and they are as poles apart.

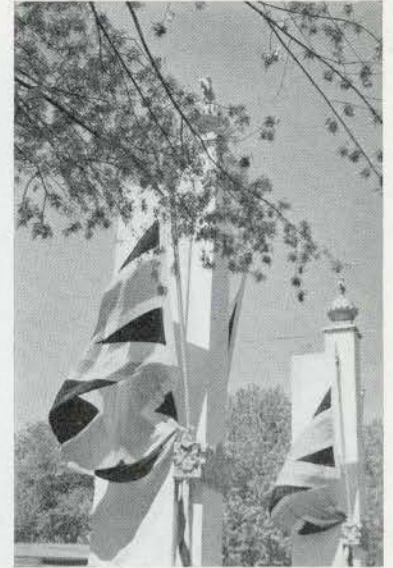
In the general wave of enthusiasm and rejoicing, we lost all our critical faculties and a cluster of Union Jacks on a frame shack seemed to us just as gorgeous as Selfridges at the Coronation. That we did things that would have horrified the Army, the Navy and the College of Heralds, we have no doubt, but that was of no moment at a time of such jubilation. Jacks were flown at half-mast because they looked better so, the flags of Canada and Scotland probably predominated in Toronto, and the Royal Standard, which we remember with awe on Windsor and Buckingham, we saw floating proudly on a pole in a park a week after His Majesty had left the city. In co-ordinated street decoration, where it existed, we obviously learnt much from the Coronation, and Montreal and Winnipeg are particularly to be congratulated on their efforts. Though the press has made no mention of it, it is only proper that, in this Journal, it should be recorded that both these schemes were carried out by architects. The Toronto City Hall, also designed by architects, had just the right spirit of dignity and pageantry, and Eatons, in Toronto, surpassed in colour and design, anything we have seen in façade decoration, here or abroad.

We are not living in the Renaissance when on such an occasion of national rejoicing every architect would have been employed, like Inigo Jones, to the full extent of his talent, but His Majesty can be assured that the efforts of groups of architects throughout Canada are but a symbol of the good will and loyalty of the members of the Royal Architectural Institute of Canada.



ENTRANCE TO MCGILL UNIVERSITY GROUNDS

Civic decorations in Montreal were designed by a committee composed of Ernest Cormier, Chairman, Emile Lemieux, J. Roxburgh Smith, Clarence Gagnon, J. B. Lagacé and Edwin Holgate. The McGill decorations were designed by Nobbs and Hyde.



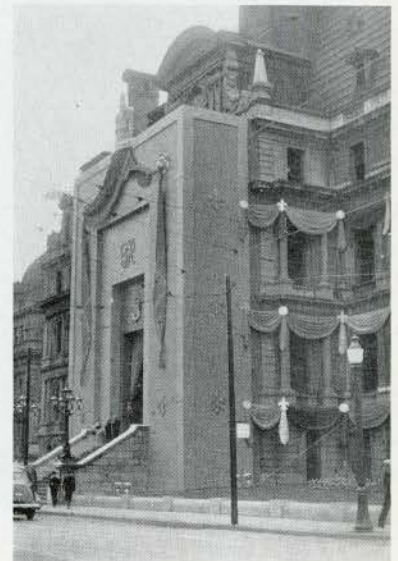
FLETCHER'S FIELD



PINE AND PARK AVENUE



SHERBROOKE STREET WEST



CITY HALL

TORONTO



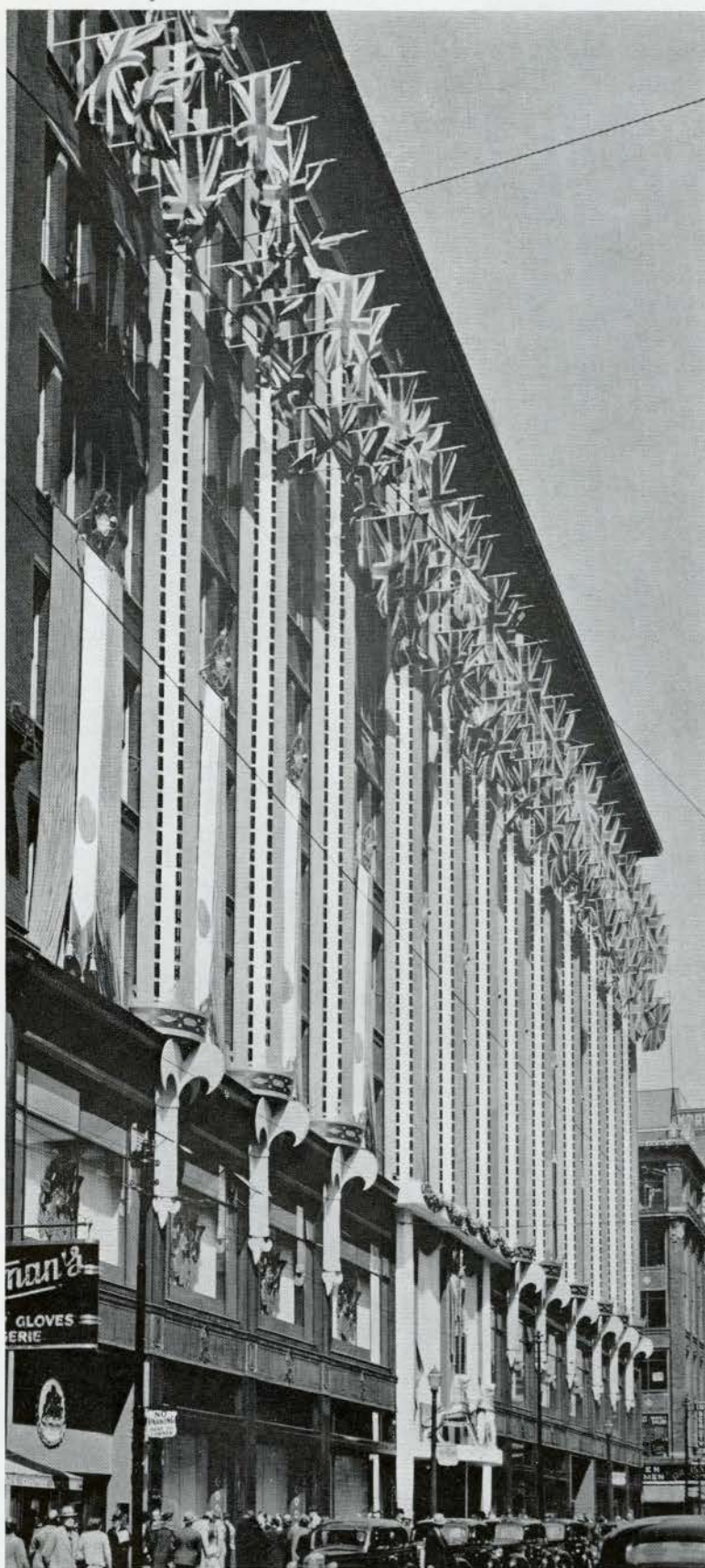
QUEEN'S PARK

Due to the fact that Editorial Board members were on vacation, it has been impossible to obtain material from Ottawa or Winnipeg in connexion with the decoration of those cities.—Editor.



CITY HALL

The City Hall Decorations were designed by a committee composed of the Commissioner of Buildings, Mr. K. S. Gillies; the Commissioner of Property, Mr. G. D. Bland; Mr. Martin Baldwin, Curator of the Art Gallery; Col. F. H. Marani, Chairman of the Toronto Chapter O.A.A., and Col. Mackenzie Waters.



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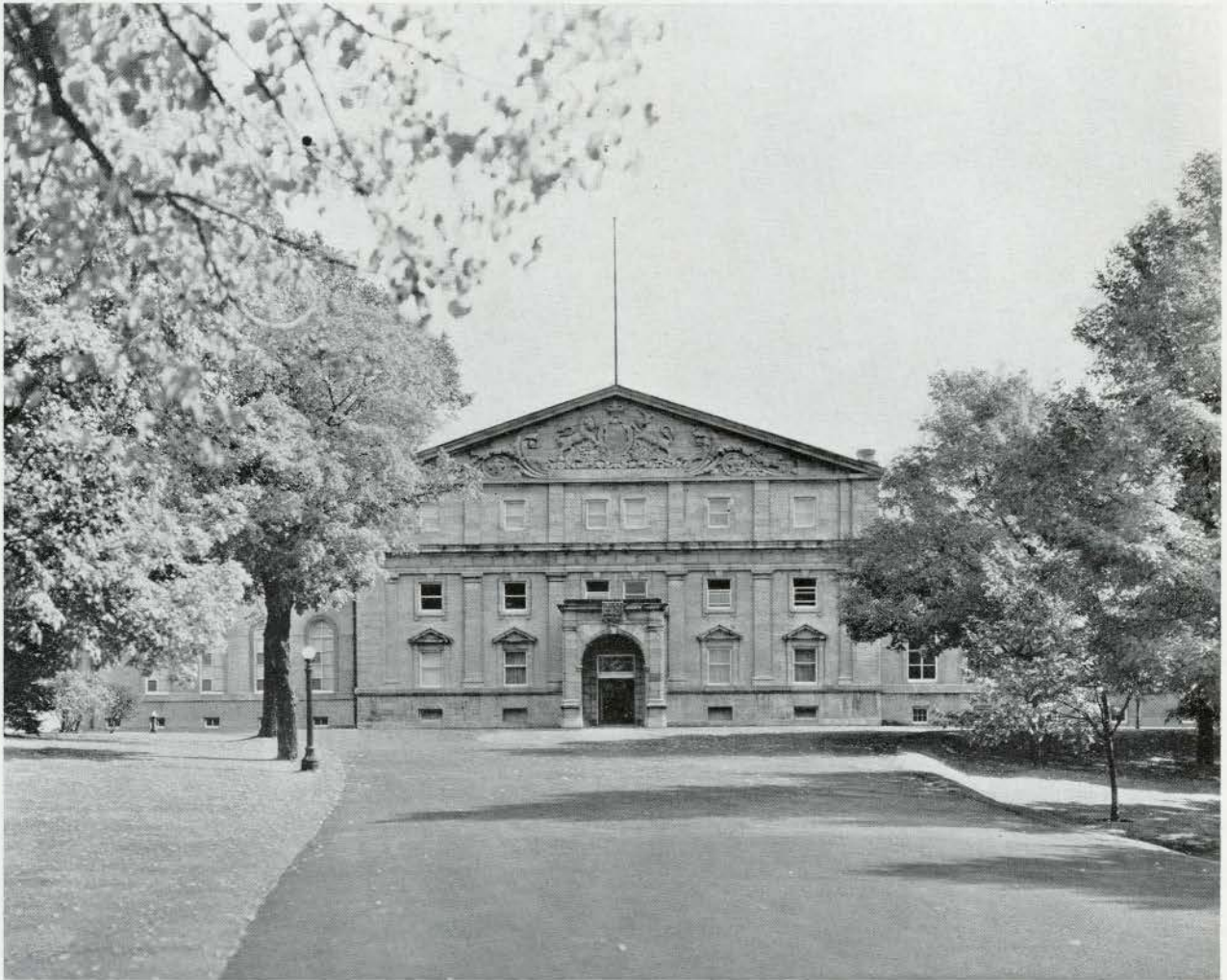
PAISLEY SHOP, YONGE STREET



EATON'S COLLEGE STREET

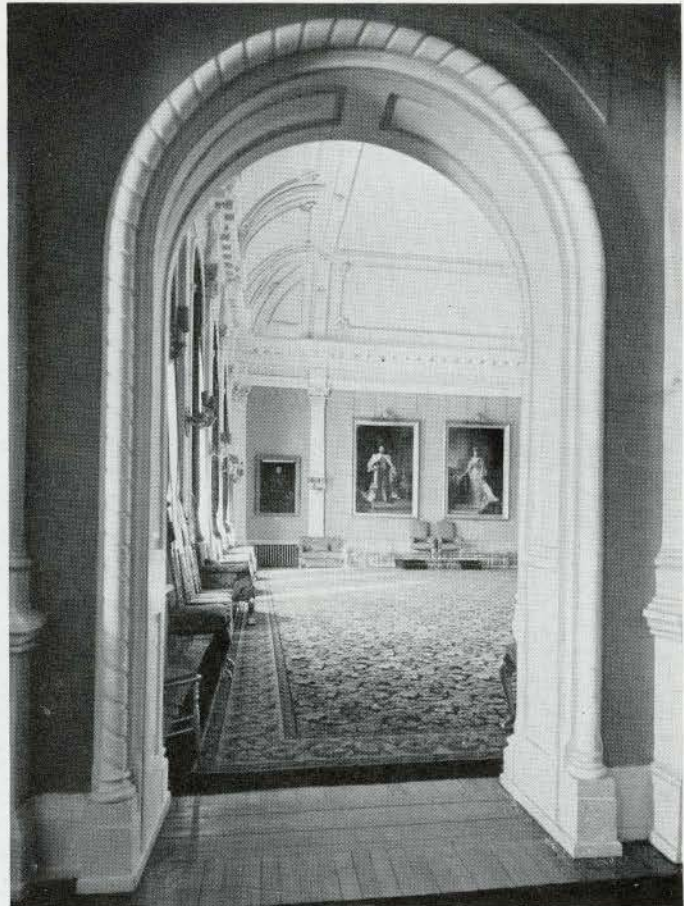


THE T. EATON CO., LIMITED,
YONGE STREET ENTRANCE



MAIN ENTRANCE, RIDEAU HALL, OTTAWA

BUILT AS A PRIVATE RESIDENCE IN 1838. ALTERED AS A
RESIDENCE FOR THE GOVERNOR-GENERAL OF CANADA IN 1865.

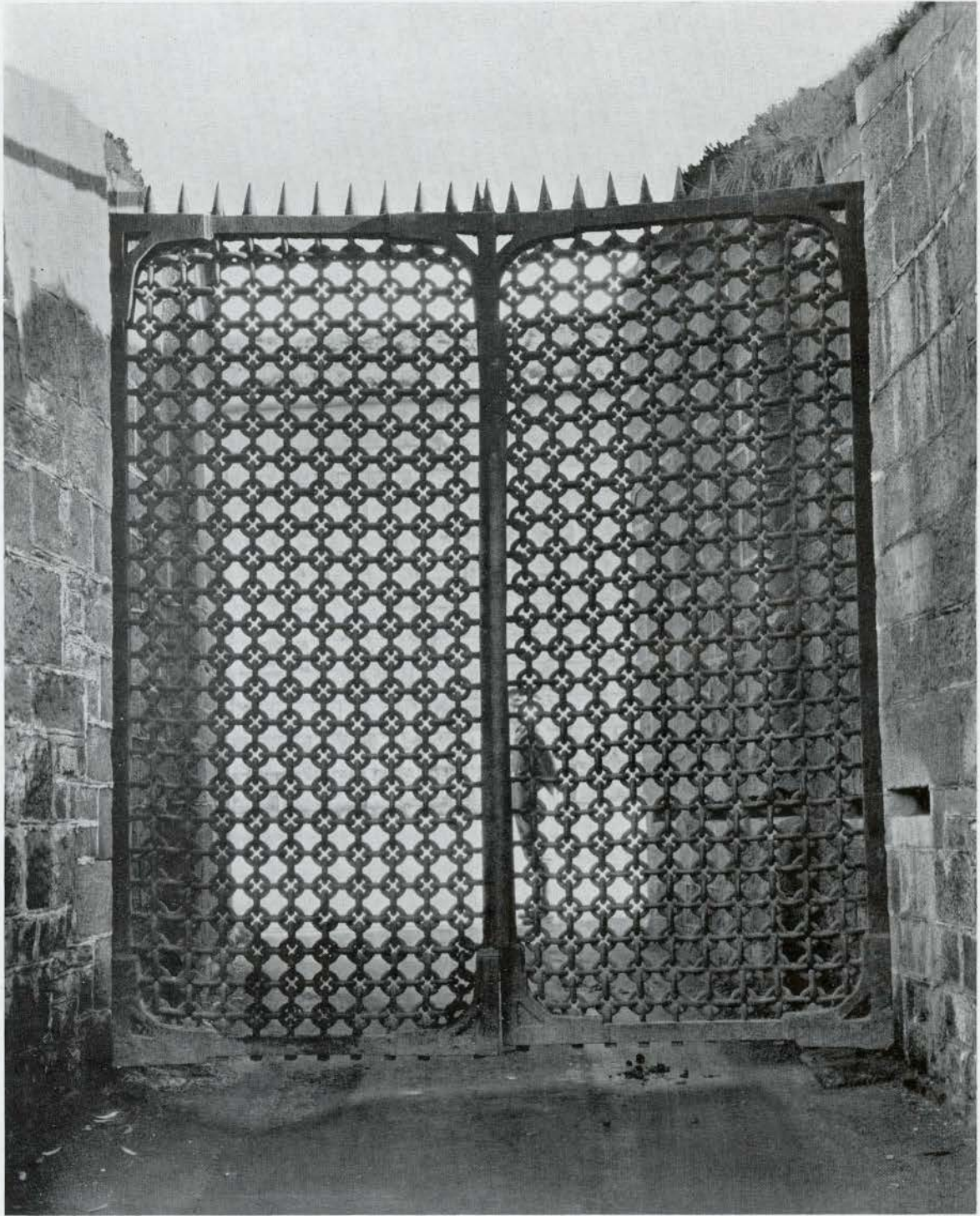


THE BALL ROOM

Karsb, Photographer.

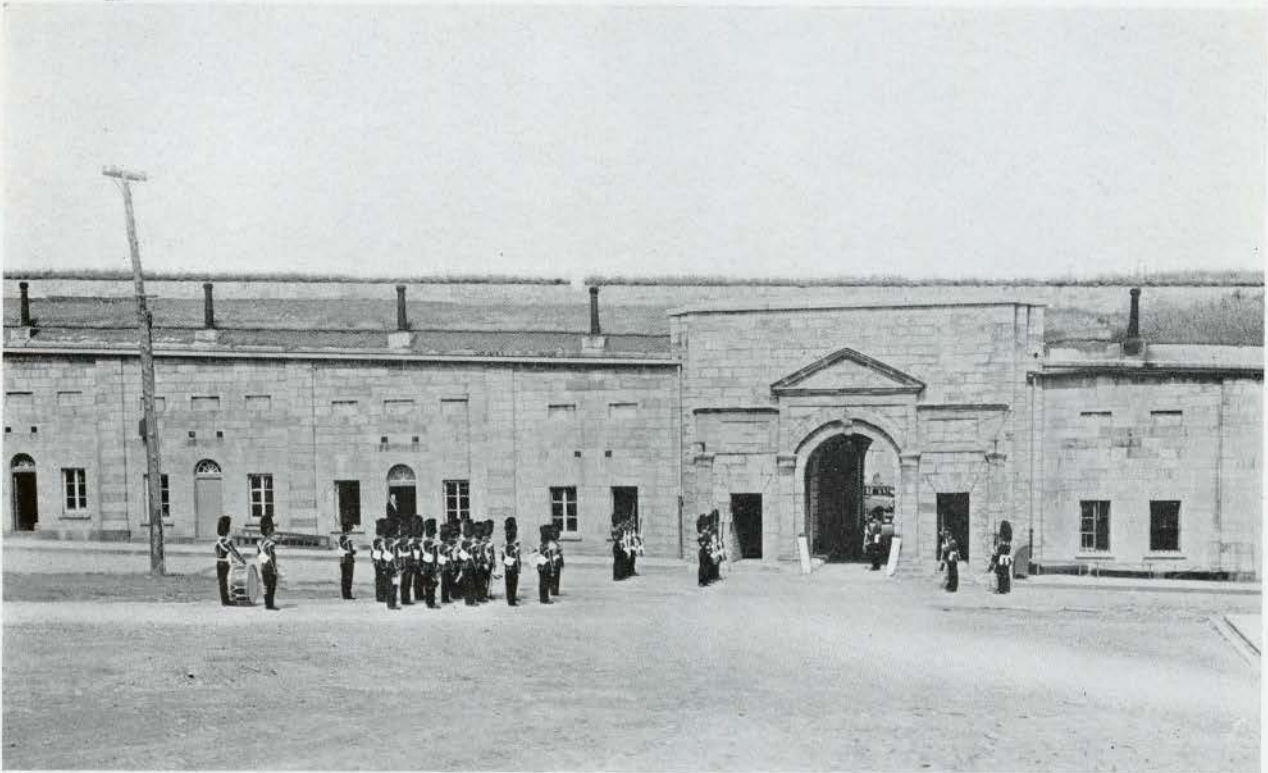


MAIN ENTRANCE LOBBY

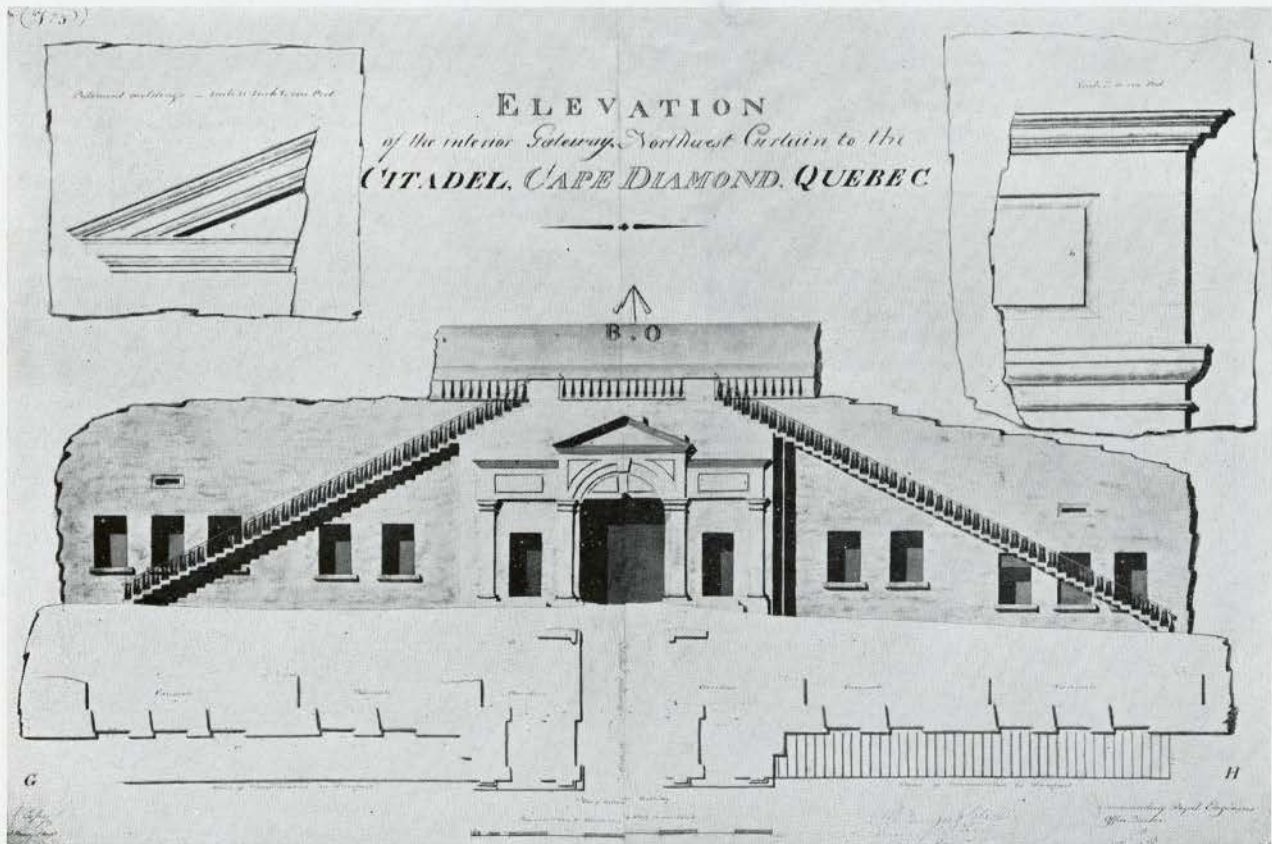


CHAIN GATE AT THE ENTRANCE TO THE CITADEL, QUEBEC

THE ORIGINAL BUILDINGS WERE FRENCH (BUILT BEFORE 1759), BUT THE CITADEL WAS BEGUN IN 1820 AND FINISHED IN 1832. PLANS IN THE PUBLIC ARCHIVES OF CANADA ARE SIGNED BY LIEUT.-COL. ELIAS W. DURNFORD (COMMANDING ROYAL ENGINEERS IN CANADA), LIEUT. JOSHUA JEBB AND CAPT. S. C. MELHUISE. THERE HAVE, OF COURSE, BEEN ALTERATIONS AND ADDITIONS SINCE.

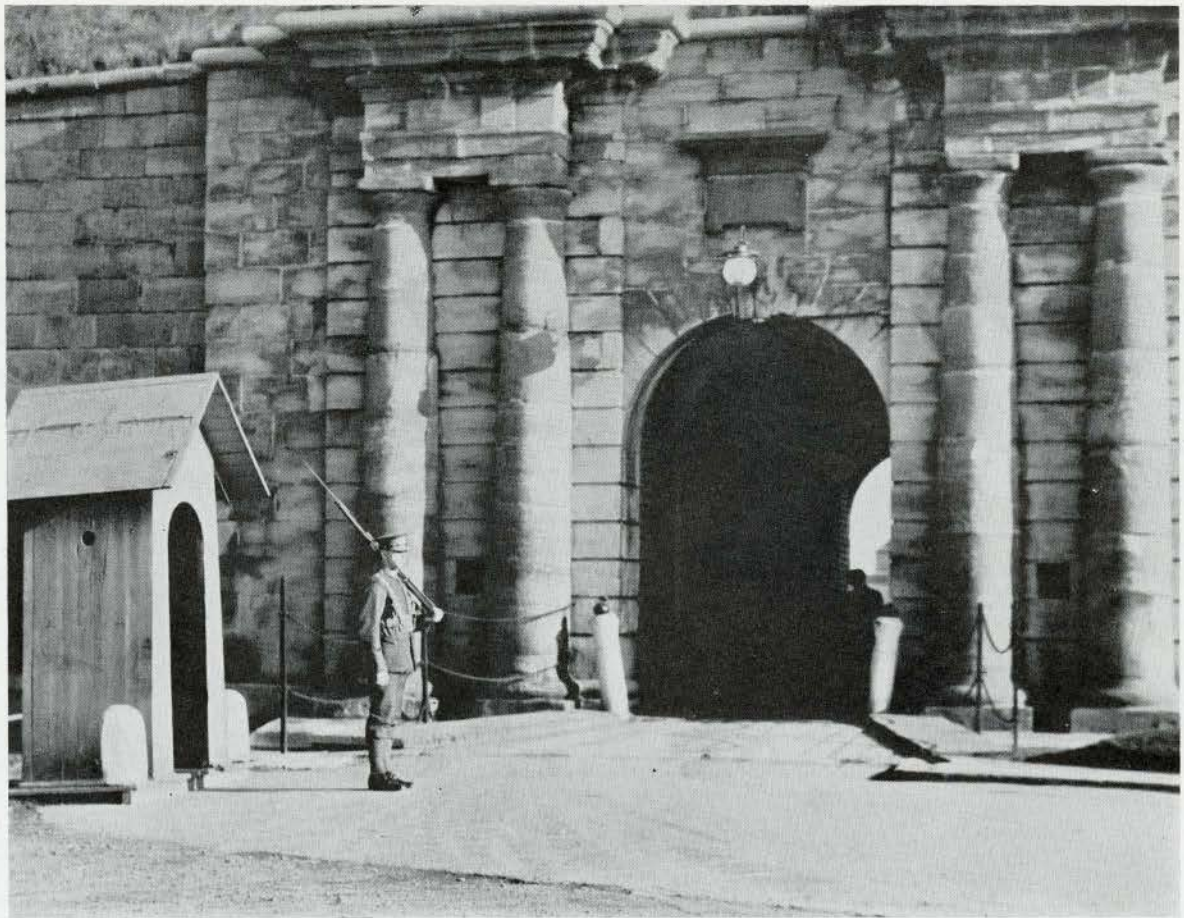


INTERIOR GATEWAY



INTERIOR GATEWAY

FROM THE ORIGINAL DRAWING IN THE POSSESSION OF THE DOMINION ARCHIVES, OTTAWA. THE DRAWING IS DATED 1825.



ENTRANCE TO THE CITADEL



THE CITADEL FROM THE AIR



GOVERNMENT HOUSE, HALIFAX, 1808



GOVERNMENT HOUSE, HALIFAX, THE GARDEN VIEW



MEN'S BARRACKS

OFFICERS' QUARTERS

FORT LENNOX, ILE AUX NOIX, QUEBEC

FORT LENNOX is situated on the Ile aux Noix in the Richelieu River. The fort is named after Charles Lennox, Duke of Richmond, who was Governor-General of Canada in 1818, and the island takes its name from the fact that the rent received from the original owner (Sieur Chavoys de Noyan in 1733) was one bag of nuts per annum. With the French occupation of the Richelieu territory a line of defence for the Richelieu river became a necessity, since the Richelieu was the chief highway from the south to the cities of Montreal and Quebec. In the course of time a chain of forts was built, stretching from Sorel to Lake Champlain, to cover with their guns the advance of an enemy from the south. In these operations the famous Carignan regiment took a prominent part and the names of many of its officers are still preserved in the place-names of the Richelieu region.

Around these forts the first settlers clustered for protection and thus formed the "French Country" of the Eastern Townships. In the term "habitant" is preserved the literary memorial of the stockaded villages or "habitations" that were the outcome of these defensive posts.

The struggle between English and French involved the fortification of Ile aux Noix. The island is three-quarters of a mile in length, with a swift narrow channel on each side and shores rendered unapproachable for troops on account of wide tracts of treacherous marsh land. These factors made Ile aux Noix an ideal site for the defence of the Richelieu. To the south, where attack might be expected, the river takes a sharp bend and an approaching flotilla coming suddenly around Sturgeon Point could be surprised by a deadly fire from the guns of the fort.

In 1759 the French were forced to abandon the forts of Carillon and St. Frederic which guarded that part of New France situated around Lake Champlain. It appears that this movement had already been foreseen in 1758. On May 13th of that year, Lieut. Jean Nicholas Desandrouins, Royal Engi-

neer, left Quebec for Montreal, and in June departed from Fort St. John, where he was under Montcalm's orders for Forts St. Frederic and Carillon. He must have made a favourable report on Ile aux Noix, for in 1758 a report was made criticising his appreciation of that site and recommending that Pointe a Margot, on the east bank of the Richelieu, be selected. However, Desandrouins' advice seems to have prevailed, for on April 25th, 1759, under instructions from Montcalm, he left Fort St. John for Ile aux Noix, which he examined as a strategic point.

General Bourlamaque decided to entrench himself strongly at Ile aux Noix with the intention of arresting the march of the English commander, Haviland. With 2,000 men of the detachments of la Reine, of Guyenne and of Berry, Bourlamaque worked so well that his adversary was afraid to attack him immediately. It was only in the month of August, 1760, after having received some reinforcements, that Haviland appeared before Port Ile aux Noix, then commanded by de Bougainville, who distinguished himself later by his voyages and discoveries and whose body rests in the Pantheon of Paris.

The French had thrown some stockades across the river to close the passage, but the English had succeeded in establishing themselves on the peninsula situated on the east side and with their cannon pointed at three sides of the fort. The French commander judged it to be better to retreat than to be obliged to surrender with all his forces and during the night of August 27th-28th, profiting by darkness, he embarked the greater part of his troops in canoes, leaving in the fort 50 men in order to hide his stratagem. He thus succeeded in evading the enemy and gaining St. John's and Montreal, where he joined Levis.

The surrender of the island was the prelude to the fall of Montreal and the loss of New France to the French Government. Ile aux Noix was the last defence of the old regime.

From the time of the British occupation Ile aux Noix was recognized as a strong position and was constantly garrisoned

by troops. With the outbreak of the American War of Independence in 1775 the need for a strong fortress on the island became apparent. In that year the American rebels, commanded by Generals Schuyler and Montgomery, took Ile aux Noix in the course of their advance on Montreal and Quebec. It was from here that they issued their famous proclamation inviting the Canadians to join the Congressional troops. After Montgomery's failure and death before the walls of Quebec, the American army retreated to the Richelieu and entrenched at Ile aux Noix under the orders of General Arnold. Fever broke out among the soldiers, the Americans left very hurriedly in order to escape the ravages of the epidemic, and the British reoccupied the fort.

Brigadier-General Fraser was its first commandant. He had just previously, on June 8th, won a victory over the United States troops at Three Rivers. He occupied the island with three battalions from July. The Brunswick regiment which he employed to complete de Bourlamaque's fortifications, was sent to him in the month of August. The following year, on October 7th, 1777, Fraser was killed while with the unfortunate Burgoyne expedition.

The British government decided in 1782 to build on the island a real fortress. Plans were made and immediately the work of reconstruction was begun under the direction of an engineer named Twiss. A large number of Canadian prisoners who had joined the Americans during the invasion were employed on this work, but the major part was carried out by the German mercenaries who were in the British service. The plan was to dig a large moat surrounded by high ramparts in the form of a rectangle with bastions on four corners, and then build, in the interior, quarters for the officers and soldiers. This was a gigantic enterprise when one considers the rudimentary means available for the building of large earthworks. The workmen were obliged to make great cribs of timber which they filled with earth brought in wheelbarrows from the ditches. The stone for the casemates and barracks was hauled from the island at Lamothe.

It was at this time that General von Riedesel, the commander of the Brunswick mercenaries, employed by the British to assist in the campaign against the revolting New England colonists, figures in the destinies of the island. The

Landgrave of Hesse and the Duke of Brunswick had supplied the British with 20,000 troops. In command of 4,000 Brunswickers, General von Riedesel came to Canada and operated between Sorel and Lake Champlain. Under his supervision the first considerable British fortifications were built on Ile aux Noix. The fortress was advanced before the winter came on, but was not completed till the next summer. The expected attack of the Americans did not materialize, but Ile aux Noix had been established as a garrison fortress.

The War of 1812

When trouble once more broke out between the neighbouring countries in 1812 it was found that the fortress built by von Riedesel at the cost of so much labour and suffering was not sufficient to meet the purposes of defence. It was decided to reconstruct the interior and the present buildings were from time to time erected. The island also became a naval station where warships of the lesser class were built. The work was begun in 1812 and was not completed for many years.

TENTATIVE LIST OF REGIMENTS STATIONED AT ILE AUX NOIX

French Regiments—

de Barry, La Reine, de Guyenne.

British Regiments—

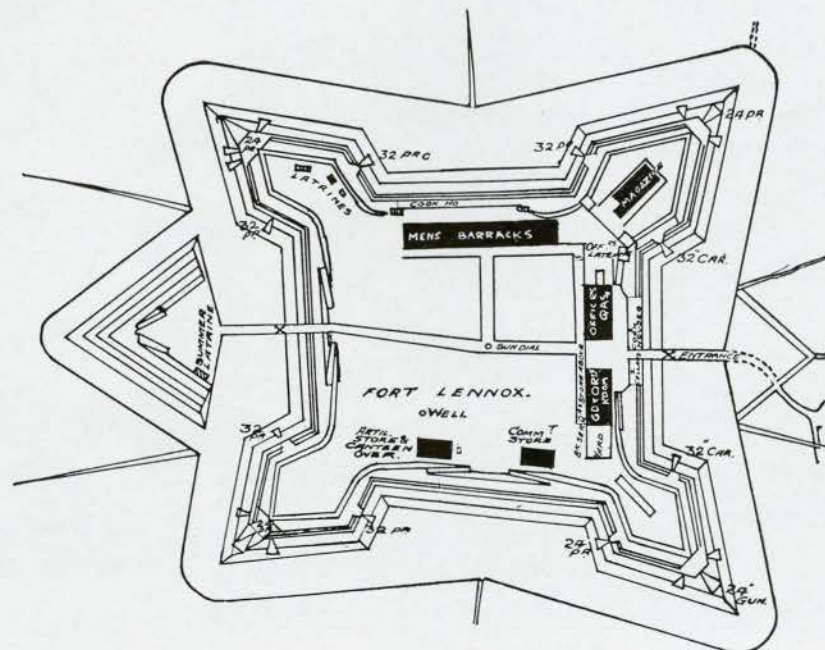
8th, 13th, 15th, 20th, 24th, 26th, 32nd, 37th, 41st, 47th, 49th, 60th, 69th, 70th, 73rd, 74th, 76th, 81st, 85th, 100th, 103rd, 10th Battalion Royal Veterans, The Royal Canadian Rifles; Embodied Militia—1st, 2nd, 3rd and 4th Battalions.

German Regiments—

Brunswick, Rhetz, Riedesel, Speckt.

We are indebted to the Commissioner, National Parks of Canada, Ottawa, for the use of photographs of Fort Lennox. The history of the Fort is from an excellent pamphlet published by the King's Printer for the Department of the Interior in 1936.

—E. R. Arthur.



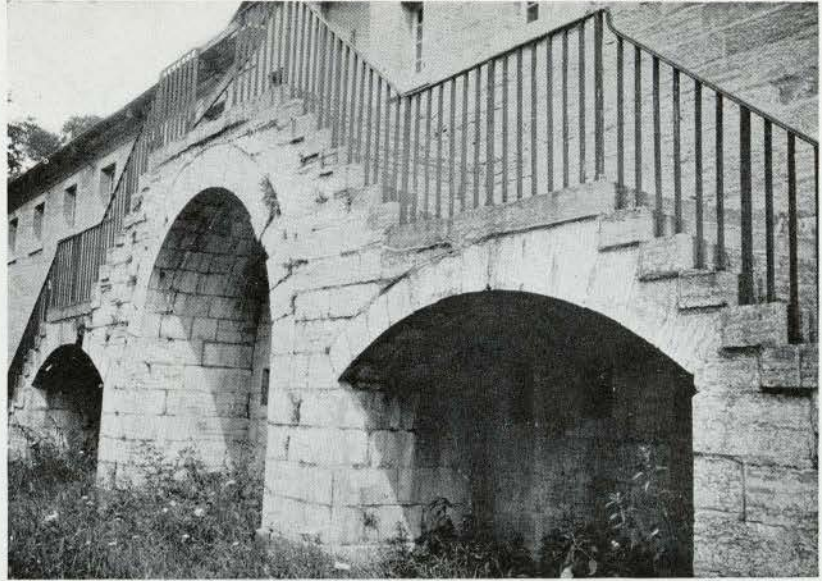
PLAN OF FORT LENNOX



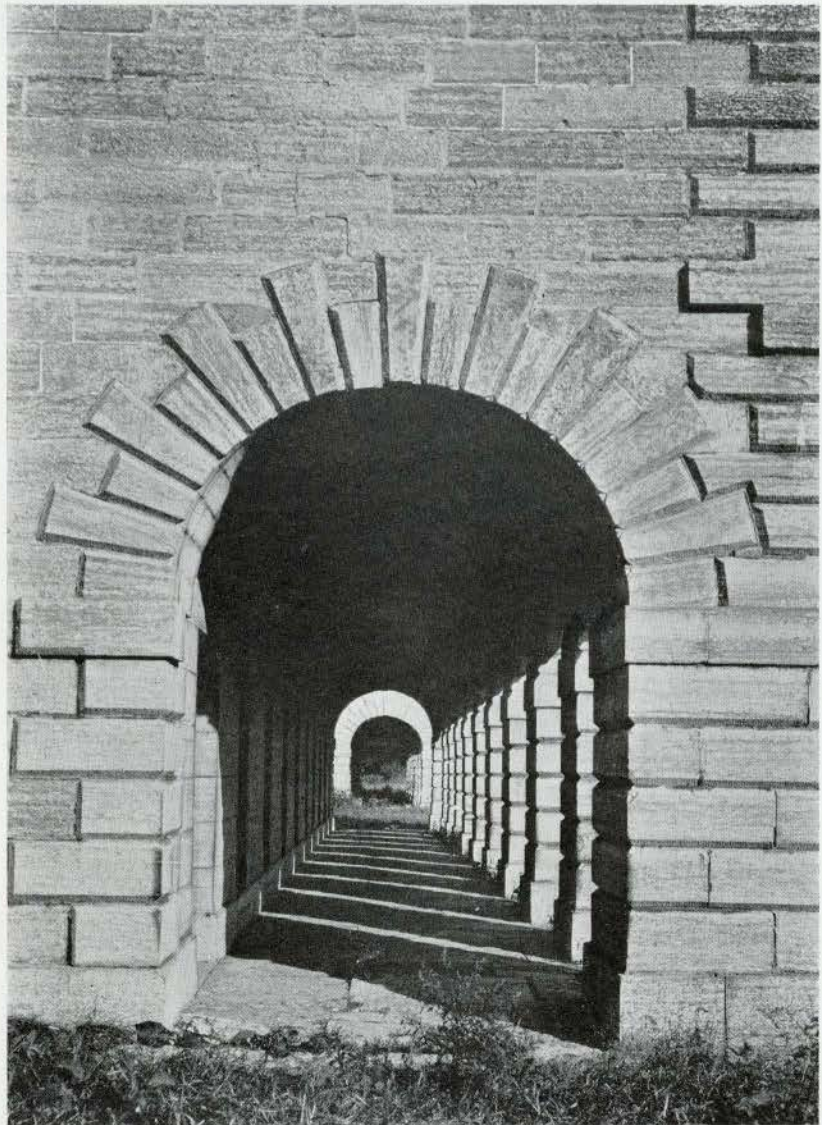
THE GUARD HOUSE



INTERIOR OF MEN'S BARRACKS

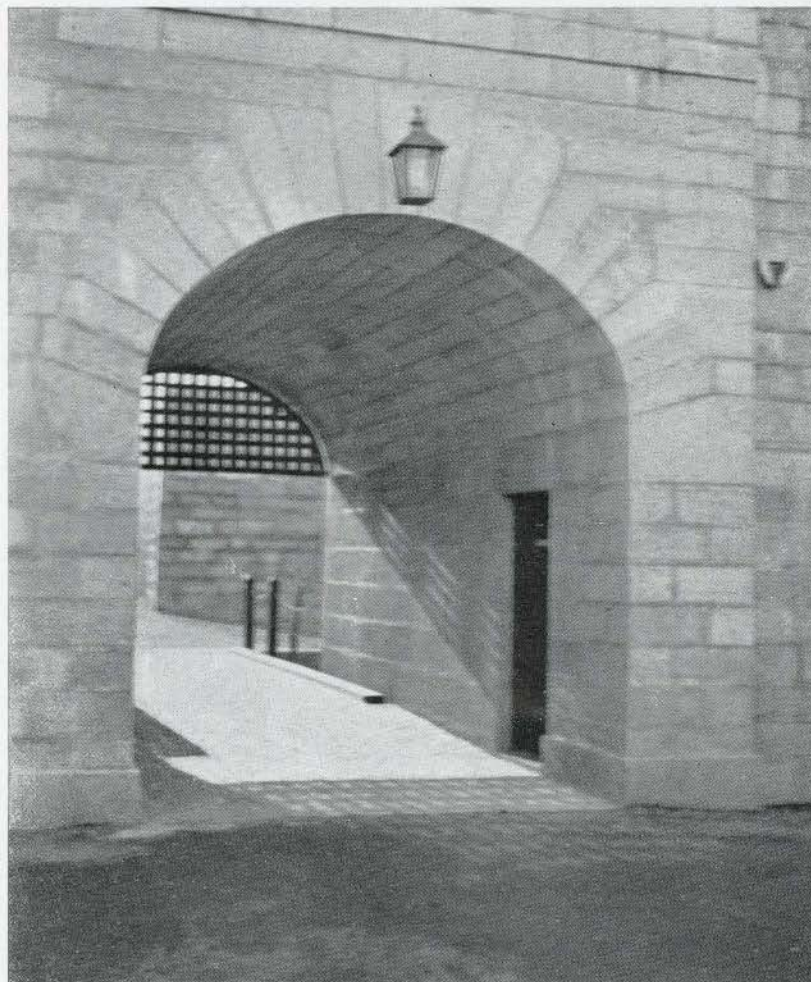


STAIRWAY AT REAR OF MEN'S BARRACKS



THE ARCADE, OFFICERS' QUARTERS

FORT HENRY, KINGSTON, ONTARIO



ENTRANCE FROM INSIDE PARADE

BUILT during the unsettled and apprehensive period immediately following the war of 1812-14, this impressive citadel is one of five included in the Duke of Wellington's system of defence to protect the mouth of the Rideau Canal, the City of Kingston and its naval base. It replaced an earlier fortification of the same name and was the only portion of Wellington's scheme that was completed.

Although Fort Henry has never been attacked it has many historical associations. It was garrisoned by Imperial troops until 1870, when it was taken over by a Canadian garrison and occupied by them more or less regularly until 1890. It was used as a prison during the Rebellion of 1837 and for civilian prisoners interned during the Great War.

The Fort straddles a narrow peninsula with steep, sloping sides. The main portion is built within a deep excavation so that the guns mounted on the roof of the two-storey portion are only a few feet above the surrounding glacis which has an even slope to the water edge. A deep ditch surrounds the main portion of the Fort formed by the space between the walls of

the structure and the edge of the excavation. It varies in depth from twenty to twenty-five feet and is from thirty to fifty feet in width.

The Advance Battery, through which the Fort proper is entered, is an extension to the south toward the end of the peninsula, and consists of two parallel rows of stone storehouses; the open end is occupied by a battery of guns commanding the entrance to the bays on either side.

On both flanks of the Fort the ditches extend to the water, terminating in small stone towers of the Martello type, prototypes of the modern "pill-box". The stone masonry is an excellent example of the work of this period, the vaulting is especially well done.

At the time of the withdrawal of the garrison in 1870 the impracticability of such a fortification was recognized and it was allowed to fall into ruins, becoming a local source of supply for building stone. One entire side of the polygonal interior parade was entirely removed in this way. A few years ago the Fort was no more than a mass of crumbling limestone with grass and weeds growing out of the chinks in the disintegrating stonework. Local legends had enshrouded it. It was said that the Fort was built the wrong way around and that the unfortunate engineer responsible only escaped court-martial in England by jumping overboard on the homeward voyage. It was also whispered, too, that the plans used were really drawn up for a fort at Kingston, Jamaica.

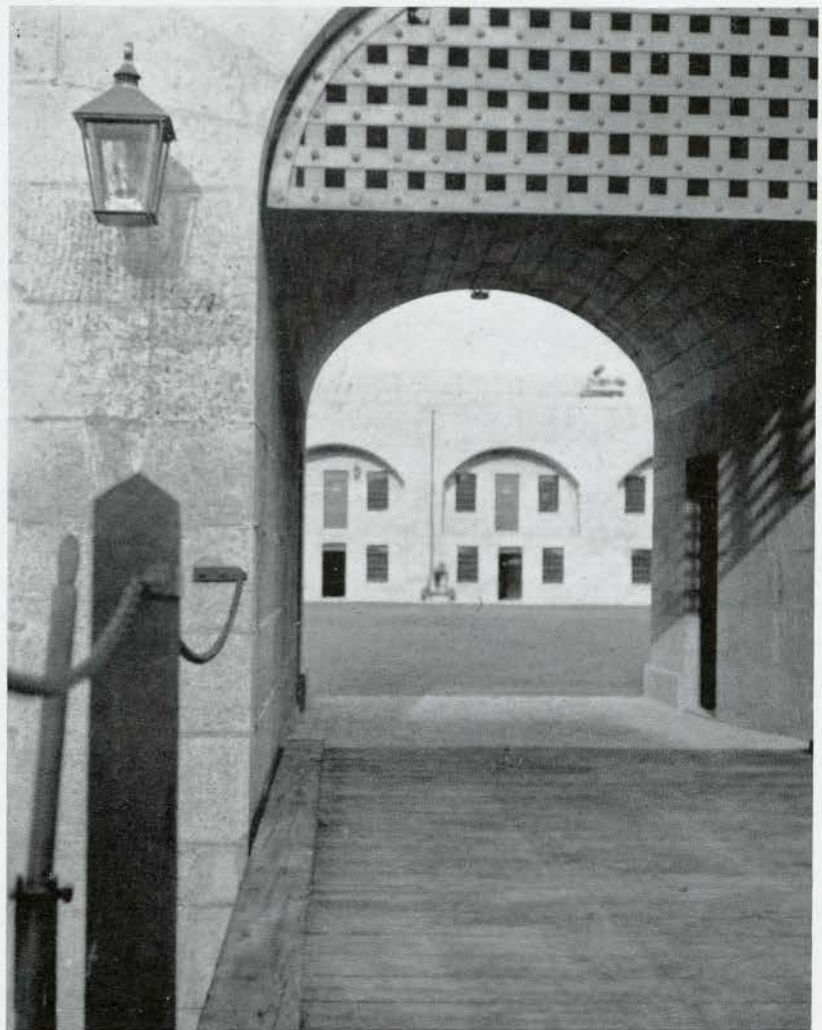
Under a scheme sponsored by the Dominion and Ontario Governments, the work of restoration was begun during the summer of 1936, and was completed the first of August, 1938. The original structure was faced with large blocks of local limestone backed up with rubble. In the work of restoration it was necessary to remove portions of the facing that had broken away, and to clear the ditches of sections which had collapsed. The walls were then rebuilt, using the old stones as far as possible and new stone required was quarried from what is believed to have been one of the original quarries.

The completely -restored Fort has quite an impressive appearance with mounted cannon, extensive glacis, ditch, caponniere, reverse fire chambers and connecting tunnels and the flanking towers. The kitchen, powder magazine, officers' quarters and several of the casemates that were occupied by the men have been completely furnished as closely as possible to their original condition. Other portions are used to house collections of ancient weapons and specialized collections of infantry, cavalry, artillery and naval arms and equipment. The naval collection is especially interesting.

— *W. L. Somerville.*



INTERIOR PARADE AFTER RECONSTRUCTION



RESTORATION OF FORT HENRY,
KINGSTON, ONTARIO.

OFFICE OF W. L. SOMERVILLE, ARCHITECTS.
ASSOCIATES: RONALD L. WAY, M.A.,
W. E. CARSWELL, B. ARCH.

ENTRANCE TO FORT



HISTORY OF THE CARILLON BARRACKS MUSEUM

By FRANCIS J. NOBBS

History—

CARILLON, on the Ottawa River, is situated at the foot of the Long Sault Rapids, the first rapids encountered between Montreal and Ottawa other than at Ste. Anne de Bellevue.

Today it is a quiet village, with oil tankers and freight boats passing through its canal all summer long.

It was, however, in the past a place of great military importance strategically. On May 1st, 1660, Dollard des Ormeaux, with 16 companions, 40 Hurons and 4 Algonquins, left Montreal to cut off an Iroquois advance of 300 strong on Montreal (which at that time had a population of 372 persons). After Dollard had been deserted by his Hurons, and the Iroquois had been reinforced to number 800, he and his companions were killed on May 13th at the end of a three-day siege. The Iroquois were discouraged by the fierce resistance of this small advance guard and did not attack Montreal.

One hundred and fifty years later, after the War of 1812, it was seen that an alternative and safer means of communication between Montreal and Kingston, via Bytown (Ottawa) and the Rideau, than that provided by the St. Lawrence, was necessary. What concerns us here is the canal system between Carillon and Grenville. The Carillon Canal was started in 1819 by two Companies of Miners and Sappers of the Royal Engineers, recruited in England after a survey the previous year by Captain J. F. Mann, R.E. In the report of the Commission on North American Provinces in 1825 to His Grace the Duke of Wellington, Master General of His Majesty's Ordnance, certain recommendations were made with reference to the Grenville Canal.⁽¹⁾

(1) Canals, Vol. 2, 1831, Ch. 53, P. 141.

This canal was opened on April 24th, 1834. To His Lordship, the Commander of the Forces, Colonel E. W. Durnford, R.E., wrote: "Lieut.-Colonel Du Vernet has very recently represented to me that the military men stationed at Carillon are suffering from the want of proper accommodation, and the bad weather which has now set in renders their situation more uncomfortable." It was recommended that the men above-mentioned were stationed in a "stone house" belonging to Mr. John Dewar. This house was marked for demolition as it came under Valuation of Premises of Land Required for the Carillon Canal. Thus it will be seen that accommodation for the R.Es. building the canal was lacking.

Deputy Commissary-General Charles J. Forbes, a staff officer of the Duke of Wellington, who had seen service in Malta and Spain, at Waterloo, and as officer detailed to take the Rothschild money from the British Government to Vienna to pay the Prussians who had fought at Waterloo, and who had been at the Battle of New Orleans on January 8th, 1815, was ordered to Nova Scotia and thence in 1825 to Montreal. Mr. Forbes bought "Bellevue" at Carillon from Major Muir in 1827, built a stone brewery in 1833, and some time between 1830 and 1837 erected also the stone "Barracks". Mr. Forbes must have foreseen that troops would be stationed at Carillon, and knowing that accommodation for a military unit was lacking, he built the "Barracks" with the intention of renting it to the Government. During the 1837 Rebellion he was appointed adviser to Sir John Colborne, Commander of the Forces.

The Barracks is situated about 100 yards below the entrance to the canal and is some 200 feet from the river. The ferry wharf adjoins the Barracks property.

I quote from a letter from Miss E. W. C. Forbes of Santa

Cruz, California, daughter of the Deputy Commissioner General.

"My father built it (the Barracks) for the accommodation of troops sent down to guard the locks on the Ottawa. Colonel By had finished the Rideau Canal to connect the Ottawa with the Great Lakes, as we were then afraid of the Americans coming over and annexing us. Of course we can't realize that fear now (1938), but even in my day we kept a troop of soldiers at Carillon in the Barracks, and we had a tremendous force in Montreal—all things of the past. We had troops in the old Barracks till I was about ten years old. I remember the blowing up of the old powder house. No one knew how it happened and no one was hurt except the building itself."

On November 6th, 1837, Richard Howarth, Lieutenant, Royal Engineers, wrote to Captain Foster, Commissary, R.E., Montreal:

"Sir:

"I have the honour to acknowledge the receipt of your letter of the 4th instant and report the arrangements I have made in consequence.⁽²⁾

"By deducting 46 men from the large stone building at Carillon, six rooms, a messroom and an officers' kitchen will be provided for the officers. This will leave 108 men in the building at the Carillon Barracks.

Lieutenant Howarth had previously written to the R.E. at Quebec, giving an estimate of £202/4/10 for fitting up one building at the Carillon Barracks.

In a letter on November 8th, 1837, W. Price of the Commissariat, wrote: "It has been reported to me that the following arrangements have been made for quartering troops at Carillon⁽³⁾ and St. Andrews, by officers of the Royal Engineers and the officers of the Commissariat respectively charged with this duty at Carillon. In a large stone building hired from Mr. Forbes, six rooms and a messroom for officers and Barracks for 108 men.

"It has not been possible to obtain any separate buildings at Carillon for officers' quarters, although every effort has been made to do so, and temptation offered to induce persons to give up such houses as were supposed to answer for this purpose. If only two companies are stationed at Carillon, the arrangements made there will be sufficient for the men—and nearly so, I apprehend, for the officers." Thus we know the number of troops stationed in the Carillon Barracks in November.

On December 14th the Battle of Ste. Eustache occurred, and the Rebellion of 1837 was put down.

It is important to note that Carillon is situated between Ste. Eustache and Papineauville, a further justification for stationing troops at this point, as borne out by history.

The building was no longer required for public service after the expiration of the lease, October 22nd, 1841, and was returned on that day.

In an exchange of letters in 1839,⁽⁴⁾ regarding damages to the roof, Mr. Forbes states that: "1. The starting and splitting of the shingles has been occasioned by intense fires kept up by the troops immediately under the roof, in what in all shingle-covered houses is considered and used as a lumber room. 2. The roof was almost new on the first occupancy of

(2) Barracks, 1837, Ch. 58, P. 138.

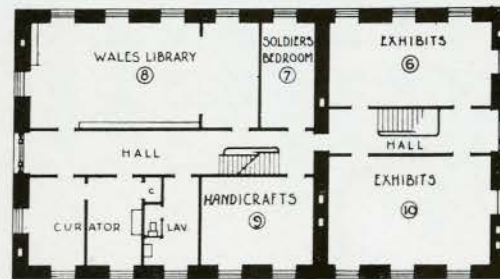
(3) Barracks, 1837, Ch. 58, P. 155.

(4) Ch. 591, P. 73 (of Notes).

CARILLON BARRACKS MUSEUM

ARGENTEUIL COUNTY, QUEBEC

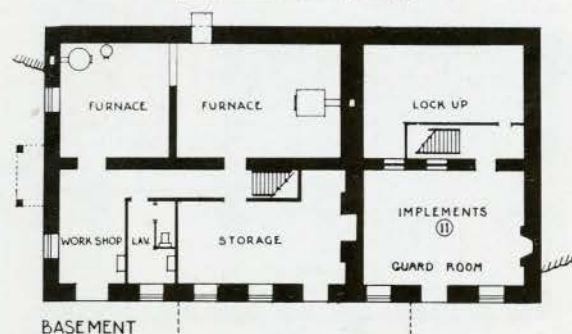
After Alterations, 1938



FIRST FLOOR



GROUND FLOOR



BASEMENT

AS REMODELLED BY
NOBBS & HYDE
1938.

10 5 0 10 20 30 40 50
SCALE OF FEET

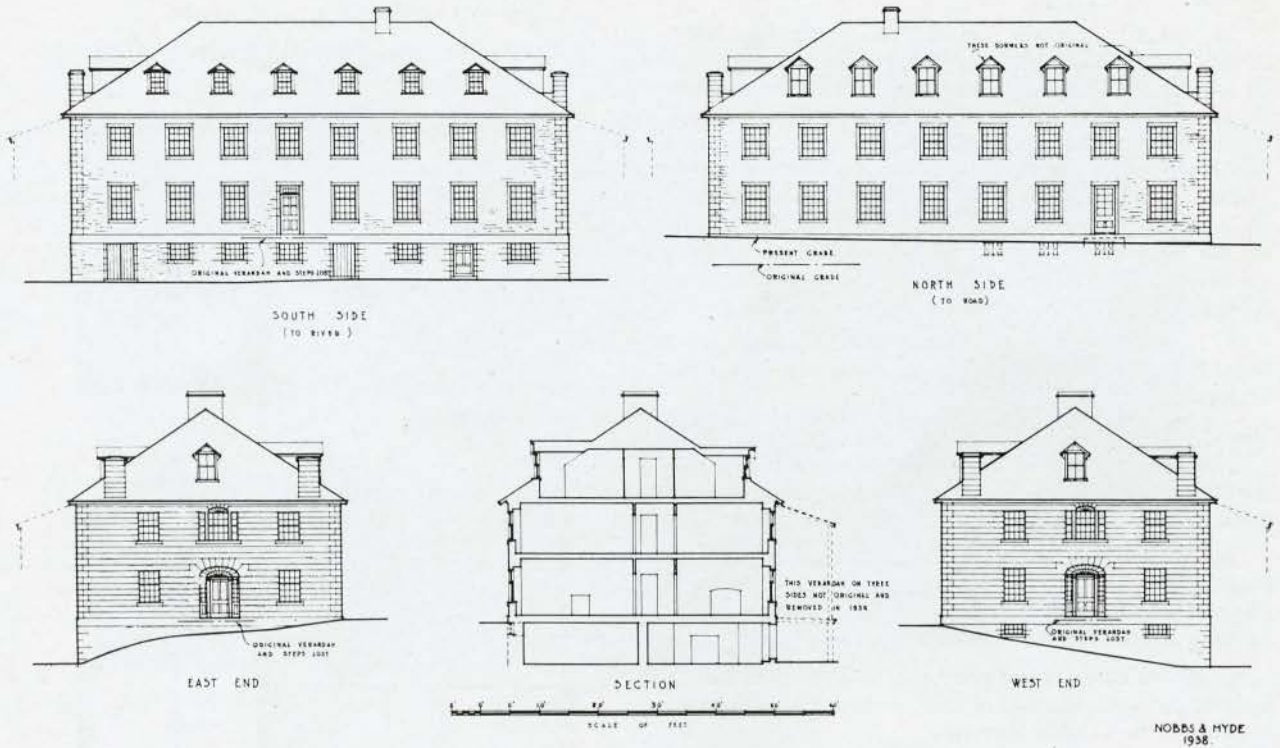
the building, and the shingles being of the best quality and as well put on as possible, and the roof not admitting a drop of water, no repairs under ordinary usage would have been required for some years to come."

It was at this time, when the "lumber room" was being used for accommodation, that a doorway was cut through the party wall in the attic.

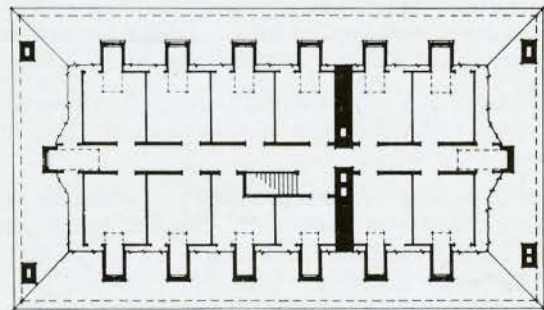
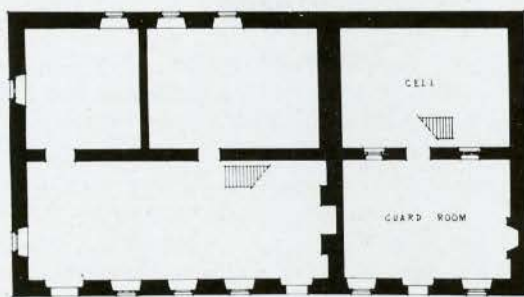
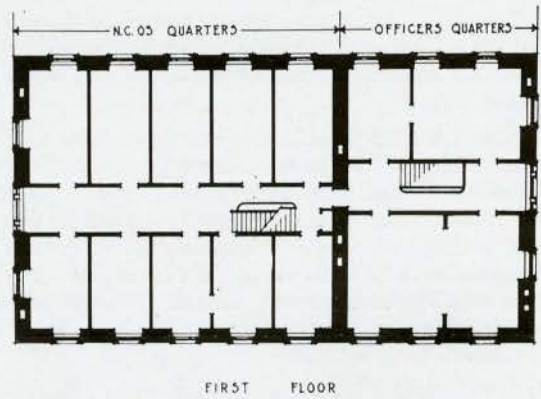
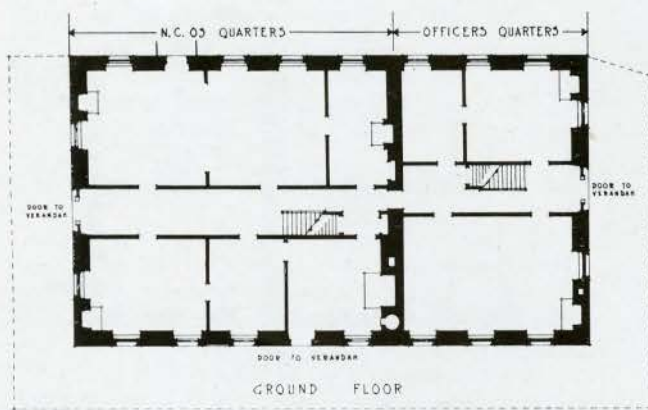
On October 25th, 1854, a railway between Carillon and Grenville was completed. The canal had fallen into disrepair and this railway saved much time. The railway suffered many and various misgivings, changing hands frequently. In 1863 the Ottawa River Navigation Company purchased the railway and used it as a link in the steamboat service between

(Continued on page 148)

THE OLD BARRACKS, CARILLON, QUEBEC, AS IN 1937



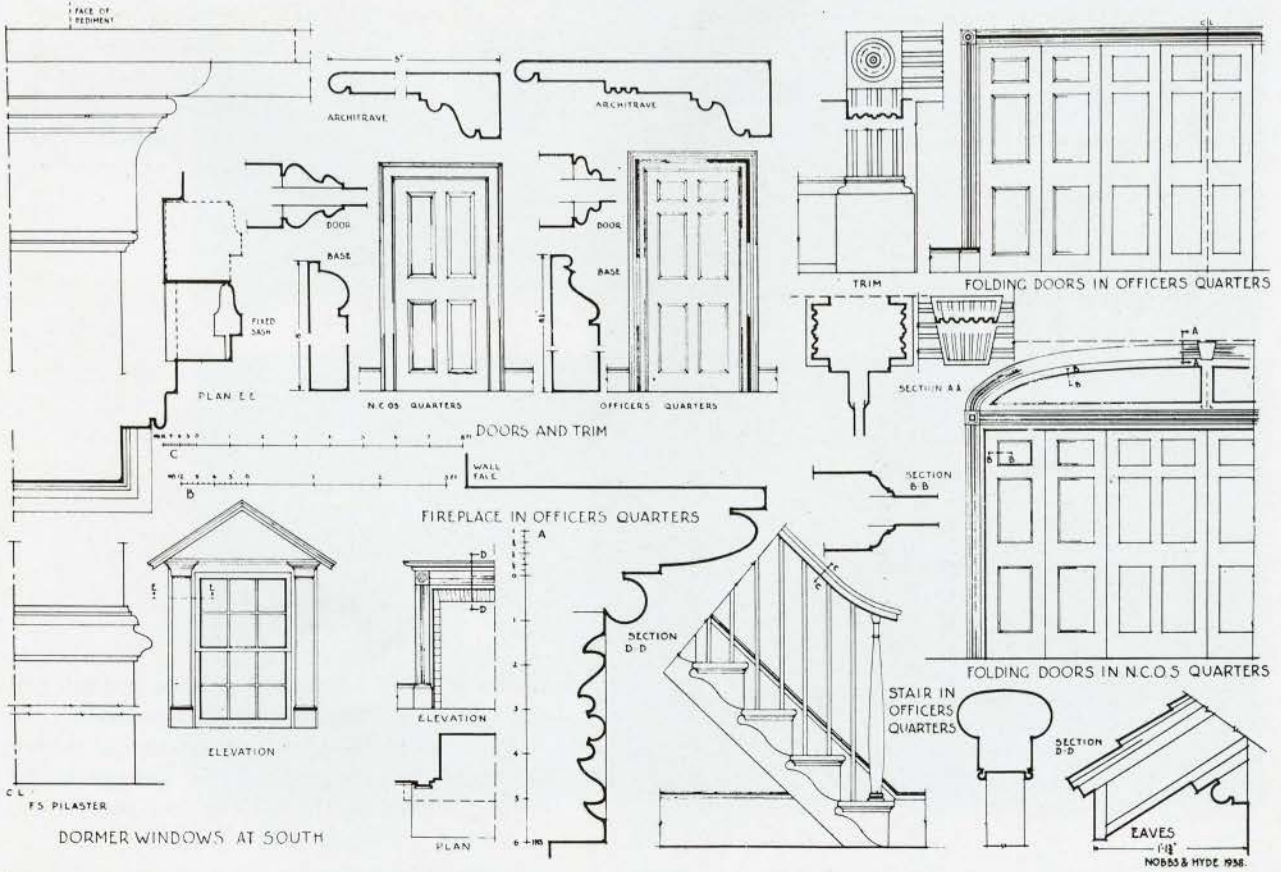
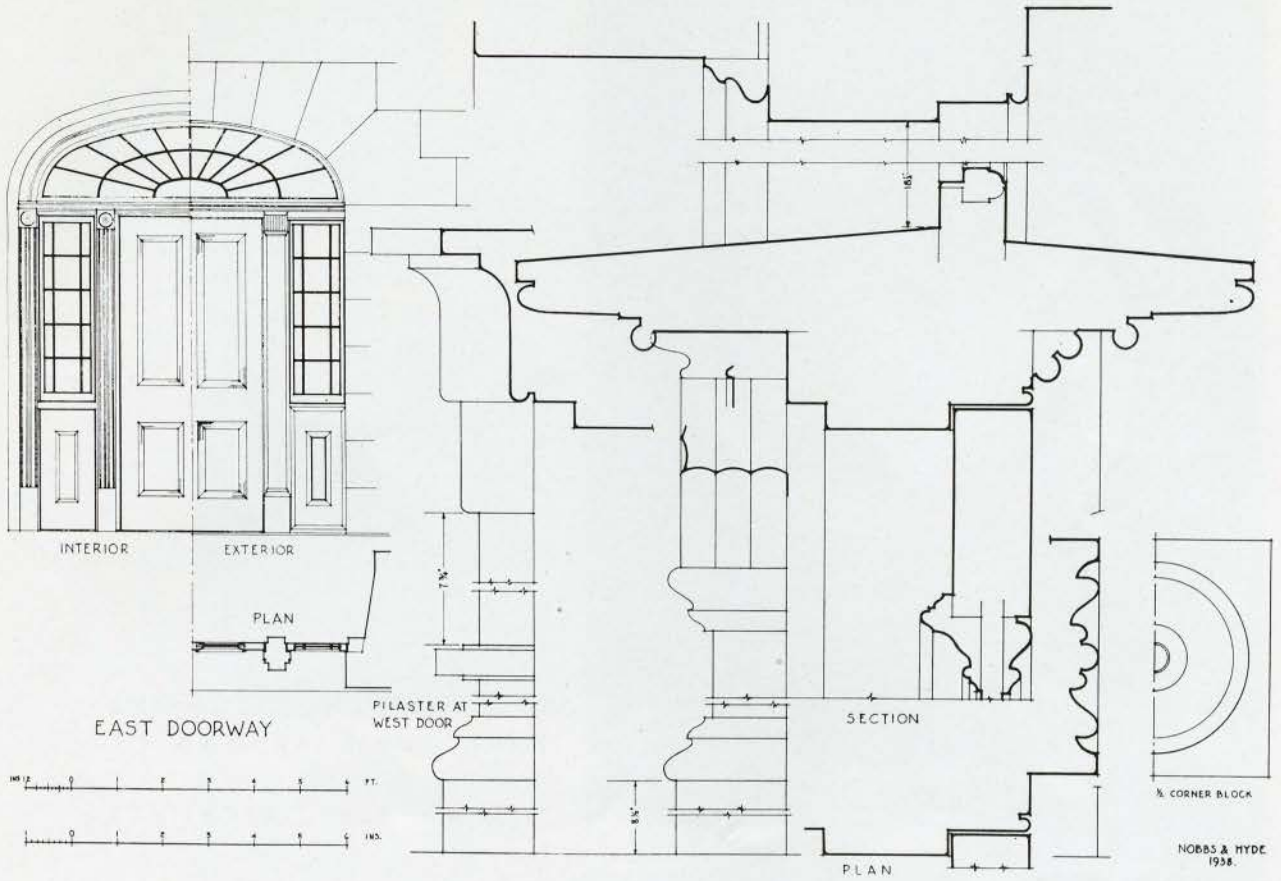
NOBBS & HYDE
1938

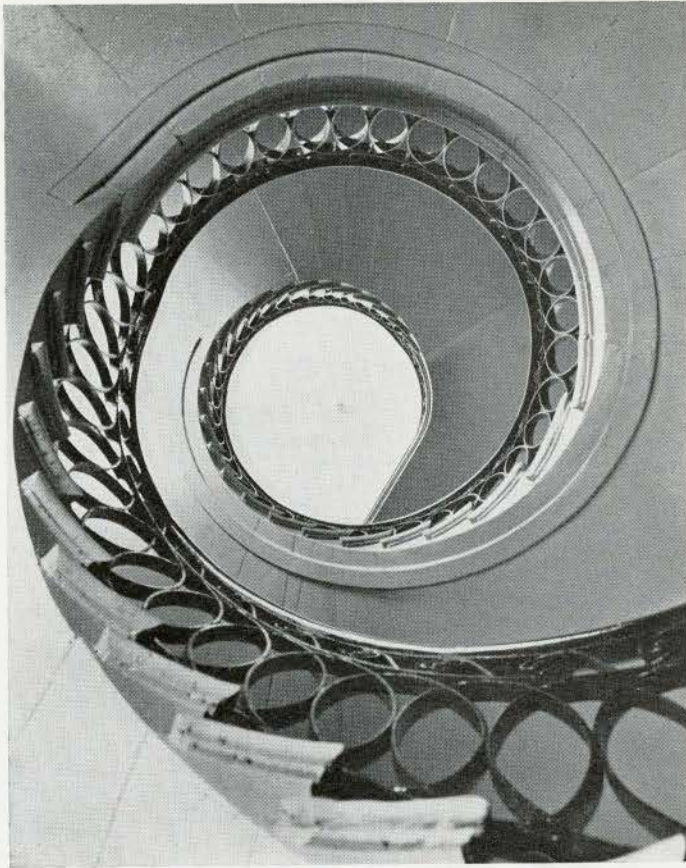


NOBBS & HYDE
1938

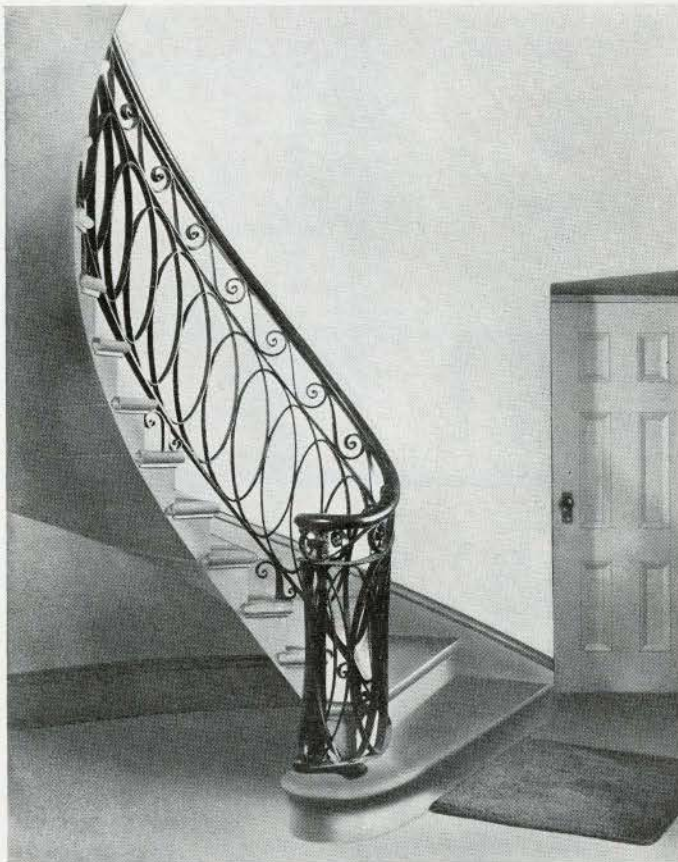
THE ABOVE MEASURED DRAWINGS AND THOSE ON PAGE 139 WERE MADE BY MR. FRANCIS J. NOBBS

THE OLD BARRACKS, CARILLON, QUEBEC, AS IN 1937

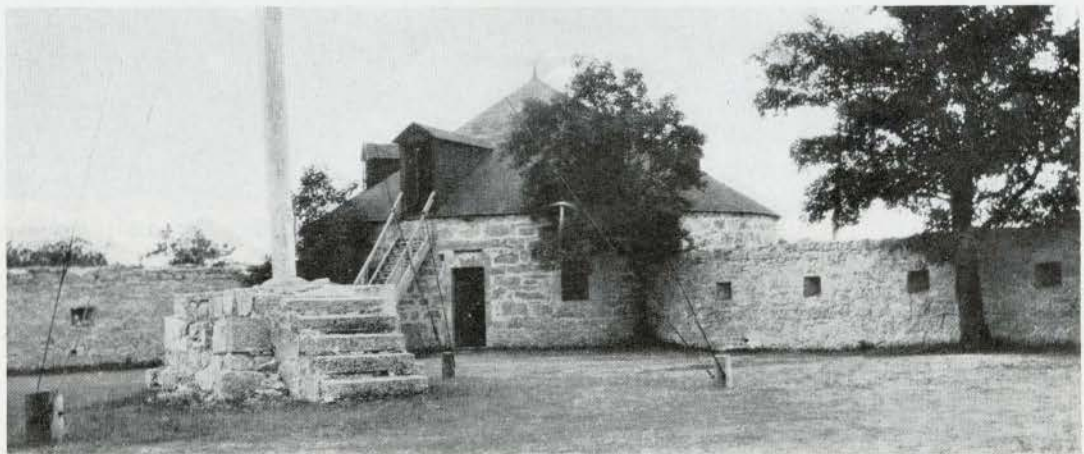
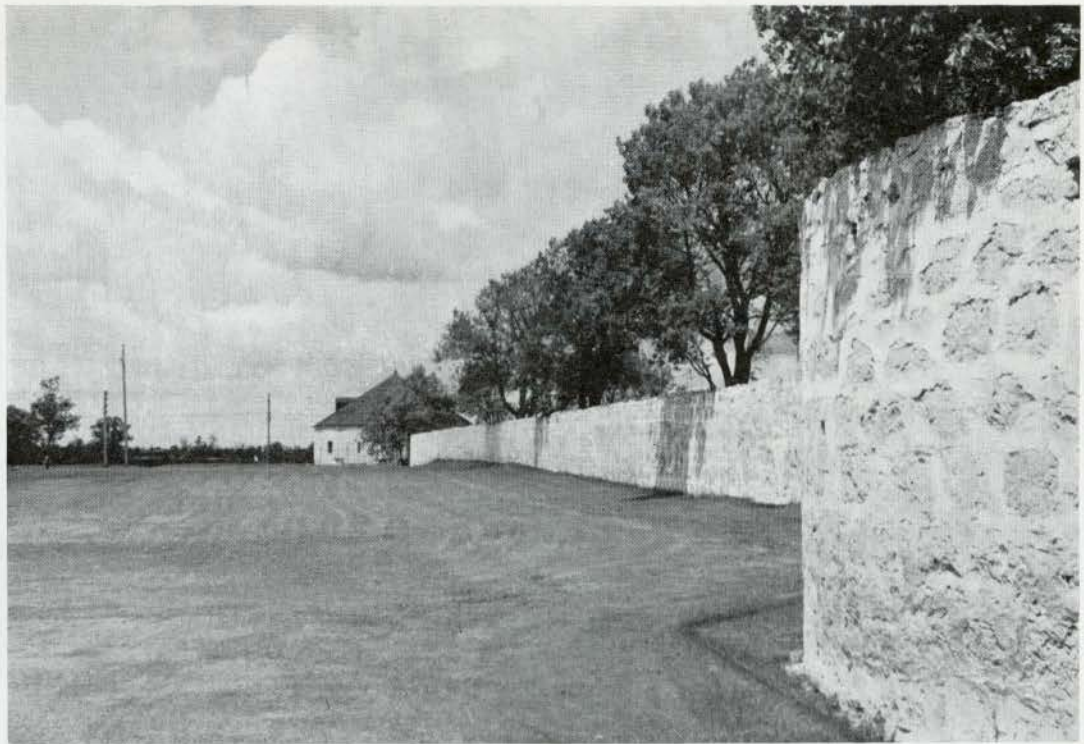




THE COURT HOUSE, SAINT
JOHN, NEW BRUNSWICK
THOMAS RUST, ARCHITECT



The Court House was built by Barbour and Bell and was opened in 1830. The stone, and presumably the iron, was fabricated in Scotland and brought to New Brunswick in a sailing vessel. The drawings of the building, signed by Thomas Rust, are dated 1824.



LOWER FORT GARRY, NEAR WINNIPEG,
FORMERLY A HUDSON'S BAY POST



FORT PRINCE OF WALES FROM THE AIR

FORT PRINCE OF WALES

CHURCHILL, MANITOBA

GOVERNOR RICHARD NORTON arrived at Churchill factory with workmen and equipment on July 28th, 1731. On August 6th the fort was staked out—one hundred yards square at the tips of the bastions. Excavation for foundations was begun on August 23rd at the south bastion. On June 3rd, 1732, with due ceremony, the first stone of the foundations was laid. In 1733 J. Robson, an experienced stone mason, came out. The first six cannon arrived in 1734 and three were mounted in the same year. In 1736, when Robson's contract with the company expired and he returned to England, the south and the east bastions had been completed as well as the curtain wall between them, and some progress had been made on another curtain wall and bastion.

Norton was not a stone mason and as he tenaciously held all authority in his own hands, there had been a good deal of friction between Robson and himself. An example of this is seen in the alteration, on Norton's order, of the width of the ramparts from forty-two to twenty-five feet. The inadequacy of this width became evident to all when the first gun was fired and recoiled from off the rampart. It then became necessary to pull down part of the finished work and increase the width. Fortunately that could be done without disturbing the outer wall of the fort. Robson, in his book published in 1752,

justified himself in this as well as in further examples of faulty workmanship by others.

In 1744 Robson was re-employed by the Hudson's Bay Company on a three-year contract to go to York factory. On the way out the ship called at Churchill and Robson took the opportunity to visit the fort. He expresses himself in his book as greatly disappointed with what he saw. Because of faulty workmanship parts of the fort were falling down.

Proceeding to York factory Robson remained there until a letter arrived appointing him surveyor and supervisor of buildings at "Prince Wales fort". Soon after his arrival at Churchill factory he began to correct the faulty methods of construction and found himself in conflict with the governor. Next year, at the termination of his contract, he returned to England.

There is no known plan of the fort to show the finished state nor can the date of completion be definitely fixed, though it is generally given as 1771. Robson gives in his book a plan of the fort, as he knew it in 1747, with only one of the ramparts brought up from twenty-five to forty-two feet in width. The parapet, which was built of timber at first, is shown replaced, along the east side of one curtain wall and bastion, with stone masonry. Evidence that the fort was ultimately completed according to plan may be gathered from

the present ruins. A plan of these, published by J. B. Tyrrell in 1900, shows that the ramparts had all been widened and the stone parapet had been completed. The number of embrasures is shown to be forty, although A. Graham in a letter to the company in 1771, states that the number of guns was forty-two. The number of guns on the ground in 1935 was forty, viz., ten 24-pounders, twenty-two 12-pounders, and eight 6-pounders. The magazine was placed in the northwest bastion and the other bastions were finished as store houses.

As a defence against hostile attack the stone fort on Eskimo Point was a complete disappointment. In 1782, on the very first appearance of an attacking force, the fort capitulated. The circumstances were these: The revolting American Colonies had signed a treaty with France in 1778 and in 1782 three ships of war were dispatched from that country under the command of La Pérouse to do what damage they could in Hudson Bay. On August 9th they approached the fort, disembarked a force of 400 men and demanded the surrender of the fortress. Totally unprepared to offer any resistance, Samuel Hearne, the governor, and his garrison of 39 men precipitately surrendered. The captors dismounted the guns, blew up parts of the fortifications, burned the governor's house and sailed away carrying stores and furs as spoils of war, and with the governor a prisoner. La Pérouse then proceeded to York fort, where he repeated the success of Churchill river. Soon afterwards he sailed home to France with his booty.

Fort Prince of Wales derives its interest as an historical monument from its structure rather than from any memories that cling to it of brave deeds or momentous decisions. It is a well-preserved example of European fortification dating back to the eighteenth century. Tradition relates that it was designed by officers who served under Marlborough. But if that tradition is accepted it does not follow that the fort was a rival to one of the French fortifications in the Low Countries that fell before his victorious army. Compared with any of these it is a small and elementary stronghold. What we have, however, has been preserved undisturbed either by the reconstruction incident to later wars or the pressure of growing towns. Even the attempt of La Pérouse to demolish it was not very effective. He burned the buildings but succeeded in doing very little damage to the masonry of the fort itself.

The outline of the fort is an improvement upon a simple square in that there is a bastion projecting from each of the four corners. This starlike perimeter is enclosed by a heavy masonry wall rising to the height of sixteen feet nine inches above the ground. Back of this wall the rampart, built of earth, provides a raised platform for the gun and is held in place by another masonry wall rising from the ground level inside the fort. The rampart is from forty-two to thirty-seven feet wide on top and the enclosure inside the fort is about one hundred and thirty feet square. As a protection to the guns and gunners the rampart was surrounded by a low parapet wall, which has suffered somewhat from time as well as the depredations of La Pérouse's men. Two houses once stood inside the fort, but they are today nothing but heaps of debris. The guns, until quite recently, lay where they were left, spiked and battered, by their captors in 1782.

Fort Prince of Wales and the land immediately surrounding it have been set apart under the jurisdiction of the Parks Branch of the Department of the Interior as an historical monument site. At the instance of the custodians the Department of Railways and Canals has undertaken to carry out a certain amount of restoration work. Timbers have been placed in the gateway to support the falling masonry. The ramparts



MASONRY WALL, FORT PRINCE OF WALES

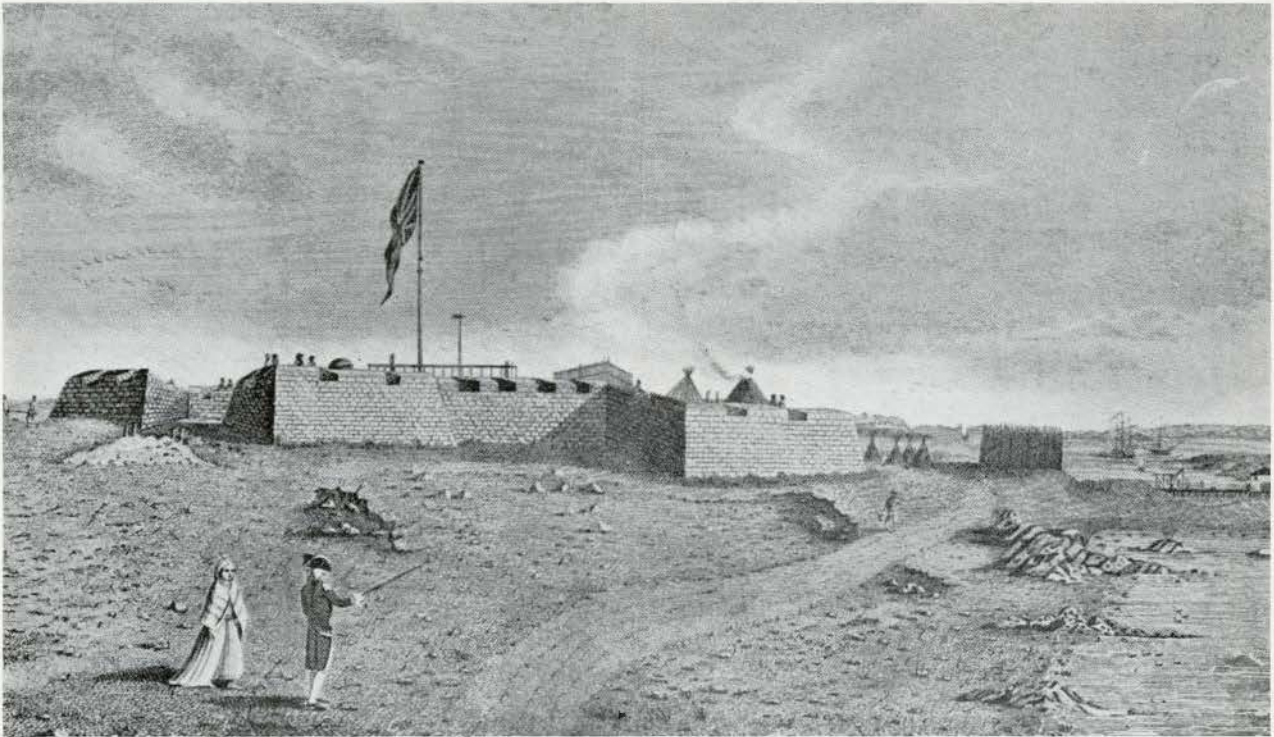
Kindly lent by Professor H. A. Innis

have been cleared in part of scrub and debris and a length of the rear retaining wall has been rebuilt. Bases have been laid down for a number of the guns and wooden carriages have been built for a few of them. Eventually it is hoped to have the rampart fully restored and all the guns mounted.

When Fort Prince of Wales was being finished, a magazine and a battery were built opposite on the east side of the harbour. The magazine was intended to hold the main supply of ammunition for the fort and the battery was to have mounted six 24-pounders. There is no trace of the guns today and it seems improbable that they were ever put in position.

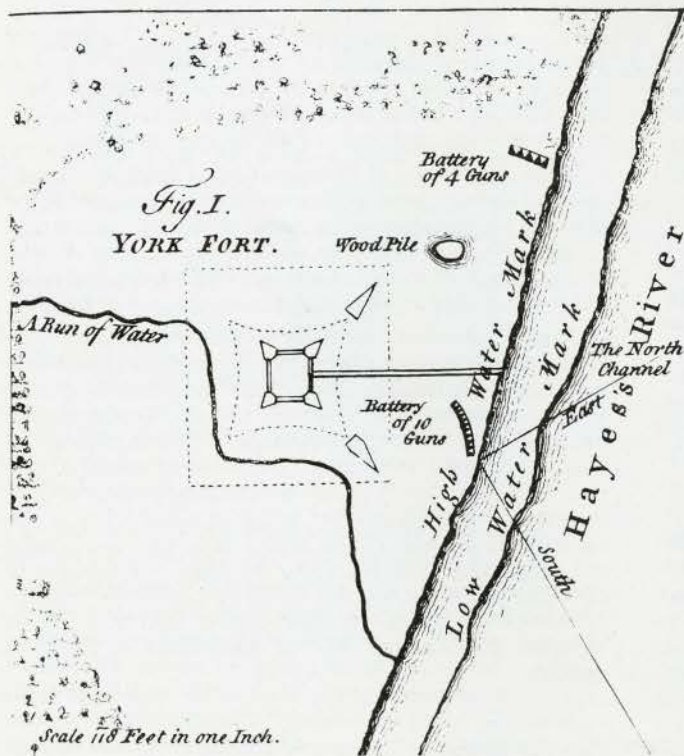
After La Pérouse's prisoners had been ransomed from France by the Hudson's Bay Company, Samuel Hearne was sent back to Churchill in 1783. He re-established the factory at the site selected by Knight in 1717, but could not restore Churchill to its former pre-eminence. Its military lustre had become tarnished and as a seat of trade it could no longer compare with York factory. Throughout the nineteenth century it remained what Hearne had left it, an isolated post of the fur trade and the white whale fishery. It was not until almost one hundred and fifty years after the capture of Fort Prince of Wales by the French that the departure of the steamers *Farnworth* and *Warkworth* for Europe in 1931 with cargoes of wheat demonstrated the real possibilities of Churchill harbour.

Those interested in this Fort should read the "Architectural Heritage of Manitoba" by Professor Milton S. Osborne, and Department of Railways and Canals "Churchill and The Hudson Bay Route", from which the above information has been taken.



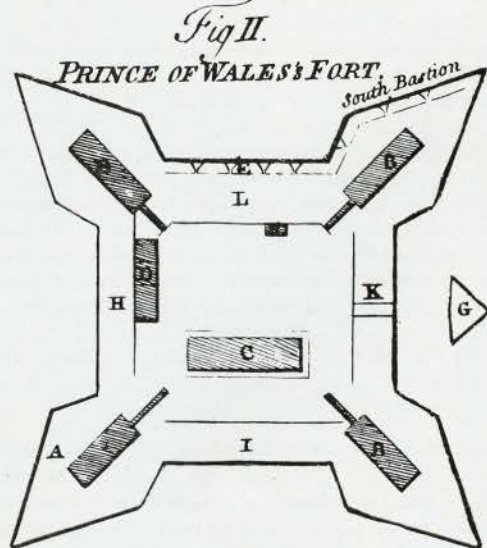
FORT PRINCE OF WALES, FROM THE DRAWING BY SAMUEL HEARNE,
THE EXPLORER AND DISCOVERER OF THE COPPERMINE RIVER

PLATE N^o III.
PLANS of YORK and PRINCE of WALES'S FORTS



Scale 118 Feet in one Inch.

- To face Page 30.
- A. Magazine
 - B. Store Houses
 - C. Dwelling House
 - D. Offices
 - E. What is built of Stone Parapa
 - F. Governors Cook Room
 - G. a Ravelin to defend the Gate.



The Original Plans Rampart was 42 Feet but the Gov.^r was sure that 25 Feet would do very well, I was order'd therefore to lay the Foundation 25 Feet thick as H. I. K. When the Cannon was try'd they ran of the Wall so L. was pull'd down K. Built up according to the first Plan H. I. and K. not done yet

Scale 114 Feet in one Inch

RAMSAY TRAQUAIR, HON. M.A. (McGILL) F.R.I.B.A.

On His Retirement from the Macdonald Chair in Architecture at McGill University

By PERCY E. NOBBS

RAMSAY TRAQUAIR was born in Edinburgh in 1874, the son of Dr. Ramsay H. Traquair, Curator of the Natural History Collections in the Royal Museum of Science and Art in Edinburgh, whose attainments in Geology and Palaeontology had earned for him a European reputation, and of Phoebe Anna Traquair (born Moss), an Irishwoman and an artist, in whom the authentic spirit of the 13th century was manifested to the delighted amazement of Ruskin and Watts. These are matters very necessary to an understanding of the retiring occupant of the Macdonald Chair of Architecture at McGill University, for there is something in him of both his parents.

As a child Ramsay was delicate, and in late years, the Professor has suffered much from rheumatic troubles, but from adolescence till quite recently, he has been a very active man — a swimmer, a boxer, then a fencer and always an angler.

Educated at the Edinburgh Academy, he spent a year at Edinburgh University and some time at the University of Bonn, and then became the pupil of the late S. H. Capper, who was my predecessor in the Macdonald Chair of Architecture at McGill. On Mr. Capper's coming to Montreal, Ramsay Traquair continued in the study of Architecture at the School of Applied Art (now the Royal College of Art), Edinburgh, with a studentship on the Scottish Survey, taking his A.R.I.B.A. in 1900. He next worked under that most competent designer, the late Sir George Washington Browne, R.S.A. After some further experience in London and Dublin, he returned to Edinburgh to work under Sir Robert Lorimer and Mr. Sydney Mitchel.

In 1900 Ramsay Traquair spent some months studying in Italy, where I was in his company. It was a very enjoyable experience.

In 1905 he was appointed a student of the British School of Archaeology at Athens and spent the summer in Greece, studying the Byzantine and Mediaeval buildings of the Peloponnese, and in Constantinople measuring and describing the Byzantine churches with Professor A. van Millingen. This was followed by a second season in Greece in 1909 working for the Byzantine Fund.

It is worth remembering that in the artistic life of Edinburgh in which Professor Traquair grew up, the Gothic Revival was still actively in force. That Edinburgh no longer gloried in the appellation of "the Modern Athens", and the making of Doric columns out of Craigleith sandstone had long since ceased. It is not too much to say that the word "academic" was a term of reproach in the artistic circle in which he received his training. This consisted largely in getting a thorough understanding of the principles of Mediae-

val Architecture, and Ramsay Traquair's measured drawings of old work, both in England and in Scotland, were thorough and spirited.

On his return from Greece, Ramsay Traquair took up practice in Edinburgh and became a lecturer at the Royal School of Art. In 1913, I relinquished the Macdonald Chair, and Ramsay Traquair was appointed in my stead, their Chair carrying with it the direction of the School of Architecture at McGill.



PROFESSOR RAMSAY TRAQUAIR

Professor Traquair, besides his flair for archaeology and scholarship, and his intimate knowledge of how Greek temples, Byzantine churches, Gothic cathedrals and Scottish castles were built to stand the tests of time, had an inevitable (remember the time and place of his upbringing) intimacy with the arts of crafts and all that pre-Raphaelites and William Morris stood for. Yet it was characteristic of him, when the arts and crafty ones discoursed in his presence, to speak of the "trades". What things are made of and how they have been made has always been an important part of his teaching. Of course, the history of architecture is the main teaching function of the Chair that Professor Traquair has held so long with distinction; and the history of Architecture is often treated as a sequence of personal repercussions and influences and cultural reflections of political forces.

That may be a very proper way to deal with it in extension lectures, but it is about on a par with teaching the history of nations in terms of kings and battles and prime ministers, which degenerates into mere chronology. Professor Traquair has always been meticulous on chronology; his memory has often served me well. But his approach to his subject has been primarily one of ways and means; and in that his students have, I think, been very fortunate. The arts and crafts (or shall I say "trades") approach to the evolution of form is, in my opinion, the only one of any use in the business of making young men into possible architects — especially so in a country that is new, as countries go; and in an age of perfervid technical inventiveness. And, after all, there are very many old ways of building in stone and brick and in wood and in metal that have never yet, and probably never will be improved upon, and very many old forms that are the result of these ways and which are part and parcel of Architecture, if it is to be an art at all. An understanding of the craftsmanship behind the history of Architecture can be very practically serviceable as a touchstone of all this present day inventiveness, only some of which can be designated as progress. But this subject of instruction has to be administered in the right way with a lively interest in technique, as Professor Traquair's history of Architecture has ever been.

Scholar and expert in the arts, and gifted with an ingenious theorizing mind of the kind that sheds light in controversy,

even when presenting propositions of startling originality—often, I suspect, designed rather to make one think than to inform—Ramsay Traquair was designed by Almighty Providence to be a professor. I am sure he enjoyed being one and, as far as a colleague can judge of such a matter, his students thoroughly enjoyed him in turn.

He certainly took the liveliest interest in his undergraduates, often telling us others of the staff with great glee of some essay, or sketch, that had agreeably surprised him. Students in Architecture are odd in their development. Sometimes one will carry on for two or three years with all the symptoms of a sub-human intelligence, yet evincing just enough low cunning in examination work to prevent an enforced departure for pastures new. Then suddenly there is an awaking and grasp of what it is all about. Under the stress of this phenomena, Professor Traquair always became radiant. Whether the student in question was made aware of his teacher's enthusiasm on his behalf, I cannot tell, being on the other side of the fence; but I think that most of his students knew that Professor Traquair was a great deal warmer-

hearted towards them than the Scots half of him allowed him to admit.

The measuring of ancient buildings has, even in the XVIth century, been an important part of architectural education. There are times when this has been overdone to the point of reducing Architecture to style mongering, but it is the only way to develop the sense of scale. Happily in the older Architecture of the Province of Quebec there is a considerable wealth of the very stuff that would appeal to Professor Traquair—a tradition imbued with all the common-sense directness of method to be found in Mediaeval art.

Out of these students' surveys there developed the copious records of Old Quebec churches and convents which readers of this *Journal* are familiar with. In these surveys Professor Traquair has done far more than record the facts, thorough as this part of his research has been. Reading between the lines of these records we find an accomplished critic making his appreciations in the light of a very full knowledge of all things architectural.

HISTORY OF THE CARILLON BARRACKS MUSEUM

(Continued from page 139)

Montreal and Ottawa. It also secured the "Bellevue" property with the Barracks Building. In 1910 the railway was discontinued.

The Barracks was used as the Sovereign Hotel at this time. The building was later subdivided and used as two residences, also as a theatre and tavern.

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Canada and its Provinces—Volume 10.

FORT PRINCE OF WALES

London E.C.2, 28th April, 1939.
The Editor, The Journal,
The Royal Architectural Institute of Canada,
9, Elm Street, Toronto.

Dear Sir,

We have received your letter of the 18th April, 1939, addressed to the Governor.

We regret that the only pictures we have of the old Fort Prince of Wales are copies of the four illustrations in the Champlain Society's volume "Samuel Hearne's Expedition to the Coppermine".

In reply to your further enquiry, Sir Christopher Wren was a "Proprietor" of the Hudson's Bay Company from June, 1679, to March, 1684, and a member of the Committee from

November, 1679, to November, 1683.

In this connection you may be interested to read the following extract from the minutes of the Board of the Hudson's Bay Company dated the 29th September, 1682—

"ORDERED that such shutters, bolts & locks be made to the Warehouse as Sr. Chris. Wren shall judge fitt to be done & the Secretary to see it accordingly done wth Expedition."

(H.B.C. Arch. A1/5)

Yours faithfully,

For the Governor and Committee
of the Hudson's Bay Company,

J. CHADWICK BROOKS,
Secretary.

PROVINCIAL PAGE

ALBERTA

Some changes in the form of examination for registration to the practice of architecture in the Province of Alberta are at present under consideration. In this province registration in architecture is on the same basis as that in medicine, law and other professions. Examinations are held under the authority of the Senate of the University of Alberta and are conducted by an Examining Board appointed by the Senate. Nominations to the Board are made by the Alberta Association of Architects and the Senate also appoints members from its own staff.

Hitherto these examinations have been arranged as a series of sittings in seven separate subjects, six of which have involved three-hour sittings and one—that in architectural design—six hours. It has been suggested that this system is far from being satisfactory. It is therefore proposed that in future candidates for registration shall, as a preliminary step, present to the Board of Examiners evidence of suitable qualifications. These are to consist of Senior Matriculation, or its equivalent, and certain testimonies of study in historical architecture and ornament. Should these be considered satisfactory the candidate will be admitted to the examination, which shall consist in the preparation of the design of an architectural project, the subject being prescribed by the Board. For this the candidate shall first present a preliminary sketch design which, after criticism and suggestions by the Board, shall be finally submitted in the form of complete working drawings and specifications accompanied by such information and calculations as the Board may call for. A final oral examination may cover any matter which the Board may consider suitable.

— Cecil S. Burgess.

BRITISH COLUMBIA

Vancouver was favoured with a visit from Sir Raymond Unwin during the latter part of April, as a guest of the Vancouver Housing Association. Although Sir Raymond spent most of his time surveying housing conditions in the city, architects attended many of the meetings and luncheons.

Following is the report submitted by Sir Raymond after his visit with us:

Sir Raymond Unwin's Impressions of Vancouver

You have indeed a fine city, on a wonderful site, in the midst of the most beautiful and varied scenery one can imagine, with the snow-capped peaks, culminating in Mount Baker, surrounding the town. The contrast between the rich and luxuriant growth and the rugged peaks of the Rockies—all so different from the east side of that range—results in a most attractive setting for a city. I am glad to find from what I saw, and from the study of the Report "A Plan for the City of Vancouver" given me by the Planning Commission, that steps to guide the development of the city, improve its street plan, and care for its amenities were taken long ago.

Much further experience has been gained in the field of planning since the report was prepared in 1926-1928, and today the emphasis of such a report and plan would be somewhat different. We now realize that to say what may and may not be done *if* and *when* any development takes place over large areas is not sufficient. We need to be able more effectively to determine where and when development shall take place; to control the actual distribution of building development and the preservation of an adequate background

of undeveloped land to be used for cultivation of crops for farming or for recreative purposes. The tendency for development of streets and sporadic building to spread over vast areas around the towns both in Canada and the United States destroys the amenities of the towns and adds enormously to the expenses of providing the services and of administration. At the same time this tends to promote constant change and consequent instability of values of good residential property.

Closely connected with this is the need now recognized to control and prevent ribbon development along the main road along which the town population must go to seek change and refreshment in the rural areas.

Perhaps a greater change of emphasis has followed the general recognition of the urgency of the problem of finding an adequate supply of dwellings suitable for the lower income groups and within reach of their means. This is a problem which was regarded as outside the sphere of the Planning Commission's report. Today an adequate supply of dwellings for all families, at rents which they can afford, is regarded as the necessary foundation for all social and economic progress. The English experience is conclusive as to both spheres. You have been spared the large areas of slum conditions which we have inherited from the last century; but you have slum dwellings and conditions of overcrowding and bad sanitation which should be removed and which at present are within a manageable scale. You have people living in shacks and in dwellings where many families share the sanitary conveniences only intended for one, and you have rooms with no light or totally inadequate light and air. I trust therefore that your authorities will decide to tackle this evil while it is of manageable size and while financial assistance from the Federal Government is available.

Experience in Europe and America proves that such housing conditions once arisen can never be eradicated without some form of subsidy because the lower income groups cannot afford a rent that would give a remunerative return to private enterprise on the lowest rate at which dwellings could now be built. On the other hand, English experience also shows that provided such dwellings continue to be held and let by some public authority, there is every reason to expect that the remuneration of the low income groups will continue to rise and that the lag between that income and the rent needed to meet present out-goings on the houses will be overtaken, in which case the amount of subsidy can be reduced and ultimately it can cease.

The case is so clear: the necessity so obvious: the results so advantageous, and the need for confidence in the whole scheme so great that I think a simple subsidy of so much per dwelling per annum given by the Federal Government on condition that the Local Authority make a proportionate contribution from local revenues, all to be used to reduce the rents, would in many ways have been preferable to the forms of low interest and tax redemption adopted in your Act. That system has worked well in England where the Central Government contributes two-thirds and the Local Government one-third of the subsidy. A clear knowledge that the housing scheme—apart from the subsidy—represents a self-liquidating remunerative asset, and that the subsidy is a definite annual sum in aid of rent, to be paid only so long as needed, tends to give general confidence and facilitates the raising of the capital sum needed. At the same time: there is your Housing Act: you can, with a reasonable degree of accuracy, convert the low interest rates and the tax exemption into so many dollars per dwelling per annum and strike a balance

showing the position clearly. If that is done authoritatively by your accountants it should go far to meet the objections. In any case I should judge that amendment of the Act would be more easily obtained by a group of Local Authorities who were genuinely trying to work it and could show by experience that such amendment would help, than it would be when the demand could be regarded as largely an excuse for inaction, as it would if put forward on merely theoretical grounds without trial. I hope therefore that prompt action will be taken to test the working of your Housing Act and to translate the figures into a simple balance sheet of outgoings on one side with subsidy and rents on the other making an equal annual sum.

In a town as beautiful as Vancouver and with such surroundings it is sad to see so much dirt and mist caused by raw coal smoke: this must, moreover, mean considerable waste: could not some smoke prevention regulations be tried?

There is no question that the visit of Sir Raymond did much to stimulate the interest of Vancouver architects in low cost housing. It is our intention to keep the interest as active as possible, with such an opportunity before us.

—Robert A. D. Berwick.

ONTARIO

This province has, of course, been en fête in honour of the Royal visit, with the result that "the daily round, the common task" have been sadly neglected—and not too regretfully at that. The age of reason has been interrupted by a brief period of undisguised emotionalism which, if it revives in us the ability to distinguish between reason and the spirit of man, will add something infinitely valuable to our national culture. Decorations in Toronto varied tremendously in effectiveness, but only on one building, so far as we could see, were they anything like as good as they might have been. Report has it that the display at Ottawa was much better; but then, the Federal treasury might be expected to make some difference, since it does not seem to suffer much from hard times.

Coming back to more mundane matters, a contract has been awarded for the construction of a large plant near Kingston for the Aluminum Company of Canada, Limited; and announcement has been made that new tenders are to be taken for the City Delivery Building in connection with Postal Terminal A, at Toronto.

One of the most important subjects discussed at the annual meeting of the Toronto Chapter was the relationship between the realtor and the architect. A committee is to examine the question in greater detail, and a general meeting will probably be called later on to consider its report. The meeting also approved a proposal to establish discussion groups for the study of office practice, materials and other matters of general interest. Such a method of pooling experience works well in other professions, and ought to be equally valuable to ours. The dinner (at the Military Institute) went off with the usual éclat, winding up with an Informal Quiz conducted by the Editor of this *Journal*. Such was the erudition displayed by the assembled "brain trust" that the supply of all-day suckers ran out long before the last question had been reached—and even the cash register was beginning to heat up.

The National Construction Council, which held its annual meeting at Toronto, is reported to be considering a policy designed to stabilize the construction industry by levelling out the peaks and valleys in the volume of work undertaken. The proposal is a sound one, of course, provided that they steer clear of the widespread tendency to stabilize at a "scarcity" level. The point to be aimed at should be high enough to

keep the whole of the industry constantly engaged at normal pressure. Anything less will perpetuate unemployment relief.

Finally, the brightest thing we have heard in a long time came from the eleven-year-old son of a Toronto architect—"What the world needs is 'fewrer' Hitlers!"

—Gladstone Evans.

QUEBEC

The annual dinner of the Association was held at the Cercle Universitaire on April 24th. More than 100 attended the function over which President R. H. Macdonald presided.

The meeting was addressed by Colonel Wilfrid Bovey of McGill University who spoke in French on "The Buildings and the Spirit of Quebec." An important item on the programme was the awarding of the medal of the Association to Professor Ramsay Traquair on the occasion of his retirement as head of the School of Architecture at McGill University, a position he has held since 1913. Medals were also presented to Professor Jules Poivert, who has been head of the Ecole des Beaux Arts since 1923, and to Professor Percy E. Nobbs, who is in charge of Design at McGill University. Other members who were similarly honoured were Messrs. Louis A. Amos and William S. Maxwell, former President of the Royal Architectural Institute of Canada.

Certificates of membership in the Association were presented to four recently-admitted members, namely, Jean Paul Audet of Sherbrooke, Professor Frank P. Chambers of McGill University, Clarence Sidney Comber of Montreal and Henri Simard of Quebec.

Presentation of a very fine eighteenth century French-Canadian cupboard was made to Professor Traquair at a farewell dinner given him on May 5th. by past and present students at the Faculty Club. Richard Eve, a graduate of the school, presided. David Goodman read an amusing story in the French dialect, of his own composition, and a poem of farewell, written by P. Roy Wilson, a member of the staff, was also recited.

The address was given by Professor Philip J. Turner, who spoke of the work that Professor Traquair had done during his 26 years at the University, and of his success in reviving interest in the French-Canadian architecture in the Province. Professor Traquair intends, during his retirement at Guysborough in Nova Scotia, to complete a book on the subject, a work for which he has been collecting material for many years. In this connection it will be recalled that many articles on French-Canadian churches have been published in the *Journal* during the last few years, and these will form the nucleus of the larger work on the subject that is now being undertaken.

Professor Percy E. Nobbs has been entrusted with, and is making a fine job of the decorations of the buildings and campus at McGill University. This "Royal Institution of Learning", of whom the Governor-General—as the representative of the King, is the Visitor—will probably present the most artistic and attractive part of Montreal during the visit of the King and Queen to the city on May 16th. The "occasion" has given the students an excellent opportunity to try out their decorative talents with the brush, and the quarters of the School of Architecture, since examinations finished, have taken on the appearance of a glorified decorators' and painters' workshop.

—Philip J. Turner.

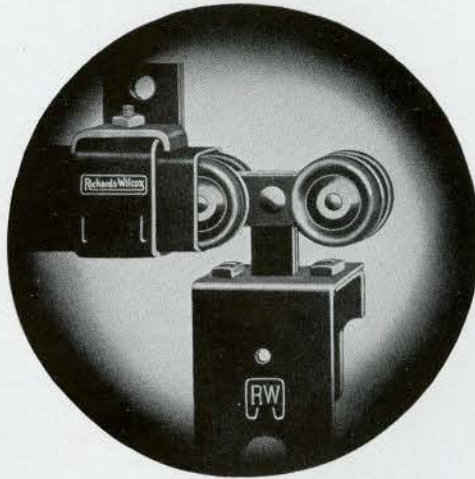
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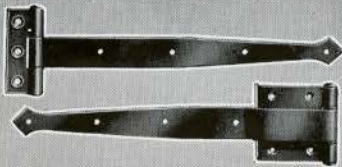
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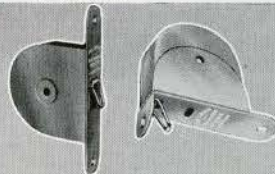


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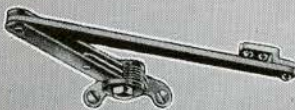
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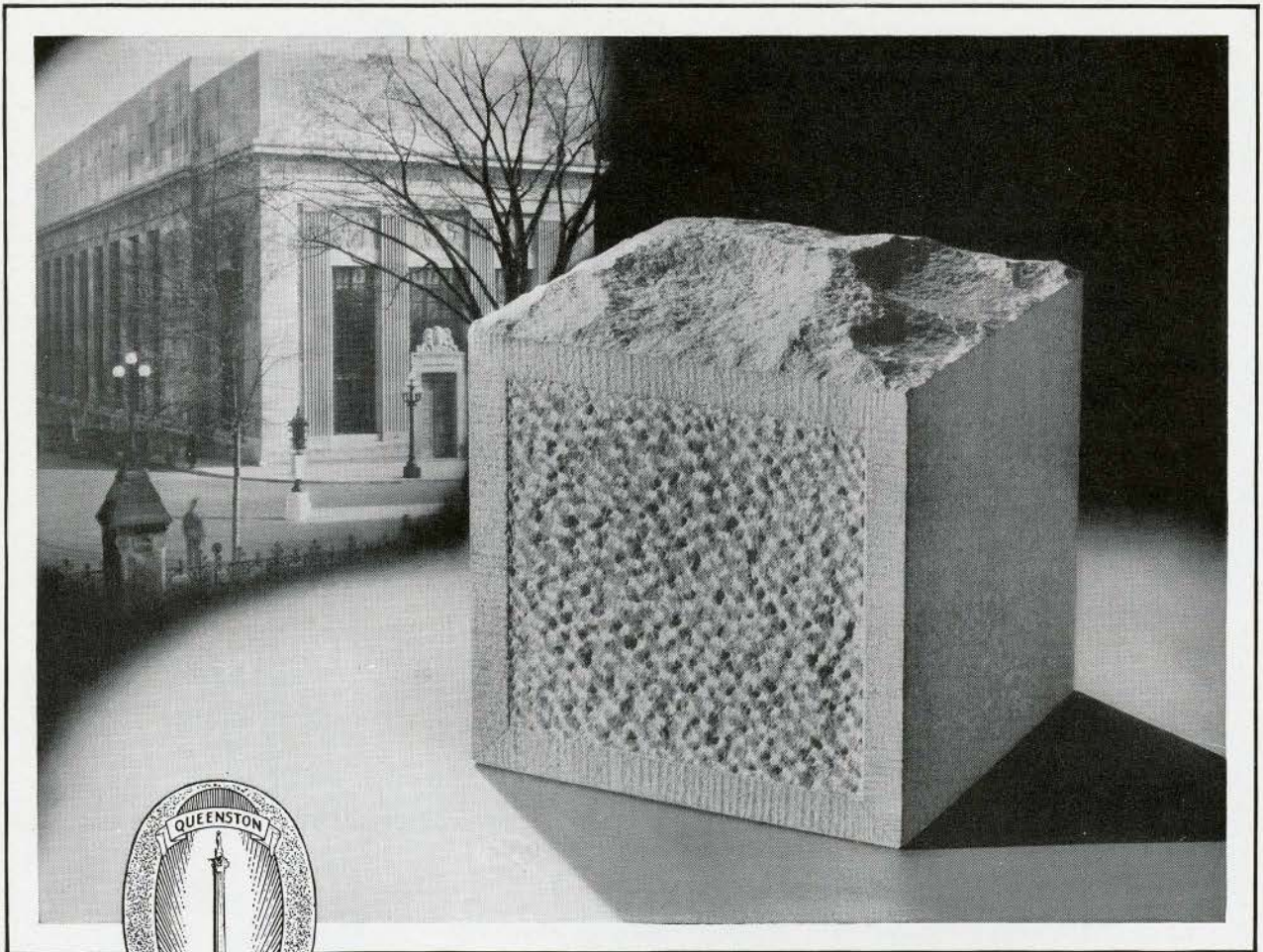
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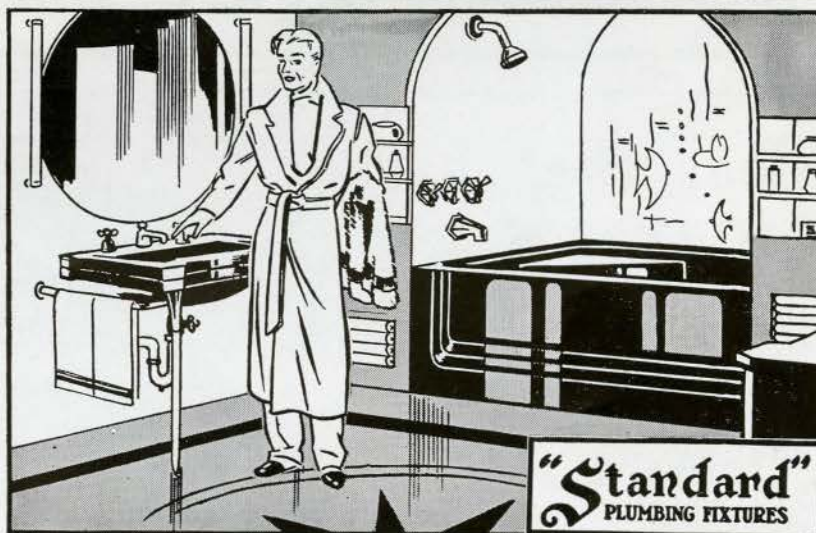
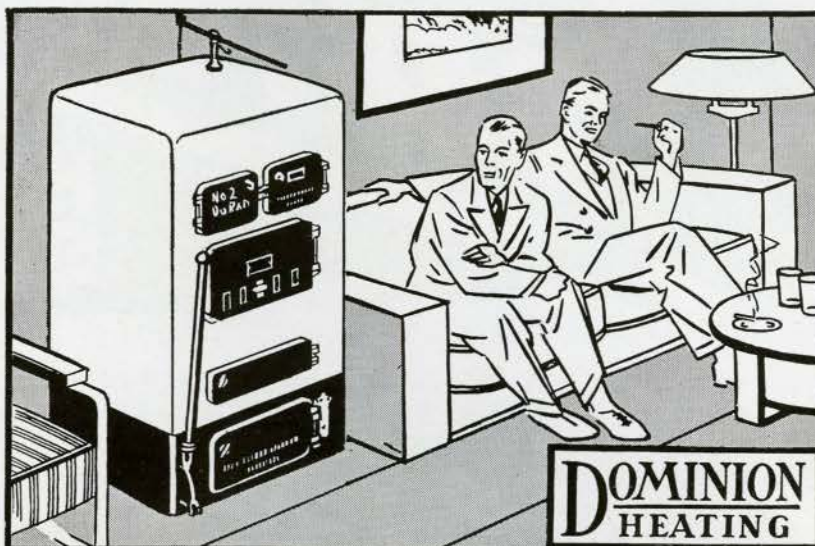
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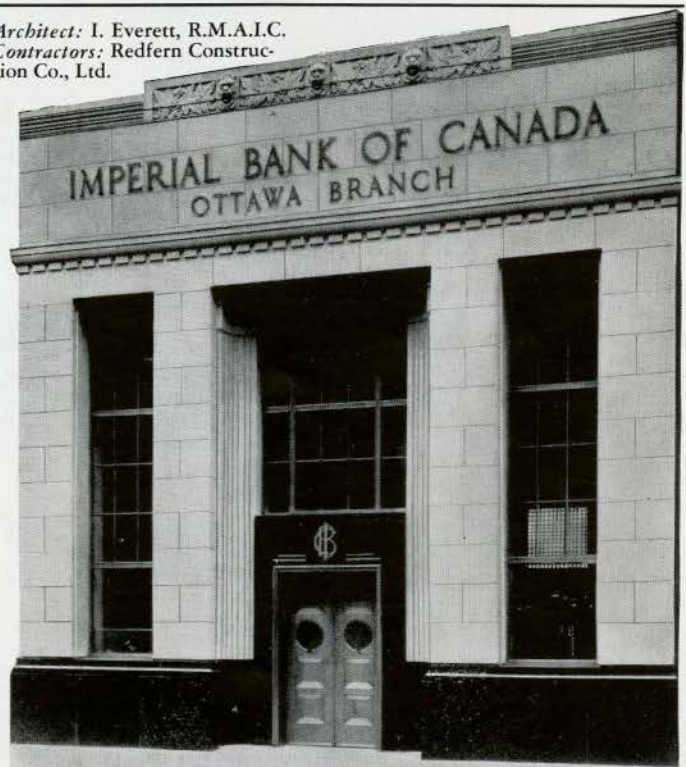
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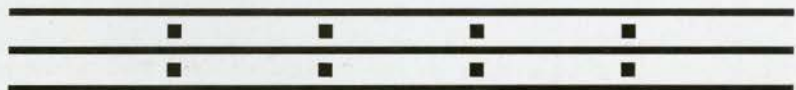
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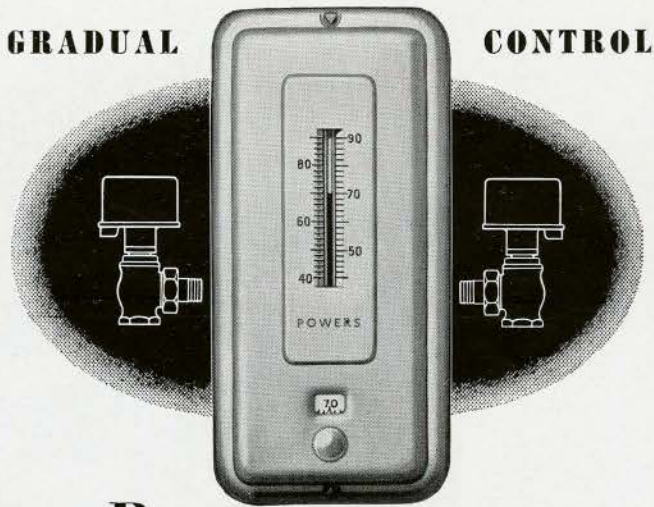
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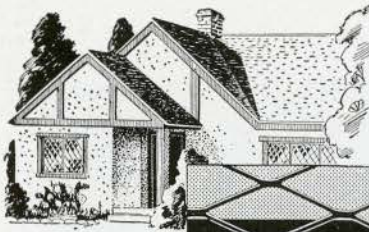
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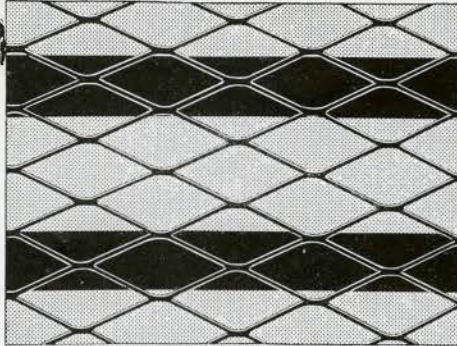
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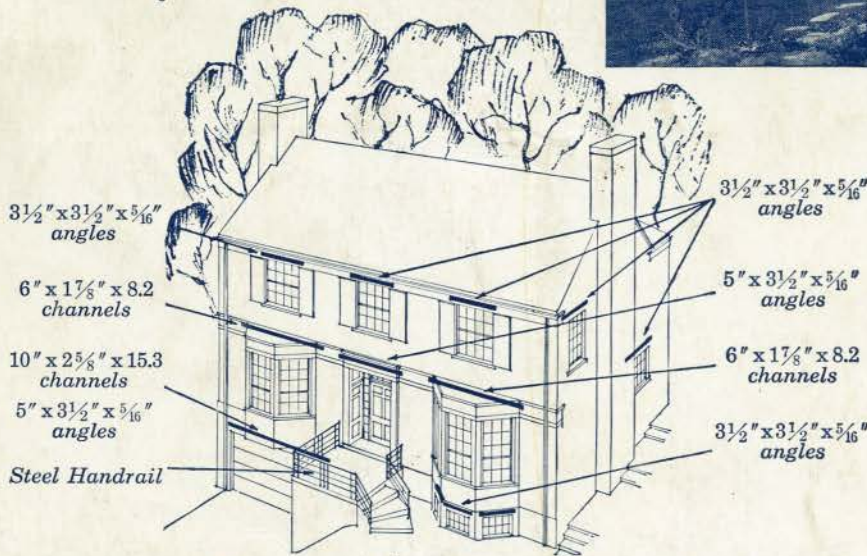
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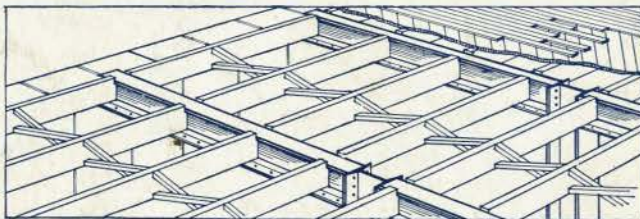
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