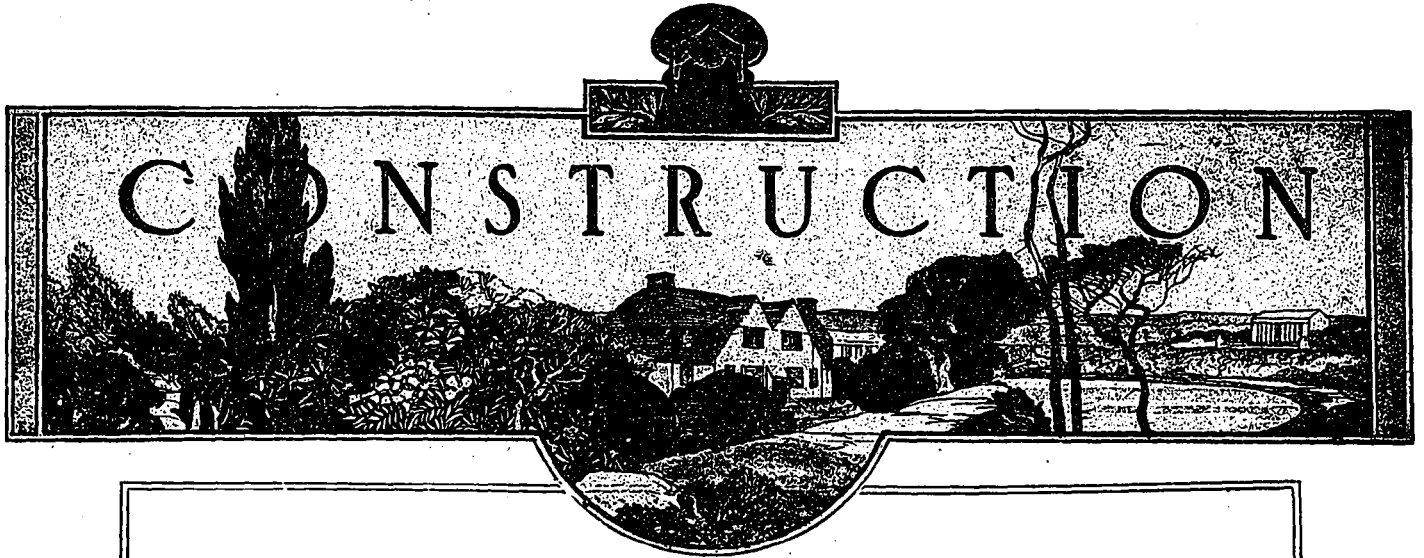


Pages Missing



September, 1919

Volume XII, No. 9

CONTENTS

RETAIL STORE OF FAIRWEATHER'S LIMITED, TORONTO..... 261

CURIOSITIES OF RARE WOODS 263

FIRE PREVENTION MEETINGS 264

FACTORY DESIGN 265

A NEW TYPE OF CONCRETE COTTAGE 267

REGINA WAR MEMORIAL MUSEUM COMPETITION 269

EDITORIAL 289

R.A.I.C. and O.A.A. Agenda—A Bigger and Better C.N.E.

Frontispiece

GROUND FLOOR, RETAIL STORE OF FAIRWEATHER'S LIMITED,
TORONTO 260

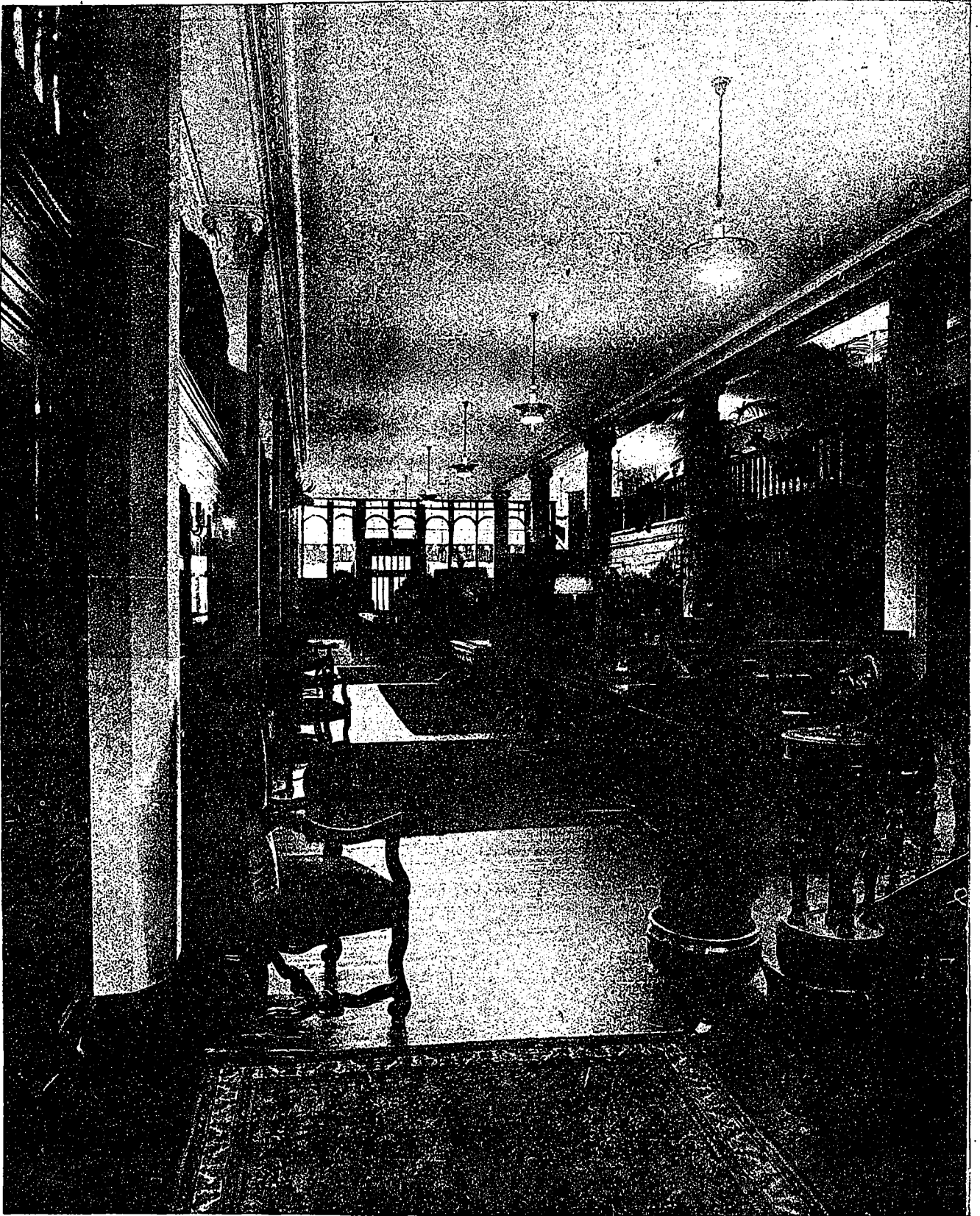
H. GAGNIER, Limited, Publishers

GRAPHIC ARTS BLDG., TORONTO, CANADA

BRANCH OFFICES

MONTREAL

NEW YORK



GROUND FLOOR: VIEW TOWARD ENTRANCE.

RETAIL STORE OF FAIRWEATHERS, LIMITED, TORONTO.

CHARLES S. COBB, ARCHITECT.

Retail Store, Fairweather's Limited, Toronto

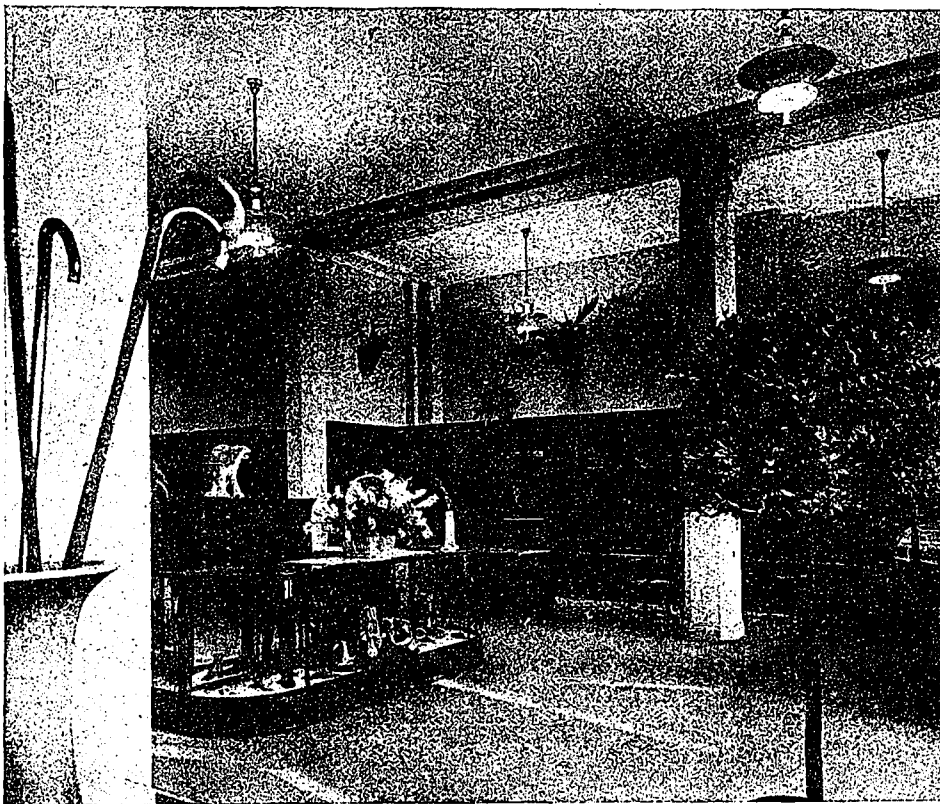
THIS establishment carries on a specialty business in ladies' fine furs, and other wear, and suggested in many ways a refined architectural treatment to serve as a fitting background for the display of merchandise of rather a luxurious character. The building was consequently planned with this idea in view, but, of course, limited by considerations of cost.

The exterior on Yonge street is constructed of buff Indiana limestone, the detail being reminiscent of the Italian Renaissance. Cast bronze is employed for the ground floor show window trim combined with a black and gold marble

A mezzanine gallery is carried around the rear of the ground floor, providing office space, and from which can be observed the operations of the entire floor below.

Artificial stone is used on the ground floor for the wall surfaces. The floors are of cork tile and quartered oak. All of the furniture was specially designed to correspond to the general treatment.

On the second and third floors are the departments devoted to millinery, women's suits, coats, and lingerie. Enamel in putty color, gray, and ivory is used on the trim.



GROUND FLOOR VIEW: FAIRWEATHERS, LIMITED, TORONTO.

architrave around the main entrance. The cornice of the building is decorated in bright colors and can be illuminated.

In the economical construction of the building, which has a frontage of 42 ft., it was decided to have a 22-ft. central bay with eleven-foot side aisles. This arrangement has resulted in an interior of considerable architectural character, the side aisles providing ample space for wardrobes, the general scheme being to keep the merchandise under cover in contrast with the usual massed display of the departmental store. The central bay of the selling floors is left quite clear for selling space.

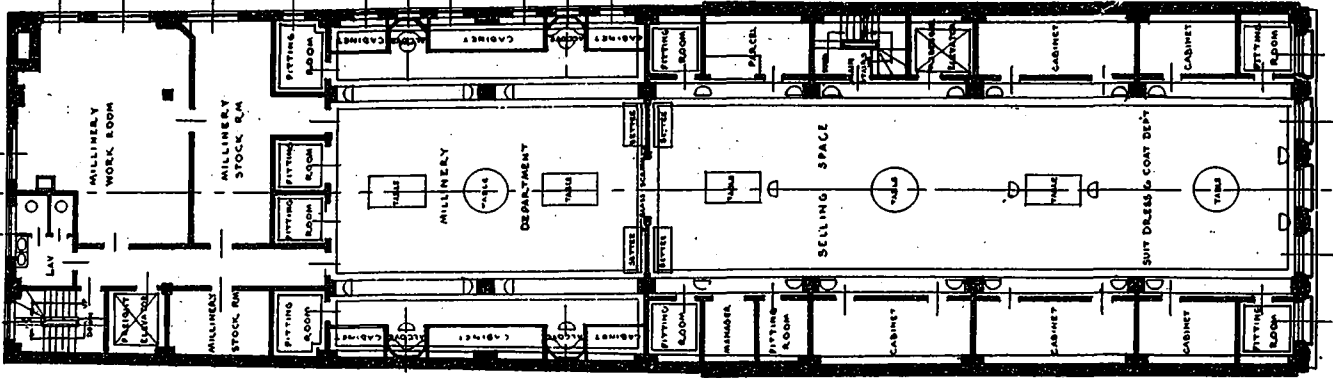
The trim of the show windows is African mahogany stained brown, while that of the ground floor is of birch of a similar finish.

The fourth floor comprises the work-rooms abundantly lighted and in close contact with the selling floors below to give satisfactory service.

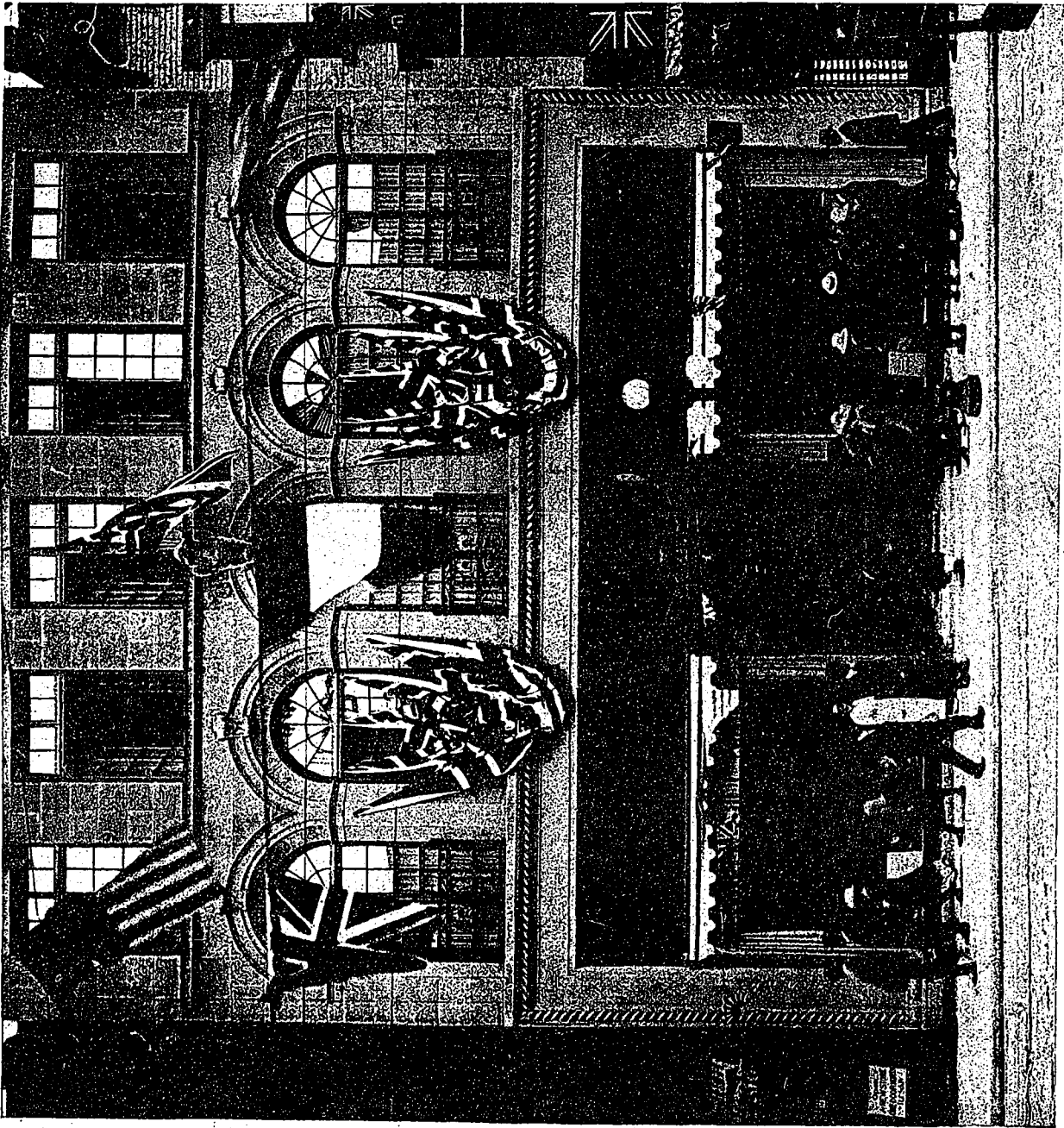
All the various departments are connected with a modern tube system, and the general mechanical features are up-to-date throughout.

The general construction of the building was first designed for reinforced concrete, but was finally changed to mill construction, it being found that due to the very large amount of insurance which had to be carried on the stock, necessitating automatic sprinklers in any event, that the annual saving in insurance on the reinforced concrete building with sprinklers simply amounted to the carrying charge on its increased cost.

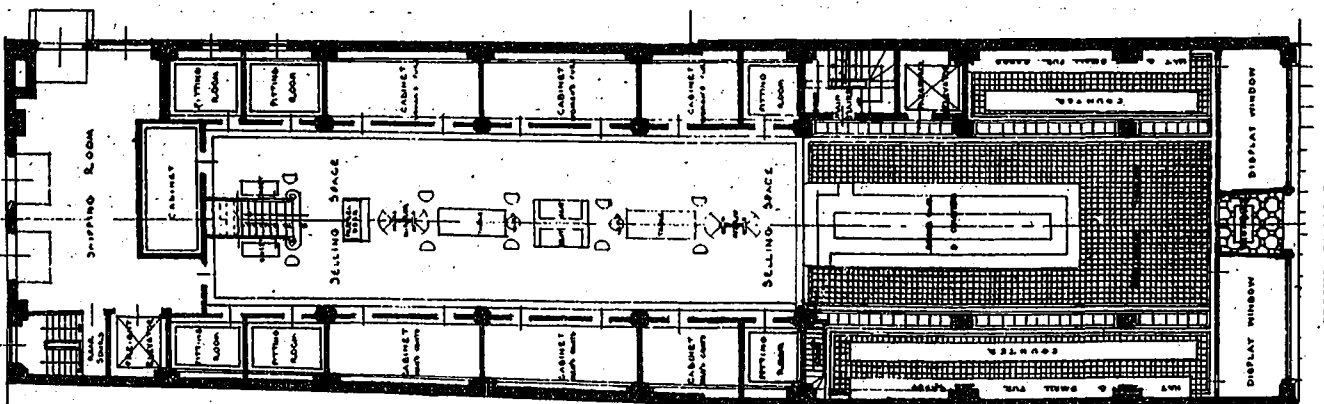
The cost of the completed building was ap-



SECOND FLOOR PLAN.



DETAIL OF LOWER FACADE.
RETAIL STORE OF FAIRWEATHERS, LIMITED, TORONTO.
CHARLES S. COBB, ARCHITECT.



GROUND FLOOR PLAN.

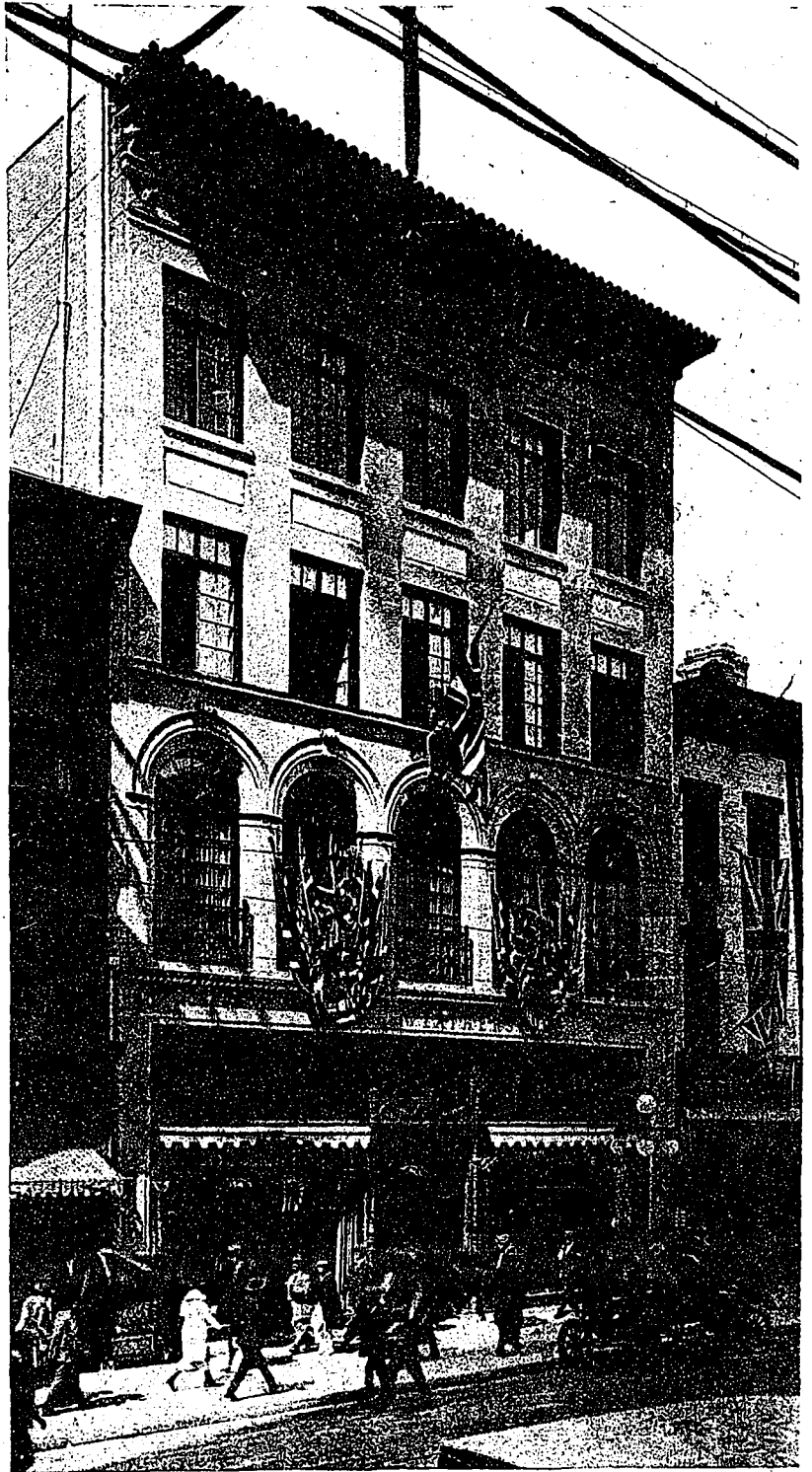
proximately 34 cents per cubic foot.

Curiosities of Rare Woods

With the development of the woodworking art and the expansion of the furniture trade there came a demand for new and rare woods, and explorers searched the forests of the earth for different effects of grain and color, writes the "Canadian Woodworker." From the Andaman Islands, from unexplored Africa, from Borneo, from the remotest corners of the earth, woods rivalling the mahogany of Mexico and Cuba have thus been brought to light. From the Philippine and Hawaiian Islands, and from the forests of South America, strange woods have been obtained of wonderful grain and color effect, which are still hardly known by name.

Lately, attention has turned more to fields at hand. Gnarled old trees, twisted and insect-stung, despised by the lumberman, are yielding ornamental woods worth many thousand dollars. Curly-birch is but the twisted grain of the ordinary tree, obtained usually from a crotch or where a trunk has been twisted by frequent wind storms. To-day the birch tree that holds the greatest number of these curly burls is considered more valuable than the tall, straight tree without a variation in its normally developed texture. Bird's-eye maple is caused by the sting of an insect whose poison produces a sore in the tree. Nature, attempting to heal the injury, pours new sap into the wound to neutralize the effect of the poison. The outward effect is of a number of excrescences; but when the wood is cut, veneered and polished, the beautiful bird's-eye maple effect is obtained. It is generally the apparently worthless small scrub-oak that gives those delightful pith rays, flaming curls and intricate patterns of light and dark shades that quarter-sawing brings out.

The finest Circassian walnut comes from misshapen, dwarfed trees on the shores of the Black Sea; and the most beautiful parts come from the twisted roots, the burls caused by insect stings. Such growths are so interwoven that they produce the curious and irregular graining which makes the wood more valuable for veneers than mahogany.

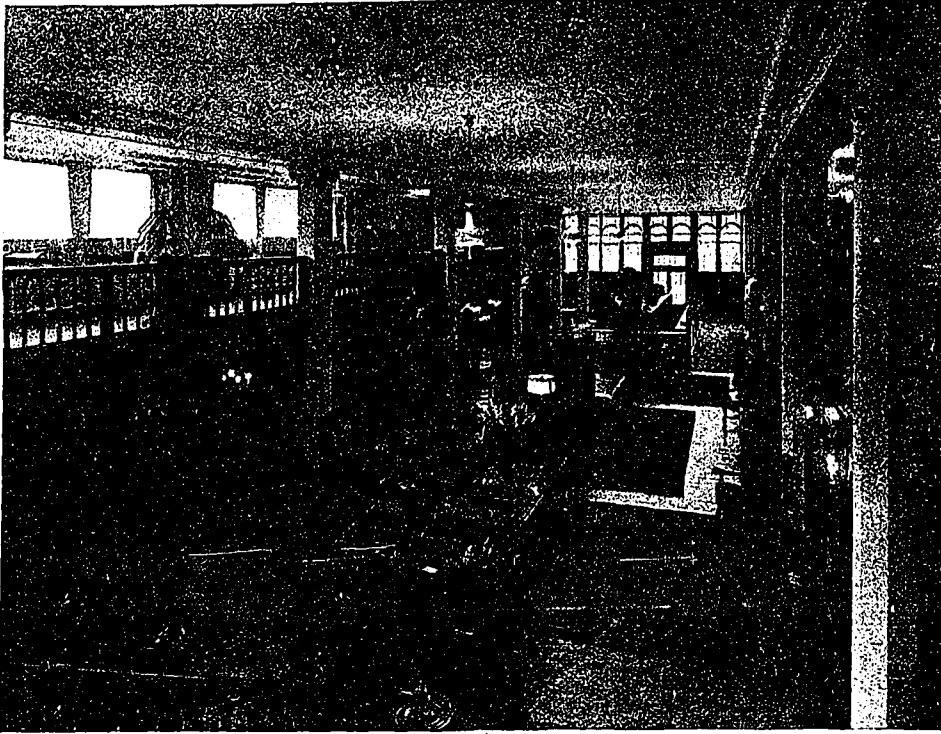


STREET ELEVATION.

RETAIL STORE OF FAIRWEATHERS, LIMITED, TORONTO.

CHARLES S. COBB, ARCHITECT.

No two mahogany trees are quite alike. Formerly only the tall, well-formed trees were cut for trade; now it is the misshapen tree that is more keenly sought. The wood expert searches the forests for some abnormal growth. Pieces cut from a crotch show the graceful curls so much desired in fine furniture. Sometimes the figure shown is of flame-like tufts, called "feather" in the trade. As often happens in some mahogany trees, the fibres are arranged



GENERAL VIEW OF GROUND FLOOR: FAIRWEATHERS, LIMITED, TORONTO.

spirally by a freak of nature, and when cut lengthwise light and dark stripes are exposed.

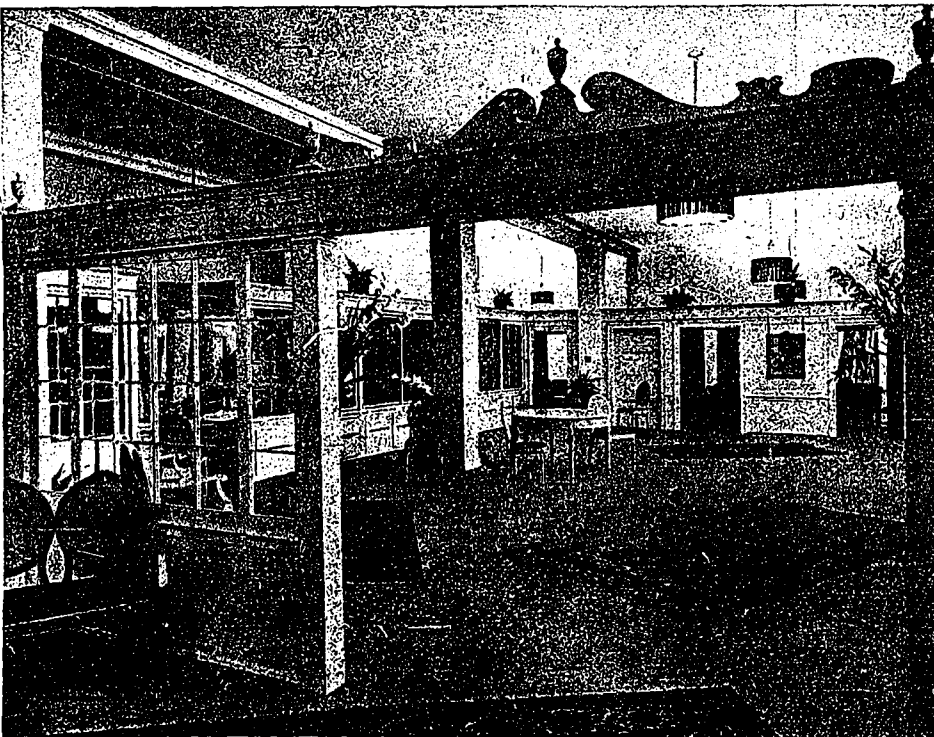
The ebony from southern India and Ceylon has a perfectly white outer wood which is neither beautiful nor useful. There is no grain to it. It is the intensely black heart-wood that is used so extensively for inlay work. The tiger-wood, or Congo walnut, owes its flaming effect to some unknown freak of nature, for the best of it comes only from a limited number of selected trees. East India mahogany, or ver-

into the harmonious effects in which we so excel to-day, surpassing the highest ambitions of the artists in wood of the preceding century.

Fire Prevention Meetings

Preventive measures to reduce waste from fire were discussed at two important meetings held in Toronto during the past month. One was the annual meeting of the Association of Fire Marshals of North America on Aug. 26 to 29th, and the other the convention of the Ontario Fire Prevention League, which was held

in the Parliament Buildings on September 4th. Both meetings had much in common, papers and addresses being delivered dealing with administrative problems and the benefits to be derived through education and propaganda. According to various speakers, in South Dakota and other parts of the United States, "fire prevention" was made a compulsory, or at least an incidental, subject in the schools, with the results which could hardly be questioned. By inculcating in the child the need of safeguarding property, the



MILLINERY DEPARTMENT, SECOND FLOOR: FAIRWEATHERS, LIMITED, TORONTO.

idea is taken into the home with the result that conditions which cause fire are remedied or removed.

As regards factory buildings, one of the delegates advocated that the following points should be considered: The design should guard against self-exposure to fire from outside; (2) automatic sprinklers should always be installed; (3) someone familiar with the operation of the sprinkler apparatus should always be in the building; (4) hand-fire equipment should always be available. Special cases would require special remedies.

Deputy Fire Marshal Geo. F. Lewis, Secretary of the Ontario Fire Prevention League, gave an outline of the progress being made as regards fire prevention in that province, and stated that the Government has been asked to have cancellation stamps used on letters during the "clean-up" period around October 9th, to read "Fire Prevention Day Clean-Up."

It was also announced by Hon. H. J. Cody, Minister of Education, that in order to stimulate the interest of the children, the Ontario Government would give one thousand gold-plated medals for the best essays on "Fire Protection" by pupils in the third and fourth classes.

Both meetings went strongly on record in favor of municipalities rigidly enforcing anti-fire regulations.

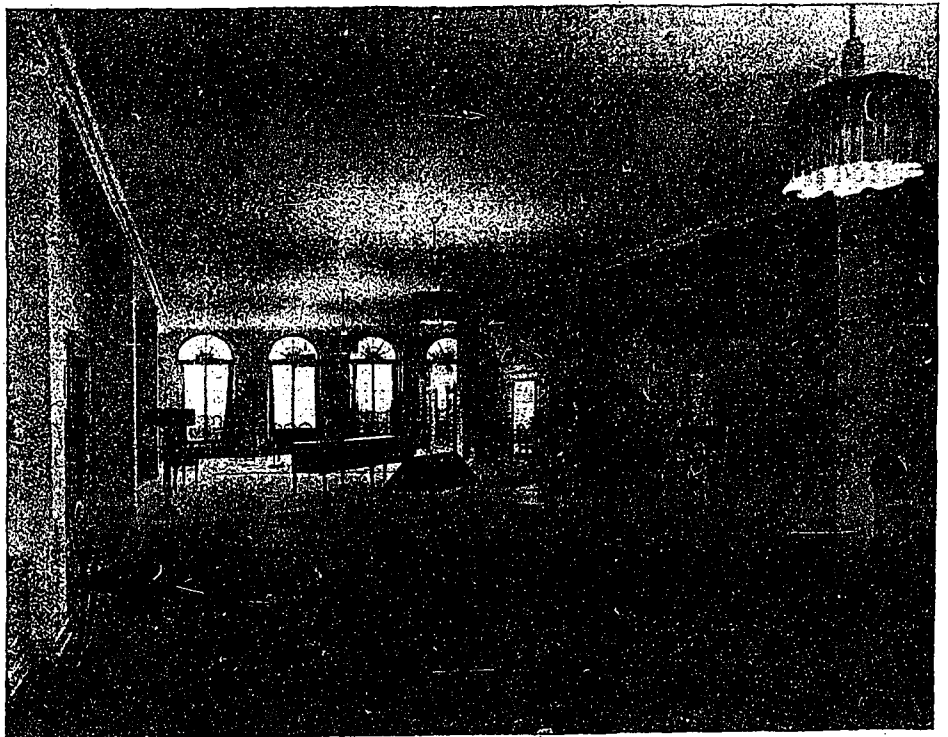
Factory Design

The field of commercial and industrial building, says the *Architectural Forum*, is one of particular interest to architects at this period of reconstruction for several reasons: the resumption of building in



HOSIERY AND GLOVE DEPARTMENT, GROUND FLOOR: FAIRWEATHERS, LIMITED, TORONTO.

this type of structure took place sooner and on a larger scale than in any other; the tremendous demand for increased manufacturing space during the war prompted the invention of simple and quickly erected methods of construction; the rapid progress in manufacturing methods to meet modern conditions of business has brought about greater changes in a similar space of time in the planning and equipment of industrial buildings than in any other type of building, and



SECOND FLOOR: FAIRWEATHERS, LIMITED, TORONTO.

the successful architectural treatment of many recent factories has made it evident that the opportunities for the development of this type of structure have been largely neglected by architects.

The fact that more industrial buildings have not been designed by architects is largely due to

most exacting character, and success cannot be counted upon without an energetic study of the problem in all its phases, and an extensive and sympathetic understanding of manufacturing methods.

Industrial buildings entail primarily practical requirements, safe, permanent and economical



THIRD FLOOR: FAIRWEATHERS, LIMITED, TORONTO.

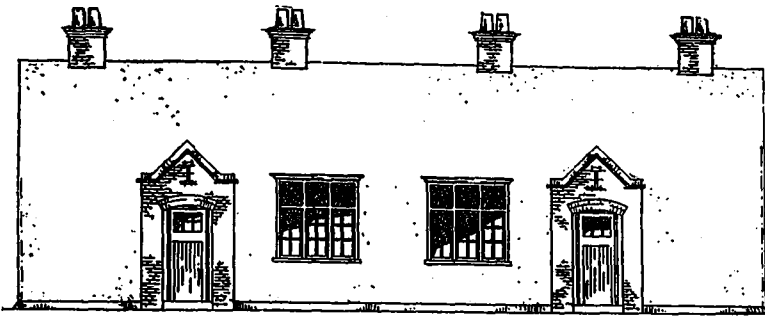
the lack of interest the profession has shown in the work. As a consequence this very fertile field of design has been served by the engineer or contracting engineers, the latter virtually contractors, who have built up in many cases large and powerful organizations from the profits of this type of work exclusively. With the growing importance of industrial building and the increasing numbers of people who gain their livelihood from industrial pursuits, the physical character of these buildings, because of their important influence in the community, is a matter of considerable concern.

Industrialism is one of the dominant notes of our modern life, but so far, architecture, which in past ages recorded in permanent form the dominant characteristics of its time and people, has not exerted any marked influence in the buildings housing our modern industries. The opportunity is no less favorable than those of earlier days. It needs only a realization of its possibilities by architects of to-day to develop application of architectural principles that will be a strong bond in uniting the profession and business interests.

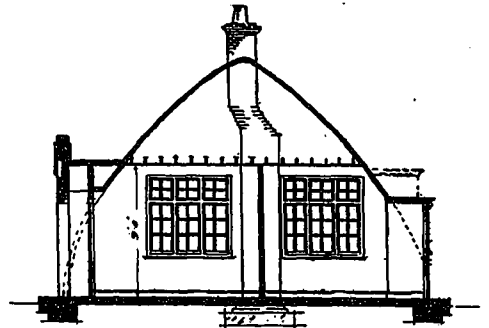
Commercial design is not such a simple matter that it can be handled offhand by any architect, and it cannot be thought that it requires no particular skill. It demands a type of service of a

construction, and the efficient installation of mechanical equipment. They are investments which must show earning capacity to be successful. Appearance is incidental from the manufacturing viewpoint; it is, of course, eminently to be desired, but efficiency of the structure cannot be sacrificed for it, nor can it justify any appreciable addition to the cost of the building.

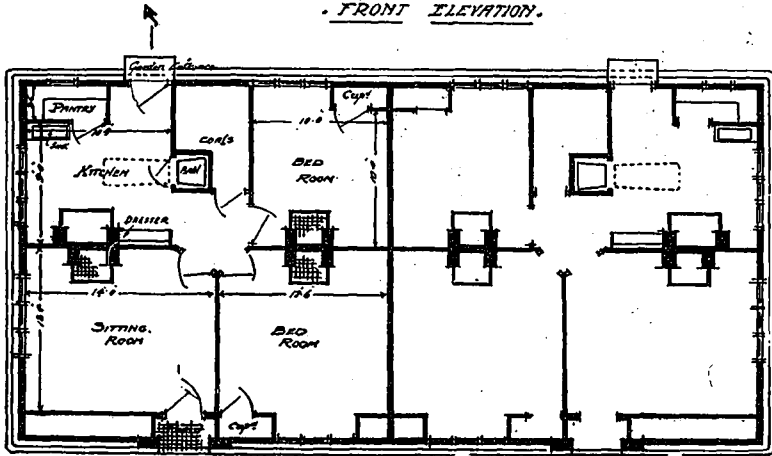
These conditions present an opportunity for service that the architect is especially capable of rendering. He has the type of mind that can grasp the problems connected with planning a building to fit the operations of manufacturing, and through the possession of a better appreciation of structural forms than the engineer, he can provide interest and beauty to the walls and mass of an industrial structure. There are, however, many features of the engineer's handling of the problem that architects may study with profit, for it is in those respects that corporations have been impressed more favorably by engineers than by architects. Good business methods, speed in construction, directness in securing results, are the contributions engineers and contracting concerns have made to industrial building, and it is only by a combination of these qualities with architectural planning and design that architects can be successful in industrial work.



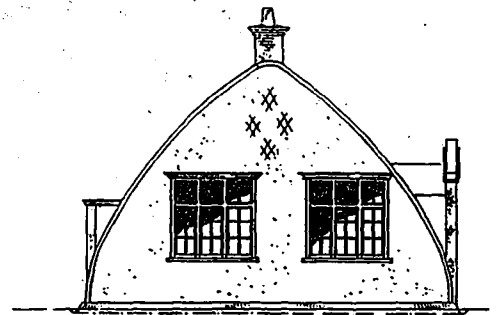
FRONT ELEVATION.



SECTION A-A.



PLAN.



END ELEVATION.

SUGGESTED DESIGN FOR REINFORCED CONCRETE COTTAGE OF SEMI-DETACHED TYPE.

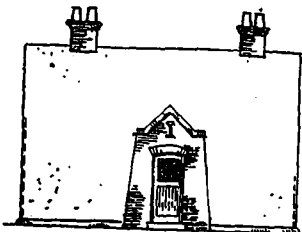
A New Type of Concrete Cottage

The illustrations on this page show a suggested scheme for a rather unique type of workman's cottage, published recently in the "Concrete and Constructional Engineering." Reinforced concrete is the material to be used with the roof designed to form an unbroken continuation of the front and rear walls. This, it is pointed out, will dispense with the use of timbers in the roof, as well as with the rain pipes and gullies which are otherwise necessary for carrying water from the roof. Economy is also effected in the fact that no slates or tiles are em-

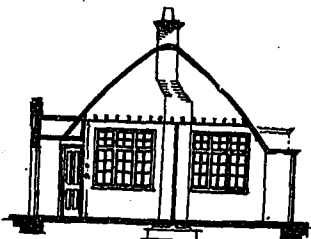
ployed for covering the roofs, or lead dressings or other materials used.

The whole of the exterior will be finished with roughcast cement plastering relieved with brick work to the chimneys and entrance porches, thus lending color to the whole scheme, and giving a pleasing effect when surrounded with trees and foliage.

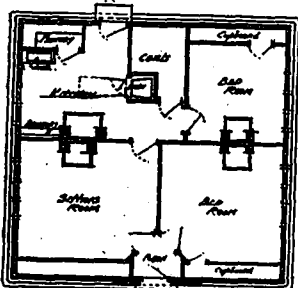
The interior and ceilings will be plastered, and the various rooms planned and fitted to meet the requirements of an up-to-date labor saving dwelling, the accommodation being indicated in the plan. It is claimed that the cost involved by this method, based on estimates submitted by reliable builders, would be considerable less than the older forms of construction.



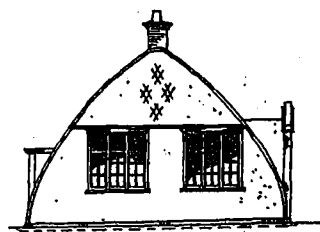
FRONT ELEVATION.



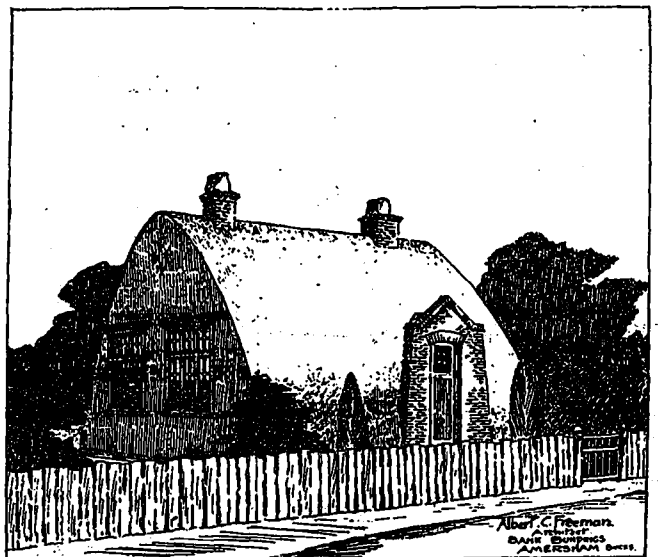
SECTION A-A.



PLAN.

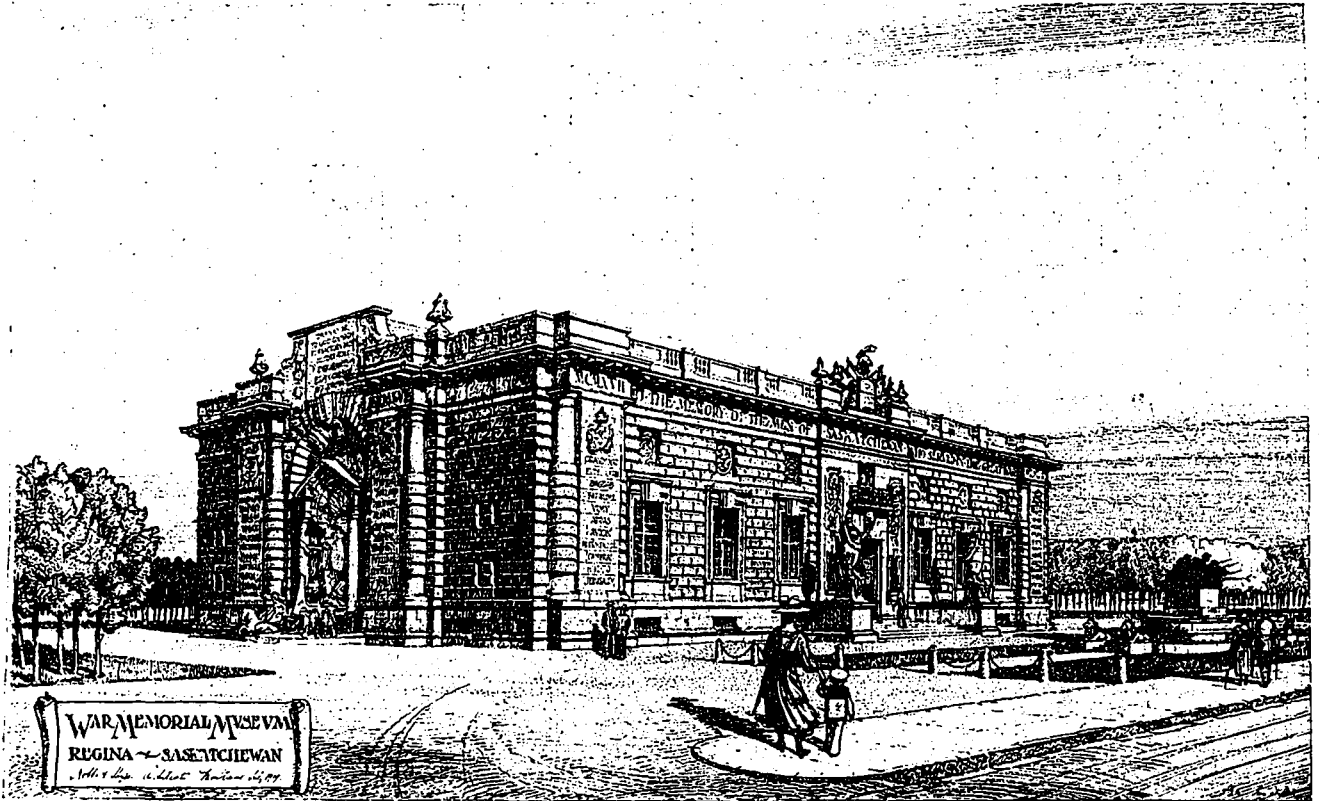


END ELEVATION.

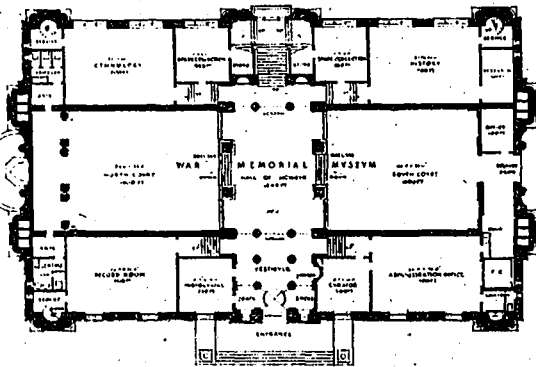


Albert C. Freeman, Architect, 3 Bank Building, AMSTERDAM, N.Y.

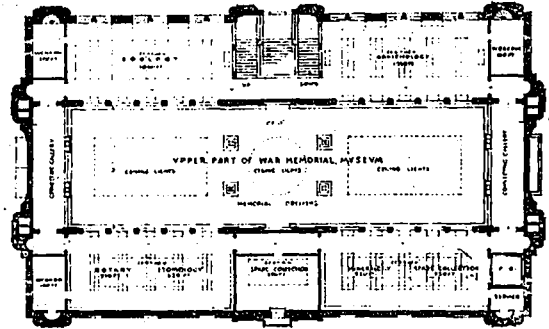
REINFORCED CONCRETE COTTAGE, OF DETACHED TYPE.



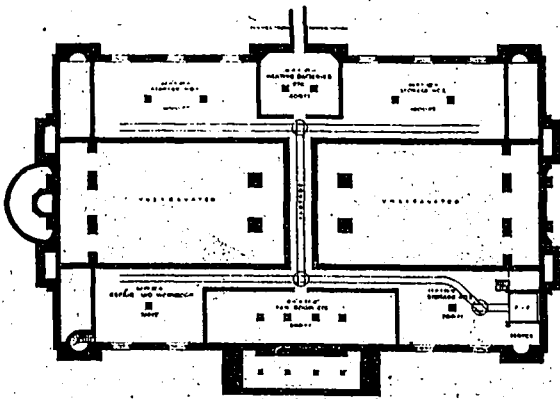
PERSPECTIVE.



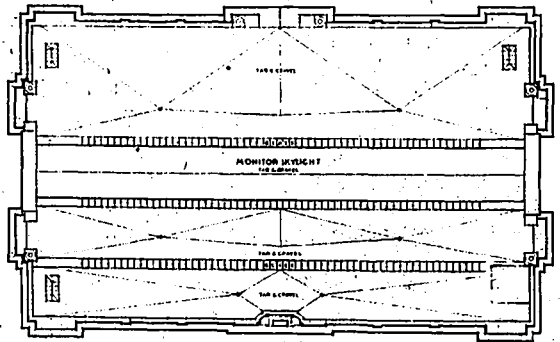
MAIN FLOOR PLAN



UPPER FLOOR PLAN



BASEMENT FLOOR



ROOF PLAN

WINNING DESIGN, WAR MEMORIAL MUSEUM, REGINA, SASK.

NOBBS & HYDE, ARCHITECTS.

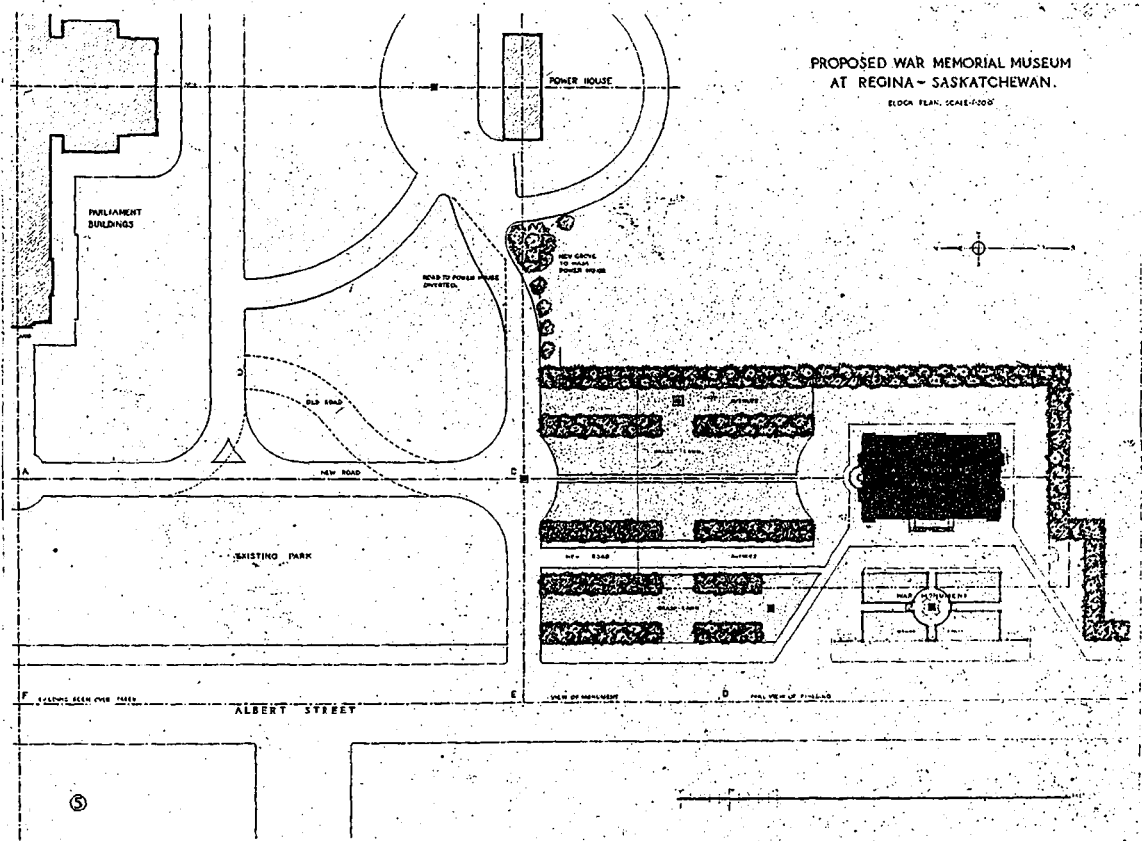
War Memorial Museum, Regina, Saskatchewan

THE Saskatchewan Government is to be congratulated on being the first of the provinces to undertake the erection of a building to commemorate Canada's part in the war. An examination of the various drawings submitted shows several schemes which could be suitably adopted for the purpose mentioned. The choice, however, of Messrs. Nobbs and Hyde's design is one which will undoubtedly meet with general approval. The conditions of the programme, which were published in full in the May, 1919, issue of CONSTRUCTION, were infinitely fair and ideal in every way and in full accord with recog-

assessors were Mr. Septimus Warwick, F.R.I.B.A., Montreal, and Ramsay Traquair, Professor of Architecture, McGill University, Montreal. A description of the various schemes submitted is set forth herewith.

WINNING DESIGN: NOBBS AND HYDE.

The Block Plan illustrates the proposal for dealing with the site generally. It will be noted that an observer at the point A to the west of the Parliament Building would perceive to the south of him a building of importance with broad avenues leading towards it. The conver-



BLOCK PLAN: WINNING DESIGN.

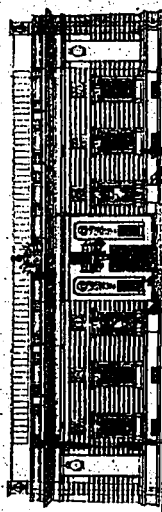
nized ethical standards. The winning design provides for an excellently planned building, and together with the other schemes illustrated, show the individual conception of the contestants for a building which with, perhaps, certain modifications will likely be duplicated in the other provinces.

The competition was limited to eight designers, and each of the unsuccessful contestants will receive the sum of one thousand dollars (\$1,000) as a compensation for their time and labor, which, considering the amount of work and study given to each individual scheme, represents a growing appreciation of architectural services and involves a principle which should become more definitely established. The

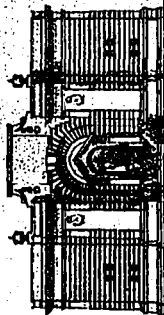
sion of the winding road, ABC into the straight road AC is recommended the better to relate the new work to the existing scheme. On reaching the point C one passes from the semi-naturalistic surroundings of the Parliament Buildings to more formal avenues and wide lawns. (The use of Russian poplar and Asiatic willow is intended.) From C onwards the view resolves into a monumental fountain backed by a massive wall,—Britannia at War is the theme suggested,—with glimpses on the right of the sculpture group in front of the entrance to the Museum.

By a slight deviation of the road running eastward to the Power House, place can be found for a group of trees masking that building.

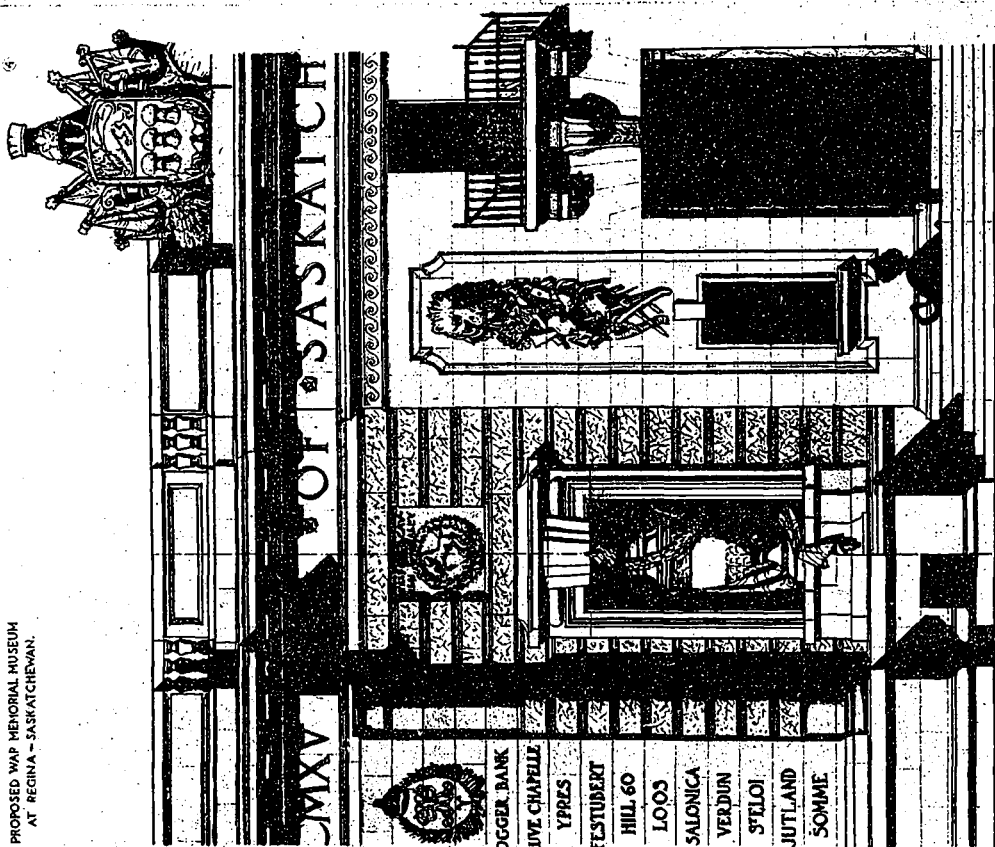
PROPOSED WAR MEMORIAL MUSEUM AT REGINA - SASKATCHEWAN.



WEST ELEVATION

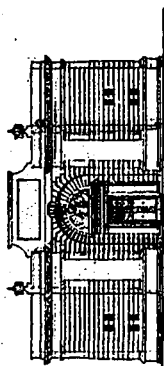


NORTH ELEVATION

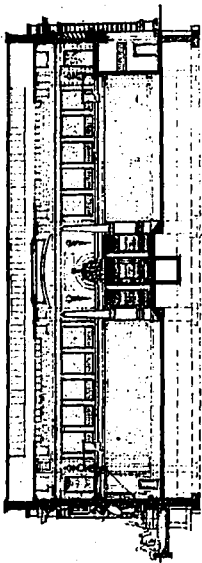


HALF INCH SCALE DETAIL.

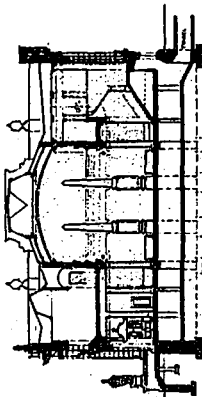
WINNING DESIGN. WAR MEMORIAL MUSEUM, REGINA, SASK.
NOBBS & HYDE, ARCHITECTS.



SOUTH ELEVATION



LONGITUDINAL SECTION



CROSS SECTION

Between the Museum and Albert Street the avenues are discontinued and a formal balustraded lawn is proposed as a setting for the monumental group of sculpture above referred to. The intention is that the building, although visible from a distance, should not reveal itself *in its entirety* to one approaching from the city by Albert Street till the point D is reached.

The treatment, which is generally homogeneous on all sides, is dominated by the requirements of the north elevation, with which a fountain is incorporated, and the west elevation, designed as a background to the proposed memorial sculpture group and containing the main entrance.

Pylons inscribed with the battles of the various campaigns and the frieze containing the dedication render the intention of the building

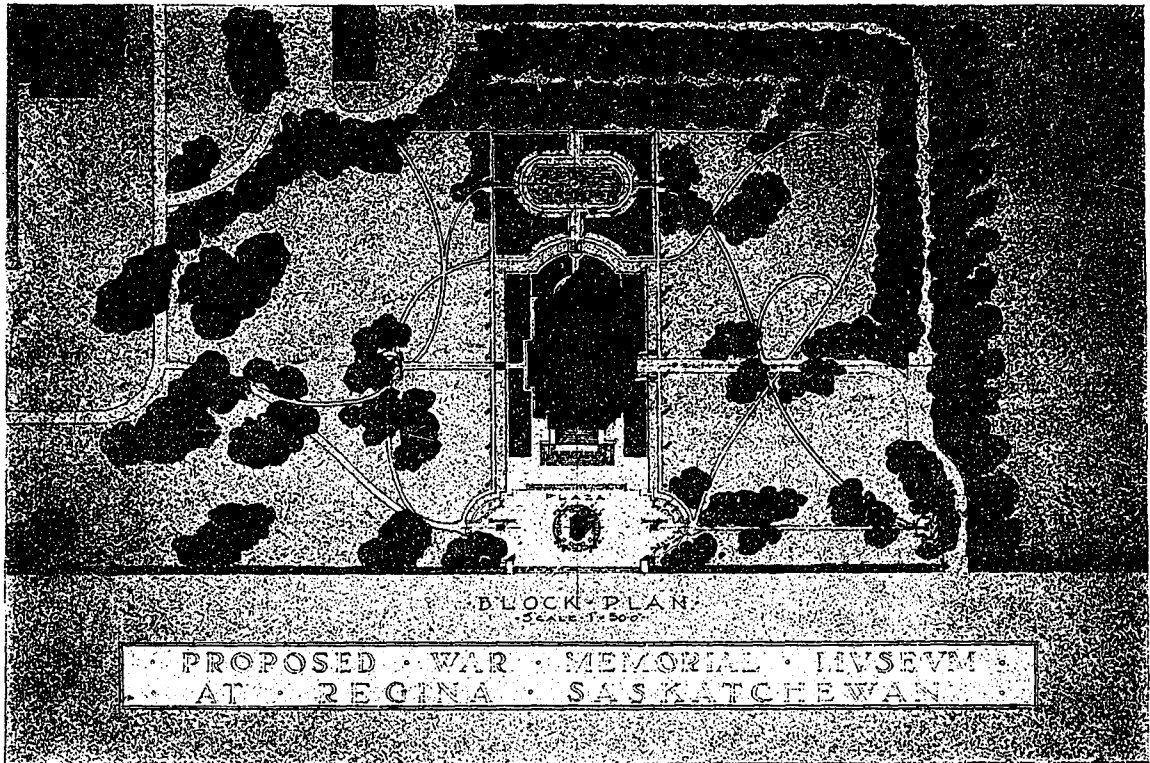
end with the entrance and at the other with the main staircase, giving a vista of over eighty feet, while it is flanked by the open courts of the War Relics Museum.

The War Museum thus contains the Hall of Honor within itself, a room of monumental proportions, 140 feet long, resulting. Wall piers and obelisks and a slight difference in floor levels serve as demarcations between the parts.

Wrought iron screens within the Hall of Honor enable the building to be closed off when required into three sections:

- (A) Administrative and Records.
- (B) War Museum.
- (C) Provincial Museum.

On entering the Curator's Offices and the Board Room are found flanking the vestibule; beyond the first screen is the War Museum and



COMPETITIVE DESIGN, WAR MEMORIAL MUSEUM, REGINA, SASK.
J. H. G. RUSSELL, ARCHITECT.

in words. The panels over the windows containing the badges of the Saskatchewan units (5th Western Cavalry, 28th Battalion, etc., etc.), will have meaning for those who bore these emblems. The draped and wreathed urns flanking the entrance are intended as a hint of the sentiment attaching to the Hall of Honor within, with its long tale of the Province's losses.

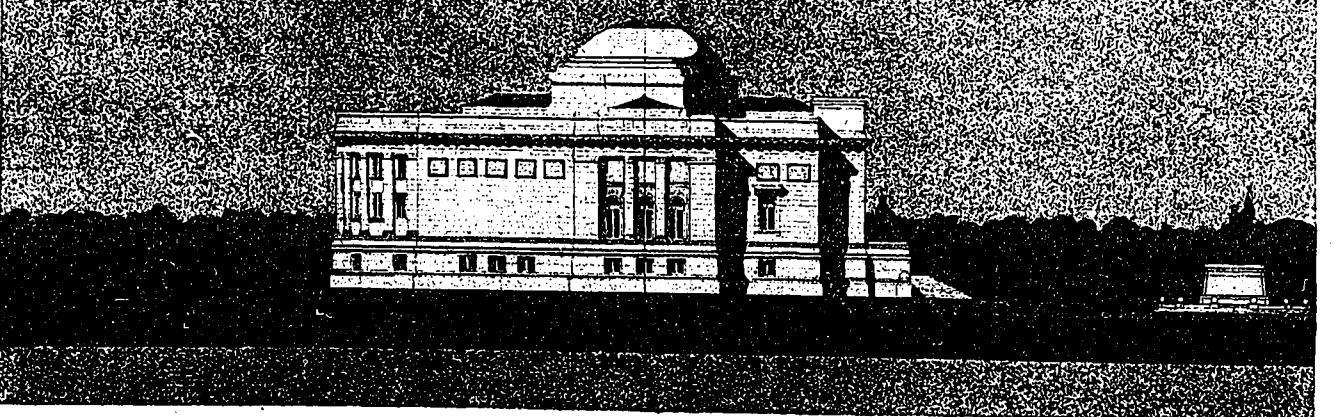
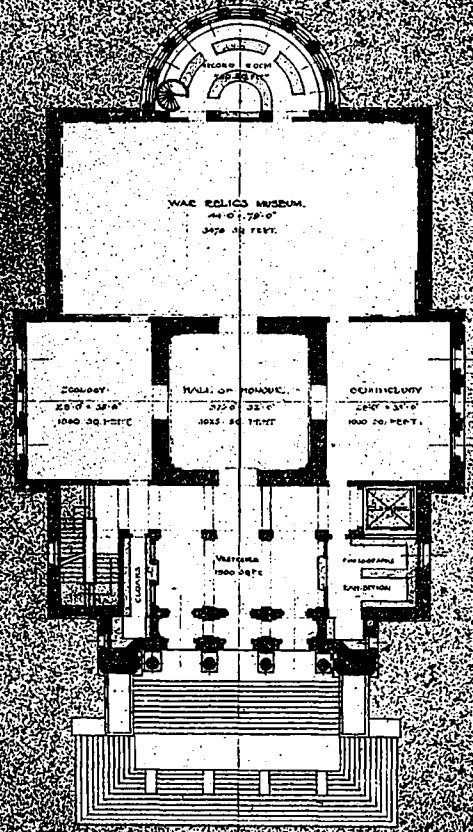
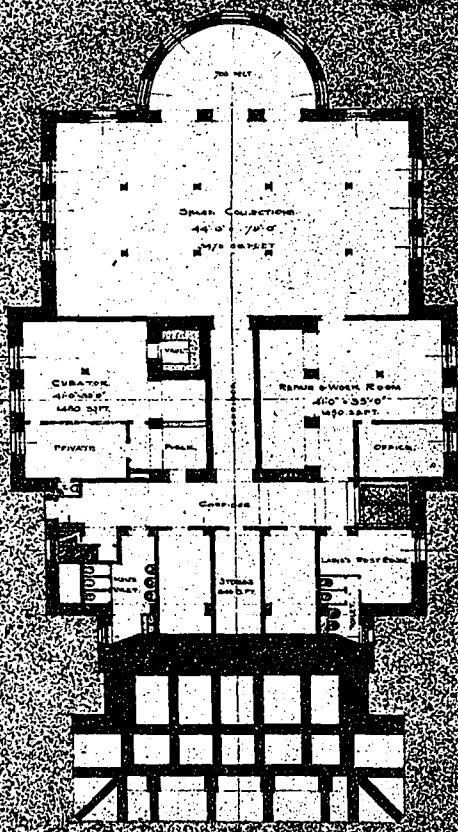
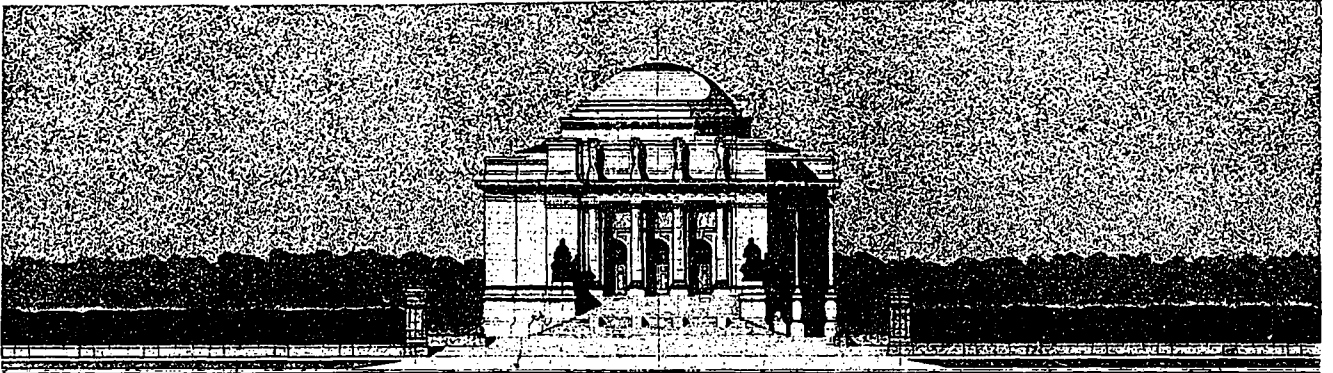
The design is a frank attempt by the omission of intervening walls where possible to connect the various elements, as far as may be, under one ceiling, coterminous with the area of the building. This solution combines effects of space with very great structural economy.

The Hall of Honor thus merges at the one

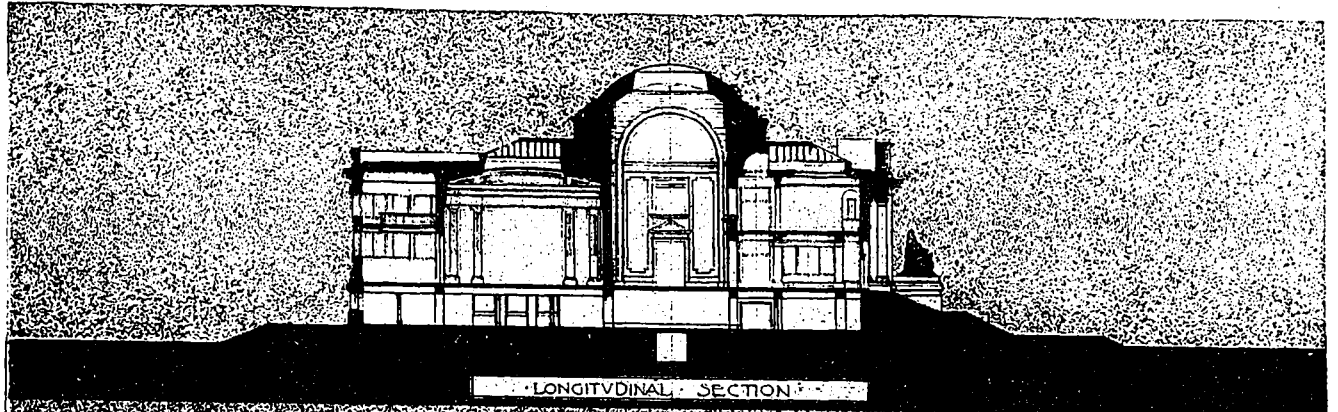
beyond the second the Provincial Museum containing on the lower floor the Department of Ethnology and History, and on the upper the whole Natural History collections in the suite of galleries open to the upper part of the War Museum.

Adjoining the service entrance and the administrative offices is the freight elevator connecting the basement store and work room with the War Museum and the Provincial Museum galleries.

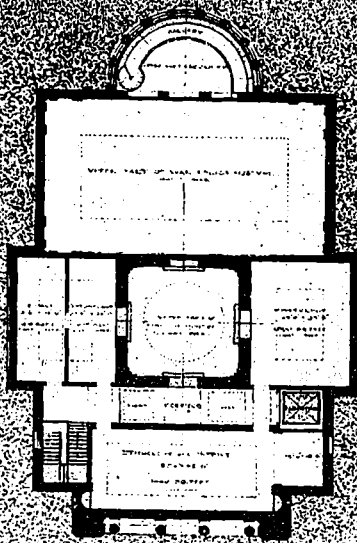
The main internal architectural features are the tablets for the honor rolls on the piers and obelisks surrounding the Hall of Honor. The lower walls of the War Museum Courts provide



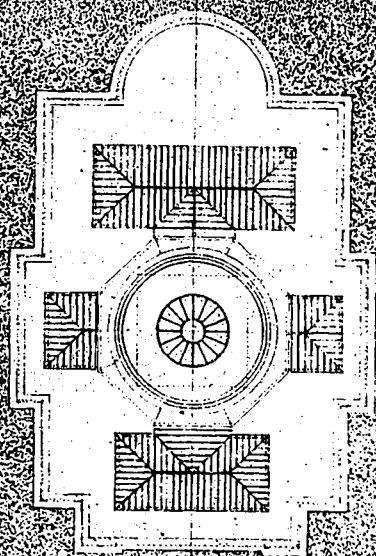
COMPETITIVE DESIGN, WAR MEMORIAL MUSEUM, REGINA, SASK.
 J. H. G. RUSSELL, ARCHITECT.



LONGITVDINAL SECTION



SECOND FLOOR PLAN



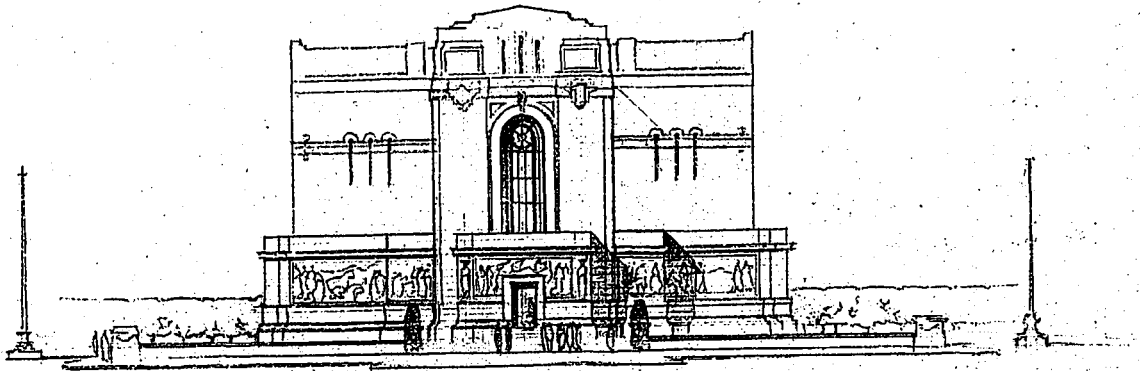
ROOF PLAN



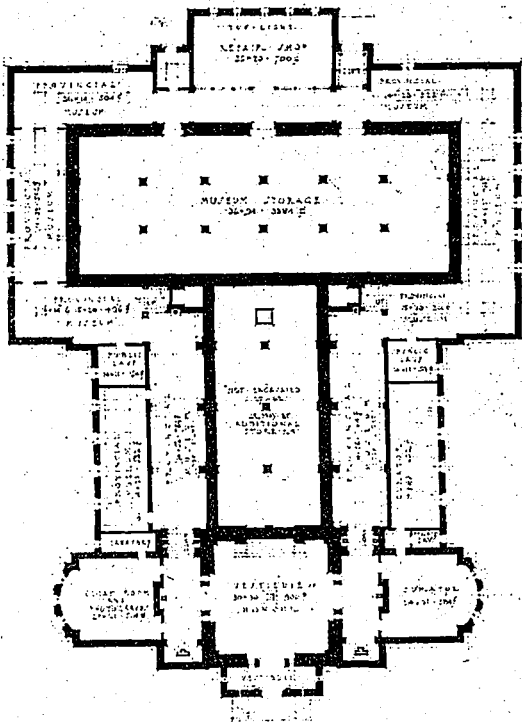
COMPETITIVE DESIGN. WAR MEMORIAL MUSEUM, REGINA, SASK.

J. H. G. RUSSELL, ARCHITECT.

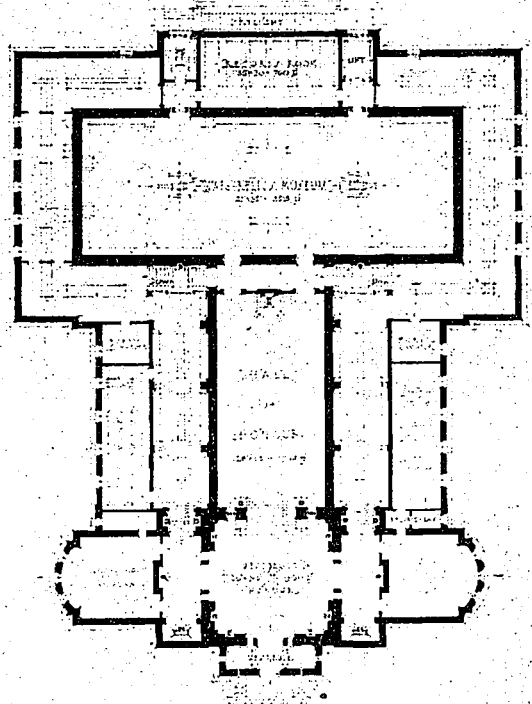
CONSTRUCTION



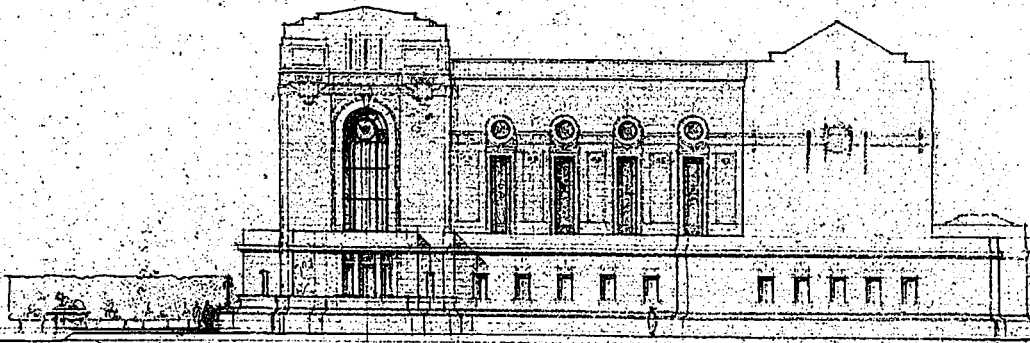
FRONT ELEVATION



PROVINCIAL MUSEUM - FLOOR PLAN



WAR MEMORIAL MUSEUM - FLOOR PLAN



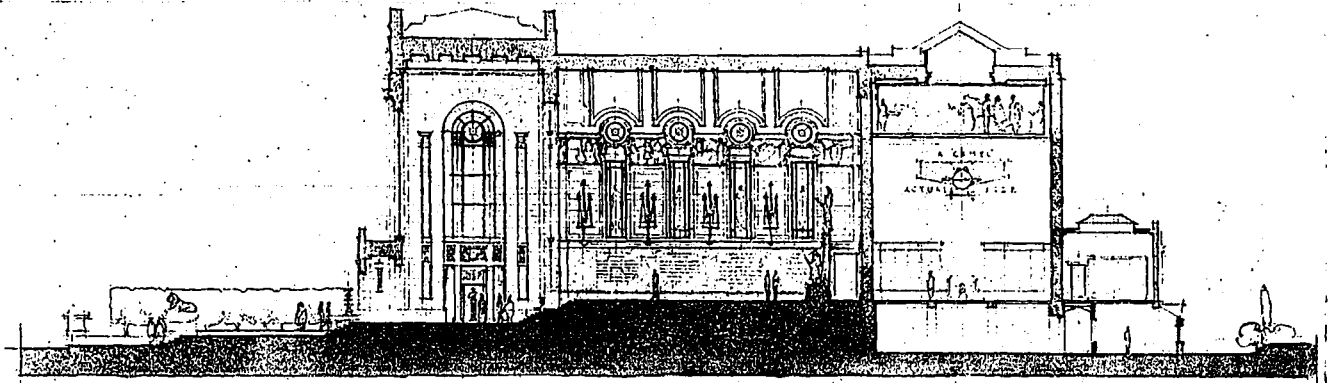
SIDE ELEVATION

COMPETITIVE DESIGN, WAR MEMORIAL MUSEUM, REGINA, SASK.

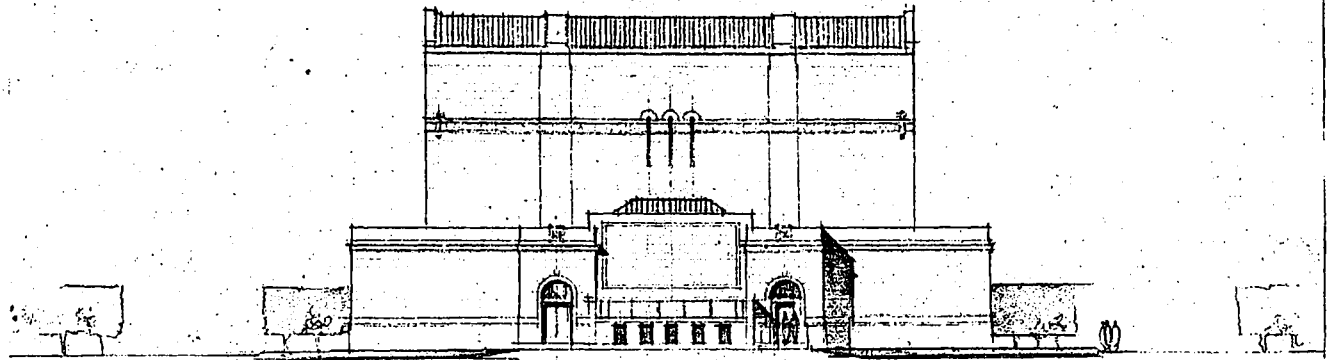
BROWN & VALLANCE, ARCHITECTS.

places for large decorative paintings:—panoramic views of such historic battle grounds as (1) Vimy Ridge, (2) Ypres, (3) The Somme Valley, and (4) Cambrai, are suggested. At the ends of the hall two large lunettes above the connecting galleries would be suitable for decor-

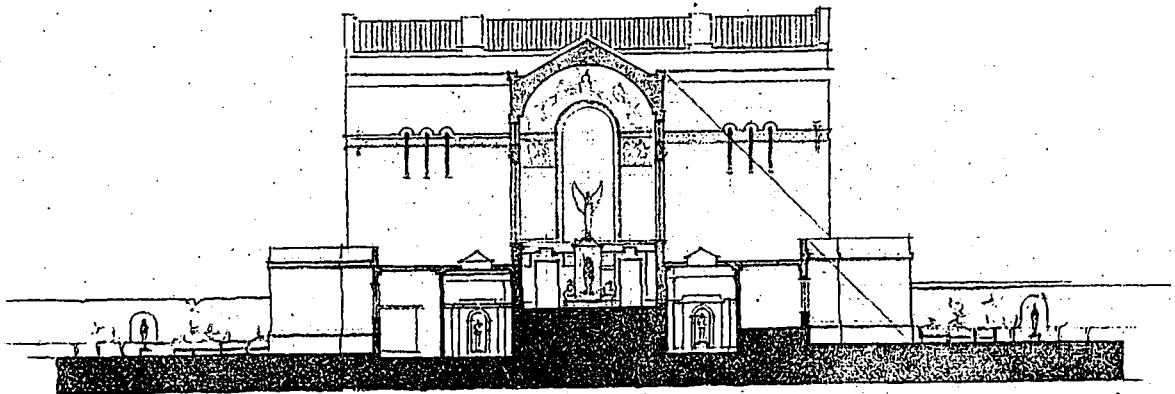
Accommodation	Story	Area Sq. Ft.	Totals Sq. Ft.
(A) Hall of Honor.....	Ground floor.....	1500	
Vestibule and Coat Rooms..	Ground floor.....	375	
Photograph Room		225	
Adjoining Connections		400	
(Exclusive of Main Stair)			
Hall of Honor, etc			2500
(B) North Court (1900)	Ground floor.....		
South Court (1600)	Ground floor.....	3500	



LONGITUDINAL SECTION



REAR ELEVATION



CROSS SECTION

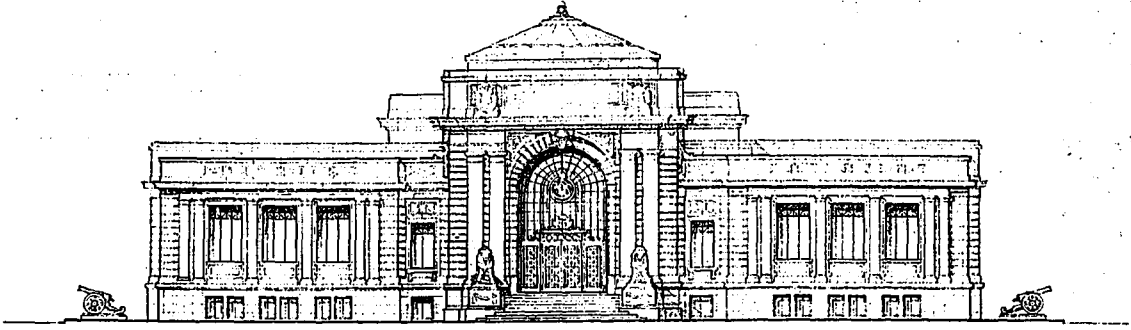
COMPETITIVE DESIGN, WAR MEMORIAL MUSEUM, REGINA, SASK.

BROWN & VALLANCE, ARCHITECTS.

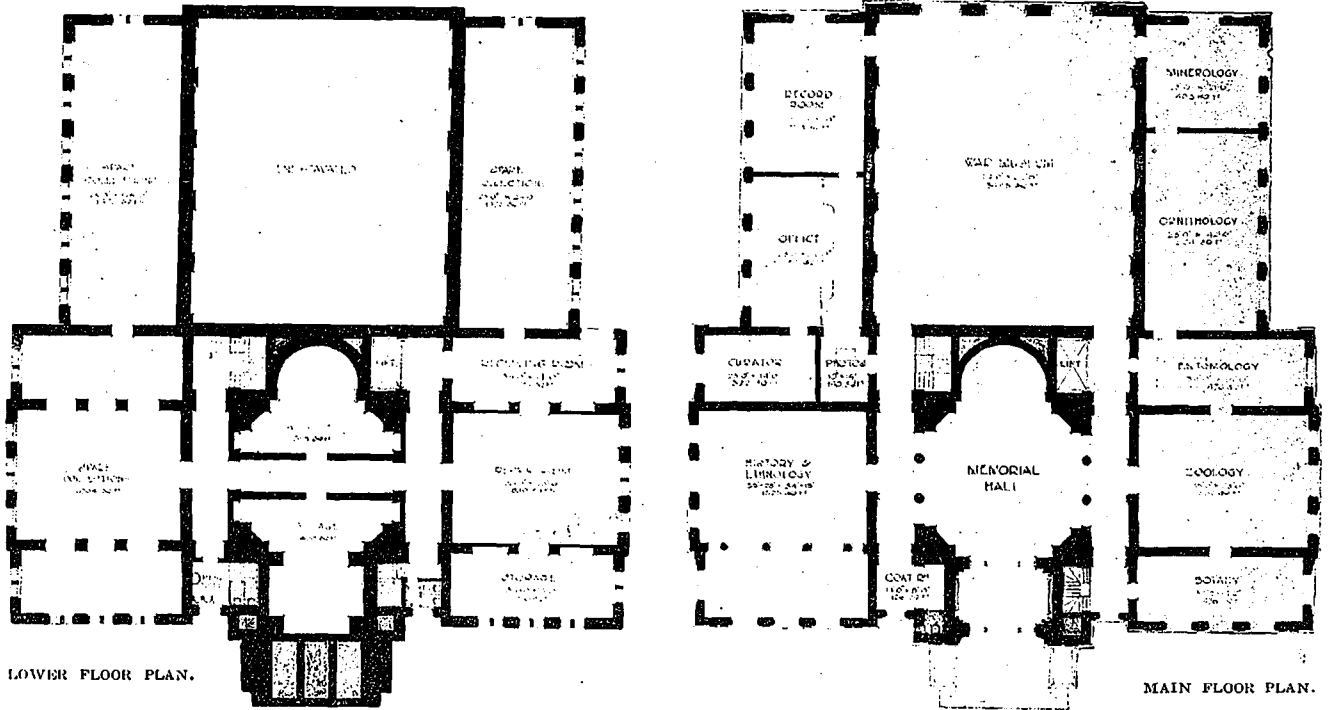
ative paintings symbolic of the spiritual aspects of the conflict, while below at the ends a good setting is provided for scenes of transport and war life. As top light is largely depended on, the ceilings are treated with simplicity.

The required floor areas are provided as follows:

Record Room	Main floor.....	700	
War Relics Museum			4200
(C) Zoology	First floor.....	1050	
Ornithology	First floor.....	1050	
Botany	First floor.....	520	
Mineralogy	First floor.....	520	
Entomology	First floor.....	520	
Ethnology	Main floor.....	700	
History (with Research Room)	Main floor.....	800	
Provincial Museum			5160
(D) Spare Collection No. 1	Main floor.....	225	



FRONT ELEVATION.

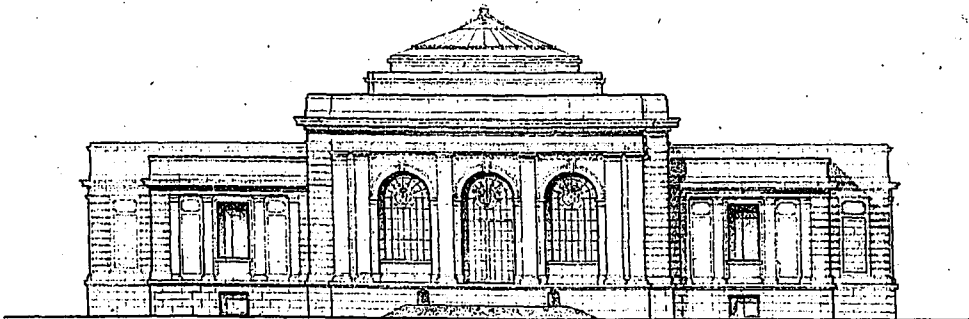


LOWER FLOOR PLAN.

MAIN FLOOR PLAN.



SIDE ELEVATION.

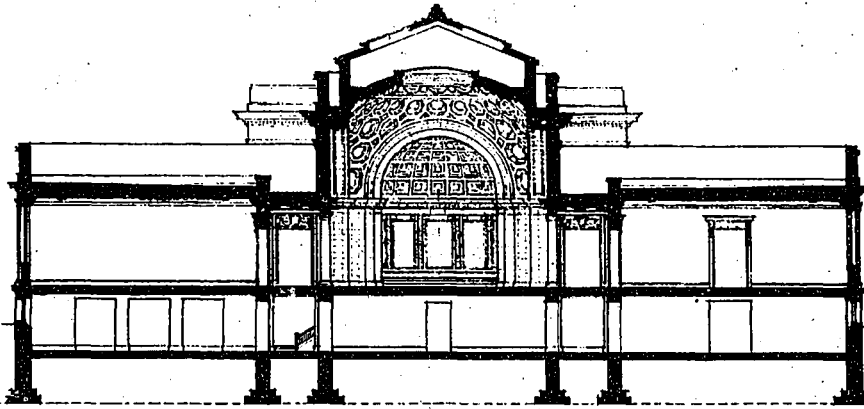


REAR ELEVATION.

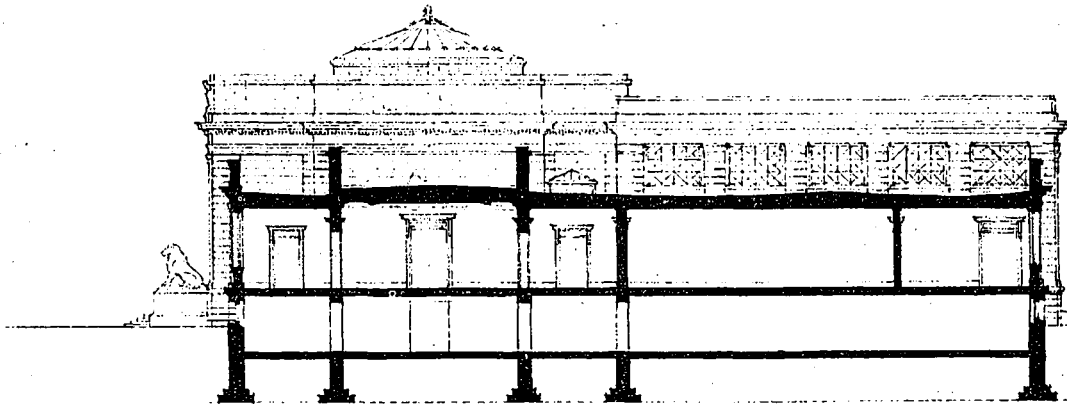
COMPETITIVE DESIGN. WAR MEMORIAL MUSEUM, REGINA, SASK.
 E. & W. S. MAXWELL, ARCHITECTS.

Accommodation	Story	Area	Totals	(G) Lavatories, etc.	Ground floor.....	300
		Sq. Ft.	Sq. Ft.	Fan Rooms, Heating, etc.	Basement.....	1000
Spare Collection No. 2	Main floor.....	225		Service etc.		1300
Spare Collection No. 3	First floor.....	350				
Spare Collection No. 4	First floor.....	500				
Stores No. 1	Basement.....	1000				
Stores No. 2	Basement.....	1000				
Stores No. 3	Basement.....	700				
Spare Collections and Stores			4000			

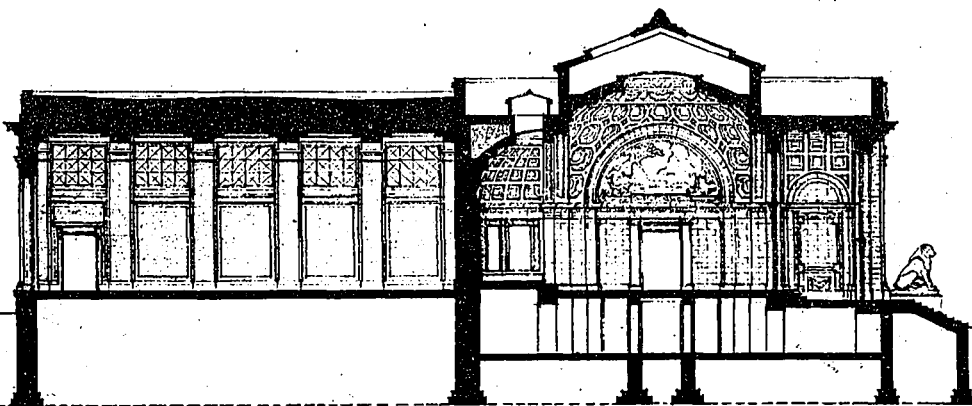
The design is for a structure of precisely 500,000 cubic feet above the grade and is itemized as follow, it being estimated that the build-



CROSS SECTION.



LONGITUDINAL SECTION.



LONGITUDINAL SECTION.

COMPETITIVE DESIGN, WAR MEMORIAL MUSEUM, REGINA, SASK.

E. & W. S. MAXWELL, ARCHITECTS.

(E) Repair Room	Basement.....	700	
3 Workrooms adjoining Museum Galleries....		300	
Repair and Workrooms			1000
(F) Private Room	Main floor.....	200	
General Office	Main floor.....	200	
Receiving Room	Main floor.....	200	
Curator's Office			1000

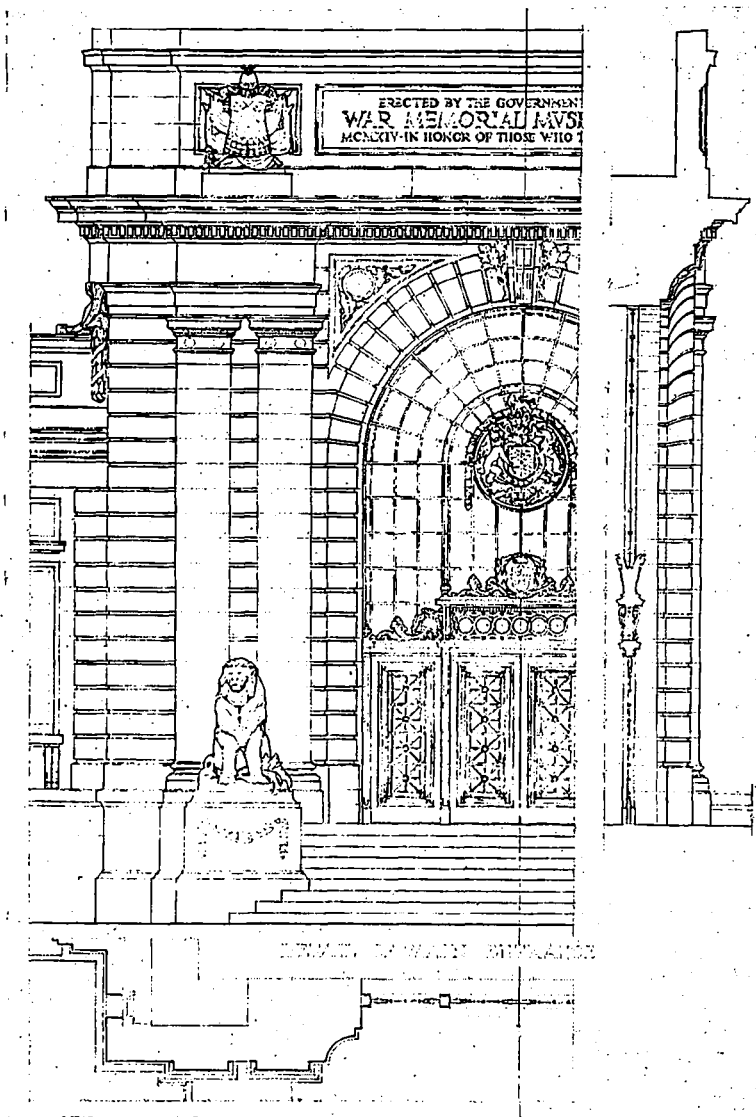
ing can be executed with very adequate embellishments for the figure proposed—\$400,000.

	Cubic Ft.	Rate	Cost
I. Hall of Honor, Entrance, Staircase and Ends of War Museum			
Hall with connecting galleries..	160,000	\$1.20	\$192,000

	Cubic Ft.	Rate	Cost
II. Administration and Provincial Museum Galleries and Record Room	190,000	.60	114,000
III. War Relics Museum (Courts only, walls included in items I and II)	132,000	.25	33,000
IV. Basement (from below ceiling only)	80,000	.30	24,000
V. Foundation Work	20,000	.75	15,000
VI. Fountain to N. and steps at entrance	5,000	4.00	20,000
			\$398,000

COMPETITIVE DESIGN: BROWN AND VALLANCE.

In the study of the problem, the promoter's definite instructions have been kept in mind, that the importance and interest must centre



DETAIL.

COMPETITIVE DESIGN, WAR MEMORIAL MUSEUM, REGINA, SASK.
E. & W. S. MAXWELL, ARCHITECTS.

in the Hall of Honor and the War Relics Museum. The Provincial Museum, although given a secondary place, is conveniently arranged, with complete circulation independent of the memorial parts of the building.

The style of the building being left to the discretion of the competitors, no attempt has been made to follow the lines of the Parliament Buildings, but it has been kept in mind that any building within the grounds must harmonize with that already there.

According to the conditions of the competition, the area of the several rooms were optional, the exact area and division being left to the discretion of the designer. With these instructions in mind advantage has been taken of the conditions and the vestibule and Hall of Honor increased.

Careful computation has been made of the several parts of the building, and from the floor levels to the roof levels the cube is 654,000 feet. The estimated cost of the building, including ventilation, plumbing, carving, etc., is \$408,161.

COMPETITIVE DESIGN: J. H. G. RUSSELL.

As shown by the block plan, the building is to be located west and south of the Provincial Parliament Buildings, and placed on a terrace about 24 feet larger than the outside dimensions of the structure, and raised about four feet above the level of the street grade. The main longitudinal axis runs due east and west, which presents the greatest length to the principal approach from the city, provision being made on Albert Street for a wide central approach and a feature statuary group.

The building is three stories high with the exterior in Doric design to harmonize with the existing Parliament Buildings, the treatment being simple with little ornament, resulting in a dignified scheme emblematic of the purpose for which the building is intended. The plan is rectangular and symmetrical, permitting of simple construction. The basement or more properly the ground floor, is 12 feet in the clear, and the first and second stories each 16 feet in the clear. There is no basement in the ordinary meaning of the term, except a tunnel through the central portion for plumbing and heating pipes, and ventilating ducts, with a small space below the floor for branch lines.

On the ground floor, which is at a level about six inches above the grade, are the Curator's general offices with private office, toilet and vault; the repair room and workroom with a large entrance on the side so trucks may be driven in to unload large pieces; the spare collections and storage rooms, men's and women's toilet rooms, and stairs and elevators to the upper floors and down to the tunnel. There is also an entrance from the grade to provide convenient access to the offices.

The first floor is reached by a wide and acces-

sible flight of steps from which there are three imposing entrances to the main vestibule, opening from which there are the cloak room and the photograph room conveniently located. Opening from the main vestibule is the Hall of Honor, carrying up through the two stories to the dome ceiling. The War Relics Museum which opens from the Hall of Honor, is also carried up through the two stories. These two rooms are the main feature of the plan and have been treated in a simple but dignified manner, all unnecessary ornament has been eliminated in order to render them more adaptable to the purpose for which they are to be used. The record room opens off the rear of the War Relics Museum, and at either side of the Hall of Honor are the zoology and ornithology departments. The stairs are conveniently located to the left of the entrance, it not being necessary to make a memorial feature of them.

On the second floor are the departments for botany, ethnology and mineralogy at either side of the upper portion of the Hall of Honor, and across the front of the building is the departments of ethnology and history.

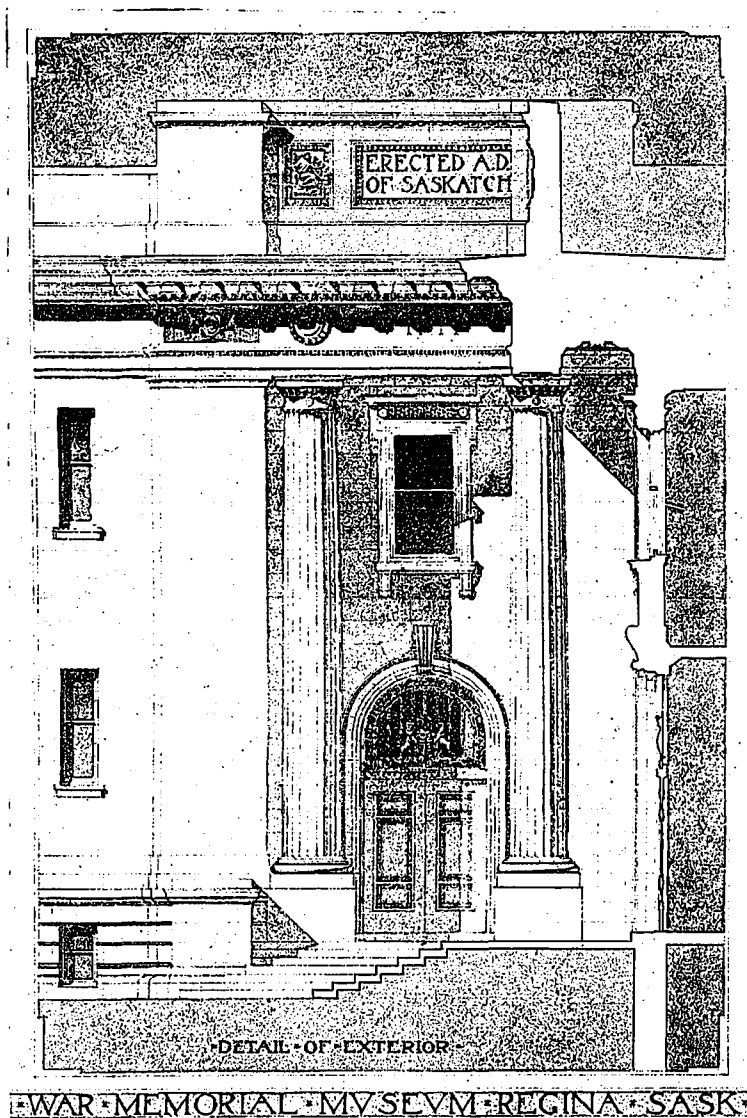
The intention is to make the structure fireproof throughout, with interior construction of steel and reinforced concrete columns, beams, floors, ceilings, roofs, etc. The dome would be of light steel and concrete construction with a copper covered roof, and the exterior walls faced with Tyndall stone. The finished floors in work-room, spare collections and stores on the ground floor, would be of cement, and in all corridors and toilet rooms on this and the second floor of terrazzo. The main entrance, vestibule and Hall of Honor would have marble marble floors, and all other rooms, floors of oak. Where marble and terrazzo floors occur there would be a marble base, and wood base for wood floors.

All windows to have marble stools and plaster jambs, the openings around the main entrance and Roll of Honor to have marble jambs. Wood trim is confined to openings between the main exhibition rooms to which there are no doors, and to the trim and doors to minor rooms. Stairs to have cast iron strings and raisers with marble treads and platforms. Doors to elevator would be of steel, finished to match adjoining trim.

The area of the building, exclusive of the steps, is 11,900 feet, and the height of 48 feet, on

which the cubical contents are figured, is from one foot below ground floor to the flat of the roof. The cubage and cost per cubic foot is estimated as follows:

	Sq. ft.	
Front Porch	13 x 62 ft. or	806
Vestibule Sec.	29 x 84 ft. or	2436
Centre Sec.	41 x 99 ft. or	4059
Rear Sec.	45 x 84 ft. or	3780
½ Circle Ext.	44 Diam. or	760
½ Circle Ext.	44 x 1½ ft. or	66
	11,907 x 48 ft. or	571,536 c. ft. x 75c
		\$428,652.00
Dome54 ft. diam. or 2290 ft. x 14 ft. is	32060
Dome Roof48 ft. diam. or 1809 ft. x 8 ft. is	14472
		46542 c. ft. x 50c is
		\$23,266.00

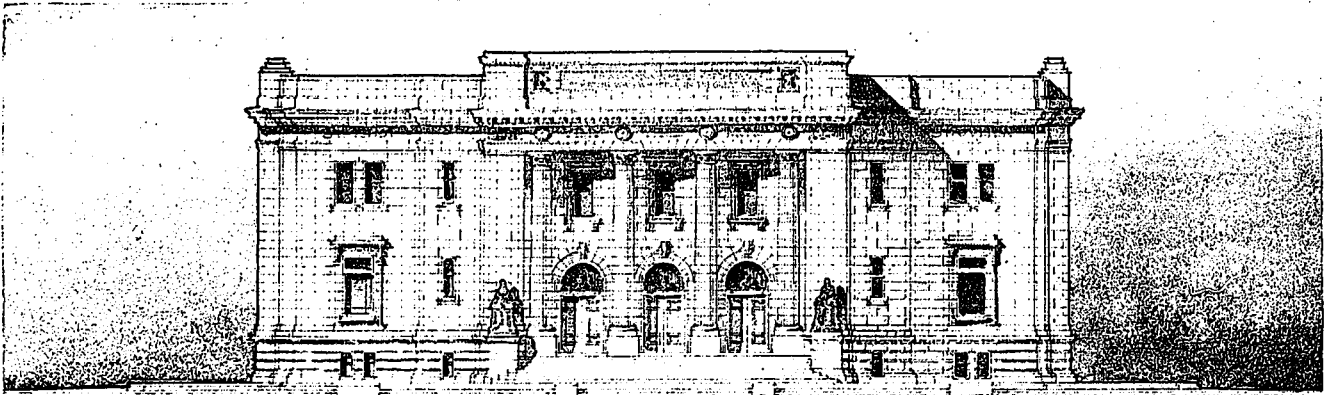


DETAIL OF ENTRANCE.
COMPETITIVE DESIGN, WAR MEMORIAL MUSEUM, REGINA, SASK.
STOREY AND VAN EGMOND, ARCHITECTS.

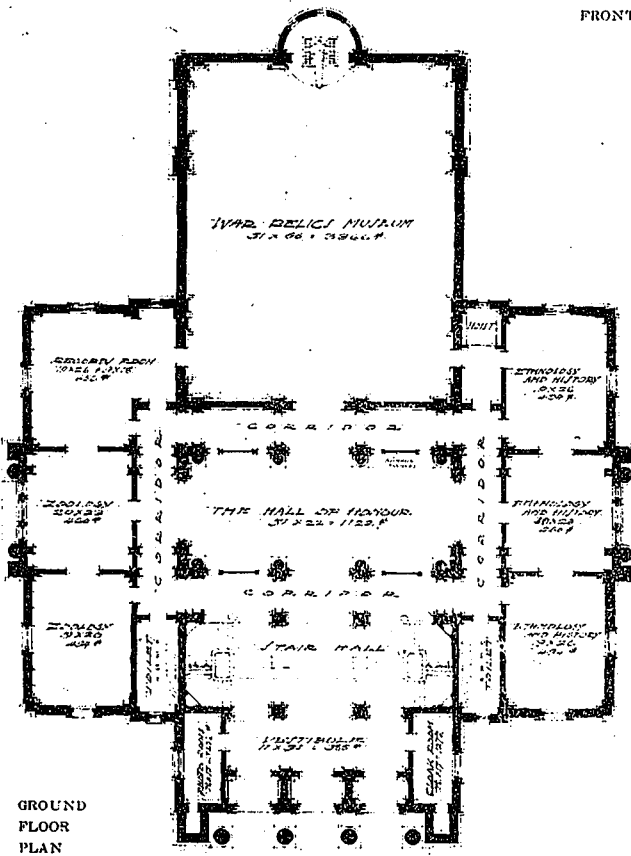
Tunnel 12 ft. x 99 ft. or 1188 x 10 ft. is	11880 c. ft. x 48c.	5,702.00
Main Steps	1972 x 7 ft. is	13804 c. ft. x 50c.
		6,902.00
		\$464,522.00

COMPETITIVE DESIGN: E. AND W. S. MAXWELL.

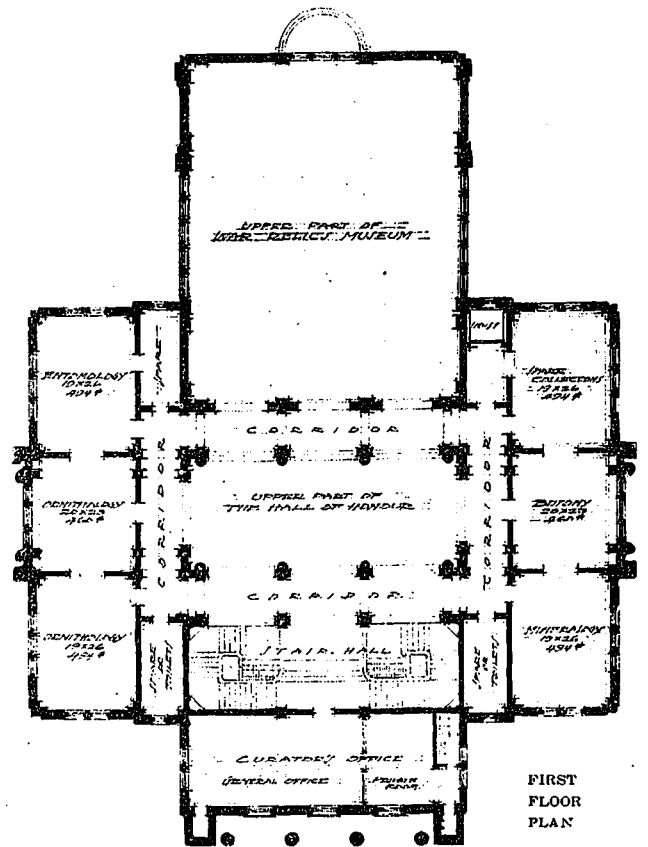
The Hall of Honor partakes of the nature of a Pantheon, the top lighting recalling the one at Rome, which is acknowledged one of the most admirably lighted interiors in the world. The semi-circular apse is designed to receive the tablets honoring those who participated in the war. It was considered that the Hall of Honor should



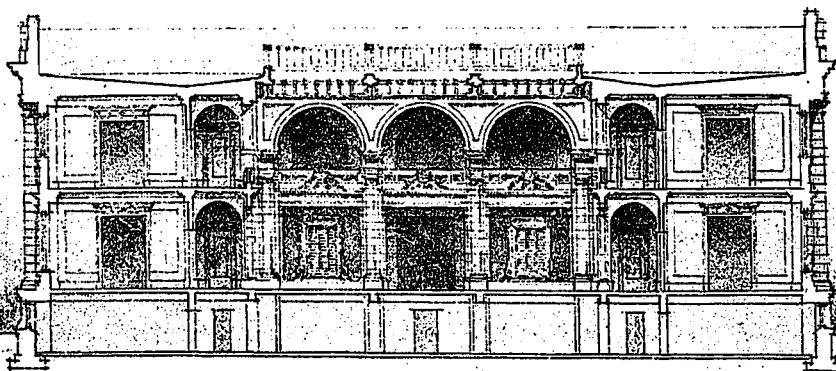
FRONT ELEVATION.



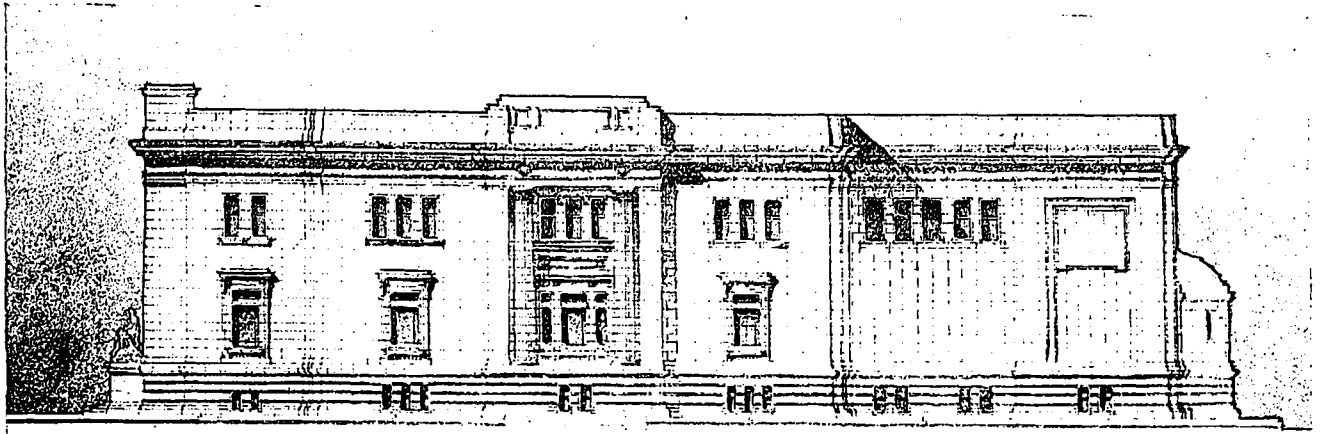
GROUND FLOOR PLAN



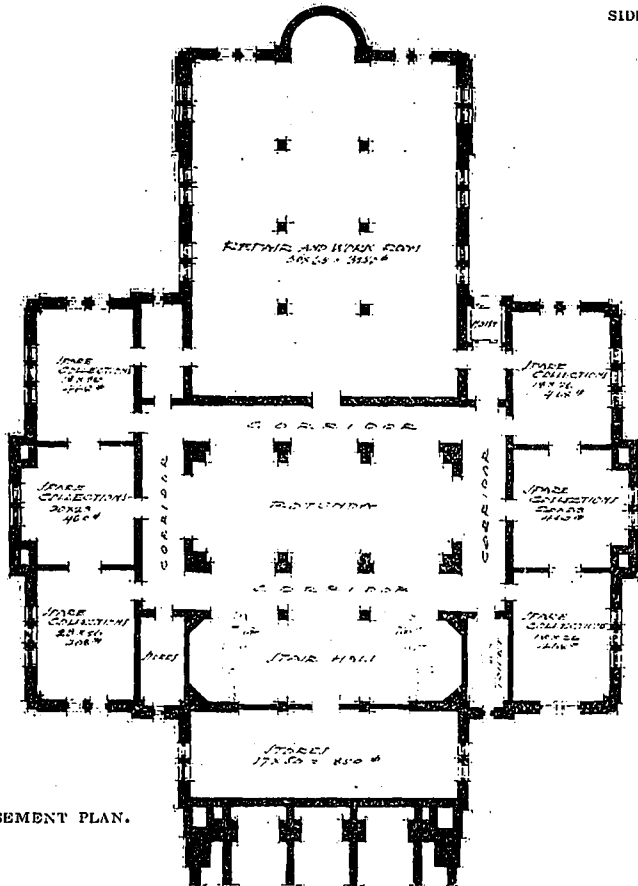
FIRST FLOOR PLAN



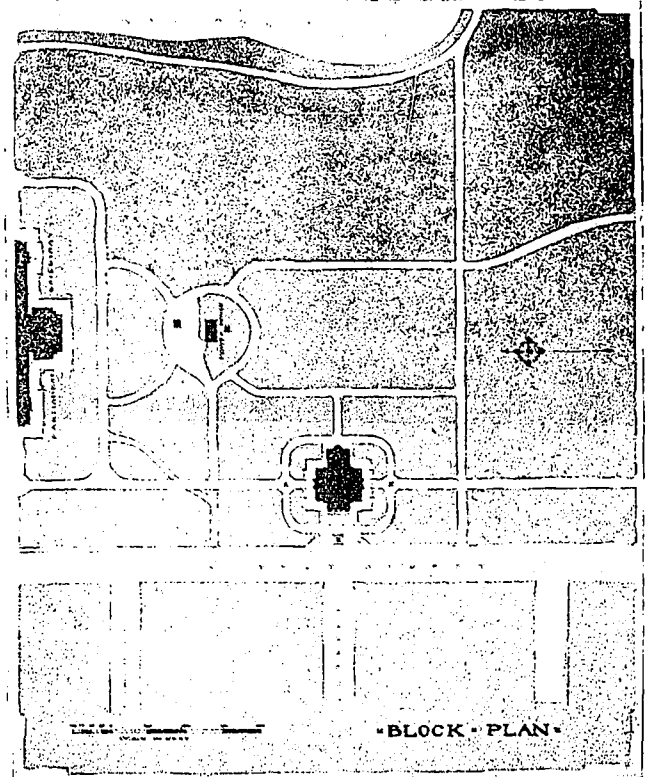
CROSS SECTION.
 COMPETITIVE DESIGN, WAR MEMORIAL MUSEUM, REGINA, SASK.
 STOREY & VAN EGMOND, ARCHITECTS.



SIDE ELEVATION.

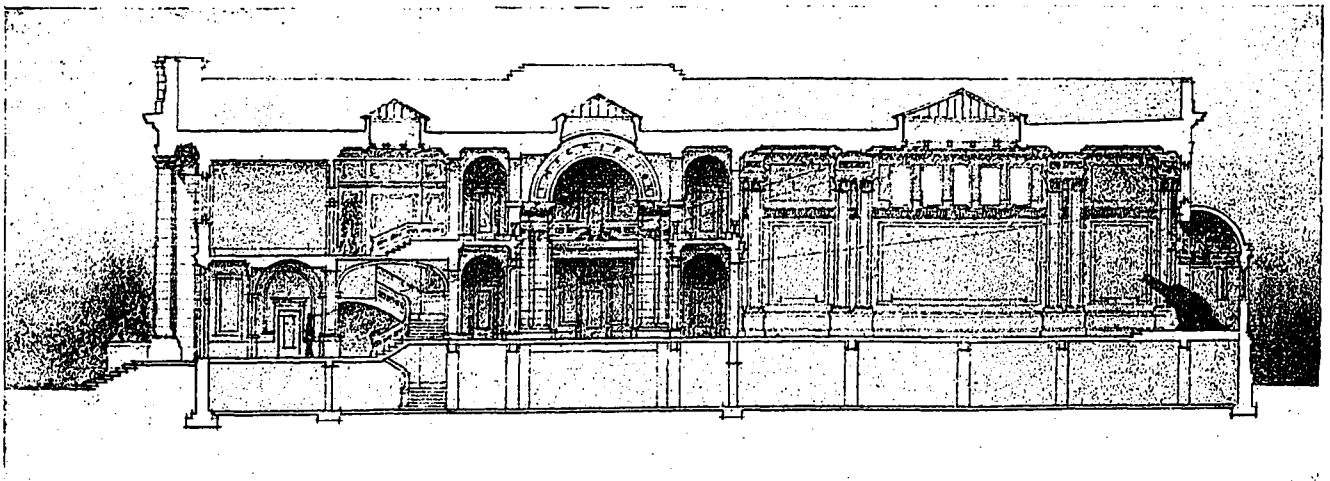


BASEMENT PLAN.



•BLOCK PLAN•

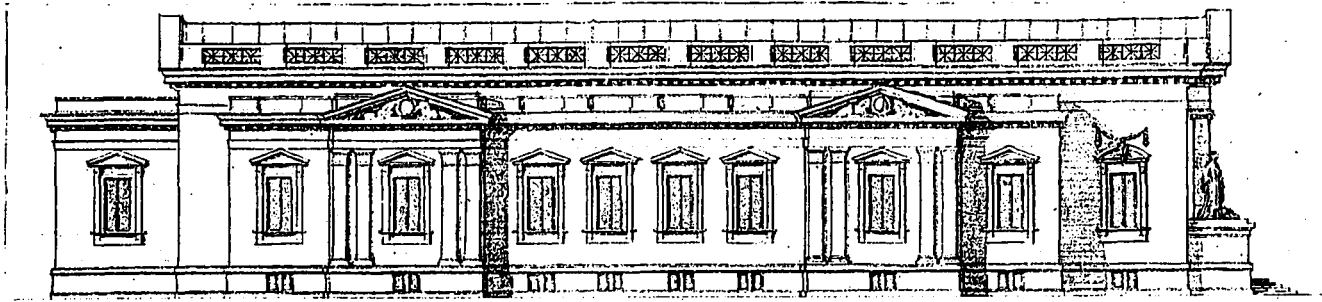
BLOCK PLAN.



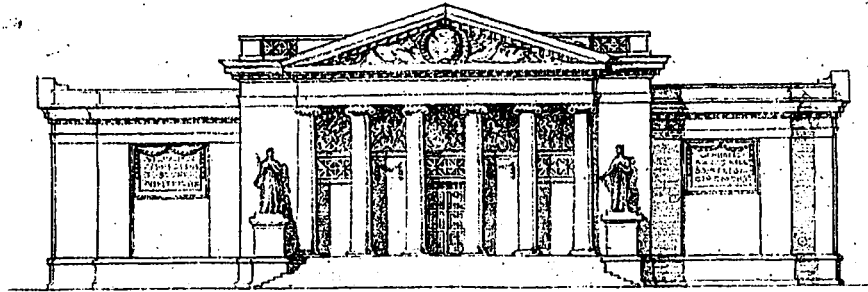
LONGITUDINAL SECTION.

COMPETITIVE DESIGN, WAR MEMORIAL MUSEUM, REGINA, SASK.
STOREY & VAN EGMOND, ARCHITECTS.

CONSTRUCTION



SIDE ELEVATION.



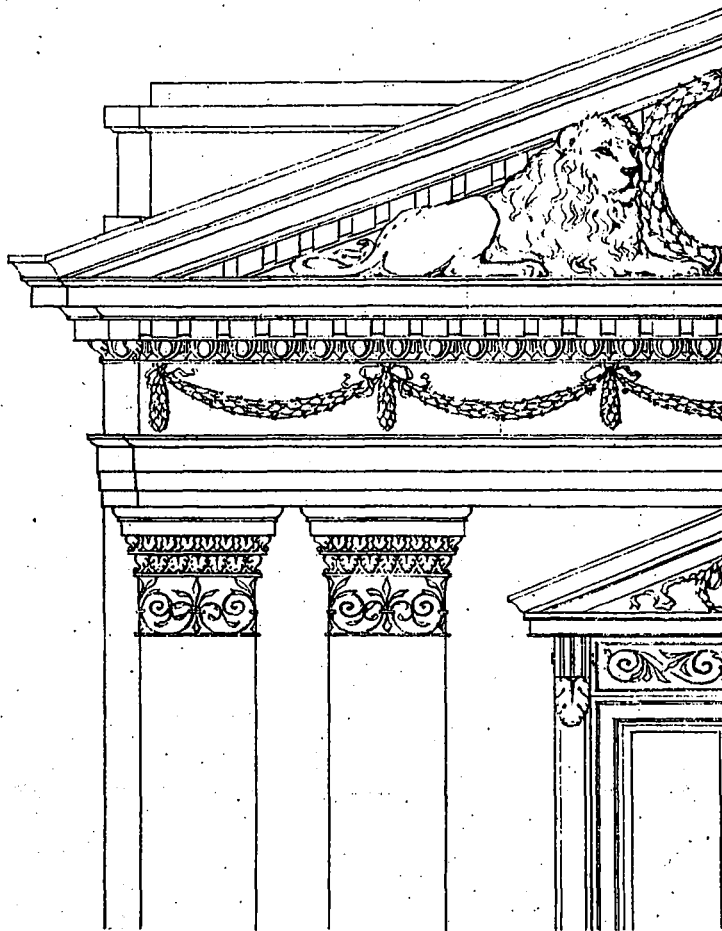
FRONT ELEVATION.

have the important central position in the plan, and the aspidal treatment was introduced in order that the tablets, which in their very nature will always be symbols of valor and sacrifice, should occupy a position of honor quite apart from the routes of circulation, and yet in evidence to all who enter the Museum. In adopting the aspidal treatment, there is a spiritual significance recognized and place of honor given for its commemoration.

The main entrance in its form and dominance in the composition, commemorates the triumph achieved in the great struggle for human rights. Its arched form and ample facilities for entering, all tend to express this idea. The two lunettes show maps, decoratively treated, indicating the places where the great battles took place.

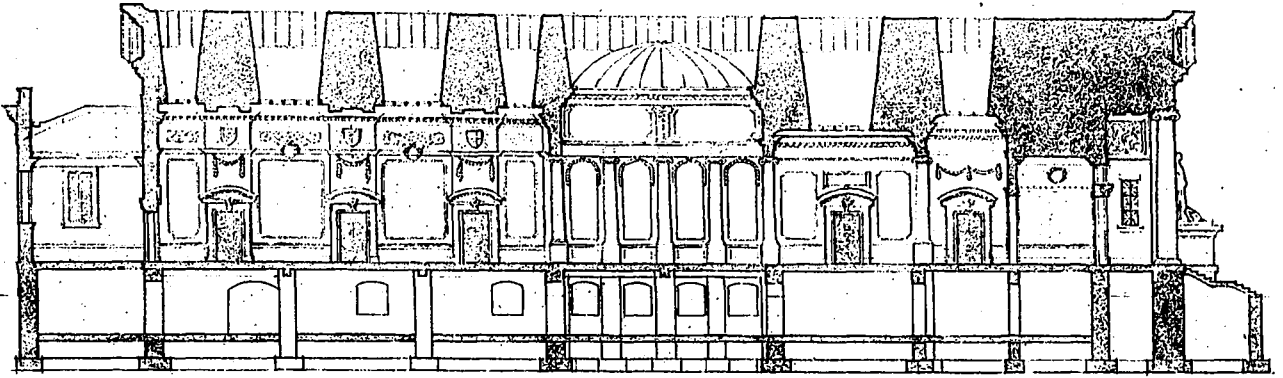
Lateral passages on each side give access to the War Relics Museum, a well portioned hall that will house in a fitting manner the various engines and implements of war from the smallest articles to the guns and aeroplanes which will require a spaciousness and height for their proper display. The Record Room opens off this Museum, conveniently placed next to the general office.

While the Museum rooms are of secondary importance, they nevertheless are well situated, well lighted apartments that in no way suffer by being made subsidiary to the more monumental features of the building. The Museum of Ethnology and History is placed north of the Hall of Honor, while the Museum of Zoology is to the south. Opening off the latter are the rooms for botany,

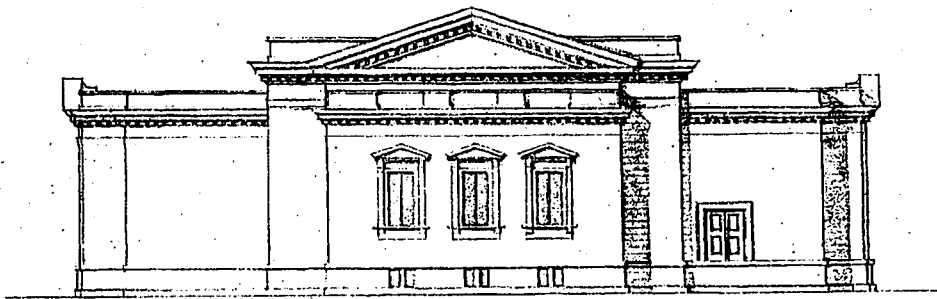


DETAIL.

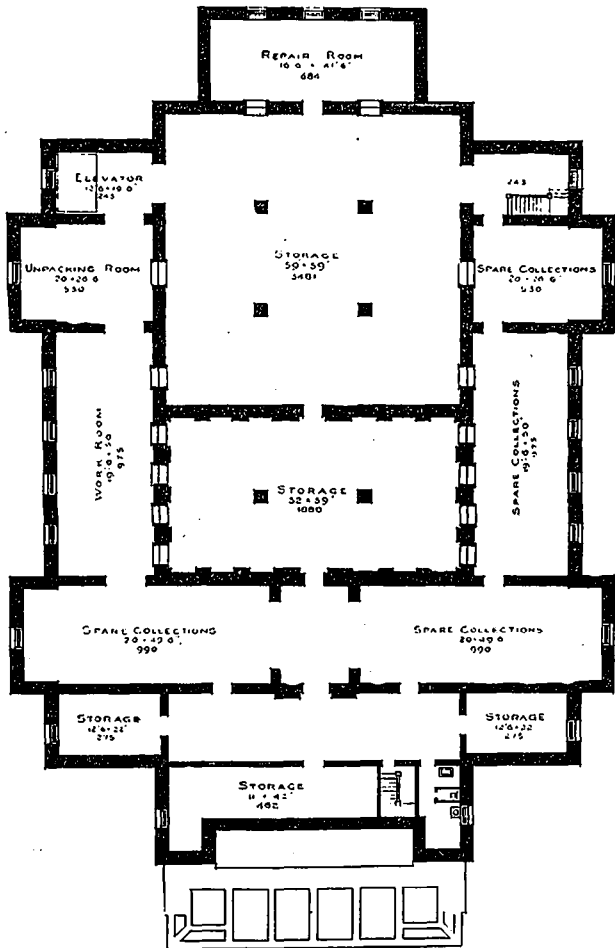
COMPETITIVE DESIGN, WAR MEMORIAL MUSEUM, REGINA, SASK.
R. G. BUNYARD, ARCHITECT.



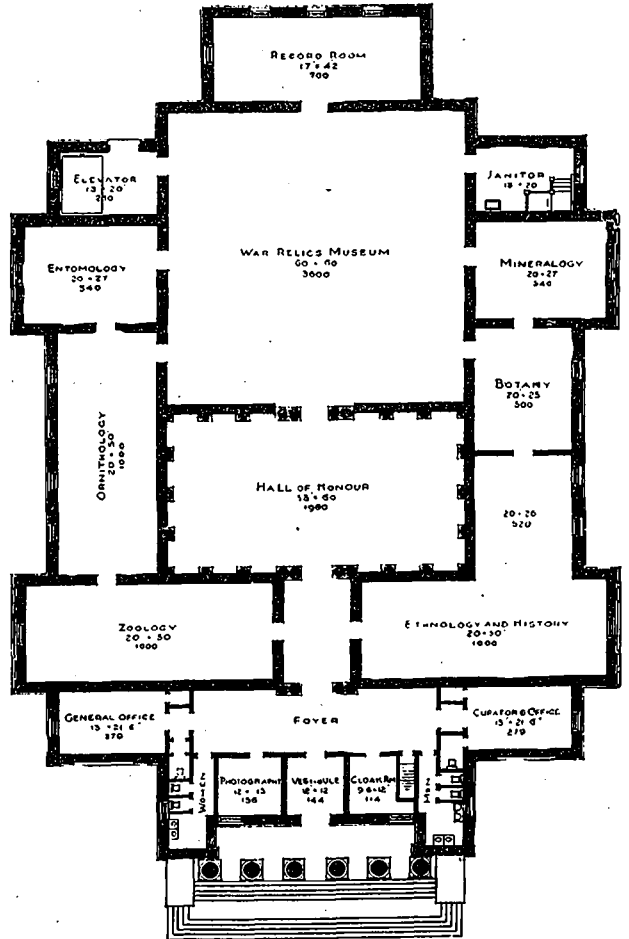
LONGITUDINAL SECTION.



REAR ELEVATION.



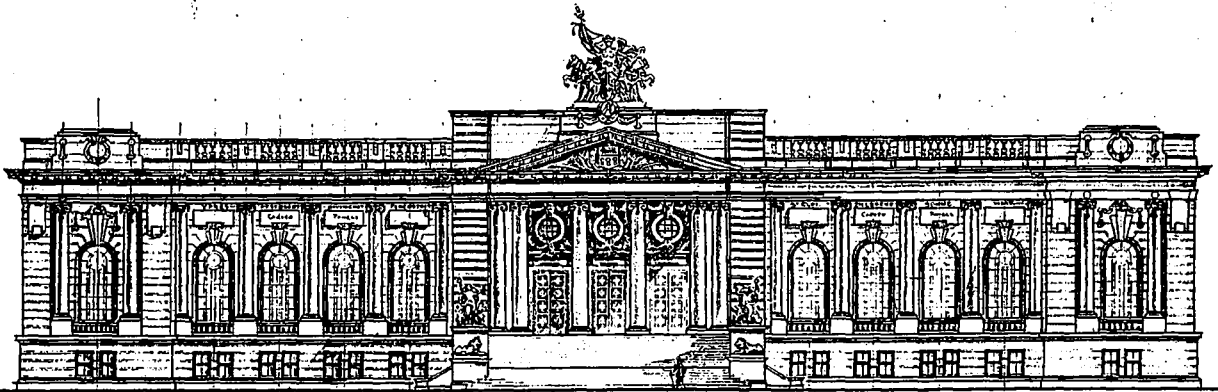
BASEMENT PLAN.



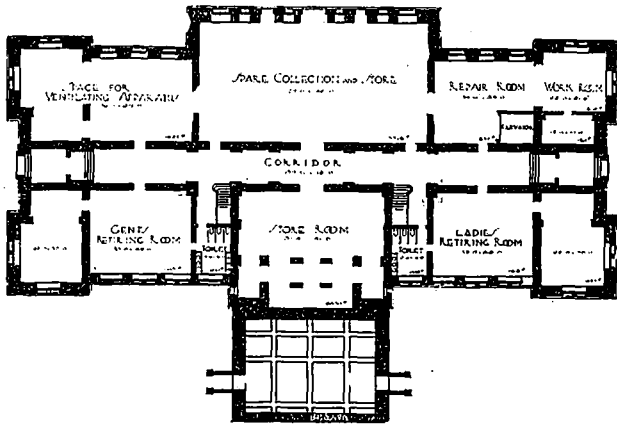
GROUND FLOOR PLAN.

COMPETITIVE DESIGN, WAR MEMORIAL MUSEUM, REGINA, SASK.

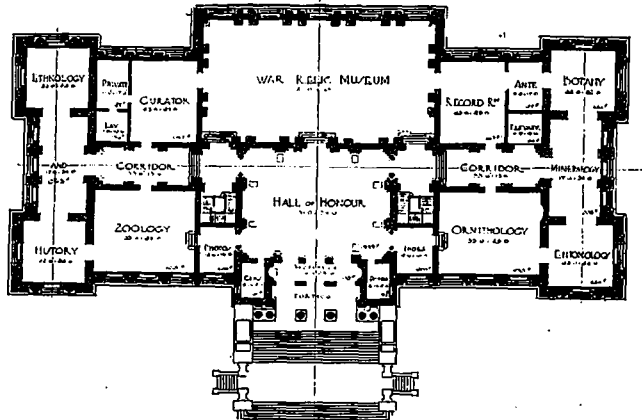
R. G. BUNYARD, ARCHITECT.



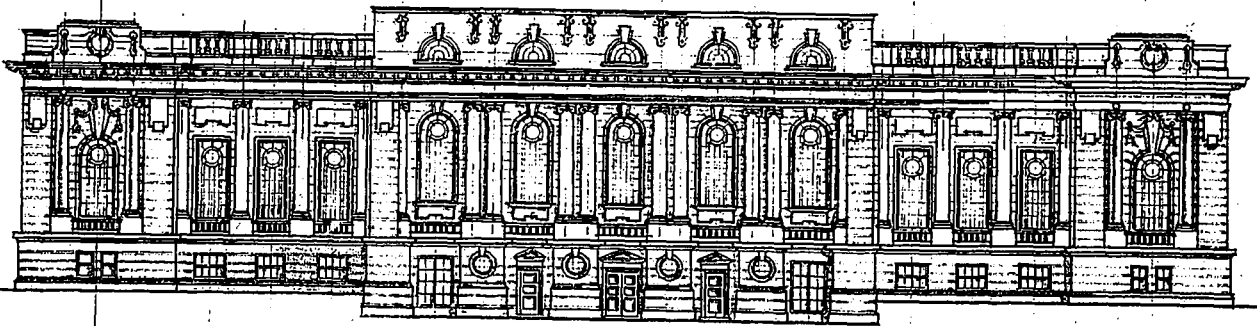
WEST ELEVATION.



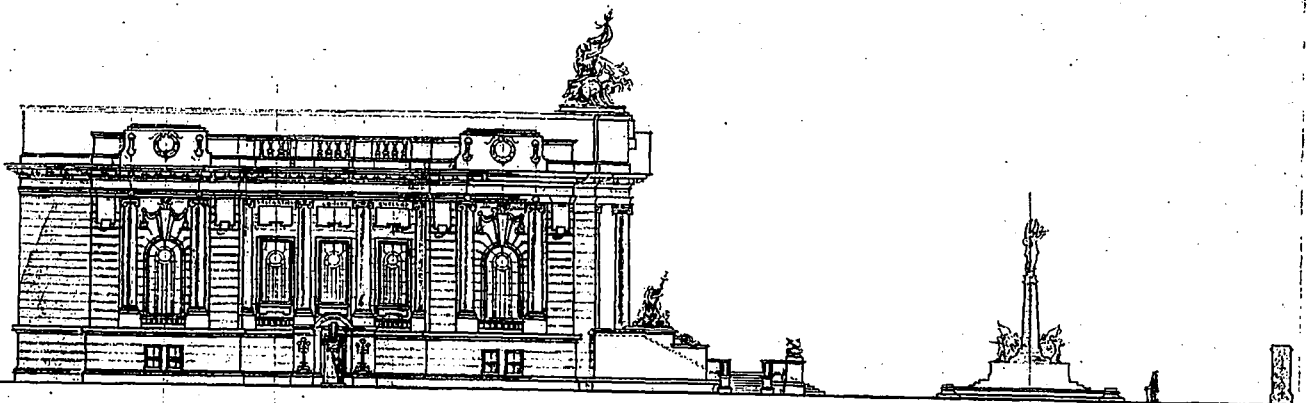
BASEMENT PLAN.



FIRST FLOOR PLAN.



EAST ELEVATION.



NORTH ELEVATION.

COMPETITIVE DESIGN, WAR MEMORIAL MUSEUM, REGINA, SASK.
DAVID WEBSTER, ARCHITECT.

ornithology, mineralogy and entomology. The Curator's private room and general office are easily accessible to visitors, next the records room, thus concentrating the administration of the building in one portion. In the lobby, giving access to the general offices, is located the cases for photographs, etc., thus if necessary being in-

living goods to the lower floor level. Provision has also been made for the delivery of large exhibits to the Museum Hall at the rear of the building, where an inclined roadway leading up to a special entrance is provided.

The cubical contents work out to a total of 496,327 cubic feet, allowance having been made for all foundations with a sufficient spread of footing to a depth of 12 feet below the mean level of the site, as well as for all parapets, dome and other features extending above the roof. At the unit of price of 80 cents per cubic foot mentioned in the conditions, the cost of the building would amount to \$397,061.60.

COMPETITIVE DESIGN: STOREY AND VAN EGMOND.

As the importance and interest of the building is the Hall of Honor and War Relics Museum, these have been placed in a central location. The Hall of Honor, being accepted as the more important room, is placed on the major and minor axis of the building. Both extend from the main floor to roof, or twice the height of the secondary exhibit rooms.

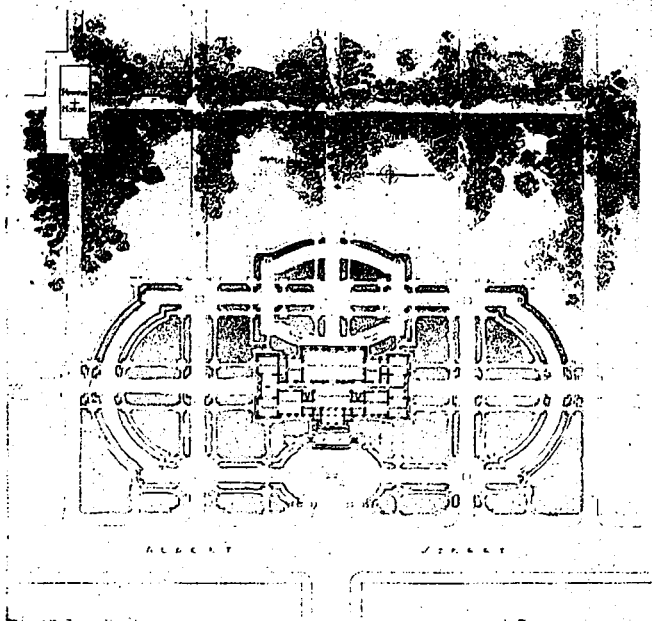
The entrance is through three arched portals into small storm vestibules which have been introduced owing to the extreme climatic conditions and thence into the main vestibule which has cloak room and photo room adjoining.

From the vestibule a comprehensive and interesting vista is afforded through the Hall of Honor and into the War Relics Museum to which one is naturally drawn through a succession of monumental rooms. The Hall of Honor has received careful monumental treatment with vaulted ceiling and side galleries, which afford recurring and different views as a circuit is made in the building. Provision has been made in the room for bronze tablets on which to record the names of men who fell in the war.

The War Relics Museum is lighted from High windows and a skylight, and in the simple treatment of walls and ceilings an interesting room is secured without elaborate detail, which would tend to detract from the exhibits to be placed in the room. At the extreme end a circular recess has been introduced to receive one of the large guns which the Province will have allotted to it. Adjoining this room is the small room required for records.

Through a careful study of the space required for Provincial Museum, it was concluded that the quite apparent subdivision of space would be to allocate the main exhibit rooms to the ground and first floors and place the spare collections, stores, repair and work rooms in the basement.

The stairs, although naturally located near the entrance to secure the desired circulation of the public, have been made to a certain extent secondary, as they lead only to rooms of the

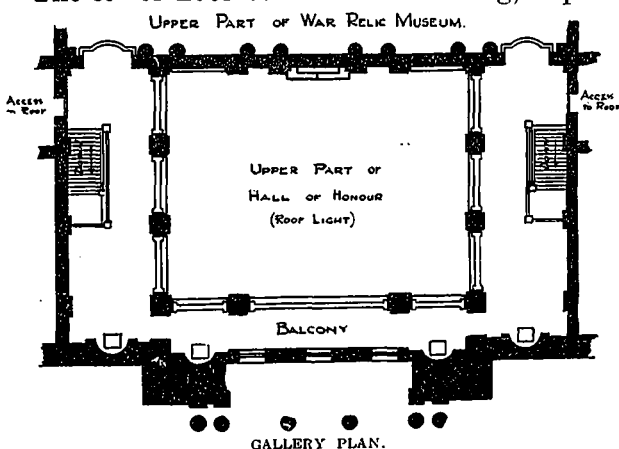


BLOCK PLAN.

the care of one of the assistants employed therein.

Two staircases giving approaches to the lower floor, a spacious goods hoist, a coat room, and a private lavatory occupy the remaining space on this, the principal floor.

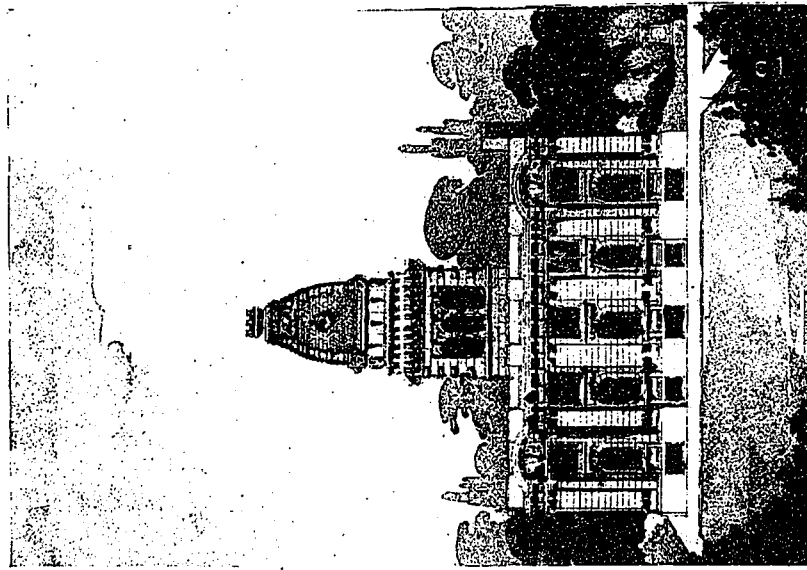
The lower floor contains a receiving, unpack-



COMPETITIVE DESIGN, WAR MEMORIAL MUSEUM, REGINA, SASK.

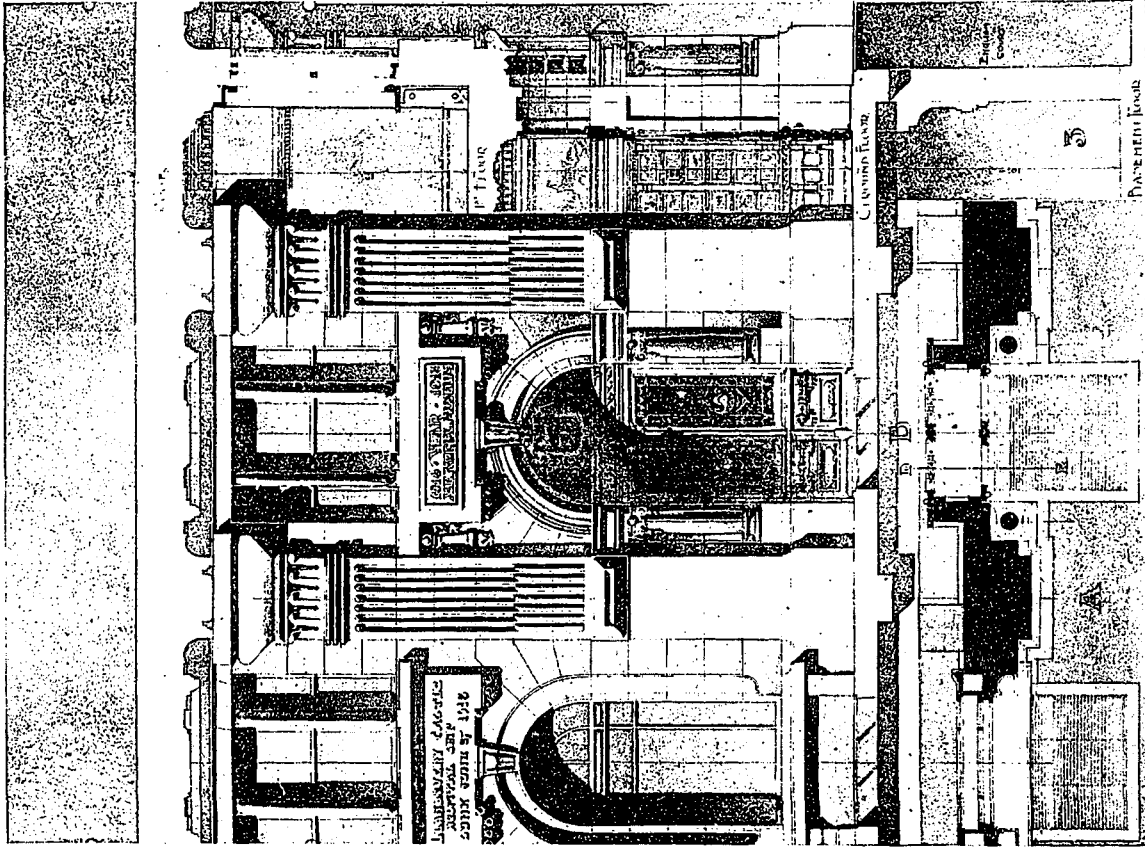
DAVID WEBSTER, ARCHITECT.

ing and storage room for exhibits, close to the goods hoist, with a separate entrance, a repair room, ample rooms for spare collections and stores, while public lavatories are provided for both sexes. The approach for vehicles to the receiving room is on an inclined drive, thus de-

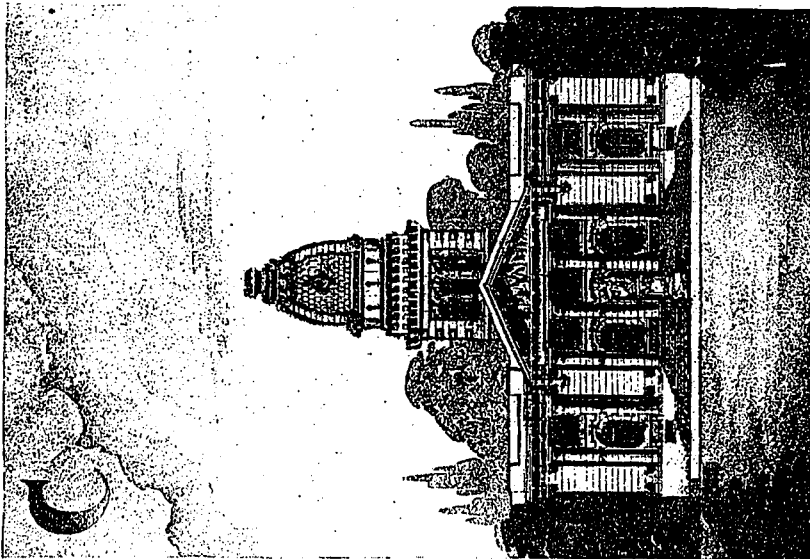


WEST FRONT.

EMIL DELAY, ARCHITECT.

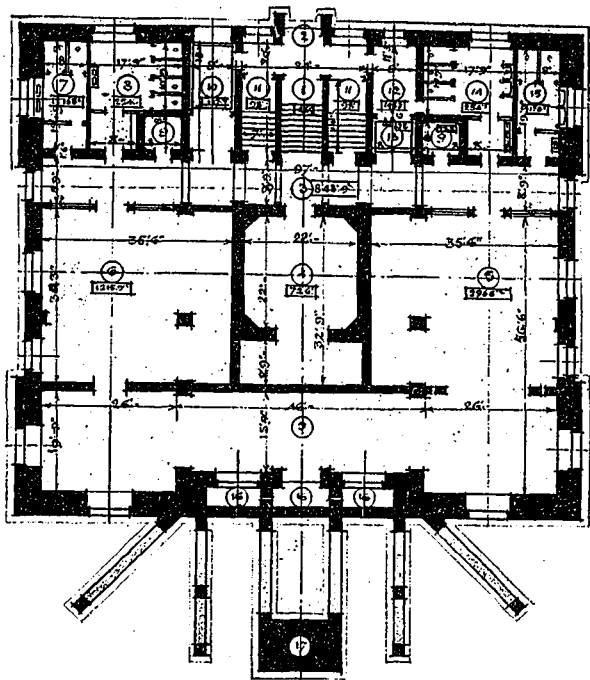


DETAIL.



NORTH FRONT.

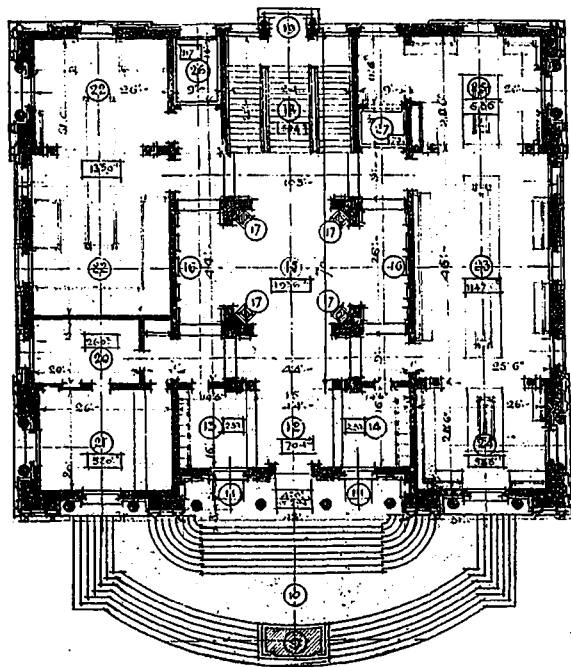
COMPETITIVE DESIGN, WAR MEMORIAL MUSEUM, REGINA, SASK.



BASEMENT PLAN.

- 1.—Main Stairway. 2.—East Exit. 3.—Vestibule. 4.—Small Room for Records. 5.—Spare Collection and Stores. 6.—Repair and Storerooms. 7.—Ladies' Lavatory (Staff). 8.—Ladies' Lavatory (Public). 9.—Vaults. 10.—Elevators. 11.—Store Room. 12.—Engine. 13.—Elevator for Public. 14.—Men's Lavatory (Staff). 15.—Men's Lavatory (Public). 16.—English Court with Drainage. 17.—Infrastructure Main Stairway and Statuary Group.

Provincial Museum, which are themselves of secondary importance. It will be noted that the general arrangement of stairs and rooms provides for the proper circulation of visitors, as required in a museum. One can make a com-

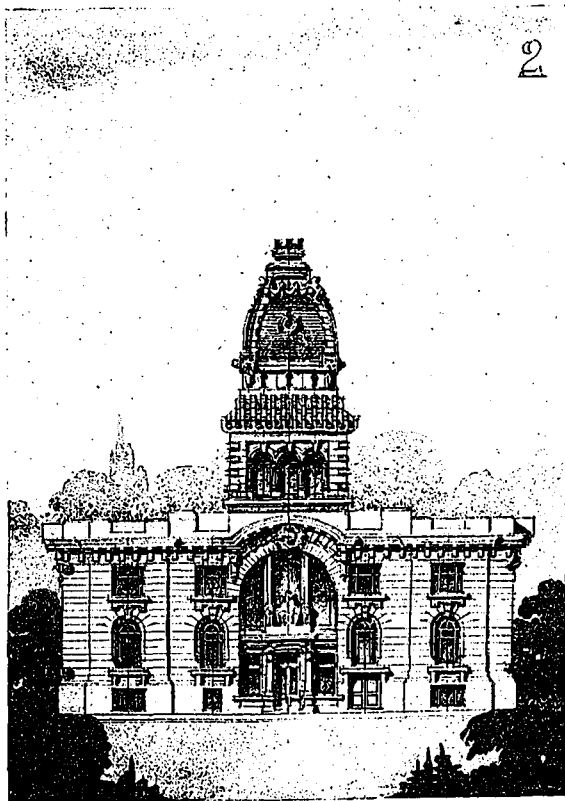


GROUND FLOOR PLAN.

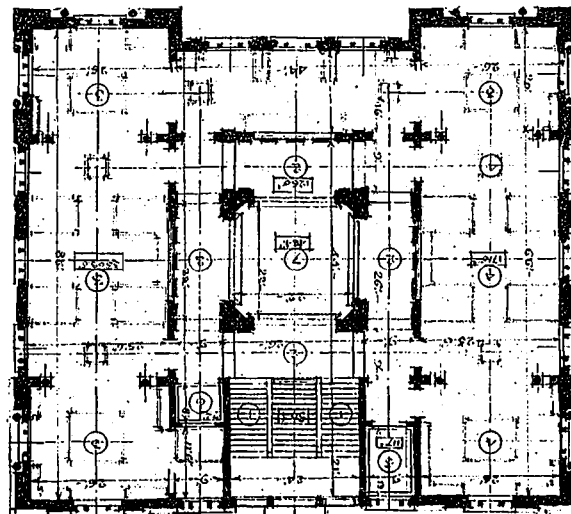
- 9.—Statuary Group. 10.—Main Entrance Staircase. 11.—Portico. 12.—Vestibule. 13.—Cloak Room. 14.—Photograph Exhibit Room. 15.—Hall of Honor. 16.—Bronze Tablets (Honor Roll). 17.—Busts. 18.—Main Stairway. 19.—East Exit. 20 and 21.—Curator's Offices. 22.—Zoology. 23.—Ornithology. 24.—Entomology. 25.—Botany. 26.—Elevator. 27.—Public Elevator

plete circuit of all rooms on both floors without retracing one's steps, thus according new notes of interest as the intercommunicating rooms are

2



EAST ELEVATION.



FIRST FLOOR PLAN.

- 1.—Main Stairway. 2.—Vestibule. 3.—War Relic Museum. 4.—Ethnology and History. 5.—Elevators. 6.—Public Elevator. 7.—Upper Centre of Hall of Honor.

COMPETITIVE DESIGN, WAR MEMORIAL MUSEUM, REGINA, SASK.

EMIL DELAY, ARCHITECT.

traversed and interesting views of the main rooms from cross-connecting corridors.

It was accepted that the side lights would be preferable to top lights for the Museum, and in

no case have windows been sacrificed to obtain an artificial exterior effect, which would not correspond with the interior requirements.

The Curator's offices have been placed in a central location over entrances and comprise general office, private office and toilet.

It is proposed to employ skeleton reinforced concrete construction with concrete floor slabs, beams, columns, etc., and hollow tile exterior walls faced with Tyndall stone. A reasonable amount of marble, stone, plaster staff, bronze, etc., would be used in the monumental portion of the building with marble mosaic floors, heavy linoleum probably being used in the Provincial Museum. The contents is calculated at 562,950 cubic feet, and the cost at \$397,920, or 71½ cents per cubic foot.

COMPETITIVE DESIGN: R. G. BUNYARD.

The Hall of Honor and War Relics Museum as the conditions requested are made the main features of the scheme. The Curator's office, general office, cloak room and lavatories and room for the sale and exhibition of photographs, all face an ample foyer. From this foyer the opening hallway gives an imposing perspective, and brings the Hall of Honor immediately to the visitor's notice. The War Relics Museum can be entered only from the Hall of Honor, thus bringing under observation of the visitor the most important part of the building.

The walls of the Hall of Honor are divided into twenty panels, each panel containing sufficient space to accommodate twelve memorial tablets of similar design. Between the panels and the stained-glass dome space has been left for fresco paintings, featuring episodes of the Great War. The treatment of this hall would be simple with columns and bases in marble, mosaic floor and cornices, etc., in ornamental plaster.

In the War Museum, top light would be used entirely. Columns in this room has been purposely omitted to afford full freedom for the placing of groups of exhibits of any size. The decorative treatment of the War Relics Museum would also be simple, consisting of openings finished in marble with shallow projections, cornices and ceiling design in ornamental plaster and floor of marble.

The War Records room is directly connected with the War Relics Museum and is plainly finished and amply lighted to make it suitable for the purpose intended.

The treatment of the museum rooms would be simple as suggested by the promoters. Lighting would be from the top and sides, with windows placed at such a height as not to interfere with the exhibits.

Access to the basement can be obtained from

either the front or rear of the building. The basement contains ample space for storage, etc., and would be finished in plain treatment.

The construction of the building would be fire-proof, the use of wood being almost entirely eliminated. The cost, based on a calculation of 55 cents per cubic foot throughout, would be \$409,980.

COMPETITIVE DESIGN: DAVID WEBSTER.

The general composition of the design, using the Ionic Order, is carried entirely around the building, thus presenting a pleasing appearance from whatever direction the building is approached. Space is provided for a statuary group in front of the main entrance which is approached by eight steps to a stone platform 46 x 14 ft., with an additional twelve steps leading up to the portico, the approach being flanked with suitable statuary. This entrance forms the main central feature, while at each corner is a projecting subsidiary feature. Around the building, above the windows, is a series of panels intended to be carved in low relief, portraying the historic actions in which Saskatchewan men took part.

From the portico the vestibule is entered through three doorways, each having two bronze memorial doors, the design of which embodies the badges of the different Saskatchewan units. The vestibule opens directly into the Hall of Honor, which has a gallery on three sides. There are three circular stained glass memorial windows over the doorway, which are brought into the Hall of Honor over the gallery on the west side. Also a stained glass memorial window on the north and south walls above gallery, the galleries being lighted through skylights, the ceiling lights having stained glass.

The floor of the Hall of Honor will be laid in black and white marble, the pilasters and walls being finished in marble to the cornice line, and plastered above. This room has forty-five lineal feet of wall space available for bronze tablets between the pilasters.

Opening from the Hall of Honor and adjacent to the main entrance is a small room for the exhibition of photographs, cloak room, porter's room and index room.

From the Hall of Honor, a seven-foot archway leads into the War Relics Museum, the floor being dropped two and a half feet lower than that of the former room, thus affording an excellent view of the exhibits on entering. The treatment of this room calls for three-quarter fluted Corinthian columns around the entire room, the ceiling being vaulted from the east to the west wall, the floor finished in marble blocks, and the walls and cornice in terra cotta, egg-shell gloss. The windows are placed ten feet above the floor, which gives good wall space

(Concluded on page 290.)

CONSTRUCTION

A JOURNAL FOR THE ARCHITECTURAL
ENGINEERING AND CONTRACTING
INTERESTS OF CANADA



H. GAGNIER, LIMITED, PUBLISHERS

Corner Richmond and Sheppard Streets.

TORONTO - - - - CANADA

M. B. TOUTLOFF, Editor

BRANCH OFFICES:

MONTREAL—171 St. James Street,
E. R. Milling, Representative.

WINNIPEG—336 Qu'Appelle Street,
F. C. Pickwell, Representative.

NEW YORK—505 Fifth Avenue,
H. M. Bradley, Representative.

CORRESPONDENCE.—All correspondence should be addressed to "CONSTRUCTION," Corner Richmond and Sheppard Streets, Toronto, Canada.

SUBSCRIPTIONS.—Canada and Great Britain, \$3.00 per annum. United States, the Continent and all Postal Union countries, \$4.00 per annum, in advance. Single copies, 50c.

ADVERTISEMENTS.—Changes of, or new advertisements must reach the Head Office not later than the twentieth of the month preceding publication to ensure insertion. Mailing date is on the tenth of each month. Advertising rates on application.

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

Entered as Second Class Matter in the Post Office at Toronto, Canada.

WESTON WRIGLEY, Business Manager

FRED. T. HOLLIDAY, Advertising Representative

Vol. XII Toronto, Sept., 1919 No. 9

R.A.I.C. and O.A.A. Agenda

Any association can only realize its objects by receiving the support of the individual members who belong to it, and it is therefore to be hoped that the joint meeting of the Royal Architectural Institute of Canada and the Ontario Association of Architects, which is to be held in Toronto on October 2nd, 3rd and 4th, will have the large attendance which is anticipated. In fact, this year's meeting promises in every way to be the most important assembly yet held, covering as it will a large number of subjects and discussions. Addresses will be delivered by a number of well-known architects on issues of special interest to the profession, and such subjects as relate to architectural education, the legal status of the technical profession, the use of the term "Registered," and Housing, have a prominent place on the programme.

The first day will be taken up with the meeting of the O.A.A., and the evening will be spent

by the members as guests of Prof. C. T. Currelly at the Ontario Museum of Archeology. At the mid-day luncheon on this day at the King Edward Hotel, the "Viewpoint of the Public as Regards the Profession" will be discussed.

On the second day the R.A.I.C. will hold their assembly, including a luncheon which will be enlivened by a round table discussion by the Hon. H. J. Cody, Minister of Education, Sir Robert Falconer, of the Toronto University, and Gen. C. H. Mitchell, Dean of the Faculty of Applied Science and Engineering. At the morning session, Professor Ramsay Traquair, of McGill University, Montreal, and Mr. W. D. Cromarty, of Ottawa, will discuss architectural education. In the evening there will be a private view of an architectural exhibition under the auspices of the O.A.A. at the Toronto Art Museum, at which visiting members will be invited to attend. Subsequent to this the members will have the opportunity of listening to an address by Mrs. H. Dunington Grubb on landscape work. The exhibition of drawings will extend for a full week and will be open to the public.

The third day will resolve itself into a joint session of the two bodies. "Town Planning Acts and their Results" will be discussed by Messrs. N. Cauchon and Thomas Adams; "Housing" by Messrs. W. D. Cromarty and James Govan; and "War Memorials" by Professor P. E. Nobbs and Mr. Herbert E. Moore. The day will conclude with a visit to the Royal Ontario Museum.

Altogether an excellent programme is provided and such questions as "Registration" and "Legal Status of the Technical Professions," which will be discussed by Mr. Ralph Shepard and Messrs. J. P. Hynes and Harry G. Acres, will undoubtedly lead to some definite action to secure better recognition for the profession, and with the other subjects under consideration result in a good amount of work being accomplished.

A Bigger and Better C. N. E.

The record-breaking attendance at this year's Canadian National Exhibition, coupled with its uninterrupted success in the past and the increasing demand for exhibit space, has clearly demonstrated the need of additional accommodations. Consequently it is a sign of a wide-awake and progressive policy to see the management seeking a plan for the enlargement of the grounds and buildings. What is essentially required is a definitely thought out working scheme, which will permit of a consistent development with reference to all future buildings and improvements. In announcing the competition for this purpose, however, the directors should have provided a more substantial induce-

ment than the three prizes offered, namely: First, \$600, second, \$250, and third, \$150. Any such scheme as would deserve consideration would involve elements of time, study and personal expense greatly in excess of what this sum justifies.

Moreover, the Board should have the services of an expert to advise it in preparing the programme and to assist in making the awards. Besides this it might also be advisable to extend the competition beyond the time set, Sept. 15th to November 1st inclusive.

Bringing within its scope the commercial and manufacturing resources of the country as well as expressing in purpose its arts and industry, an effort should be made to make the buildings of the Exhibition of the greatest architectural importance. A programme should therefore be prepared under expert direction to include a block plan of all existing structures, and with the conditions so drafted as to induce the very best architectural and landscape talent and ability to compete.

Practically all of the present buildings are overcrowded and inadequate for their purpose, and will eventually have to be greatly enlarged and remodelled or entirely replaced. The Exhibition has grown so rapidly that it is now the biggest annual event of its kind in the world. More exhibit space is demanded and better accommodation for the public required. The present buildings have served their time and purpose well. Considering that they were hurriedly built from year to year to meet increasing demands for space, they have not only fulfilled their original requirements, but were distinctly exhibition buildings in type.

Now the time has come to consider something on a more dignified scale, a series of buildings entering harmoniously into a general architectural and landscape scheme. In the object which they have set out to accomplish, the Board has a splendid opportunity. Immediate improvements contemplate the erection of several buildings, and these could be made the nucleus of a scheme to be modelled along the line of the Chicago World's Fair or the San Francisco Exhibition. Of course, the development of such a scheme would be gradual, but the present seems an opportune time to make a start. To do so and consider the problem intelligently would mean that Toronto would not only have an exhibition group of national importance, but one which would be architecturally of international repute.

War Memorial Museum, Regina

(Continued from page 288.)

around the entire room for exhibits, the height of the ceiling being forty-five feet.

The rooms containing the natural history and

scientific collections are easily approached, having access direct from the corridors, the Hall of Honor and the War Relics Museum.

The stairs are situated between the corridors and the Hall of Honor, and give access to the galleries, the War Relics Museum and the basement. The corridor walls will be finished with a 6 ft. terra cotta wainscott and plastered above, the floor being laid in English quarry tile with marble border. In the natural history and scientific rooms the floor will be of oak.

Retiring rooms and toilet accommodations for both sexes are in the basement. Space is also provided for spare collections, repair and work rooms and stores; the latter having three doorways opening direct to the driveway at the rear., which is brought down to the basement level.

The total cubical contents of the building is 876,037 cubic feet, and the estimated cost \$404,635.

COMPETITIVE DESIGN: EMIL DELAY.

The design submitted provides for a building in the Louis XVI style, having a Doric portico on the west front. The Hall of Honor, which occupies the centre of the building and extends up two stories, is lighted by twelve large windows and twelve loopholes placed in its upper part, the Curator's offices, protograph exhibit and natural history rooms being conveniently arranged on both sides and end of the space utilized for this purpose. The total height of the Hall of Honor would be 65 feet, and stone tablets placed horizontally along the walls would serve to recall the great battles in which the Canadians took part.

The first floor is arranged with balconies on all sides overlooking the Hall of Honor, and giving means of access to the War Relics Museum, and the departments of Ethnology and History.

The general treatment of the interior calls for considerable decorative work of a symbolical character. The cubical content is given as 426,092 feet, and the cost calculated at \$340,873, leaving \$59,126 of the sum available for the construction of the footings, outside main staircase, engineering fees, etc.

CONTRACTORS and SUB-CONTRACTORS

RETAIL STORE OF FAIRWEATHER'S LIMITED, TORONTO.

Awnings, American Tent & Awning Company.
Boilers, Kewaunee Boiler Company.
Brickwork, James A. Wickett Company.
Cabinet and Fittings, M. Fromson.
Carpentry, James A. Wickett.
Conduits, Conduits, Limited.
Cork Tile Flooring, Armstrong Cork & Tile Company.
Cornice Work, A. B. Ormsby Company.
Cut Etone, Geo. Oakley & Son.
Electric Wiring, Ramsden & Roxborough.
Elevators, Otis-Fensom Company.
Glazing, Toronto Plate Glass Company.
Heating, Fiddes & Hogarth.
Marble and Tile, Gibson Marble Works.
Painting, Fred. Cox.
Plastering, James Wickett Company.
Plumbing, Fiddes & Hogarth.
Roofing, A. B. Ormsby Company.
Store Front, Architectural Bronze & Iron Works.
Steel Sash, A. B. Ormsby Company.
Sprinklers, Canadian General Fire Extinguisher Company.
Weatherstripping, S. L. Hammond.
Wrought Iron Rails, Architectural Bronze & Iron Works.
Vacuum Cleaner, United Electric Company.