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CONSTRUCTION

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INTERESTS · OF · CANADA



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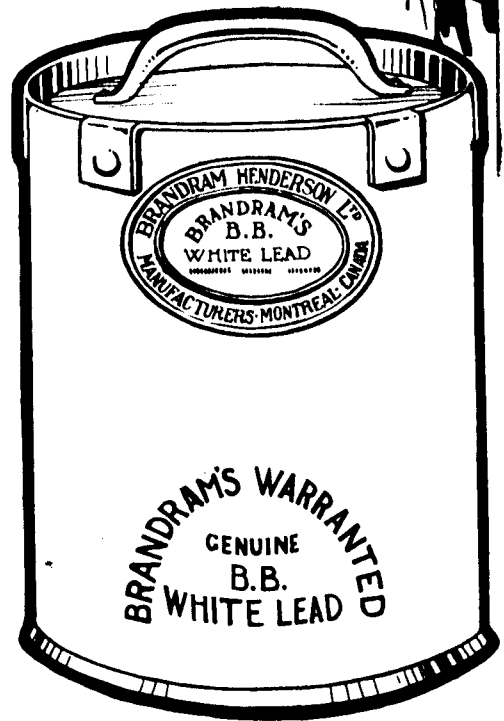
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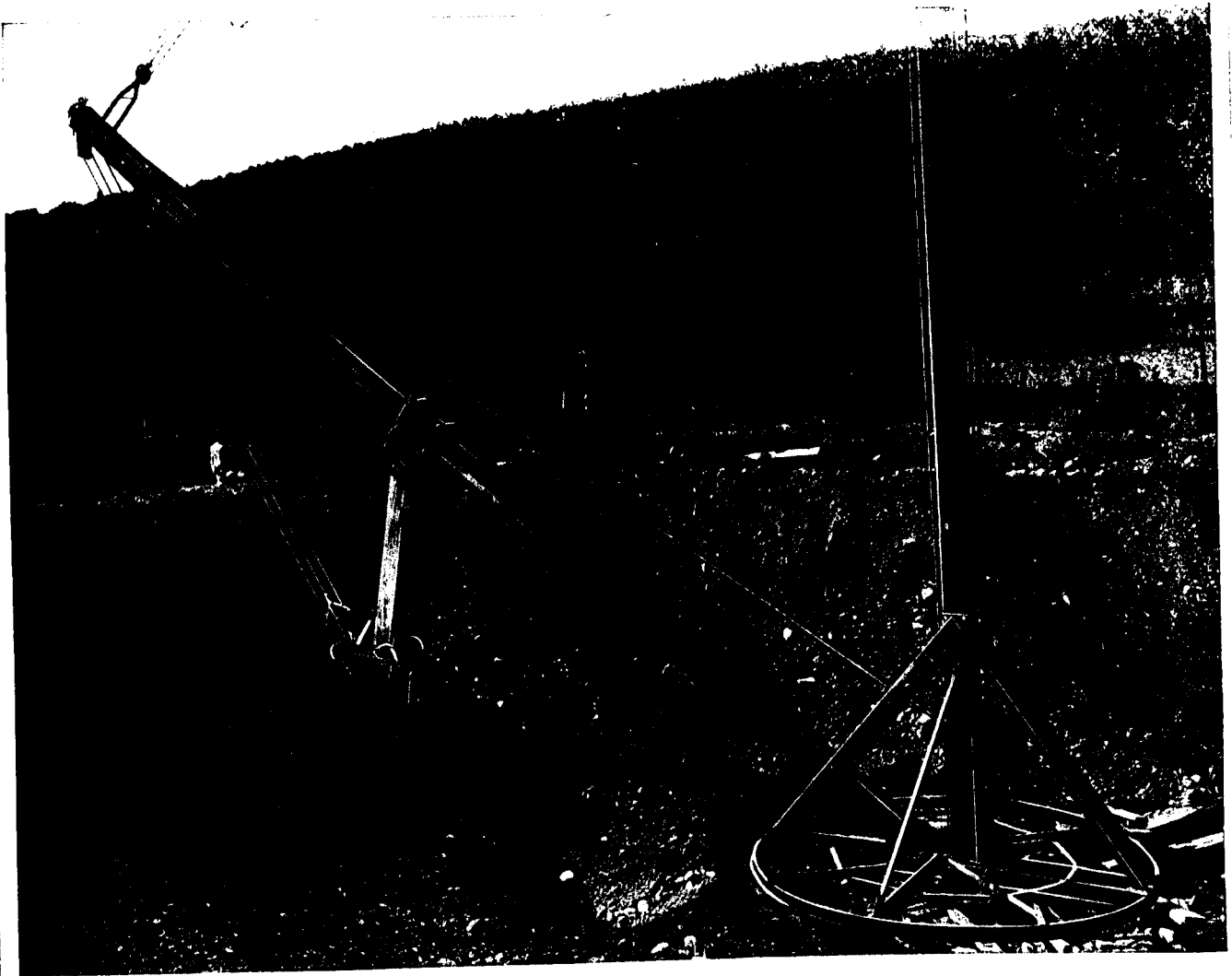
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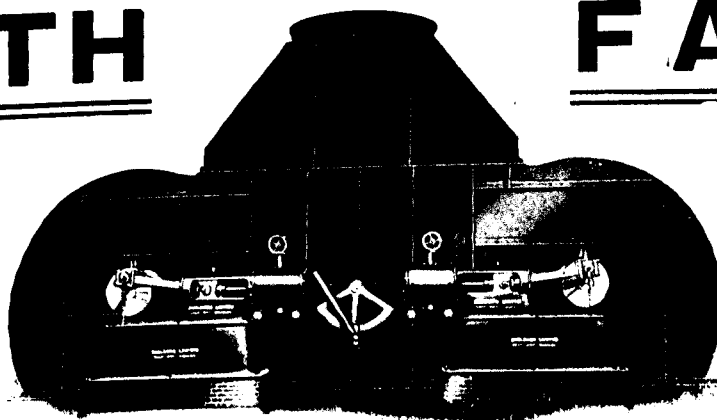
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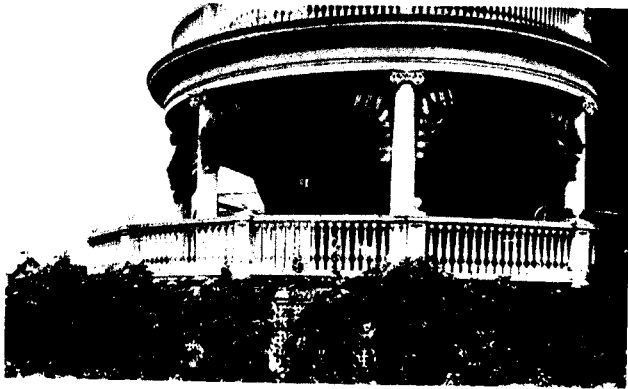


Interior of an Enclosed Porch at Wilmington, Del.

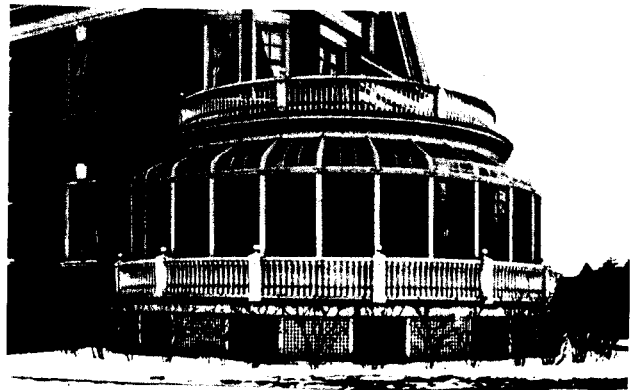
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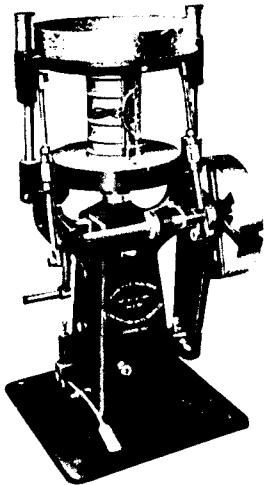
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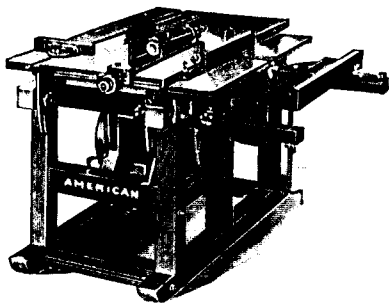
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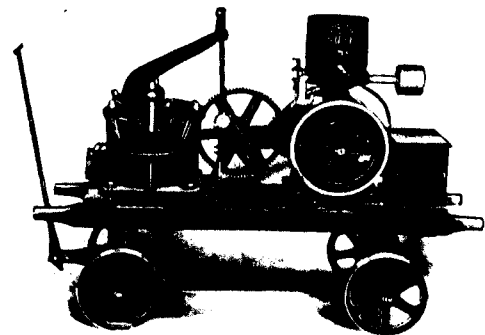
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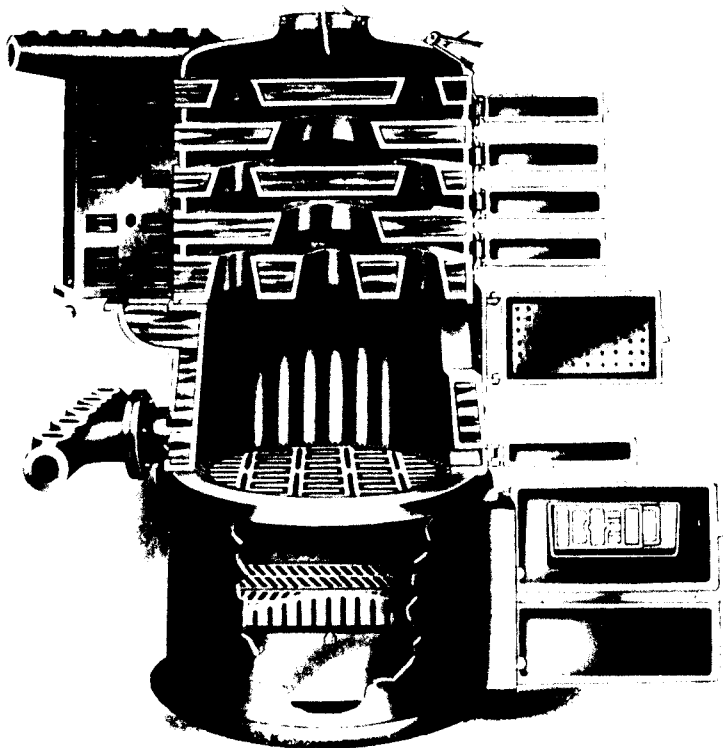
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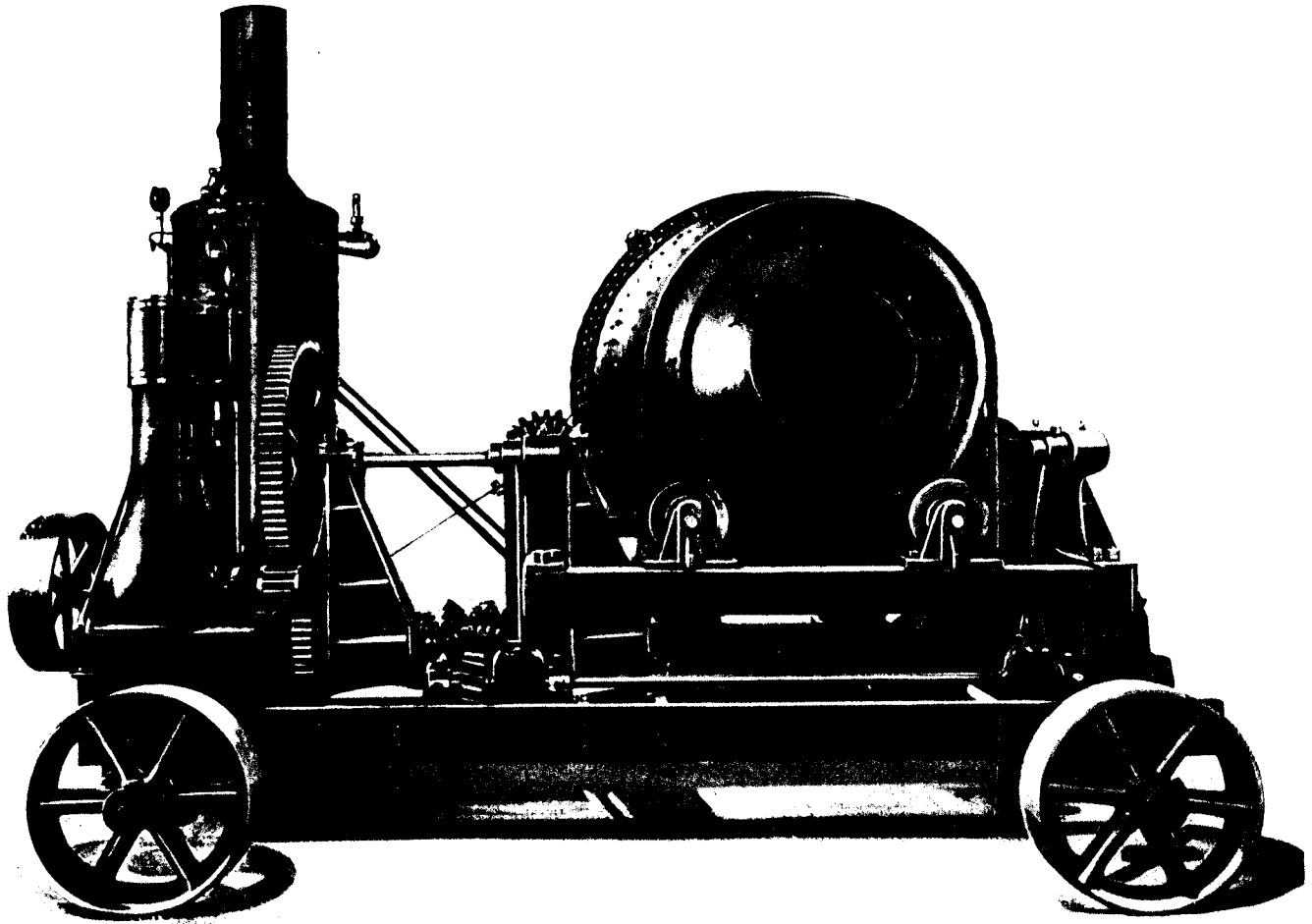
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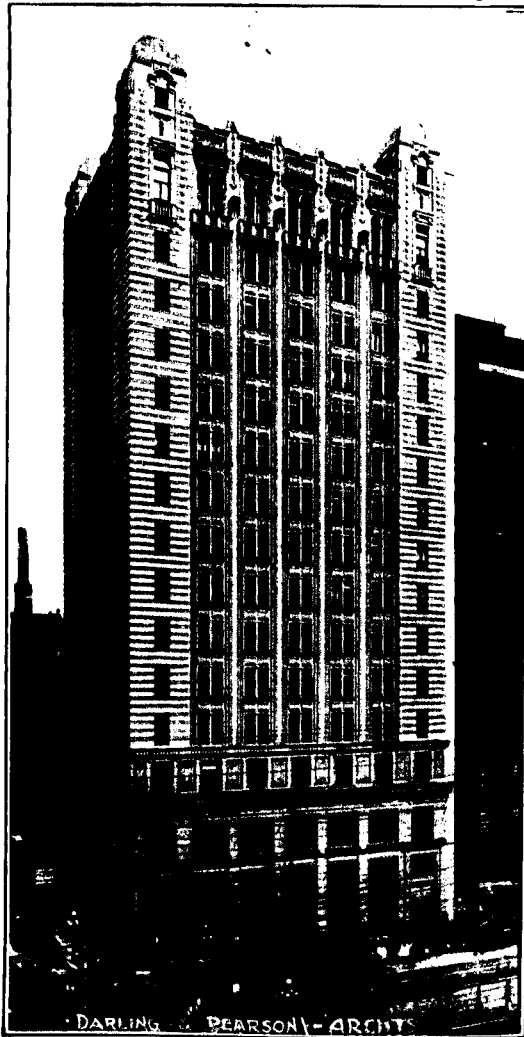
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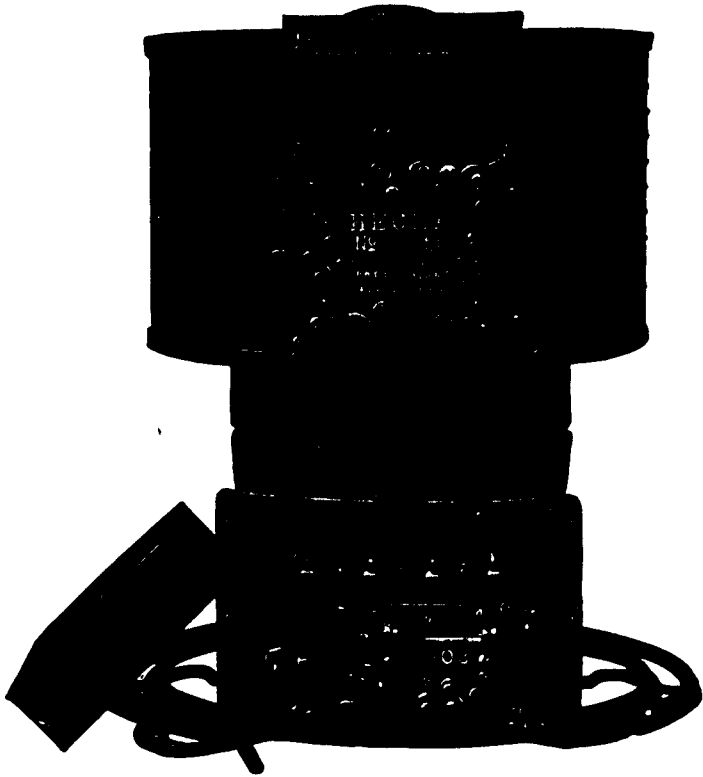
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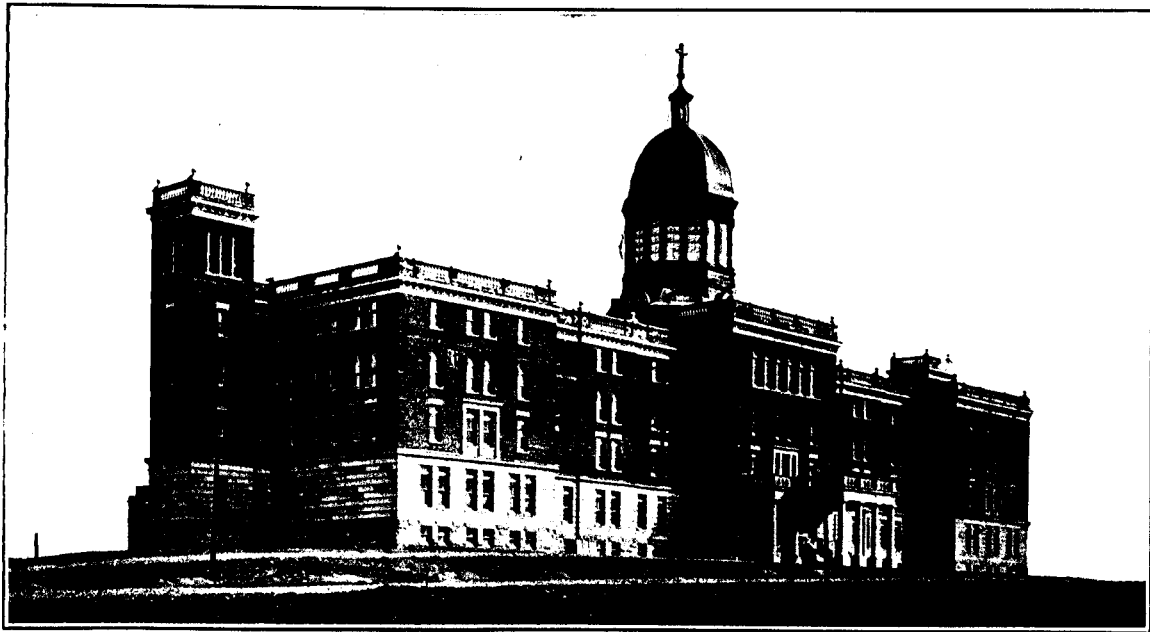
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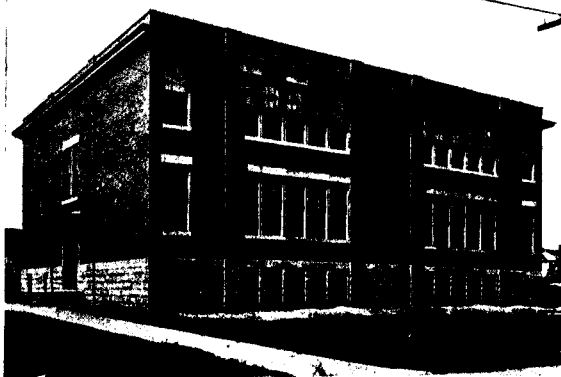
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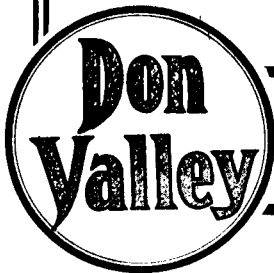


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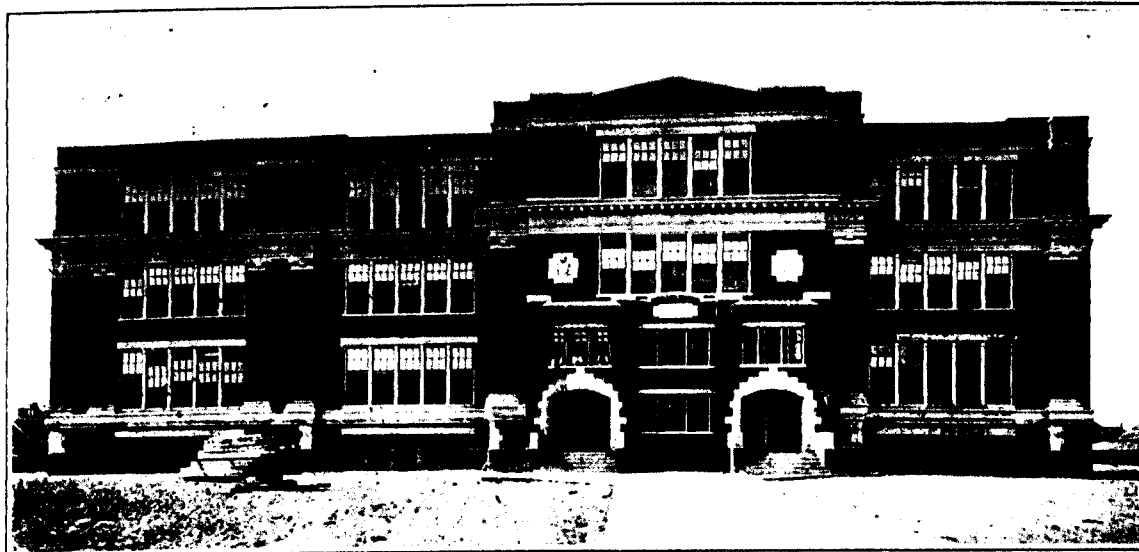
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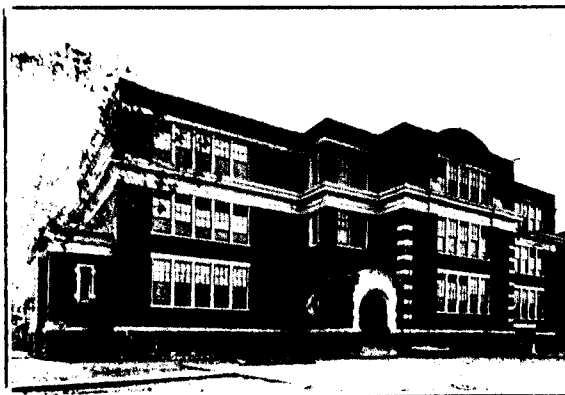
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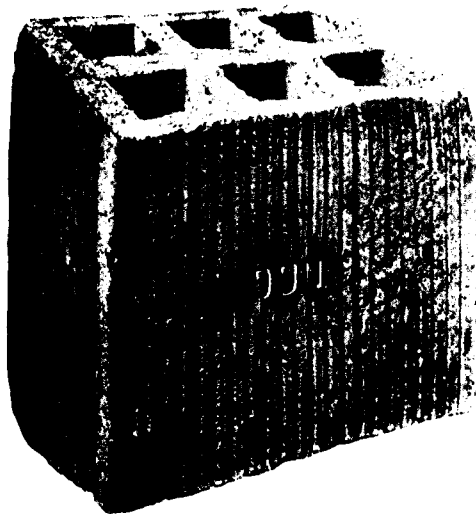
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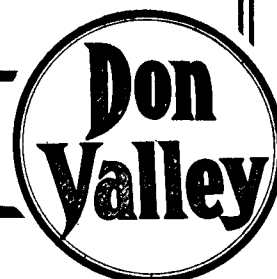
Clinton Street Public School, Toronto.



Williams Road Public School, Toronto.

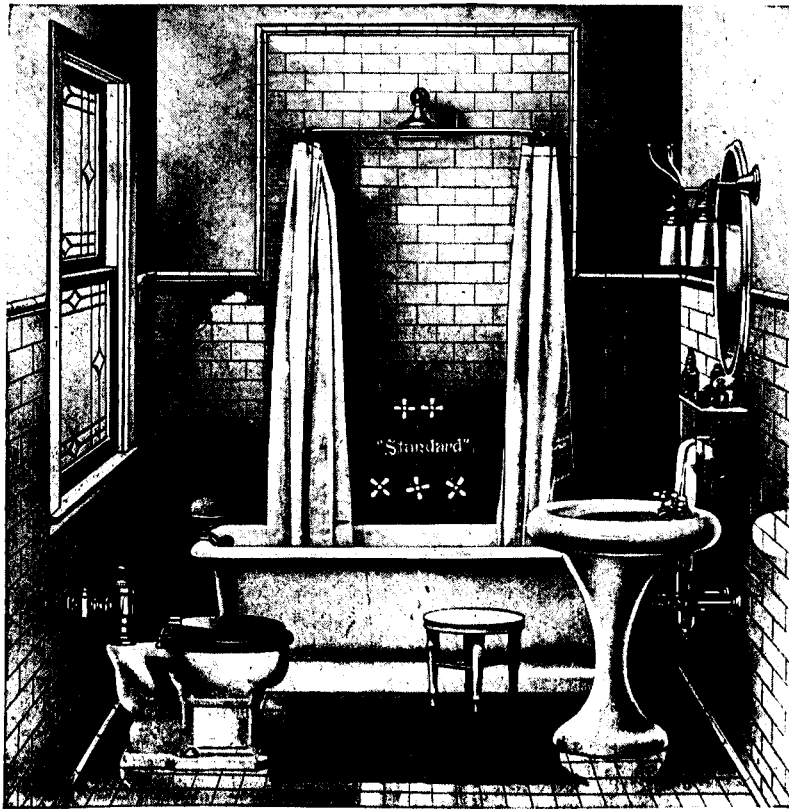
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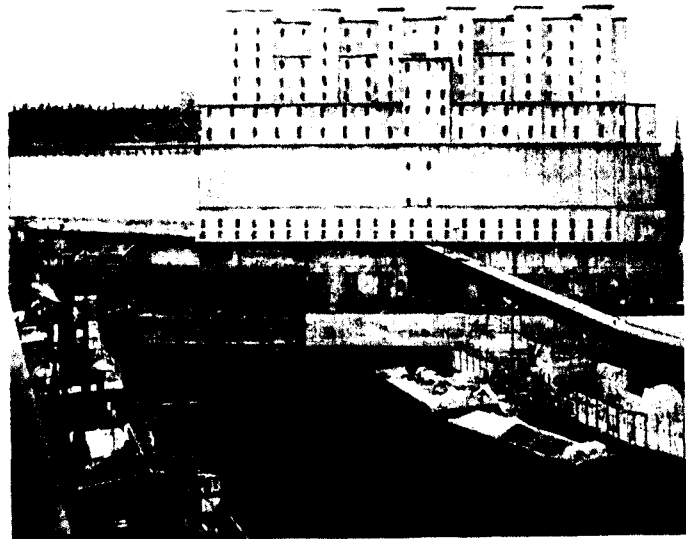
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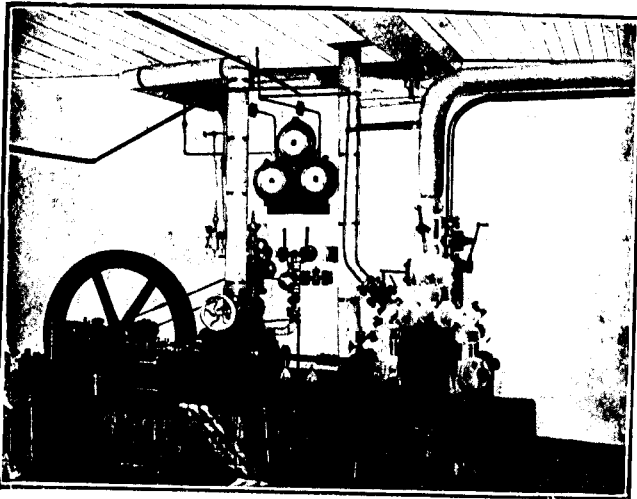
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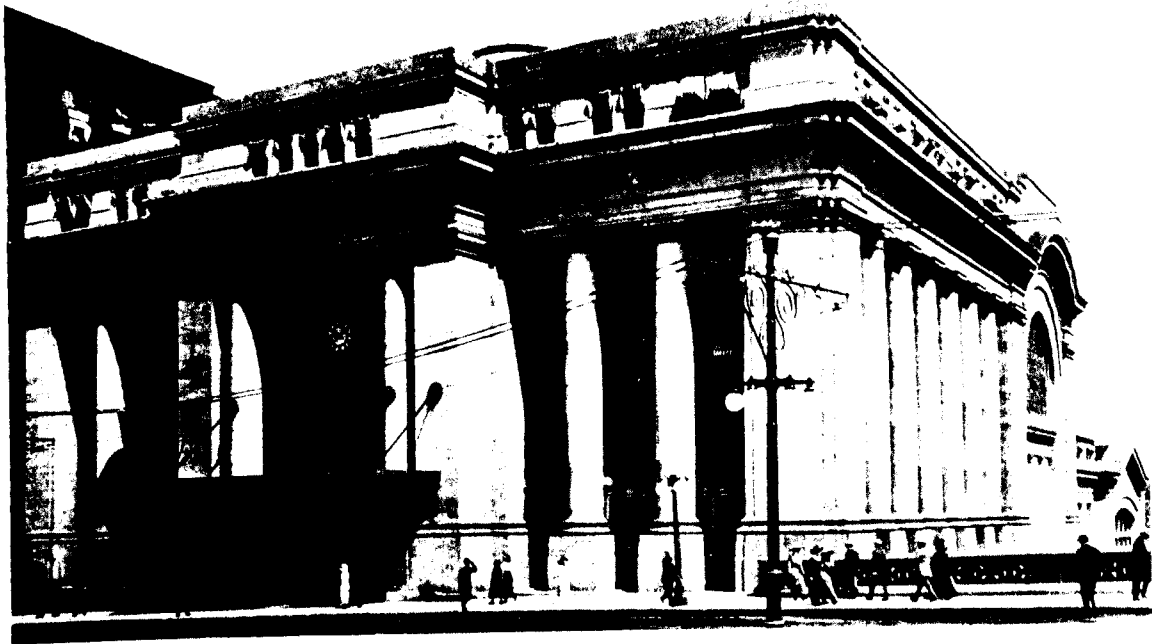
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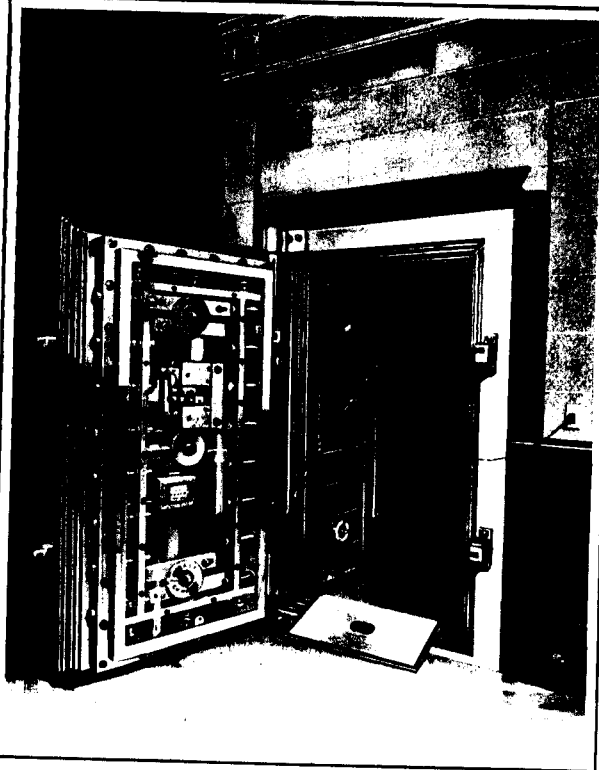
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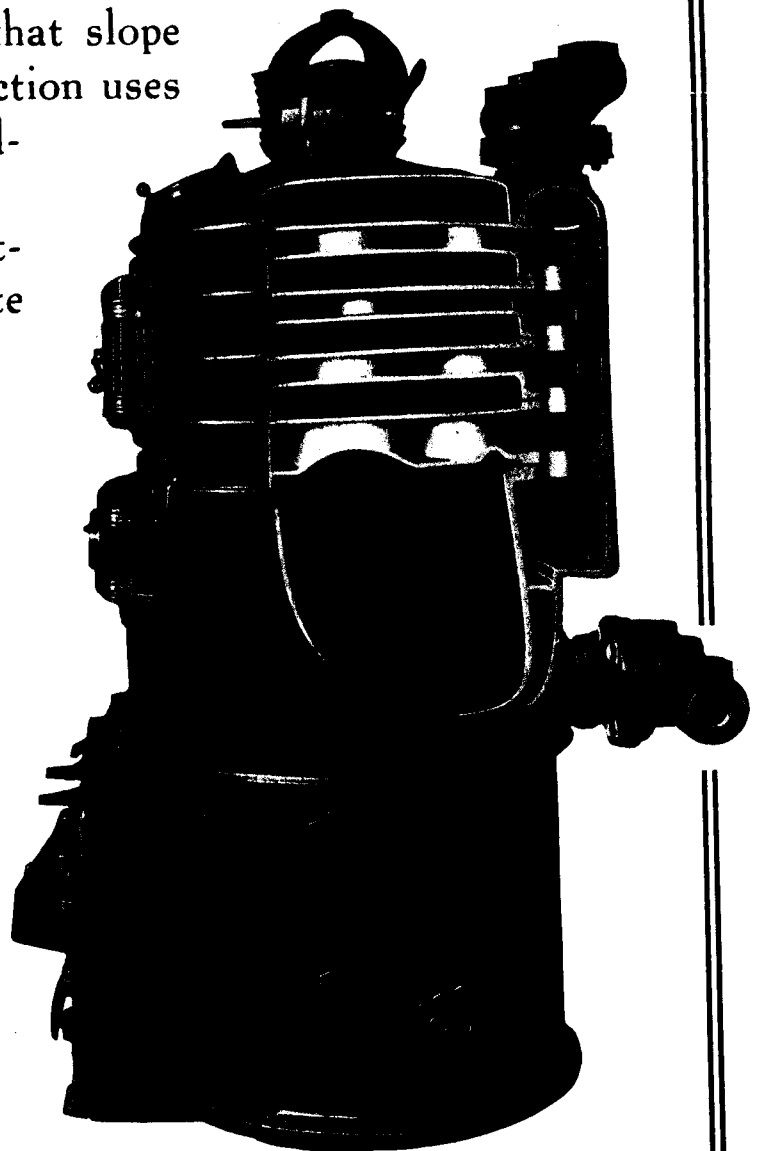
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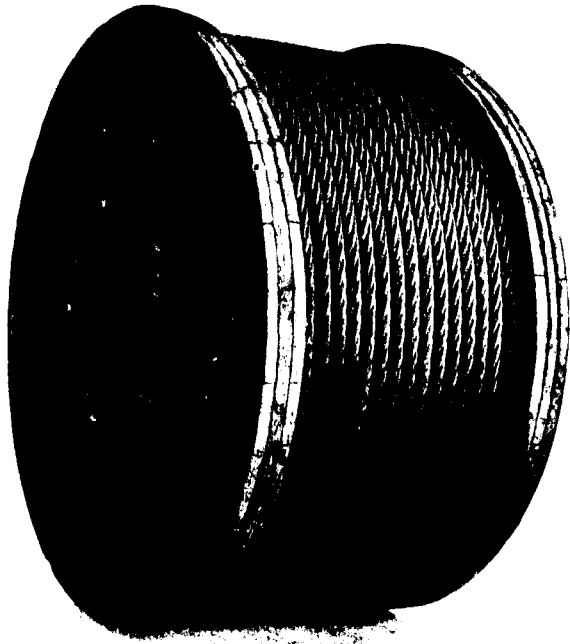
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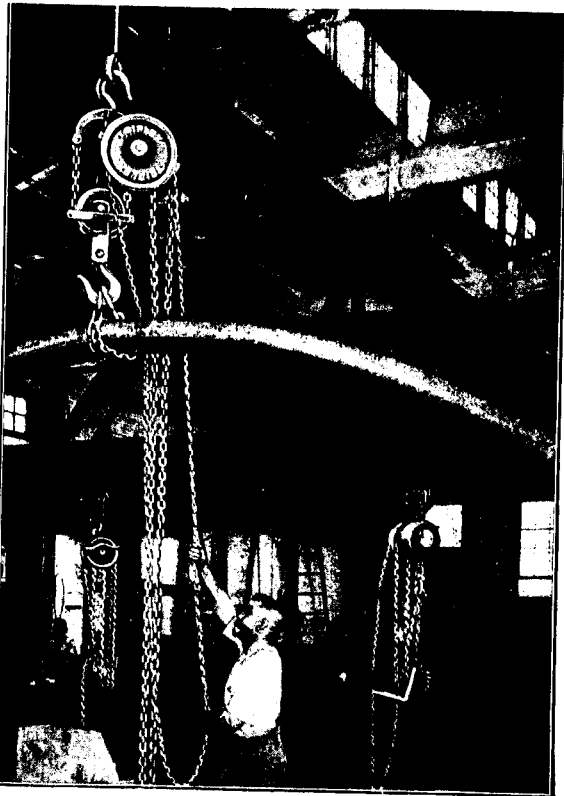
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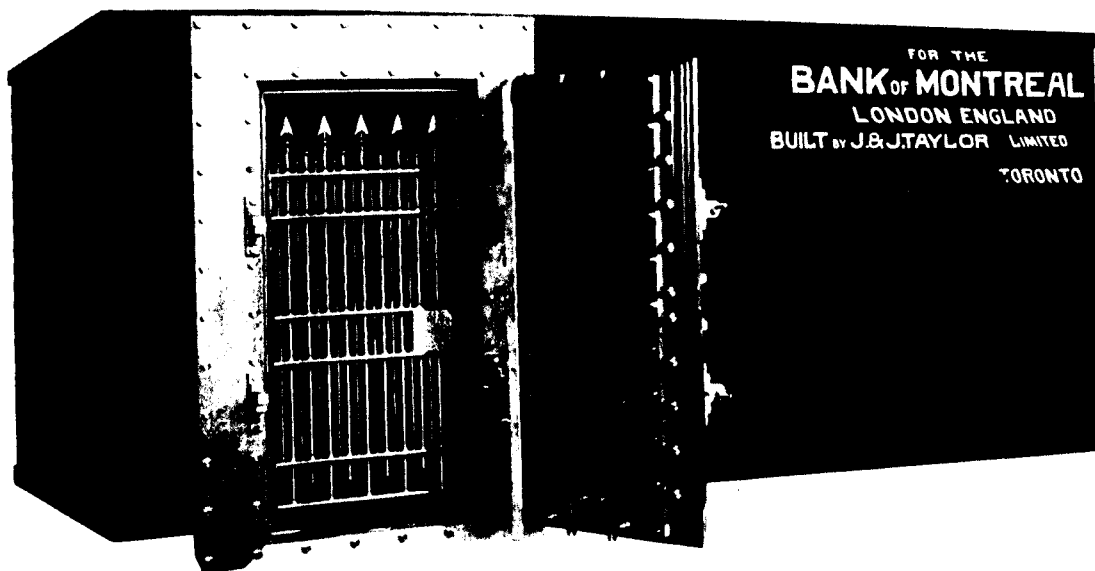
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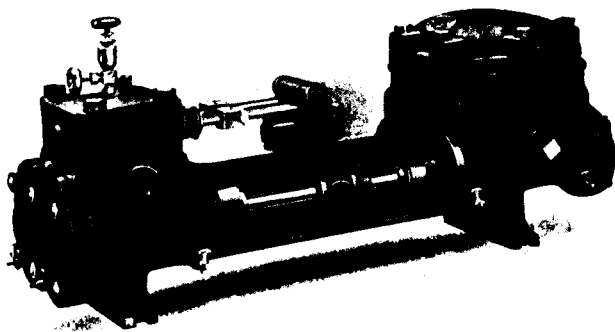
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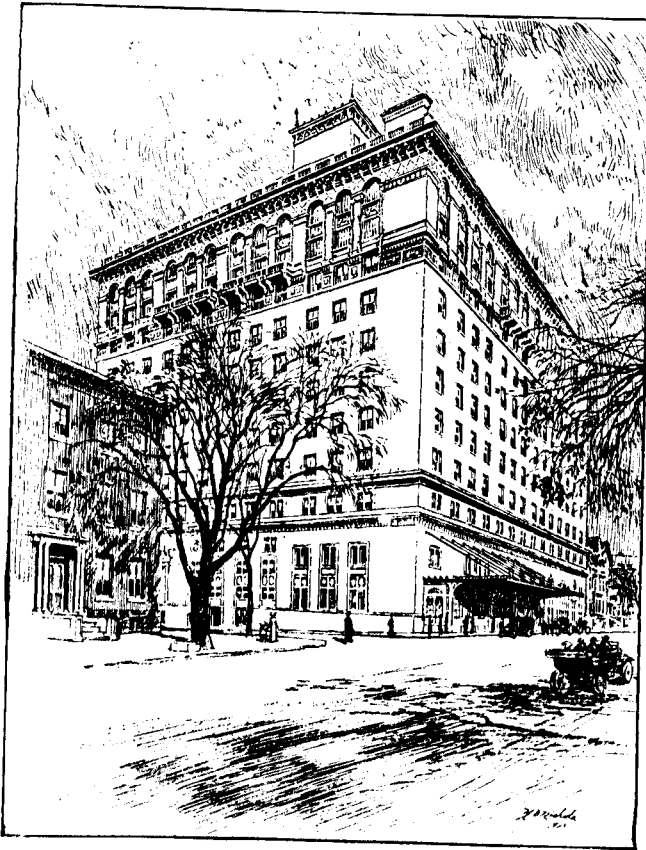
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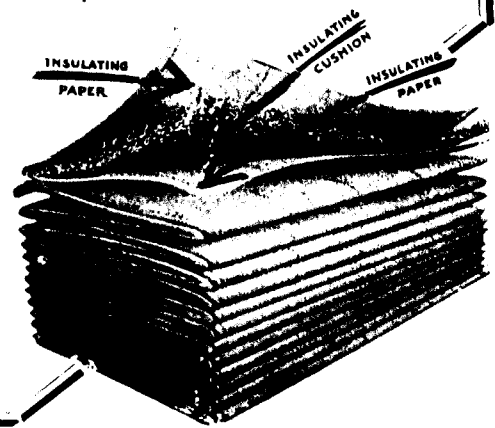
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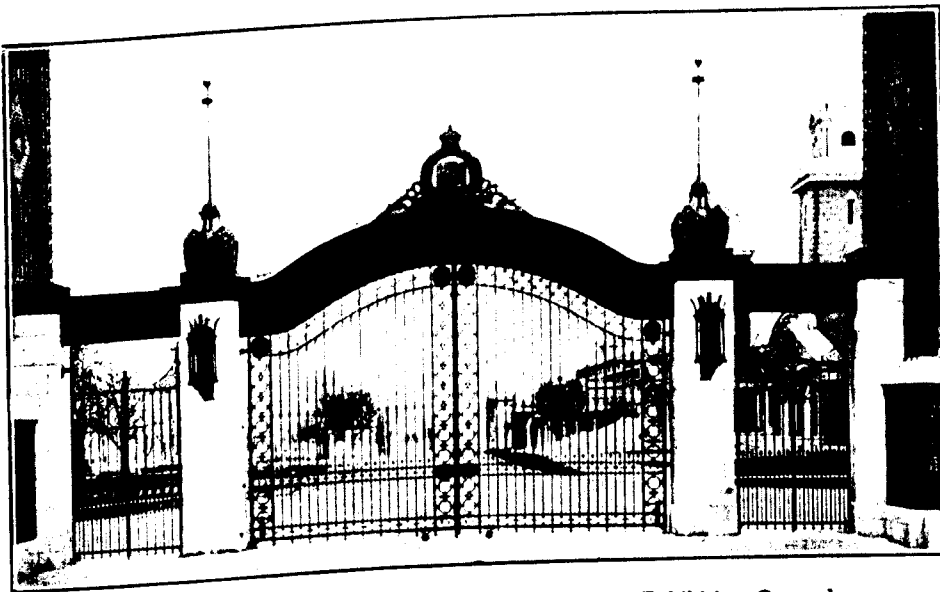
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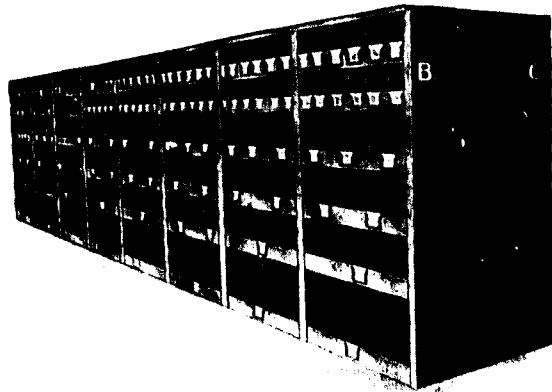
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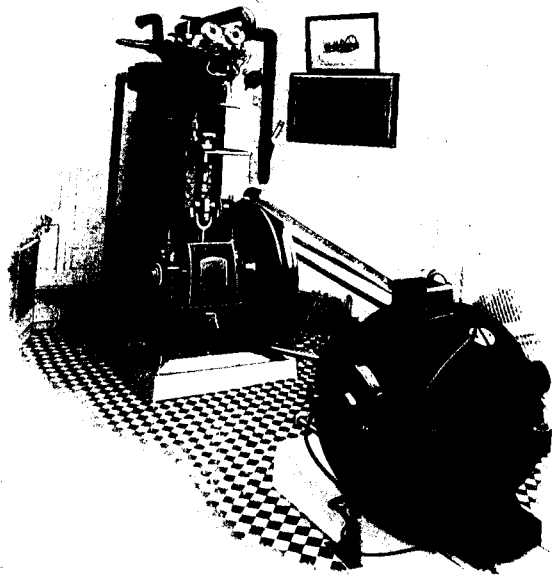
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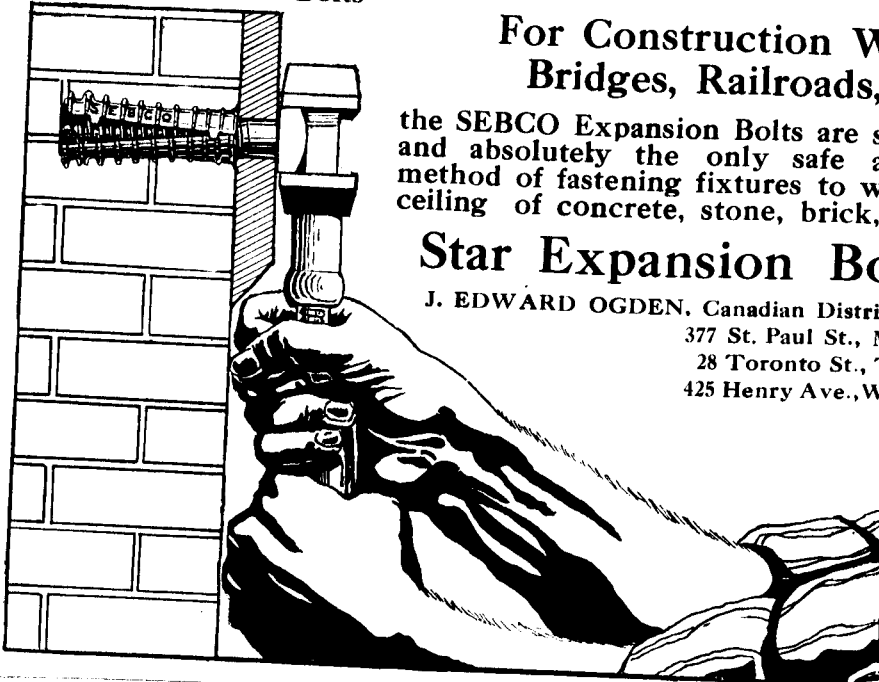
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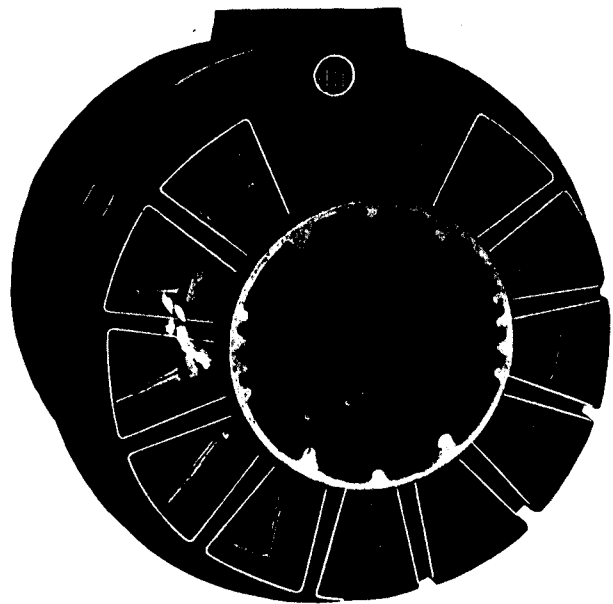
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24 GAUGE EXPANDED STEEL LATH

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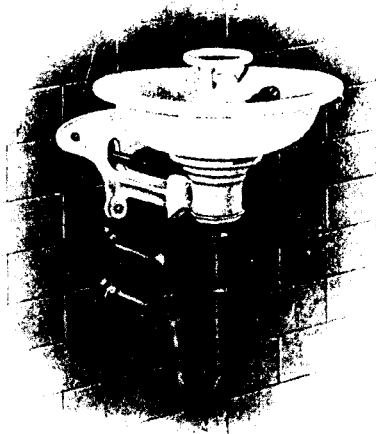


Plate F 3342



Plate F 3305



Plate F 3013



Plate F 3025



Plate F 3055

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CONSTRUCTION

VOL. VI

No. 10

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H. GAGNIER, Limited, Publishers
GRAPHIC ARTS BUILDING, TORONTO, CANADA

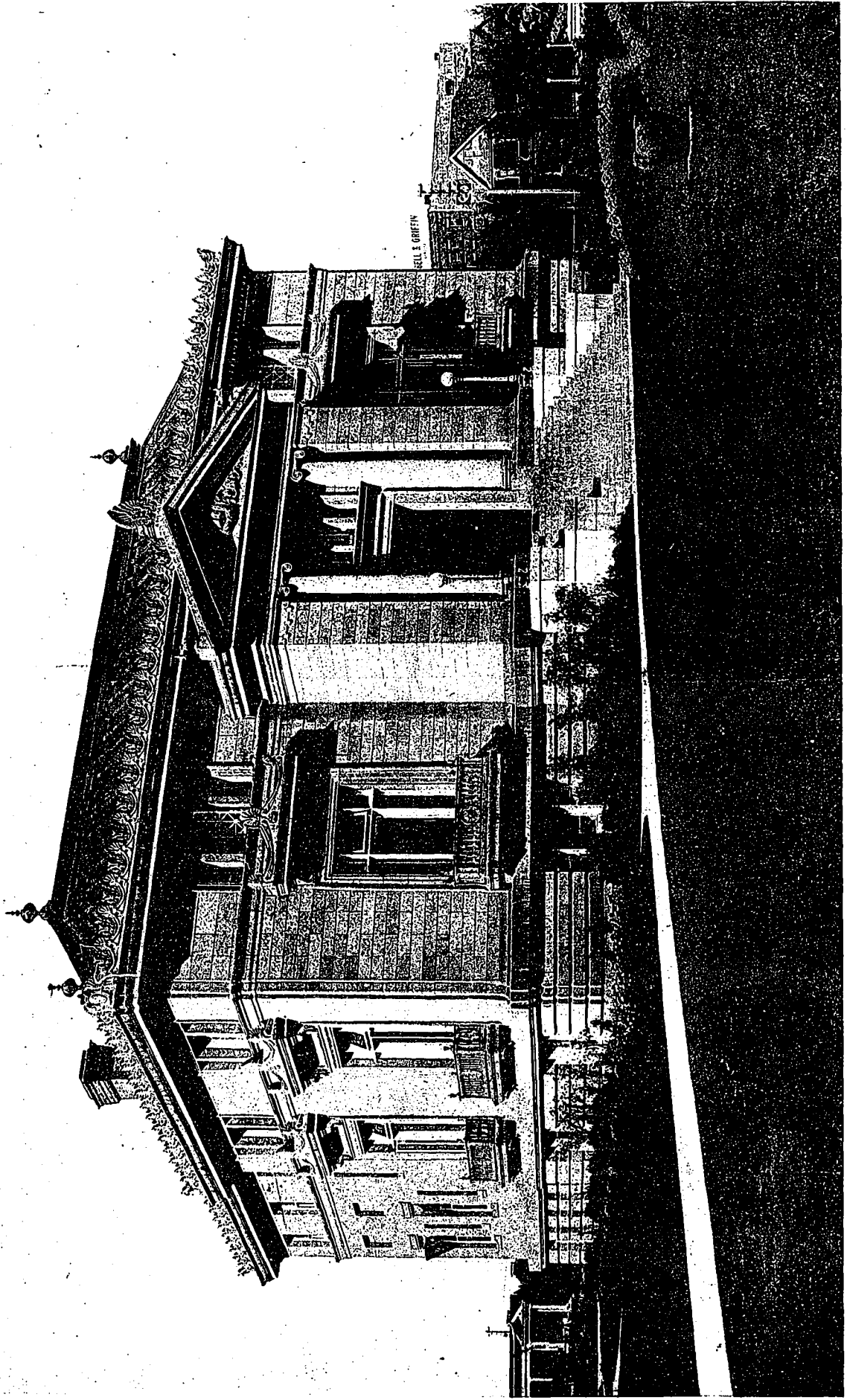
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Q *Relation of expert adviser to the people who hire him—Condition at Calgary over scheme for a city bridge.*

UNTIL THE LAST few years the people, in general, have paid little attention to architecture and civic planning. It has been a source of considerable embarrassment to the architectural profession and has taken years of constant effort on its part to overcome this prejudice. But the results are more than satisfactory, and it behooves each member to help keep the confidence won through such a struggle. To do this it will be necessary to avoid such clashes as the one which is now taking place in Calgary. The people are paying liberally for the services of an expert city planner to advise them. In connection with his duties plans for a proposed bridge have been prepared which should naturally be brought to the people's attention, especially since they are voting on a by-law relating to this subject. The city council has refused to grant their wishes in posting sketches of the expert's plans for a free and wholesome consideration. What is more inconsistent and what will embitter the people more than such actions? They only serve to generate criticism and hostility towards a project, no matter what qualities it may possess to recommend it. We have worked hard to bring the people to a point where they will hire men of authority in matters of an artistic nature. Are we going to drive them back to their former condition when even the suggestion brought only smiles of derision? It is a serious matter and must not be treated lightly. In this case we hope it is due to the ignorance of the members of the city council, but if it should be at the advice of the expert himself or even countenanced by his silence, then due pressure should be brought to bear not only for the future welfare of Calgary, but also for the maintenance of the present standing of art among the people at large.

Q *Calgary's present status as a commercial centre—Her great wealth and building enterprises—The possibilities for a successful future.*

FROM A POPULATION of five hundred in 1884, Calgary, "The City Phenomenal," has grown to approximately ninety thousand. Forming the commercial centre between Winnipeg and Vancouver, it lies in the midst of a great agricultural and industrial section. There seems to be little which might be termed antagonistic to the prophetic statements that Calgary will become a large and prosperous city, as the climate, soil, timber, and mining wealth in the Province of Alberta warrant such predictions. One of the sources from which it will be greatly benefited is the forest reservations. The Commission on Conservation feel that one of the most important acts is to expedite the inclusion in forest reserves of all lands which are non-agricultural. The reservations in Alberta are especially important on account of the extensive tract on the eastern slope of the Rocky Mountains which was set apart on the recommendation of the Commission. It is considered the greatest problem which is being handled at the present time. Proposed additions to the amount of 7,698 square miles have been endorsed by the Forestry branch of the Department of the Interior. The agricultural possibilities have been proven by the official records of the past few years. An unusual richness of the soil makes the producing power far greater than that of any other large grain growing area in North America. From this year's crop report compiled by the C.P.R., Alberta has approximately twenty-three and one-half million bushels of wheat, forty-five million of oats, and eleven and one-half million of barley. An idea of the yield may be obtained by comparing it with the crop for 1911, which totaled 44,745,000 bushels, including wheat, oats, barley, flax, rye, etc. The Province of Alberta has

also an abundance of mineral wealth. Aside from the inexhaustible supply of coal, natural gas, etc., the architectural products are obtainable in all parts and the quality of the building stones, clay for brick and terra cotta, limestone for cement, is of a superior grade. The rapid growth of the country creates a large demand for these materials, which results in the architectural development of its cities and towns. The building enterprise of Calgary is a constant factor and totals between one and two million dollars each month. At the present time there are under construction twelve large buildings which are being erected with reinforced concrete frames. By-laws are before the people to vote on new bridges, industrial building, etc., to the total of \$1 500,000. Having become the greatest centre for abattoirs and pork packing; one of the largest milling sections in the West; the outlet for the vast grain belt; a great future awaits this progressive city in its steady stride towards an ambitious goal.

Q Sir Gilbert Parker's address before the R.A.I.C. at Calgary—His plea for the establishment of Fine Arts departments.

IT IS TO BE sincerely regretted that all our readers were not permitted to listen to the inspiring address given by Sir Gilbert Parker before the sixth annual convention of the R.A.I.C., held at Calgary. The eminent author and statesman spoke eloquently of the rapid progress made in the architectural field and encouraged the members to accept as their highest reward the satisfaction of expressing their own ideals in elements of beauty. He urged each one present to take a most serious view of their profession.

Sir Gilbert, in referring to his subject, "The Arts," felt the need of more encouragement to our Canadian artists. He expressed the idea that architecture has made wonderful strides in this country because she has adopted the methods and beauty of the great artistic nations such as Rome and Greece to the exigencies of a utilitarian age.

It was gratifying to hear his remarks in regard to the establishment of a department of fine arts in every college in Canada. May his criticism along this line bear fruit, for we must train our present generation in the direction of æsthetic beauty if Canada is to claim the distinction of being artistically built and preserved during future generations. The association could not build a more lasting monument than establish a means in every city whereby the student could come under the influence of masters in all branches of fine arts and have exact replicas of the art which Sir Gilbert mentions as having influenced our best efforts in the past.

The copyright bill introduced in the British Parliament during the last session was also commented upon. The author, while a member of the Opposition, said that when this bill came before the House he favored it because he realized it was the first time in the history of British politics that an Act had come to an issue whereby the musician and the architect

were guaranteed ample protection in their work. It is worthy of mention that Sir Gilbert frequently addressed the House in favor of the measure, pointing out that such a measure would assist the author, musician and architect as no other act of legislation had ever done before. "I did that," said Sir Gilbert, "because I wished to help protect the architects and because, gentlemen, I wanted to protect you."

In conclusion, the author said: "I have to construct, just as you have to do, for every book of mine, such as it is, is an attempt at architecture. We are one in our failures and our successes. You who represent the whole Dominion and make the people realize and understand that culture and beauty go hand in hand with utility the rewards that you receive, namely, the satisfaction of your own ideals and the satisfaction of the eternal elements of beauty, these are indeed the greatest and most precious rewards that you can gain in all the failures and successes of your career."

Q An attempt to convert our public parks into homes for working people—Toronto's need of more parkage in the crowded districts.

IT IS TO BE sincerely hoped that Controller McCarthy will find tremendous opposition to his pet scheme of erecting homes in the various parks of Toronto. While his contention is to buy the waste ends of city lands which he styles as "barren wastes" and use them for model homes for working people, he does not consider the advisability of improving these sections and adding them to the much needed park area of the city. Plenty of ground in suitable quarters can be obtained for housing problems, but little land is left in crowded districts for breathing and recreation parks. Toronto, like all other cities in the Dominion, is woefully lacking in this regard and it is about time a proper squelching were administered to any and all persons who try to secure such land for private use. A worthy precedent might be found in the city of Paris, France. The areas of the principal public parks in that city are as follows: Bois de Vincennes, 2,290 acres; Bois de Boulogne, 2,156 acres; Jardin des Tuileries, 74 acres; Jardin du Luxembourg, 62 acres; Buttes Chaumont, 62 acres; Parc de Montmartre, 63 acres. In addition to the above there are dozens of smaller parks like the Champ de Mars 25 acres and the Parc Monceau 6 acres. All the parks above named have remained substantially unchanged as to area during the city's growth. Paris is at present demolishing the fortification walls which inclose the city, filling up the moat, and converting a large portion of the area thus reclaimed to a belt of parks and public gardens. The constancy in preserving their parks and creating more is due to the increasing population as well as a broad grasp of the essential needs of the people. Surely Toronto should study her future conditions, for no city is growing faster in proportion to her present size. Let the other members of the board take a decided stand and give an emphatic no to the elimination of any section of our public parks.



THE BANK OF NOVA SCOTIA BUILDING, CALGARY, ALTA.

SHARP & BROWN, ARCHITECT.



THE BURNS BUILDING, CALGARY, ALTA.
HODGSON, BATES & BEATTIE, ARCHITECTS.

New Buildings, Calgary, Alta.

CALGARY furnishes an excellent example of the progressive spirit prevailing throughout the Western Provinces. This is clearly demonstrated by the fact that twelve large buildings with reinforced concrete construction are being erected at the present time, while several others of artistic merit will be started in the near future. The business centre, which was formerly confined to a limited section on Eighth avenue, has encroached upon other streets, where some of the largest structures have been built. During the month of August the permits amounted to approximately \$1,100,000.

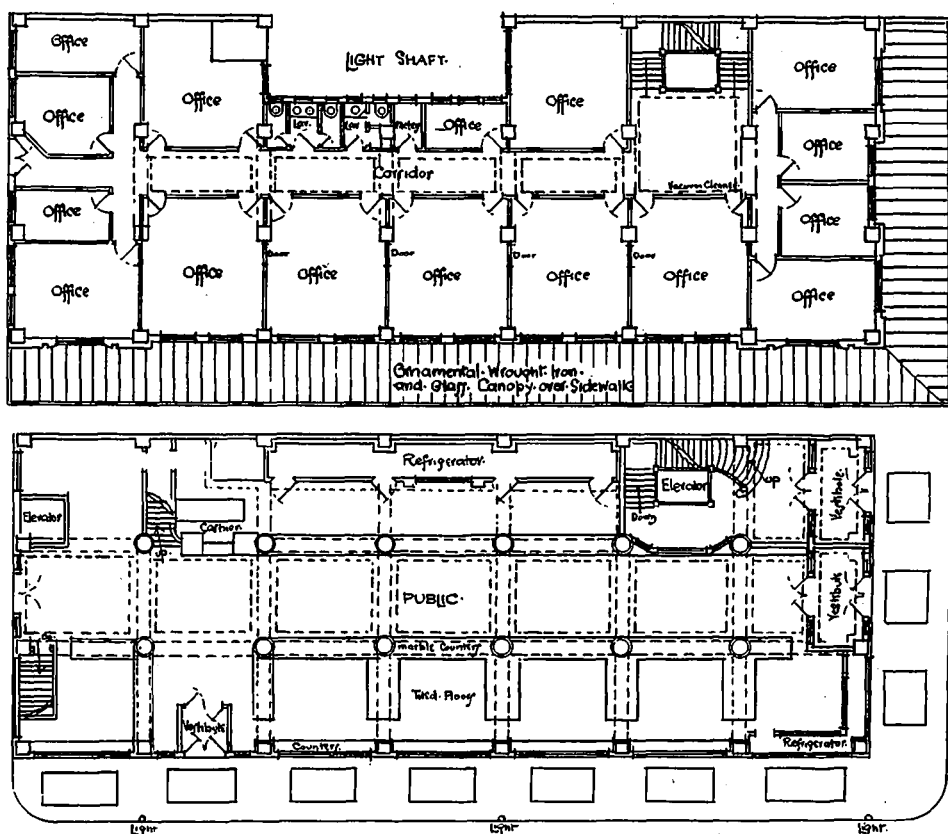
In addition to the buildings shown in this issue there are several important structures which have been or are being erected that will be taken up in another number. Among them might be mentioned the C.P.R. Hotel, occupying an area one hundred and twenty-eight by two hundred and twenty feet, with a height of one hundred and fifty feet, by E. & W. S. Maxwell, architects; the Herald building, ten stories high, with a frontage of one hundred feet, by Brown & Vallance, architects; the Dominion Bank, by George Northwood, architect; Central Fire Hall, by Lang & Major, architects, and others of similar prominence.

A brief description of the buildings illustrated herewith is given, limited to the few facts obtainable in a short time. The Bank of Nova Scotia possesses a façade in English matt white terra cotta and granite base; windows on ground floor are metal casement; floors of marble mosaic; walls and ceiling of hard tinted plaster; counter of mahogany, and fittings of bronze. The vestibule is panelled with Canadian marble.

The new Burns building is six stories in height, with basement covering a site of fifty by one hundred and thirty feet. The structure is of reinforced construction with facing of white glazed terra cotta. An ornamental wrought iron and glass canopy extends along both façades. The main entrance and corridors have a tile flooring; white and green marble wainscoting. On the ground floor, which accommodates a meat market, are marble counters, tile walls and floors, and panelled ceiling. The staircase is finished in marble enclosing the elevator well of polished wire glass.

In the basement is a pool room, barber shop, boiler room, refrigerator and lavatories. The upper floors consist of offices finished in oak, with floors of composition covered with a cement preparation, and partitions of tile plastered. Tile flooring, Italian marble wainscoting and oak trim is the treatment of all corridors. Accommodations are provided for the janitor and other help on the seventh floor. The approximate cost of the building was \$350,000.

The Bijou Theatre is one of the latest moving picture buildings in the West. It is twenty-five feet in width and one hundred and thirty feet deep, designed in ornamental plaster, with seventy-five tons of steel entering into the construction. The seating



TYPICAL OFFICE AND FIRST FLOOR PLANS, BURNS BUILDING.
HODGSON, BATES & BEATTIE, ARCHITECTS.

capacity of the main auditorium and balcony is six hundred and fifty. An indirect system of electric lighting has been installed, with glass bowl fixtures suspended from the ceiling. The cost of structure approximated \$50,000.

The Lougheed building is of fireproof construction and covers a tract two hundred by one hundred and thirty feet. An artistic theatre occupies a large portion of the building, the rest being planned for stores, offices and living quarters. In the basement, in addition to the boiler room and other mechanical spaces, is a restaurant, together with accommodation for other places of amusement. The ground floor is devoted to stores on the two main fronts as well as entrances to the theatre. The second and third

floors are arranged for commercial sample rooms for wholesalers and jobbers, while the fourth and fifth floors are planned in two and three-room living suites.

The new Hudson's Bay Store building stands six stories above the street and one below. Cream glazed terra cotta decorates the entire frontage, excepting a narrow granite base running beneath the first story show windows. The corner piers are relieved of their plain treatment by means of decorative coat of arms representing the company, while the

walls and ceiling of the main floor are of plaster painted an appropriate shade, while the trim and fittings are of mahogany.

The elevator system consists of four passenger with ample provision made for two more; two plunger from first story to basement only; three freight which run to a freight room located on all floors, and one for the employees. There are two main stairways of iron, an employees' staircase and an outside fire escape all enclosed in wire and glass.

The basement accommodates a shipping room occupying one-half the floor space; a boiler room with three tubular boilers; engine and pump rooms; employees' coat rooms and locker space; refrigeration machinery which supplies all drinking water, fur storage department, etc. In addition to the above is a spiral parcel conveyer connecting all floors from which runs an endless belt to the distribution table. There are also three ventilating rooms under the main entrances which take the fresh air from the street, wash, filter and warm same and then distribute it to the basement and main floor.

A mezzanine gallery extends along the rear of the first story and provides for telephone and lounging quarters. The second floor, in addition to general selling space, accommodates the ladies' waiting room; the fourth floor the general offices, board room, and cashier booths finished in mahogany; the fifth floor, a storage room; and the sixth a public dining room, cafe and kitchen. The dining room is finished in oak after the Elizabethan style in commemoration of the fact that the charter was granted to the Hudson Bay Company in 1670.

The building is of fireproof construction, having floor dimensions of 130 by 250 feet, and cost approximately \$1,500,000.

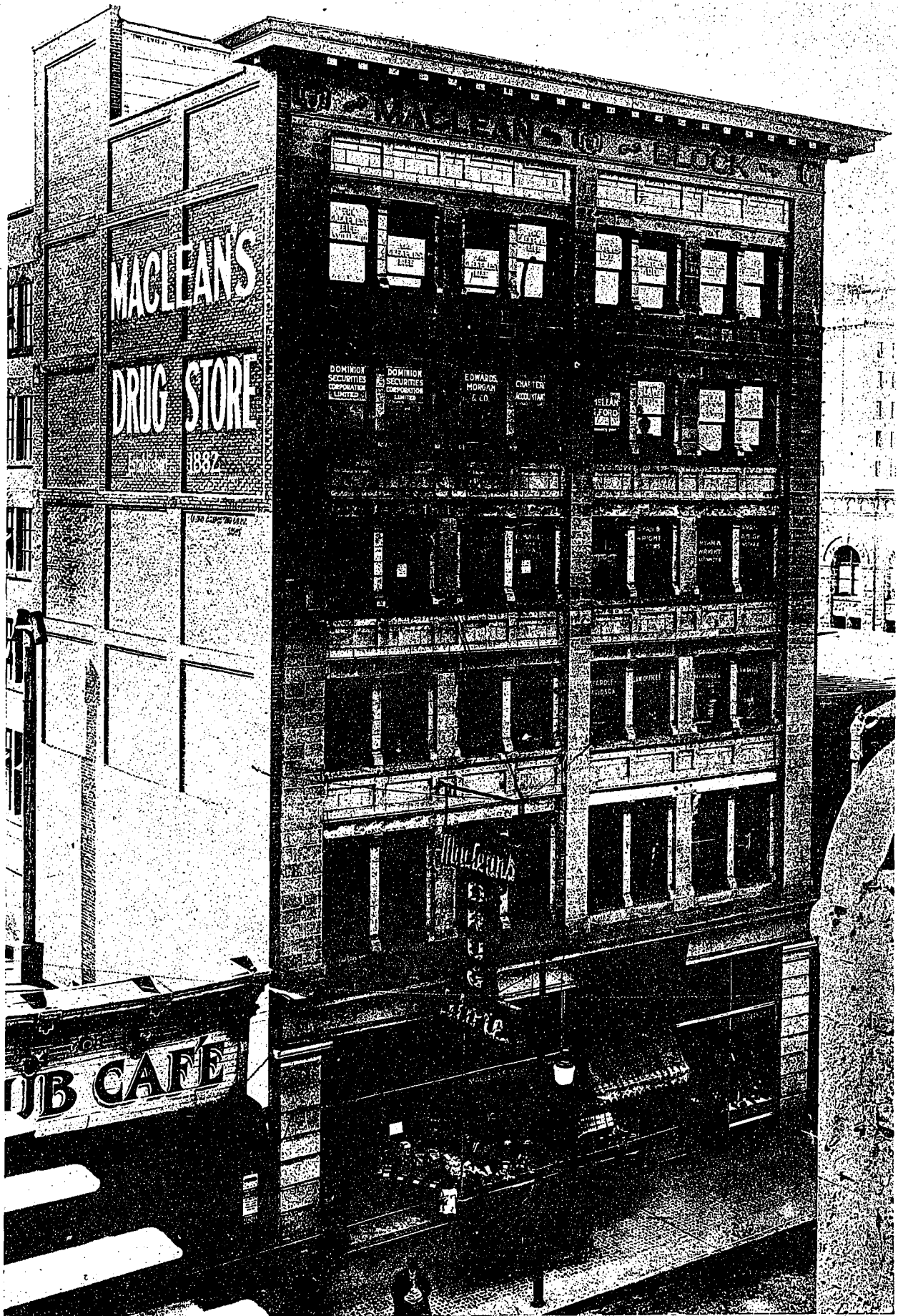
What the next twenty years will make of Calgary can only be surmised. Judging from the last three years' growth in the building lines, it would seem that E. N. White, London manager of a large Canadian real estate firm, in his interview with a representative of "Canada," speaks conservatively when he says: "Calgary continues to grow, and it is the conviction of many that it will one day be the largest city in the Canadian West. Those who have placed their confidence in it need have no fear of the consequences, but with a little patience and judgment should in due course reap the fruits of their trust."

One of the progressive signs is the completion of the C.P.R. Ogden car-shops, the largest repair shops in the world, with a full capacity of five thousand men. Another wholesome sign is the result of the election held recently which passed by-laws authorizing the erection of an industrial building to cost \$250,000; union stock yards for \$350,000, and a tubercular hospital for \$30,000. The industrial structure will be six stories in height with basement, erected for the housing of small industries locating in the city until they grow large enough to house themselves. The various bridge by-laws were defeated, which is only temporary, for the need is imperative, but the people spoke loudly in its criticism



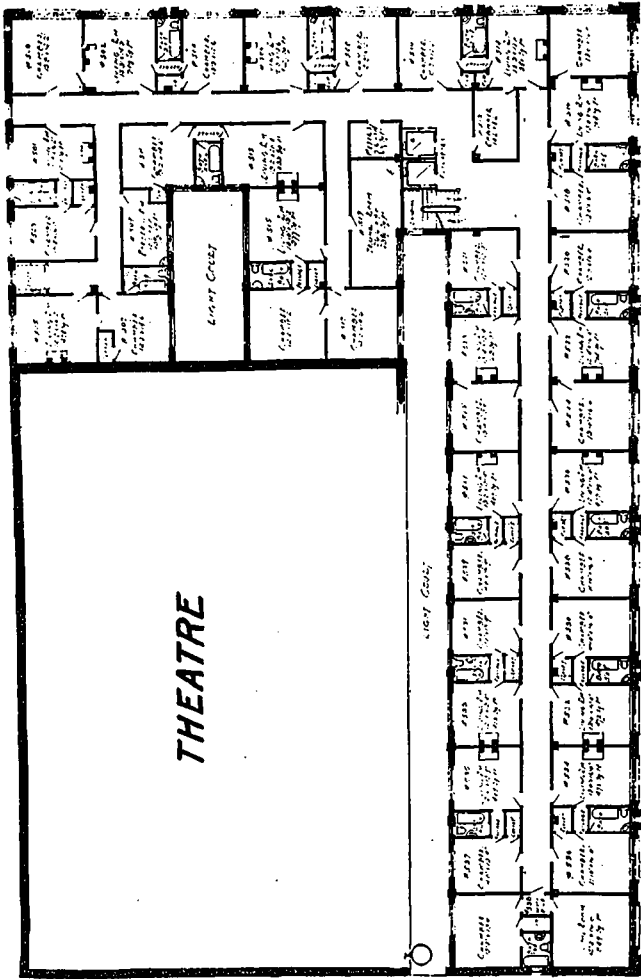
THEATRE AT CALGARY.
JAMES C. TEAGUE, ARCHITECT.

same shield made of bronze is laid flush in three sections of the concrete sidewalk. On the street façades the window frames of first story are copper, the two remaining façades facing the lanes having steel sash. Three main, one employee and an emergency exit constitute the entrances to the main floor. The vestibules have marble mosaic flooring, all other parts of the building being finished with wood floors. The

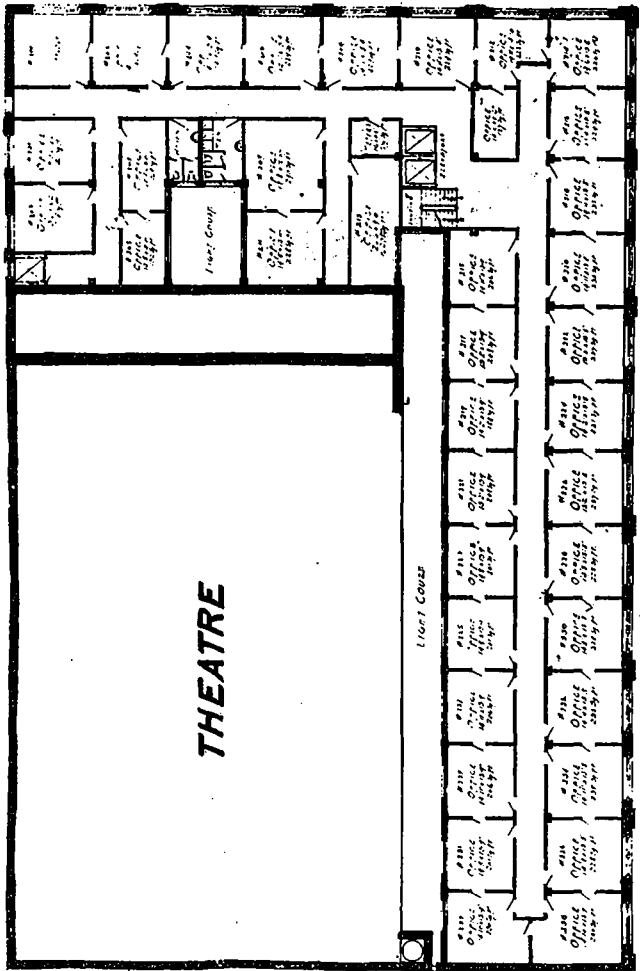


MACLEAN BUILDING, CALGARY, ALTA.

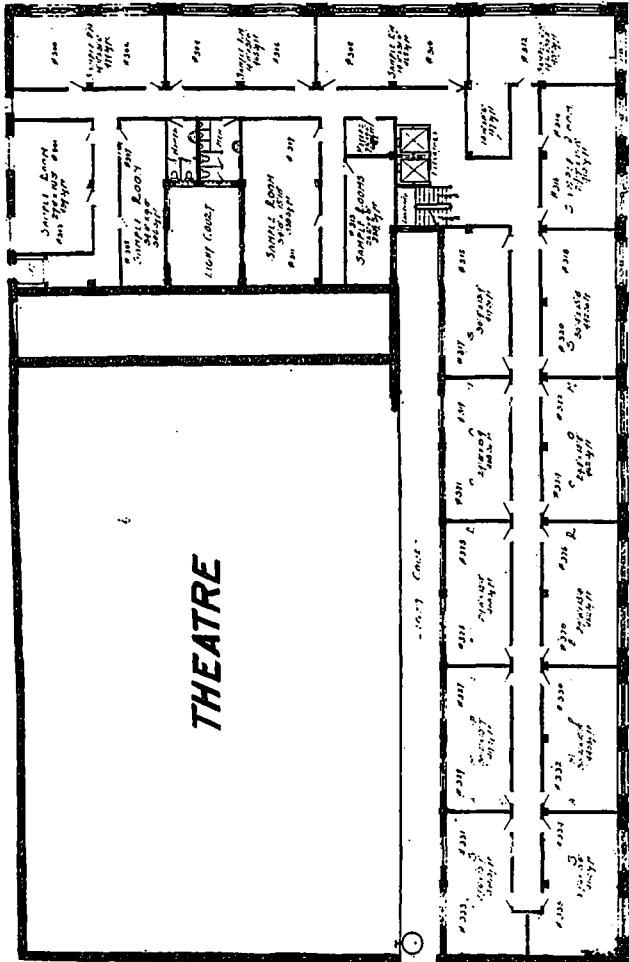
LANG & MAJOR, ARCHITECTS.



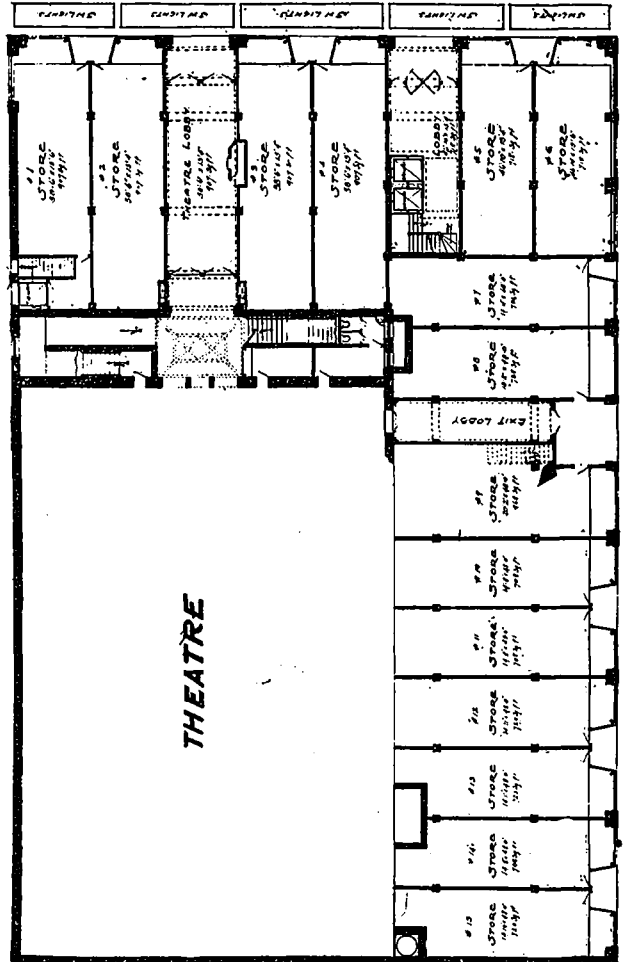
SECOND FLOOR PLAN.
FIFTH FLOOR PLAN.

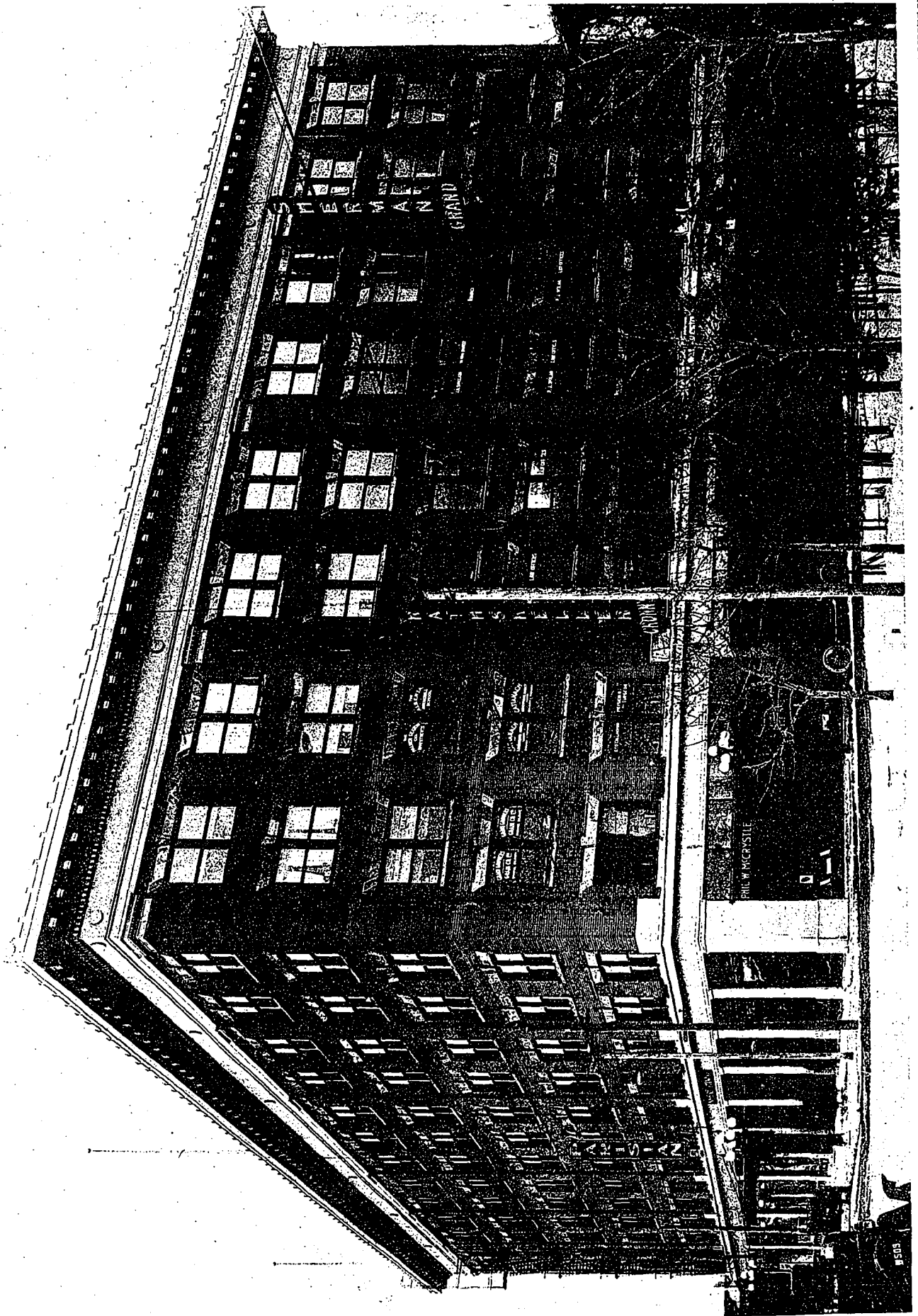


THE LOUGHEED BUILDING, CALGARY, ALTA.
R. WARDROP, ARCHITECT.



THIRD FLOOR PLAN.
GROUND FLOOR PLAN.

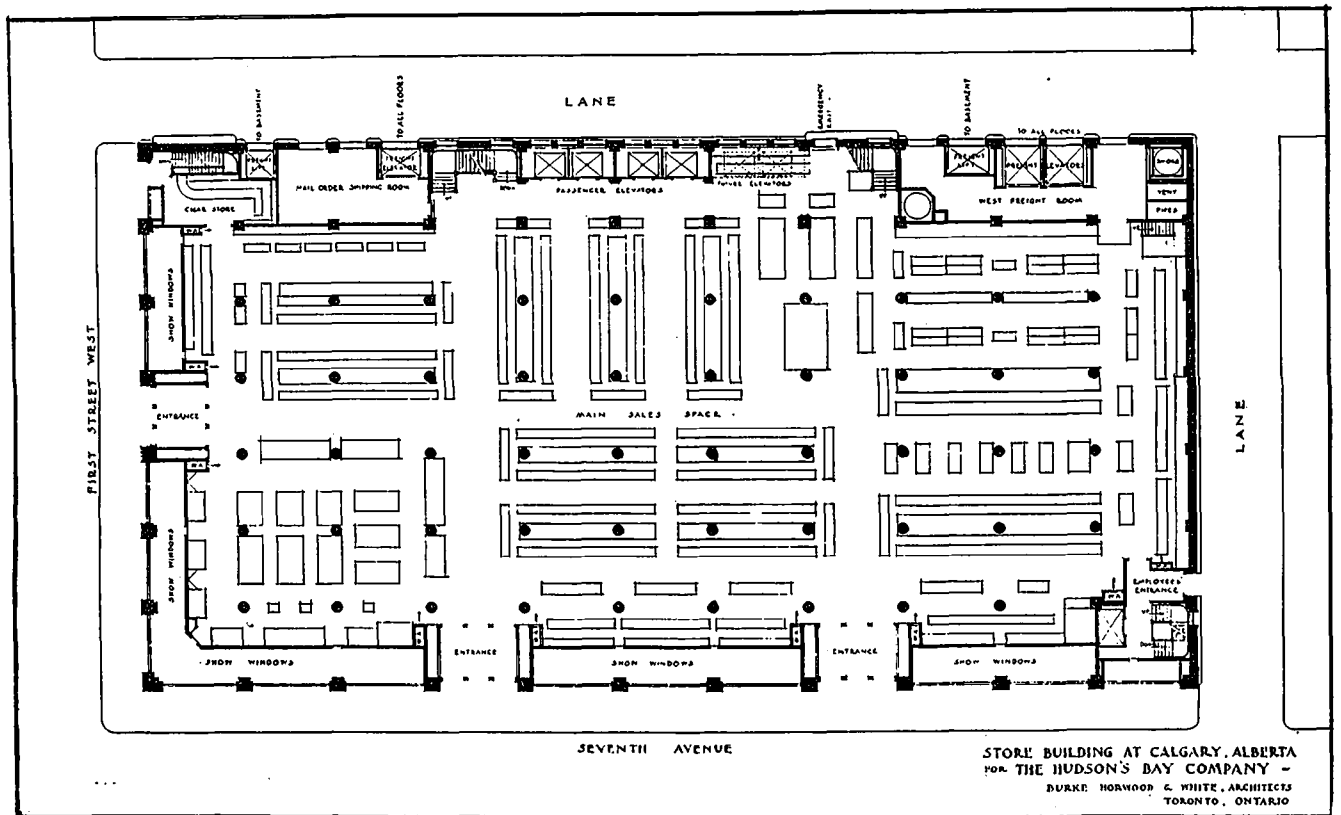
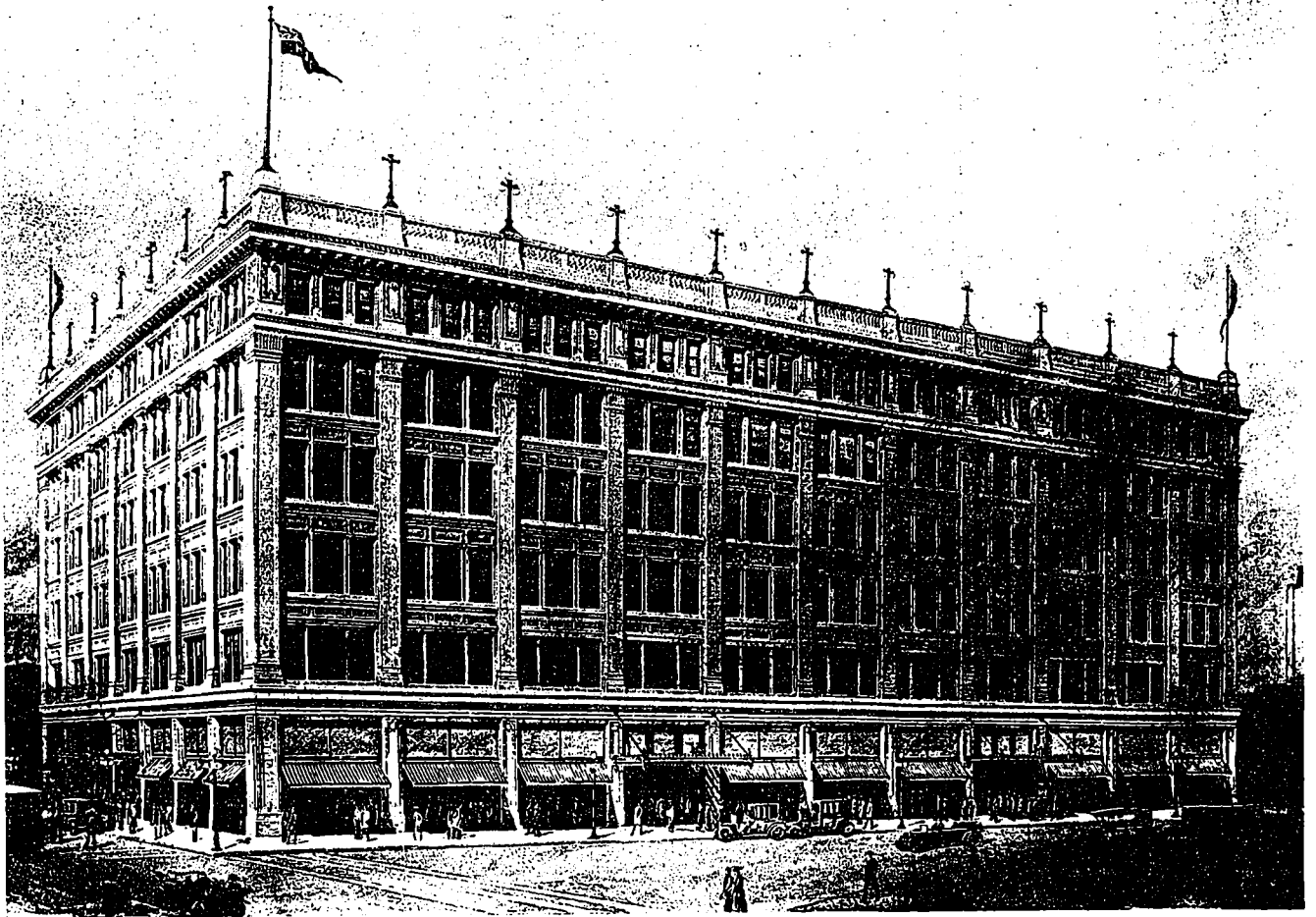




R. WARDROP, ARCHITECT.

THE LOUGHEED BUILDING.

CALGARY, ALTA.



STORE BUILDING AT CALGARY, ALBERTA
FOR THE HUDSON'S BAY COMPANY -
BURKE, HORWOOD & WHITE, ARCHITECTS
TORONTO, ONTARIO

HUDSON'S BAY STORE BUILDING, CALGARY.
BURKE, HORWOOD & WHITE, ARCHITECTS.

of the secretive manner in which the bridge propositions have been handled. A city laboratory will also be built which is to cost \$12,000.

The city commissioners have acted against the installation of improvements in country subdivisions before the population of these places warrants such procedure. This will act in favor of a natural growth

in the course of construction. Among the more important is the one for Pilkington Bros., which will cover a plot one hundred by one hundred and twenty feet. Faced with pressed brick and sandstone trimmings, it will be constructed of reinforced concrete.

The Burns cold storage building will cost \$300,000, six stories in height, and covering a site of



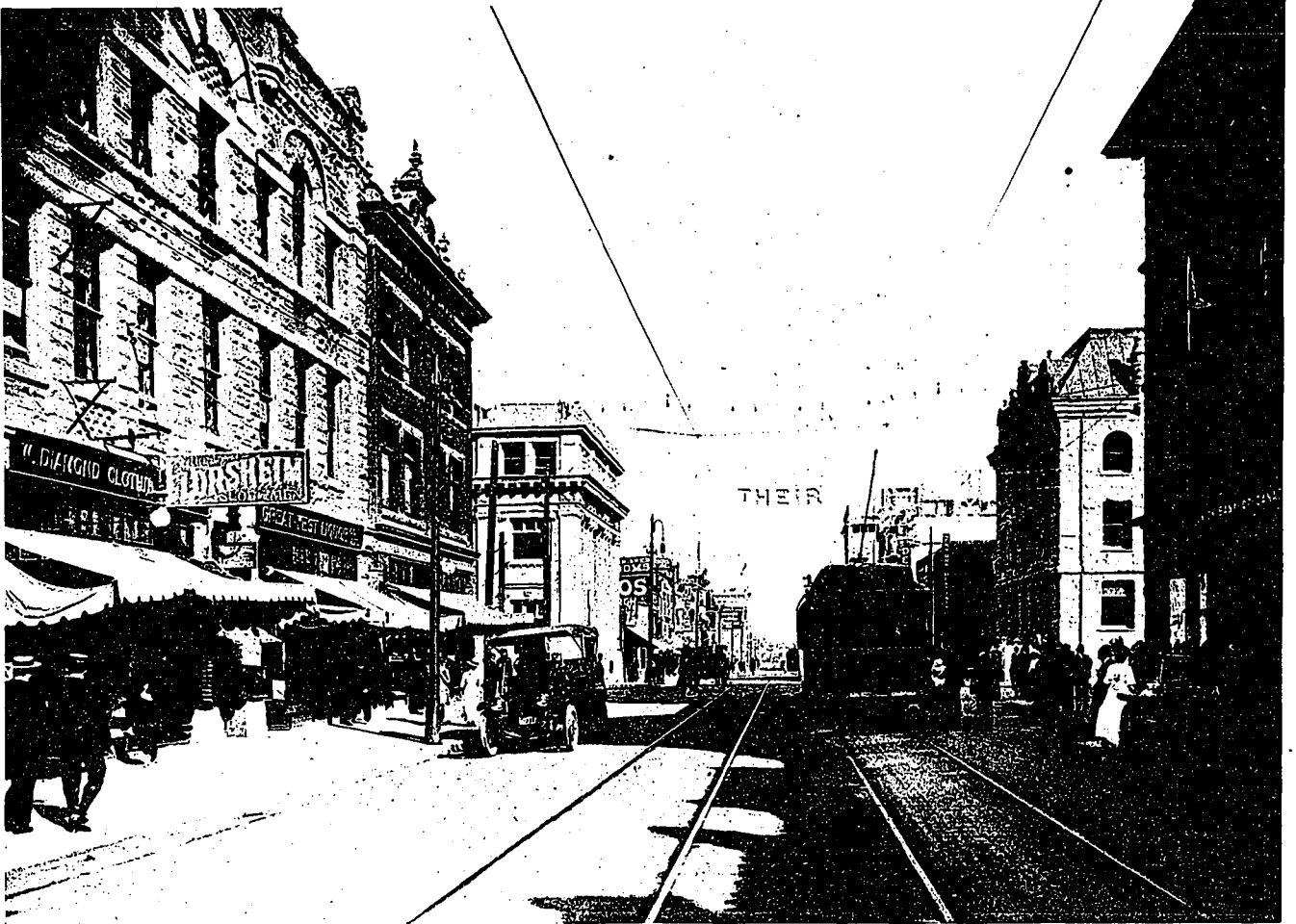
HUDSON'S BAY STORE BUILDING, CALGARY.

BURKE, HORWOOD & WHITE, ARCHITECTS.

to the city instead of being determined by a few real estate sharks. As a consequence the people decide the proper direction for the city's extension, after which the sewerage, sidewalks, etc., are laid for their use. This eliminates one sub-division suffering by the beautifying of another less desirable.

A number of large warehouses and factories are

approximately 25,000 square feet. The exterior walls of pressed brick will be entirely independent of internal structure, the floors, etc., being carried on independent columns. Work is also being rushed on a \$100,000 addition to the present building of the Canadian Consolidated Rubber Co., also grain bins and malt house for the Canada Malting Co.



VIEW OF EIGHTH AVENUE, CALGARY.

The City of the Plain—Calgary

T. H. MAWSON*

TRUE we are, at tremendous cost and sacrifice of energy, busily engaged setting our cities in order, whilst others, seeing nothing, hearing nothing, oblivious to what has for generations been so patent, are repeating our mistakes and laying up trouble which will tax to the uttermost the energies of their children.

If I had to name our greatest error, I would say that we have allowed our cities to grow hap-hazard without plan or forethought. If I had to name the greatest mistake made on the American continent I would say the adoption of the chessboard plan, which, checking all imagination, often ends in dreary, treeless monotony. Both the American and English methods, however, have this in common. They have both to a great extent been developed in the interests of individuals, but let me add that it has always been the apathy of the public, and the absence of a Civic Consciousness which has made this possible. Let me further add that in the Old Country our trouble has not been with the owners of large estates, or men with ducal minds (not necessarily dukes), but with the owners of small areas. It is only within the last

few years that our Government, realizing the pernicious effect of this system, has come to our aid, and even yet the fight for individual rights against those of the community goes on.

These rights, if too rigidly observed, may override the best interests of the community, and feverish anxiety for present gain, blunt all those finer expressions for which our race has always stood. In all this division and sub-division the permanence and solidarity of our cities is often lost sight of, and only that which is for the day and the hour fostered. We are indeed builders of great cities, but are they not built for profit rather than for use, and may it not be truly said that the quality they possess is sometimes spectacular rather than intrinsic? And do they not suggest that "sick hurry and divided aims" of which Matthew Arnold speaks, rather than that noble quality of restraint, refinement and scholarship which characterizes all great art? The present movement for civic betterment, especially in Europe and the United States, has received its impetus from the recognition of two facts:

First, that a city based on the unit of 25-foot lots and 60-foot roadways can never express the virile, living soul of a great city; and secondly, that the

*Extracts from paper read before the Canadian Club, Calgary.



VIEW OF FIRST STREET, CALGARY.

enormous and at times crushing indebtedness of our municipalities has largely been brought about by self-styled economists, men who live day by day without any guiding policy, and who can only grasp the necessities of the day. It is always clearing away the debris of these false economists' mistakes which help to pile up our indebtedness.

In all progressive and well regulated communities, however, there comes a time when national and civic interests take precedence of narrow or private interests. Nay, there comes a time when men without compulsion think spaciouly and when even millionaires are inspired and civic consciousness becomes the prevailing atmosphere. This is a phase of development upon which we in Europe are now entering.

There are three broad principles on which all city builders must proceed, and each is of such vast importance as to deserve a separate lecture. The City Beautiful can only be realized by the due observance of each principle and their proper co-relation. I must, however, content myself by briefly stating them and then pass on.

Convenient transit, whether by water, rail, street car, automobile, or other vehicle, and the proper grading and division of these several modes of transit so as to attain the highest efficiency and therefore least waste of time and energy, forms two-thirds of the anatomy of our subject. In this connection you

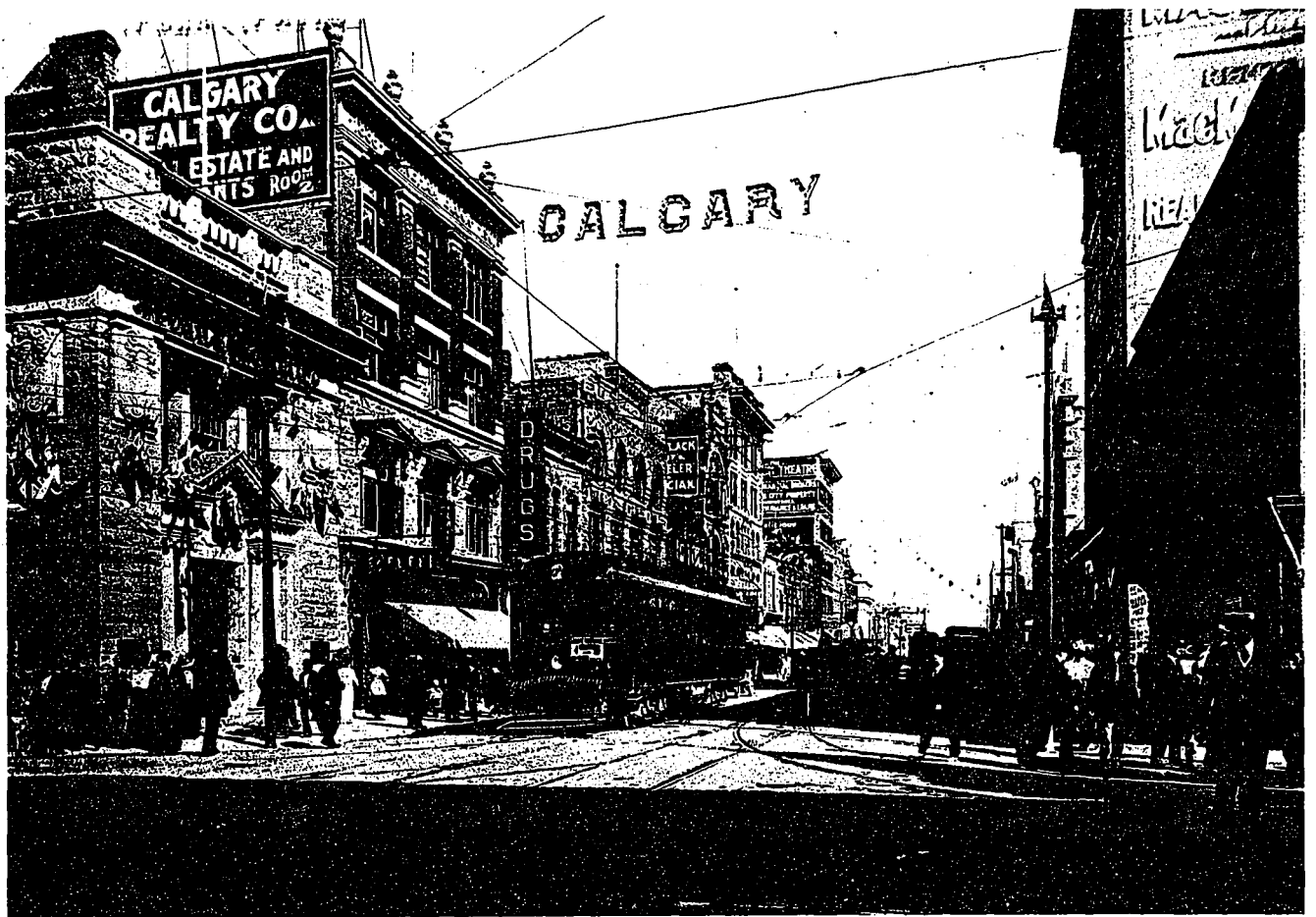
must bear in mind the rapid evolution of transit.

Hygiene, controlling density of population, provision of ample open spaces for physical recreation and especially playgrounds for the children, water, and perfect sanitation.

Beauty, or the comely external presentment of the city's life and activities and the correlation of features which individually may be antagonistic. The perfect orchestration, shall I call it, of Nature, Art and Science.

It is to the creation of beauty that I must devote the remaining part of my address, but before I idealize or give a local application allow me briefly to state my position in relation to Art, Science and Nature. It will help you to interpret what I have to say later. I will not speak of great Art, for I realize that the highest is only attainable when great ideas are patent and the prevailing atmosphere is propitious.

To give logical sequence to my address I ought now to speak of Architecture and the art of construction, especially of a great civic centre, the value of street perspectives, focal points and accentuated centres of interest, but as I must say something about parks and gardens I can only stop to tell you that the other day I was asked by Sir Richard McBride what style of architecture I would suggest for the new University of British Columbia. I replied that there could only be one style which could adequately



VIEW FROM CORNER OF EIGHTH AVENUE AND CENTRE STREET, CALGARY.

express a seat of learning, and that was the one which was universal and which expressed the most ripened scholarship. Let me say how delighted I am to find in Calgary such distinct evidence of scholarly attainment in some few of your newer buildings. You are showing commendable progress, and judged by the best, you have already reached a high degree of excellence.

If without offence I may be critical I would like to say that I find throughout Canada that you expect men who have no claim either temperamentally or scholastically to be regarded as artists to interpret Nature, and give you a beautiful composition. You expect to reap that which you have not sown. The pity of it is that the more amateurish a work is the more costly it becomes. I suppose I need not further urge the claim of the idealist or the need for a well-considered policy for park development. Economy and common sense alike suggest it. What, then, are the principles on which you should proceed? Calgary is a city of the plain, unscreened either from the storm or summer heat. Surely afforestation on a comprehensive scale (there must be nothing niggardly here) is your first necessity. From forests on the outskirts of the city should be arranged wedges of land narrowing as they approach the city. This is the theory of the thing; in practice you would need to compromise and where the land is more or less developed take what you can get. Still, the idea of a wedge widening as it approaches the forest lands

is a good one. Before you can lay out your parks you must first recognize that you have several distinct classes of individuals to cater to.

The children, who must have well equipped playgrounds—for the boy without a playground is father to the man without a job. The young men and women, who must have recreational opportunities provided under the best and most elevating conditions. The large number of middle aged and aged who require restful spaces combined with something of the pageantry of Art and Nature.

Your immediate privilege and present duty to posterity is to evolve a great plan providing for the assured development of your city, on hygienic and æsthetic lines; your second to prove to John Smith the practicability of your idealism by presenting your scheme to him in pictorial form with connected plans and by propaganda in which your women folks must take a part. You may not agree to give them a vote, but if you really wish your city to become beautiful you had better ask their help. (Applause.)

Meanwhile establish a nursery where you may experiment and grow the vast quantities of trees which you must plant if your city is to appeal to permanent residents, and then secure every acre of land you can purchase on the outskirts of your city and plant quickly with young trees of proved hardiness. Secure every strip of river bank still available, and don't forget the children's playgrounds; but, above all, be aye stickin' in a tree.

How to Apply Town Planning to Calgary

HENRY VIVIAN*

FIRST I thank those responsible for inviting me here to-night, for the great compliment they paid to me, and you, gentlemen, for the very kind way in which you have received me. This is, as your mayor has stated, my second visit to Calgary. I was here about two years ago, at the invitation of the then Governor-General, Earl Grey, to talk on this question, he knowing I was interested in it in the Old Country. I am now paying a visit to some of the cities I visited at that time to see what progress has been made. Undoubtedly progress has been made in a great many directions, more particularly in population, in several of these cities. I think I then said, Mr. Mayor, I looked forward to Calgary having 200,000 of a population in fifteen to twenty years. I believe you have already cut off 30,000 in two years. I was a pretty good prophet in regard to the size of your population. (Laughter.)

With regard to the question of town planning, I think it is also true to say that Canada has made considerable progress during the two years that have intervened between my last visit and to-day. It is possible that one might not be able to see it in practice, in the actual towns themselves, as two years, after all, is but a comparatively short time in the life of a nation. Though there may not have been any practical steps taken in many of the towns of Canada, yet I am satisfied there has been a great deal of talk on the question during those two years. Large numbers of people are realizing the importance of the issue, and in several of the towns I have visited, plans are being prepared for the improvement of the towns and cities on what are called "town planning lines." I have been more impressed by that this time than I was on the last occasion.

I have come through from Montreal, and it is difficult to find any city in Canada that has not a magnificent position for the development of something, of which we should all be proud. You come right through from Montreal to Ottawa, on to Toronto, then on to Saskatoon, through Edmonton, and from there to your own city of Calgary. All these cities are finely situated for the purpose of making of them magnificent organizations of human beings for the development of all that is worthy in human nature.

First of all, Mr. Chairman and Mayor, I would like to say that those of us who are interested in city planning would like people to take a wide and comprehensive view of the term. That it does not merely mean better houses, or the providing of parks or playing sites for the poor, or the provision of bold arteries and main streets. It is true it includes all these, but town planning, in its widest sense, is nothing more or less than the science of city development. We see no

reason why cities should be left to grow practically without order, and without some scientific attempt being made to adapt the growth of the city to the real needs of the people. The truth is, I suppose, that our control over the resources of wealth individually has grown more rapidly than the civic or corporate spirit has grown.

Take, for instance, any city in Canada. I suppose it will be true to say that the bulk of the people are given merely to improving their own fortunes. I am not saying anything against that, but I believe there is a great mass of men who centre most of their energy on that object, and it remains for a later time for us to have the civic support that will enable us to order our towns wisely and rightly. But unfortunately, Mr. Mayor, we have made too many mistakes. All we require in connection with the development of cities—I would have in mind the development of every city—is a Thinking Centre, charged with reporting and recommending whatever happened within the boundaries of the city, so that those responsible, whether it be the city council or whatever authority, may have before them, in the rough, the forecast of how the city ought to grow, so as to provide for the future needs of the city.

I see no reason why we should throw the best brains of the community merely into such questions as the development of industries, leaving the development of cities for the fag-end of our intellects. (Applause.) And, in my opinion, the building up of a city is as vital to the healthy development of the people as the building of factories of any kind. (Applause.) In my opinion the building of the city will be found in the long run, to be the principal industry, not the secondary. And, as for the sense of town planning, I assert that we ought to get the services of not the second best, but the best that the community has to give for purposes of this kind.

With regard to one or two practical points, in order to illustrate what I have been talking about, we will look at it from different viewpoints. Could anyone say that the average city in Canada—or any other country for that matter—could anyone say when one looks back for fifteen or twenty years, that our city has been so developed as to enable its citizens to work in the most efficient way at their business? We can see in every direction waste as the result of a lack of forethought. We have had that experience in the Old Land in practically every town that I know of. We are to-day spending large sums of money taking down buildings that have only been erected during the last fifteen or twenty years, and using the ratepayers' money. Taxpayers' money is being spent in enormous sums undoing the mistakes that are not fifteen or twenty years old, because there was no "Thinking Centre" charged with looking ahead with regard to the needs of the city.

*Address delivered in Calgary at a complimentary dinner given to the speaker.

Indeed, it is going on to-day in the Old Country, and I can see myself where money is being spent in the Old Country in the erection of buildings, paying frontages on main streets, that I absolutely say must be taken down in the next ten years, because there is no "Thinking Centre" charged with planning that area, and no responsible person to see that the plan is carried out. In other words, everyone is minding his own business, and I have no doubt but you have the same difficulties in the cities of Canada on a smaller scale than in England. No one attending to public business!

Let us take the cities of Canada. Take Montreal; you see mistakes being made there. Look at Toronto; I believe the widest street is sixty-six feet. They have already discovered that sixty-six feet is quite inadequate for the purpose of traffic in the city of Toronto. I believe your width here is sixty-six feet, if I mistake not. I may be wrong about that, but I am most certain I am right when I say that you will all regret that the streets were not twice as wide as you have them to-day. (Hear, hear.)

But Calgary is still young, and it is possible, therefore, to prevent the development in the wrong direction going too far. I want to emphasize that. The value of Calgary as an industrial centre, as a trading centre, as a manufacturing centre, will be affected immensely by the question as to whether your streets are so laid out as to secure that both population and material should move from point to point in the quickest possible way, with the least expenditure of energy, and the least cost; and surely that is one of the functions that the city should take upon itself. That is a function that cannot be taken by an individual; it must be taken charge of by an authority responsible for the whole of the city, also an authority that has a continuous life. The individual is in business to make a fortune—at least something approximate to it. He is in business to enhance his own interests. The individual's is not a continuous life. Some central authority should be charged with the continuous responsibility for unfolding the development of the town. Not only do we want it for the city proper—we want it for the areas beyond.

We have found in the Old Country—although I believe Calgary extends its suburbs out—one of our difficulties in the surrounding areas. Take London for example. To take, in the surrounding areas they must spend large sums of money to connect them with the bold arteries of the inside city; and I say, therefore, that the authorities should not only have a plan for the inside city before them, but a rough sketch of the area beyond, so that when the time arrives that the inside extends so as to include that area, it will come into harmony with the city that has already been developed.

The Germans have undoubtedly led us in that respect. You can go into almost any town hall in any important city in Germany and you will find the very thing I am talking about in existence there. I myself have been in the town hall in the city of Frankfort, and there you will see plans, Mr. Mayor,

showing how Frankfort has got to unfold itself for the next fifty years! Frankfort is a great city. Frankfort has added over 250,000 population in a comparatively few years, and it will add enormously in the next few years. In the town hall you will see market gardens already planned out, and many important sites selected for public buildings, reclaimed ground, and all that sort of thing. There is no doubt that that is partly due to the scientific German mind. I don't suppose that we can fully come up to the standard set by the German cities, but undoubtedly we can take great steps in the direction in which they have gone, more particularly in regard to our main arteries.

I would plead, therefore, for the central thinking authority for the purpose of laying out this main artery connecting up the suburbs with the city. Owing to the absence of such a plan you have enormous wastes on secondary roads. My own view is, that in regard to purely residential roads, sixty-six-foot thoroughfares are quite unnecessary, and that a lot of money is wasted in macadam that could be turned into gardens or lawns for the beautification of the city; and the roads leading to the main arteries would be termed secondary roads.

We have made a great feature of that in Hampstead, a suburb of London, with a population of about 30,000 people. We have made a special effort in these minor roads, to get the little children away from the danger zone where they will not be run over, and to keep peace near the residences of people. I am confident there is a great deal in that, the peace of mind and comfort that a man enjoys when he is far away from the heavy traffic. Let us take the motor traffic. I don't speak of the pleasure motorer or the business motorer. I refer to the motor for carrying produce. I don't know how far that has made headway in Canada, but it is certainly making great headway in the old land. There are trolleys being run by motor, and timber is being carried by motor instead of using horses, until your main roads are, after all, practically for the carrying of produce. If you are to have peace in your residence, you must get away from this.

So much in regard to that, and I think it might be carried a little further, in connection with the placing of our factories. I see no reason, myself, why factories should not be located by the authority responsible for the growth of our towns. They would be absolutely located in close connection with your present facilities. You, yourselves, frequently, no doubt, there being no plan of development, find the areas which should have been used for factories, are built up by perhaps residences or perhaps by something else which is not suitable for the neighborhood, leaving factories to develop in a less suitable quarter of the town, which makes the cost of production more.

And now I would make an appeal for the support of this security of property. I know it is sometimes said that Town Planners are people who want to ride rough-shod over the interests of others regardless of the private rights of the individual, and that their

plans would be in a direction of injuring property. I want, Mr. Mayor, to enter a very strong protest against that view. Indeed, I ought to reverse the argument and to say that on the whole, that rational town planning, instead of being detrimental, will really serve to add security to property itself. A man lays out \$5,000.00 or \$10,000.00 on the cost of a house somewhere near Calgary or Edmonton or anywhere else. Without order or properly laid out regulations, without some central control laying down the rules of the game, he has absolutely no security that a stencil factory would not be located within one hundred feet or a gin palace would not be located there or a lodging house. A man may spend ten thousand dollars for a home and at the end of five years his place is ruined because there is no order or general control. I say, therefore, that well-regulated town planning and city planning would, in the main, tend to secure property, rather than to injure it.

With regard to another aspect of it—provision of open spaces. People may ask why they are presented separately. They are only presented separately because it is natural to deal with them in that way, there is a very close connection between them. I think the city is not fulfilling its duty unless it lays down rules of the game so as to ensure for us practical parks in all parts of the city so as to develop the stamina and health of the people who have to live there. In the long run the future of Canada, just as the future of England, or any other country, depends upon the stamina of the great masses of its population. There is no getting away from that. We all may make hurried fortunes in five or ten years, but the final test is really the health of the people, and it is that test that we Town Planners ask shall be applied.

You want all these things in Calgary at the present moment. When you have 300,000 or a million people, you then begin to realize the injury inflicted on the large mass of people, or the failure to prepare the necessary conditions for a healthy city. That is why I believe that Calgary, Edmonton and Saskatoon should secure plans so that they may unfold themselves for the advance in the way of population. You will, in the time that is to come, have all these for a life-giving city, rather than a crowded city that has been so common in the old world.

In regard to one other aspect. I think we want to think of the whole nation. And I believe we cannot ever reach the matter of the individual living in a beautiful city, without making everything beautiful around him. Perhaps I may be permitted in this matter to refer to our experience in the Old Country. I mention Hampstead, one of the suburbs of London. I have been struck by the intense appreciation of the beautiful by the people who have lived there for a year or two, and, Mr. Mayor, I believe that the people who have been living in that suburb for two or three years, would be absolutely miserable if they were transferred to the ordinary, dirty working-class dwelling or to the average poor city of the old land. I am not at all sure if they wouldn't turn

anarchists! There you develop people in places of that kind, and they become acclimated to the beautiful, and when you place them in a poor section they shrink from it. Surely, Mr. Mayor, that means a great advance in human nature, in human intelligence, and also in imagination; and I would further say that this question of the development of our cities is very closely related to another task we have had in the British Empire. The British Empire is founded on representative government, called the principle of democracy. Here in Canada you have that very self-same thing.

Now, Mr. Mayor, this Empire depends upon the outlook of the average man. It does not depend merely on great statesmen like Laurier or Borden, Asquith or Balfour. They may be all born statesmen and at the head of the nation, but the future of the Empire depends, as I say, and I repeat it, upon the outlook of the average man all over this Empire. If he is to be equal with the average man who has responsibility as a founder in that Empire, he must have imagination. He is not in any fit condition, as a matter of fact, to express an opinion at the ballot boxes on great national issues and consequently great Imperial issues, unless he has had his imagination cultivated, because the whole thing implies developed imagination. I say, Mr. Mayor, in the average city, more particularly in the working class quarters, is where this imagination should be developed. If you wish a city beautiful in connection with this city, you have there—as it were—you have there the development of the imagination that will widen and greatly include, not only great national questions, but questions on Imperial outlines. If you do not develop his imagination, you will find his stamina dwarfed, which undoubtedly means unfitness for the great responsibilities for the future of the Empire. I would say that this question is not merely a question of developing the imagination, but has a bearing upon character and upon outlook and general conditions under which the average man lives in our great city of to-day.

And may I just urge this point in conclusion, that we in our cities should not, Mr. Mayor, accept the principle of tenement dwelling for the ideal home. You may not be able, in a generation, Mr. Mayor, to see the effect of these upon the individual character, and that is one of the difficulties of this great question of city development. You must take the long view, and you have to calculate what will be the effect on a certain man, not to-morrow, but in generations to come; and so with regard to this question of tenement dwelling. You are not able to see the effect of existing home life on efficiency merely in one generation. I have seen in London, during my twenty-five years of very close contact with London life—more particularly among the working classes—I have seen enough to enable me to conclude that the effect of the tenement dwelling upon efficiency is very bad indeed. The sturdy laborer who comes up from the country with all the energy country life gives to him, may be able to last through it, and you don't see much difference in his efficiency. (Perhaps

I may be able to speak from personal experience. I came up from the country and found myself in difficulty. I have been through the mill.) You at once begin to see the effect upon the children. You transfer a family from the country into the city, there the laborer himself is able to go through with his day's work year after year and earn his money, and you don't see much injury to his physical strength or his stamina. No doubt it is there. If the bulk of his work is outdoors, it helps and the unhealthy tenement doesn't count for as much as if he had not that outdoor life. Take the shoe operative or clothier, it begins to tell pretty soon on the workman himself, but not to the full extent.

The full extent falls on the wife, and later on the children, and if you take three generations, then you have got the full effect. You have got the little, measly, niggardly type of growth, unfit both physically and morally as well—a veritable weed of a man! You cannot see these things in one generation.

When you begin to get cramped, what happens? You begin to go up instead of spreading out. You may not see it in the first generation, but I believe that the working people brought up in the tenement house, must in the long run, spell disaster.

First of all, take individuality of character. The British race, what has made it so strong as it is in the world, is its strong individuality of character. Our German is scientific, but he lacks individuality. I believe, Mr. Mayor, the future of our Empire and the future of our race depends upon our preservation of those conditions that make for the retention and the strength of that individuality, and upon that our future really rests. The individual home, the individual family, the individual brought up in the home, and the association of home life—upon that all our success depends! Why, I remember in my boyhood days in our old village home in Devonshire, I used to have an individual friend in every apple tree and most of the gooseberry bushes. It is in these one thousand and one ways that you nurse all individual responsibility with life.

Take the child of the tenement house, what has he? The landing stage at the top of the staircase for a playground. To transfer the individual workman and his family into three rooms, the fourth floor up, does it have no effect upon character? Can you have the same kind of race? No, I am sure you cannot.

I say, therefore, Mr. Mayor, not only for the reasons I have given, first of industrial efficiency and for health and beautification in the interests of our race, so that we may nurse cities and this kind of character, we want to handle this problem of city planning in such a way to draw out our imagination and for the teaching of individuality.

I would make my last appeal, Mr. Mayor, to the business men of cities of this kind. I would make an appeal to the most able of our business men, not to think that this question has nothing to do with them. In my opinion, Mr. Mayor, the man who is

making his fortune in a city like Calgary has not done his share of the work when he has merely made his fortune out of the city. He owes some service, some work or duty to the city out of which he has been able to make his money. I would make an appeal to him to do that duty, as well as his private one, and give his services to health and beautification. Patriotism has been required on the battlefields of Waterloo and battlefields of that sort. I trust the day is very far distant when we will be required to have battles like that again; but there are battlefields at home where we can all render service to the city and community around us. I would appeal for that co-operative effort on the part of the whole of the citizens, and I would appeal to the public support of the most capable and successful of the citizens to go through with this work. Co-operative conscience is essential to a healthy national and municipal life.

We would not be able to reach the highest standard of civilization unless side by side with our material aims we draw out and cultivate and nurse the co-operative spirit. This spirit draws out of every individual a feeling that he owes his community something. You won't get any Victoria Cross for this kind of patriotism—patriotism that demands time and all that—but I believe in the long run, that kind of patriotism which has expressed itself in better sewerage schemes for towns, the planning of streets and open spaces for children, women and men, the securing of healthy home life—that these are the many different ways of expressing our patriotism. I would appeal for that kind of patriotism in Calgary. I believe, Mr. Mayor, that patriotism is forthcoming, and that Calgary will be a city of which we all will be proud; and I believe those who have taken part in building it up will, in years to come, look back with pride to the little contribution they may have made towards it.

IN REFERRING to the recent convention held in Buffalo, Edward Marshall claims the one main idea is to secure a proper balance between the physical and mental work. There must be recognition of the paramount necessity for such treatment of the student as will best insure his health with a most special reference to his general efficiency.

The educated weakling may be as inefficient as a citizen as the uneducated strong man, but neither will come near to realization of his capacity for usefulness. And we must take some thought, in these days, of the fact that in our school children is the material which becomes the parents of to-morrow.

In large cities the problem of ventilation has proved most difficult to rightly handle. In this, of course, is inextricably involved the architectural problem of constructing buildings properly lighted and ventilated upon limited areas and surrounded by high structures. Within the past few years, however, there has been a real revolution in the science of ventilation. The architect of to-day is an important factor in the future status of our country's welfare. He must plan to encourage cleanliness and sturdiness.

Sixth Annual Assembly R. A. I. C.

CALGARY extended a cordial welcome to the forty delegates representing the various chapters of the Royal Architectural Institute of Canada, September 15th and 16th. The general feeling of the members was expressed by J. H. G. Russell, President of the Association, in the following statement: "We were better entertained than ever before. The Calgary Association treated our wives and daughters like queens, and ourselves like kings, and every minute of our stay in this city has been enjoyable. We will never forget the manner in which we were looked after and everything possible done for our enjoyment."

The meeting held during the morning of the first day in the public library was devoted to registration, together with a session of the council. At the civic luncheon the freedom of the city was extended by W. J. Tregillus, acting mayor, after which addresses of welcome were given by R. W. Lines, of Edmonton, President of the Alberta Association, and R. A. Brocklebank, president of the Calgary Builders' Exchange.

In the afternoon Mayor Sinnott expressed the pleasure the citizens of Calgary felt at being chosen as the convention city of such an influential organization. After representatives of the board of trade and the builders' association made a few appropriate remarks the regular business of the session was transacted.

During the second day's proceedings Secretary Alcide Chaussé reported the Institute in a flourishing condition, having five hundred and fifty-eight members, eighty-eight per cent. of whom are active by virtue of belonging to provincial organizations. After a thorough discussion of the by-laws several changes of importance were made: one that each provincial organization pay two dollars for every accredited member; another that non-active members be elected by a unanimous letter ballot of the council. Without a dissenting vote the convention rejected the proposed schedule of fees and reverted to the former code of ethics and rules governing competitions. New by-laws covering problems dealing with a

greater scope of the confederated Association were adopted.

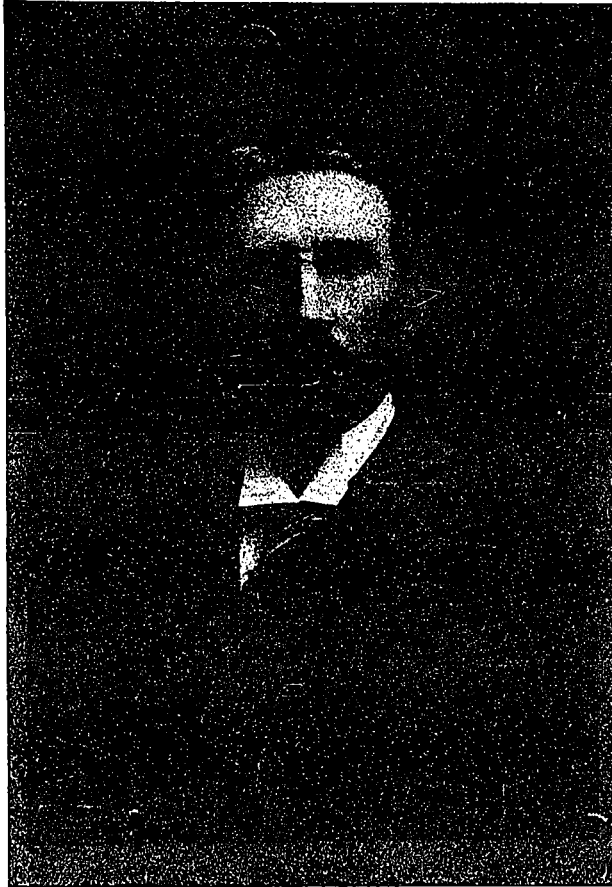
Upon the conclusion of F. G. Engholm's interesting lecture the following officers were elected for the ensuing year: President, J. H. G. Russell of Winnipeg; vice-presidents, R. W. Lines of Edmonton, and J. P. Ouelette of Quebec; Secretary, Alcide Chaussé of Montreal; treasurer, J. W. H. Watts of Ottawa; members of council from Alberta, G. M. Lang of Calgary, James Henderson and R. W. Lines of Edmonton. Quebec was unanimously selected as the meeting place for 1914.

The entertainment of the second day consisted of a luncheon given by the Calgary Association, followed by an automobile trip. The Country Club entertained the delegates during the afternoon. The evening functions furnished an agreeable ending to the successful convention. The ladies were given a theatre party by the wives of the members belonging to the Calgary Association, while the delegates themselves were guests at a smoker given in Paget Hall.

One of the pleasant memories is the address given by Sir Gilbert Parker, member of the British Parliament. Among other remarks, he said: "You who represent the whole Dominion, you who are making the people realize and understand that culture and beauty go hand in hand, with utility, the rewards that you receive, that is the satisfaction of your own ideals and the satisfaction of the

eternal elements of beauty, these are the greatest and most precious rewards that you can gain in all the failures and successes of your career.

"Architecture," continued the speaker, "is the first expression of the human race, then come painting, sculpture and music. Your position is not less to-day for your profession appears to me to be one that is getting nearer to the people themselves than any other profession in your country. Pictures are getting fewer, for most of the valuable masterpieces hang upon and adorn the walls in the houses of millionaires, hidden away from the sight of the man in the street. But your fine buildings are every day made



PRESIDENT J. H. G. RUSSELL.

CONSTRUCTION

A JOURNAL FOR THE ARCHITECTURAL
ENGINEERING AND CONTRACTING
INTERESTS OF CANADA



FREDERICK REED, Editor

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Vol. 6 Toronto, October, 1913 No. 10

an education to the poorest of the poor. The splendid edifices that your skill and genius erect will last for all to see them and learn the splendor of their beauty. Historic places such as the ancient cathedrals of the old land and on the Continent, mansions erected in the far away ages by the nobility of England and fashioned by the hand of men like Christopher Wren and Grindley Gibbons, will last and endure when paintings and perchance music may have passed into oblivion. Take your profession seriously; look upon it as a profession that tends above all others to elevate and educate the minds of men and women."

CURRENT TOPICS

CREDIT SHOULD have been given in our last issue to Clark, MacMullen & Riley, who were the consulting engineers on the Bank of Toronto in connection with the mechanical equipment of the building.

WORK HAS BEEN started on the foundation for the monument to be erected in Philip's Square, Montreal, in honor of the late King Edward. The tall shaft will be surmounted by a figure of the late King, while around the base will be a number of artistic and appropriate groups and figures, surrounded by a low granite fence. The foundation will be twenty-four by seventeen feet. One hundred thousand dollars will approximate the cost.

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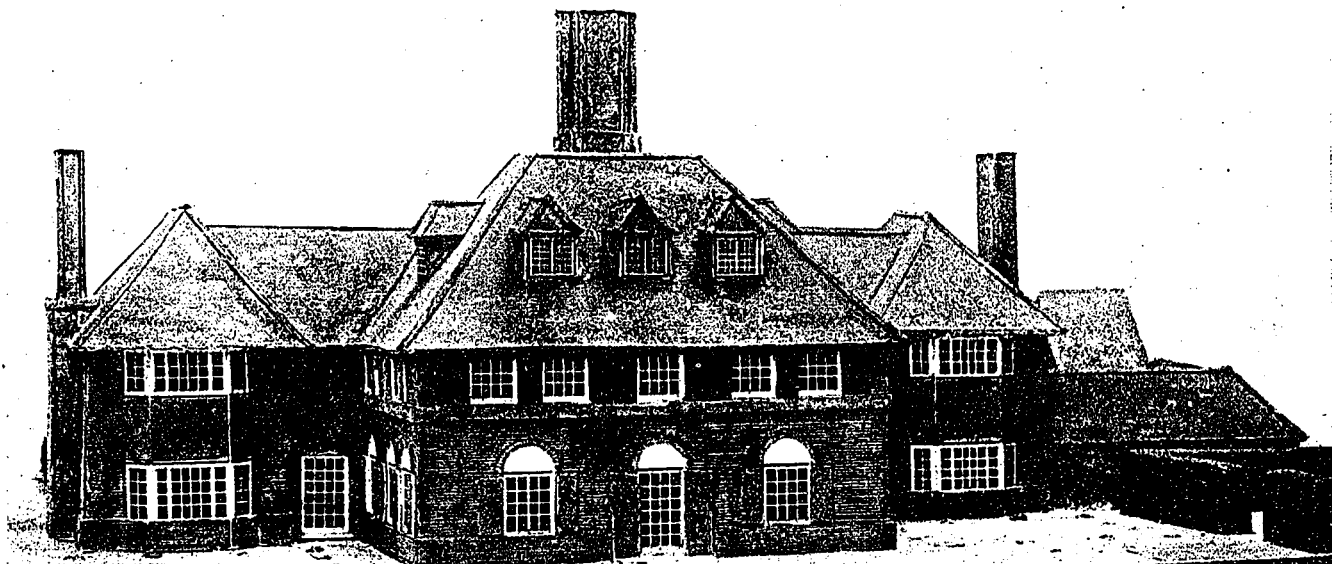
PROF. DANTE VAGLIERI, of Italy, is meeting with considerable success in the excavation of Ostia. Within the last few days about 800 coins of the fourth and fifth centuries A.D. have been found buried at Ostia, including several of the Emperor Jovian (363-4). The shops near the so-called Temple of Vulcan, the history of which is in course of study, are also being excavated, as well as a large building in the Via Decumana, the main street of Ostia. At that point recently was found the base of a statue with Cupids carved upon it, as well as portions of other statues.

Almost all the long Via Decumana is now visible. A large but unfinished drain beneath this street has been unearthed, and among the finds in this one street are two headless female statues of the second century A.D.; another inscription to a Prefectus Annonæ; a huge inscription with the name of the Emperor Trajan; a piece of a cornice bearing the sacrificial emblems; an inscription by the College of Smiths to Antoninus Pius, and two fine columns, one of which has a sun dial scratched upon it.

The theatre, the stage of which is at present being partially reconstructed, is the most beautiful sight at Ostia. Following the precepts of Vitruvius, Prof. Vaglieri has planted a garden in the square adjoining the portico of this building, and in the centre of this square is the Temple of Ceres, a goddess of great importance at Ostia, whence Rome derived her transmarine supplies of corn. Recently discovered brick stamps show that it was Commodus who built the portico.

From an artistic point of view, the most valuable of the recent discoveries is the almost perfect statue of a woman sacrificing. This statue, which is ascribed to the Flavian era, was found only a fortnight ago. A small nymphæum and an inscription to Jupiter Optimus Maximus, as well as another mosaic near the theatre and a further female statue complete the recent additions to our knowledge of Ostia.

The workmen, of whom 130 are at present engaged, are now excavating a fuller's shop, which might have been—so close is the resemblance—the original of that depicted at Pompeii. One other discovery, an ancient lime kiln of the time of Antoninus Pius, accounts for the disappearance of much that was older, and shows that it was not only in the Middle Ages that marble fragments were cast into the oven. Attention is also being paid to the better preservation of monuments.



GARDEN FRONT.

FIRST PRIZE.

BY W. C. GREEN.

Competitive Designs for Houses

THE FOLLOWING competitions held recently by the "Country Life" of London and "The Brickbuilder" of Boston are reproduced in this number of "Construction" on account of the meritorious drawings submitted. We wish to thank both publications for their courtesy and trust the results will augur well for similar contests being held in the Canadian field.

In the competition held by "Country Life" there were one hundred and ninety-seven contestants. The cost of the house was to vary from three to four thousand pounds and be so expressed as to stand the ordeal of being transferred into brick and mortar. The judges gave the following report:

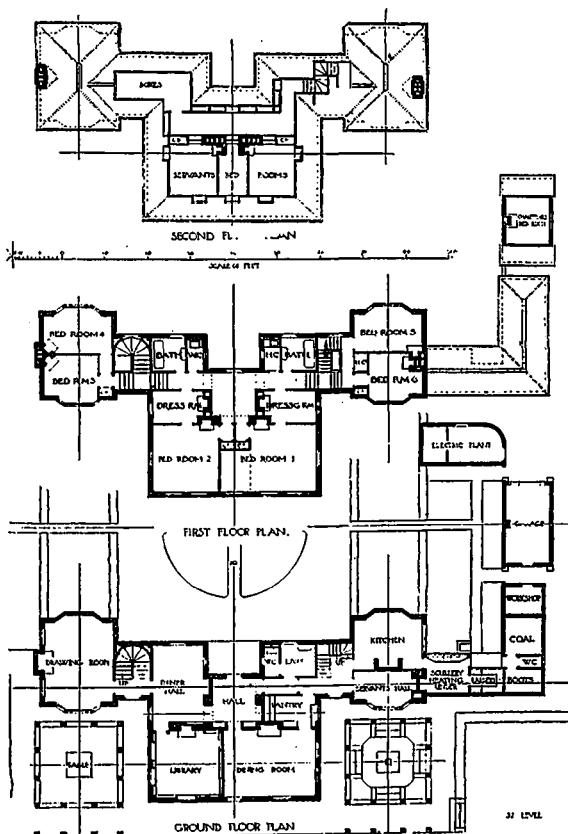
"We have carefully examined the designs submitted in the 'Country Life' competition for a house to be built at Forest Row, Sussex. Having taken into account the conditions laid down, and in particular the limits of size, accommodation and cost, we make the following awards: The first prize of £80 to Mr. W. Curtis Green—in accordance with the conditions, Mr. Curtis Green is appointed architect for the carrying out of the work); the second prize of £40 to Mr. Cyril A. Farey; the third prize of £20 to Mr. A. Winter Rose; the fourth

prize of £10 to Messrs. Geoffry Lucas and Arthur Lodge; a prize of books to the value of £10 to Mr. E. Brantwood Maufe; a prize of books to the value of £10 to Mr. Leslie Mansfield; the prize of £20 for the best perspective drawing to Mr. Charles Gascoyne; the prize for the best model submitted has been awarded to Mr. Lionel F. Crane. (The conditions provided that this prize would amount to £20 if more than twelve models were sent in. As only seven were received, the amount of the prize is £10, and the fourth prize mentioned above has therefore been awarded.)

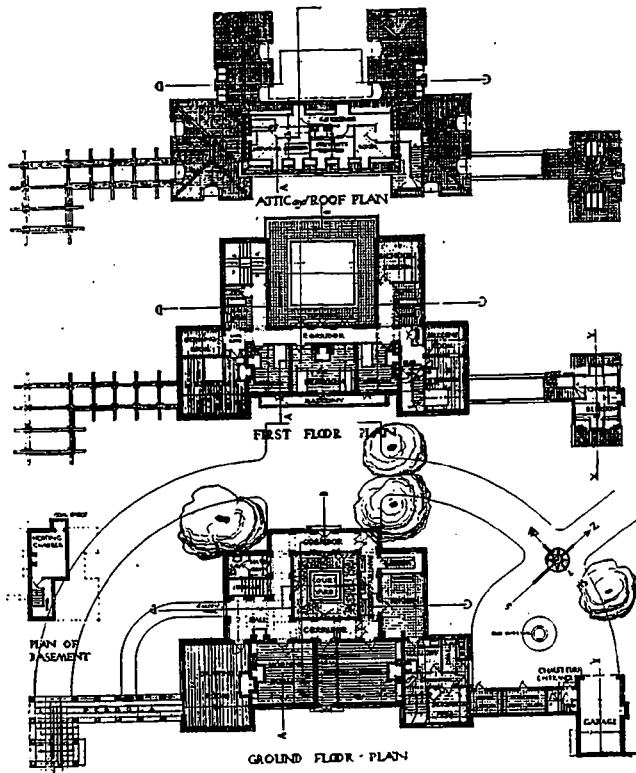
"A high level of merit is shown, not only by the designs to which prizes have been awarded, but also by many others, which we have recommended for reproduction in the pages of 'Country Life.'—E. L. Lutyens, P. Morley Horder, Lawrence Weaver.

"June 2nd, 1913."

Mr. Weaver, in commenting on the competition, said that the problem in the present competition was to give practical and dignified shape to a country house of moderate size with the following accommodation: Hall, dining-room, drawing-room, study, six bedrooms and one or two dressing-rooms for the family, two servants' bedrooms, the usual



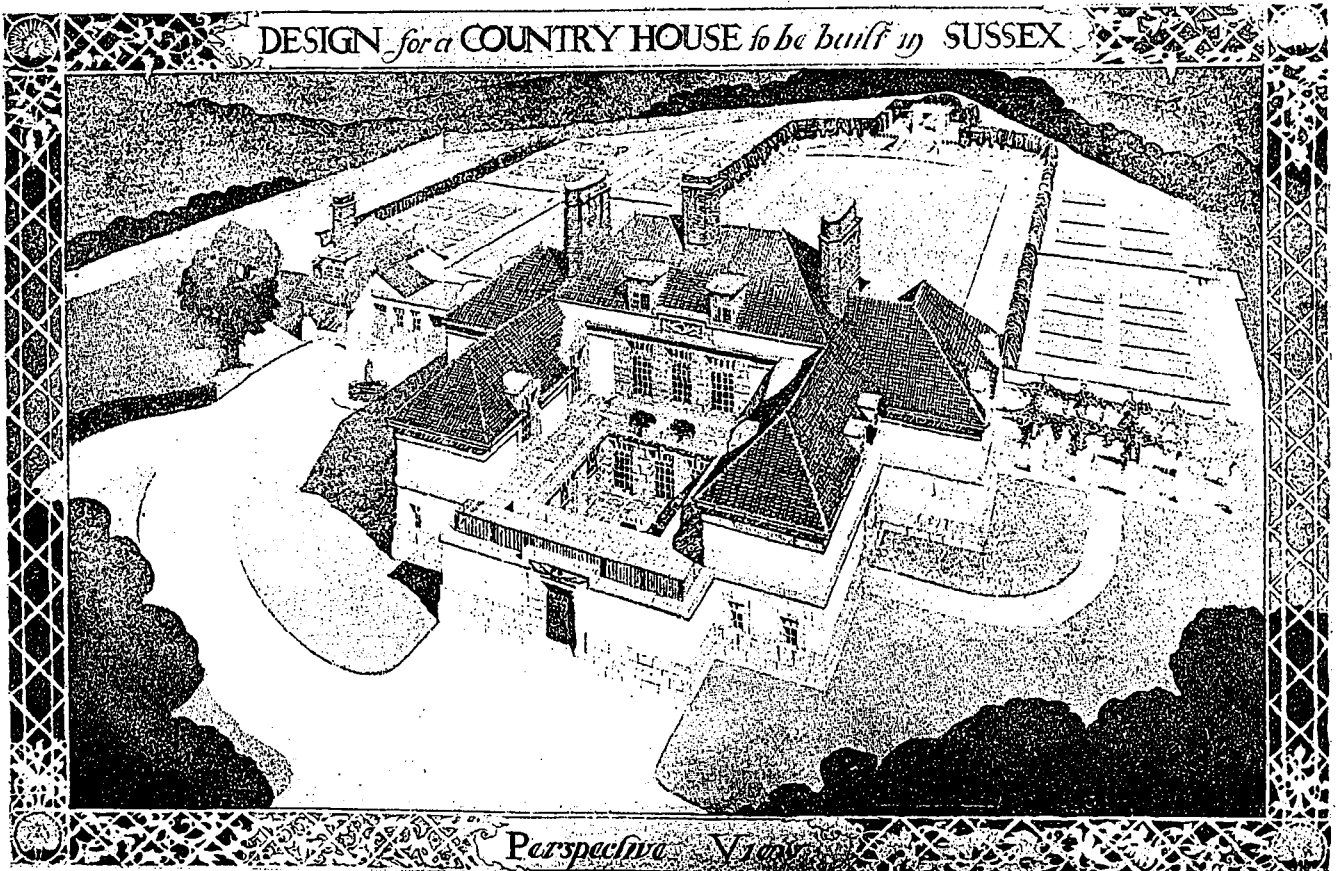
FIRST PRIZE PLANS



SECOND PRIZE PLANS.

kitchen offices, a garage and accommodation for an electric light plant. Limits of cubical content and cost were included in the competition, and allowed reasonable latitude in the employment of good, but not extravagant, materials. The competitors were

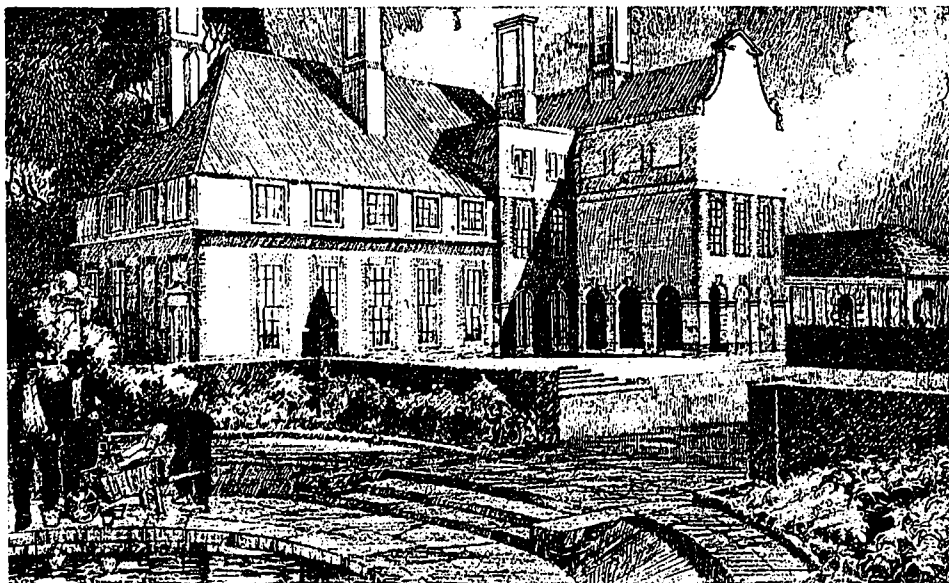
also required to design the garden. The designs now illustrated will be understood the better if the nature of the site is understood. Covering rather more than two acres of Ryst Wood and oblong in shape, with sides almost parallel, it measures a little more than one hundred and fifty yards over its longest dimension, and averages about seventy yards in width. Its main axis runs from northwest to southeast, and, as is seen by the garden plans reproduced, it runs to a point at its southeast end. There is a gentle slope upwards to that end from the approach road. From the southern end of the site there are broad views over the Royal Ashdown Forest golf course southwards, and to the higher forest land towards Hartfield eastwards. Three great chestnut trees and one double oak are important features of the site, and they obviously needed to be preserved as features of the garden scheme. To the northeast, and covering much of the land between them and the approach road, is a charming plantation of oaks and firs, Nature's ready-grown protection. The first consideration, therefore, was for the right placing of the house. It is obvious that it would not be appropriate to build it close to the road, as in that position the fine range of view would be blotted out by the trees. It also seems desirable, in order to secure the utmost possible privacy for the garden, that the carriage road to the house should creep up the site at one edge instead of being carried up the middle. With regard to the aspect of the main garden front, the choice lay between the southeast, due south, or south with a touch of west, all satisfactory.



ENTRANCE FRONT.

SECOND PRIZE.

BY CYRIL FAREY.



GARDEN FRONT.

THIRD PRIZE.

BY A. W. ROSE.

We now come to the question of architectural treatment. The country is typical of the genius of Sussex in that milder, wooden mood which belongs more especially to her northern borders. It is as unlike the large austerity of the South Downs as may well be conceived.

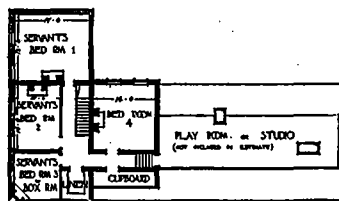
Forest Row, from which Ryst Wood is about a mile distant, is a charming village, but can no longer claim any aspect of remoteness. People are swiftly discovering that in its neighborhood are some of the most enchanting sites for country houses which can be found within so reasonable a reach of London. Other houses are springing up near by, but the various sites are so wisely hedged about with restrictions that no one house will spoil the view of another. The competition site is especially well guarded in this respect, and a perpetual open outlook is assured for the windows of the house. It seems, however, quite unnecessary to emphasize that vernacular and rural note which is appropriate to a house hidden away in an untouched, unknown neighborhood. The large majority of the competing architects seem to have appreciated this point. Although no indication of any desired style was given, most of them sought to achieve balanced and sober compositions rather than the rambling and picturesque type associated with the Sussex farmhouse. In this they have followed the increasing tendency to invest domestic architecture with those characteristics which we associate with Georgian times.

One definite impression I take from a study of the sheets of details to half-inch scale which accompanied each design on which a personal word may be allowed, seeing that it is impossible to reproduce these large drawings. They rather lack gaiety and life. It is true that the demure eighteenth century manner which most of the competitors have adopted demands sobriety and reserve in the application of detail, but it does not ask for dullness. We may require of all manners of building appropriate to domestic work

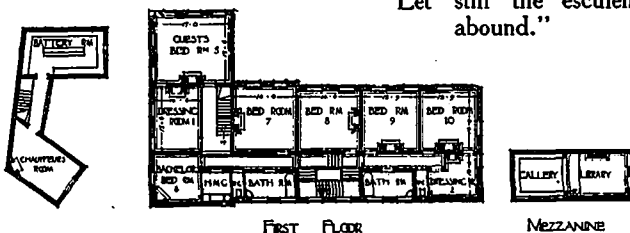
that the detail shall actively please, and believe that dispirited treatment, like the dank words which Robert Louis Stevenson hated, is a crime of *lèse-humanité*. "Every gay, every bright word or picture, like every pleasant air of music, is a piece of pleasure set afloat; the reader catches it, and if he be healthy, go on his way rejoicing; and it is the business of art so to send him, as often as possible." It is reasonable to extend the same demand to architectural detail. It may be restrained in quantity and soberly disposed, but that is no reason why it should be lacking in an intrinsic vitality.

The interesting character of the garden designs marks the attention given nowadays to the unity which should subsist between the house and its surroundings. The elements of lawn and hedge, pool and pergola, are disposed with considerable skill in most of the schemes, but it has not been forgotten that the garden should be a place not only for flowers but for the kindly fruits of the earth. Indeed the competitors seem to have interpreted the conditions in the spirit of the well-known command to a gardener:

"Friend, in my mountain-side demesne
My plain-beholding,
rosy, green
And linnet-haunted garden-ground,
Let still the esculents abound."

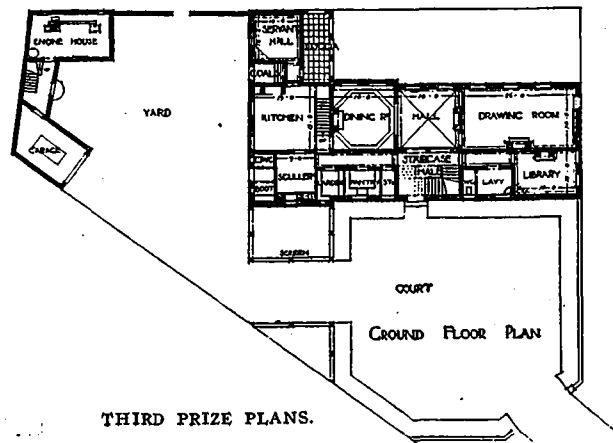


SECOND FLOOR



FIRST FLOOR

MEZZANINE



GROUND FLOOR PLAN

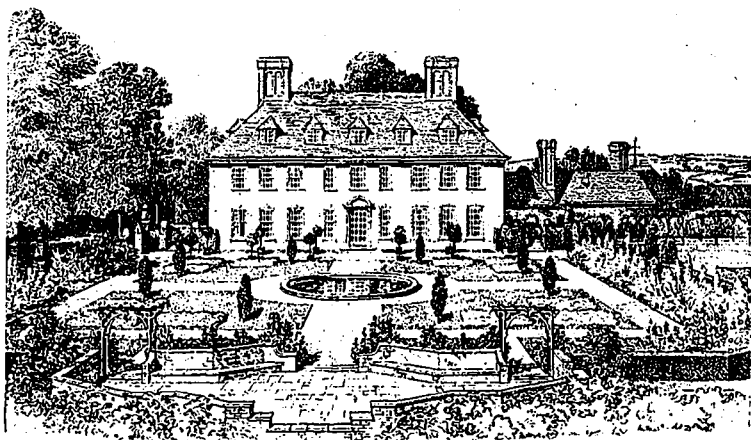
THIRD PRIZE PLANS.

The First Prize Design.—Mr. Curtis Green, well known among his professional brethren as the new President of the Architectural Association, is to be congratulated on a design of fine architectural quality. The placing of the building on the site is ideal, as is also the planning of the carriage road. The planning of the house leaves a little to be desired. The reception-rooms are well devised, but the kitchen quarters seem not to have been thought out carefully. On the first floor the bedrooms are well disposed, but those in the flanking wings are somewhat small. It must, however, be accounted to Mr. Green for righteousness that he has strictly observed the limits of cubical content and cost laid down in the conditions, and this cannot be said of many of the designs sent in. The elevations are altogether admirable. They show a fine reticence, a dignity of proportion and a right adjustment between solid and void which combine to make a design of unusual merit.

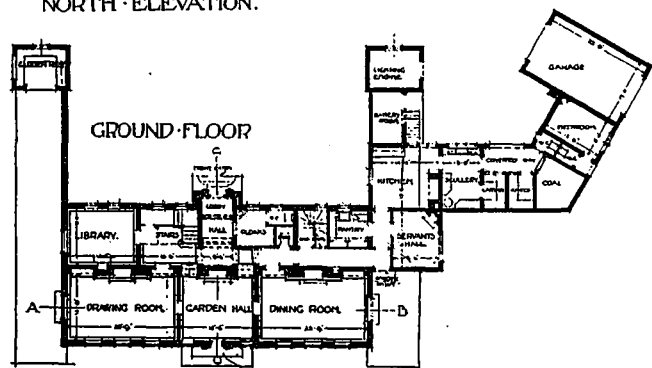
water apparatus. Mr. Green did not submit a perspective or model with his design. Mr. Lionel Crane was therefore commissioned to make a model so that the merits of the design might be more clearly shown. Photographs of the model are now reproduced, and give an excellent idea of the house.

Second Prize Design.—Mr. Cyril Farey, to whom has been awarded the second prize, submitted a design of notable interest and scholarship. It shows, indeed, a definite classical idea, represented in a very personal way. It is worthy, in fact, of the brilliant reputation of Mr. Farey, who last January carried off the Tite prize of the Royal Institute of

British Architects for the façade of a royal palace. Mr. Farey's house is not so well placed on the site as Mr. Green's, as the carriage approach divides the wild garden into two halves. On the north, or entrance front, a little courtyard is provided, surrounded by a cloister-like arrangement. Three alleys of this cloister serve as pas-

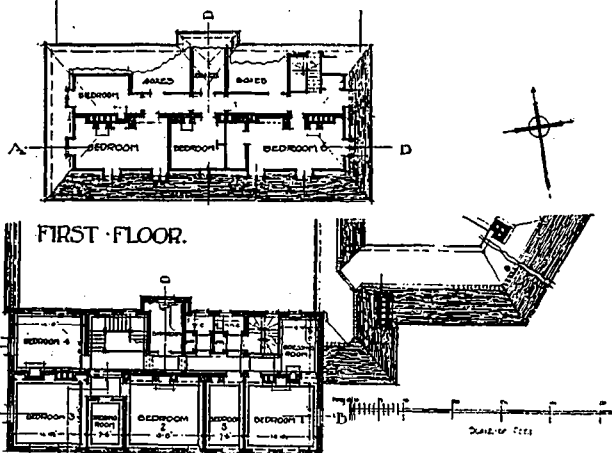


NORTH ELEVATION.



GROUND-FLOOR

ATTIC PLAN.



FIRST FLOOR.

FOURTH PRIZE PLANS.

BY GEOFFRY LUCAS AND ARTHUR LODGE

When the house is built, it will take its place faithfully and naturally in direct descent from the later phases of Sussex domestic architecture. Its walls will be of hand-made, sand-faced bricks of various colors, so mingled that the wall surface will yield a broken and lively effect. The roof will be covered with hand-made tiles. Mr. Green has not provided for anything elaborate within. Cornices and paneling will be used in strict moderation. Elements which minister to the enduring comfort of the house, such as wood-block flooring throughout the ground story, will be provided with no sparing hand, and the whole house will be warmed by a low-pressure hot

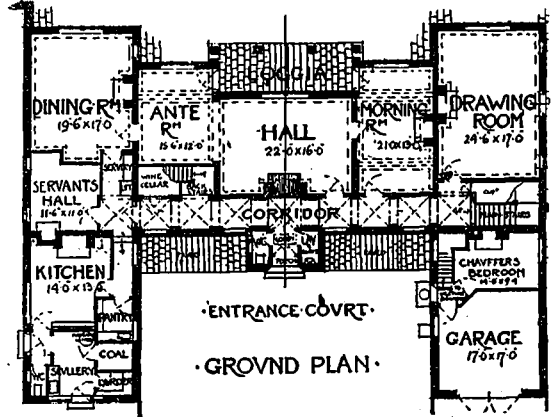
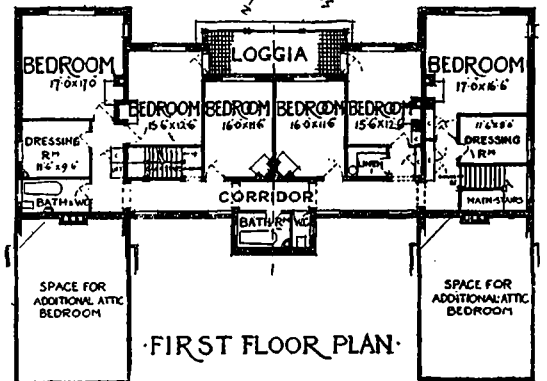
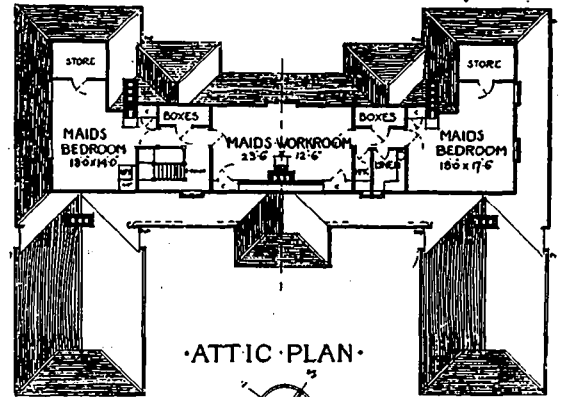
sages to the staircase hall and sitting-rooms, while the remaining alley is ingeniously appropriated to the purposes of a pantry. Mr. Farey, however, has broken down on his kitchen plan. The arrangement of the bedrooms is perhaps the best that was submitted. The elevations are of great dignity, but it is doubtful whether the dormer windows when built would look so well as they appear in Mr. Farey's cleverly drawn bird's eye view. The main criticisms of this design are that the house is not big enough in scale for the plan adopted, that the courtyard entrance is an admirable feature, but would need to be at least double the size to be effective, and that



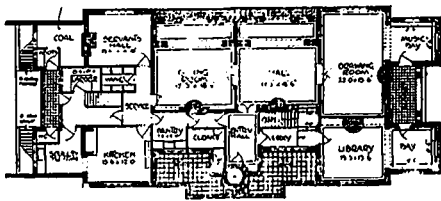
the elevations are rather un-English in feeling, and would hardly look comfortable in a country setting. For a site in a near London suburb their character could scarcely be bettered, but they show no regard for any building tradition which Sussex knows. Mr. Farey observed his conditions with regard to cubic content, but if the house were built with materials that would secure a proper interpretation of the design, it is unlikely that the limit of cost could be observed.

Third Prize Design.—Mr. Winter Rose is also to be congratulated on having given to his scheme a definite personal character, which lifts it markedly above the average level of the designs submitted. An admirer of this design, in practical proof of his liking, has commissioned Mr. Rose to plan for him a little country house. The competition house is placed well on the site, and its planning shows original thought.

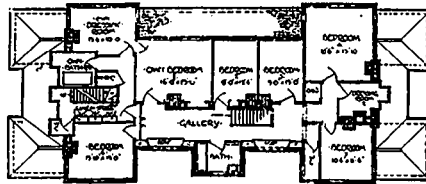
All the important rooms have a south aspect overlooking the garden, and all servants' quarters and bedrooms face to the east, so that neither would their windows overlook the garden, nor would the sounds of domestic activity reach the other part of the house. In the disposition of the reception-rooms Mr. Winter Rose has provided two rooms, the hall and the dining-room, of unusually bold proportions. They



PRIZE MODEL.
ENTRANCE FRONT, GARDEN FRONT AND PLANS.
BY LIONEL CRANE.



GROUND FLOOR



BEDROOM PLAN

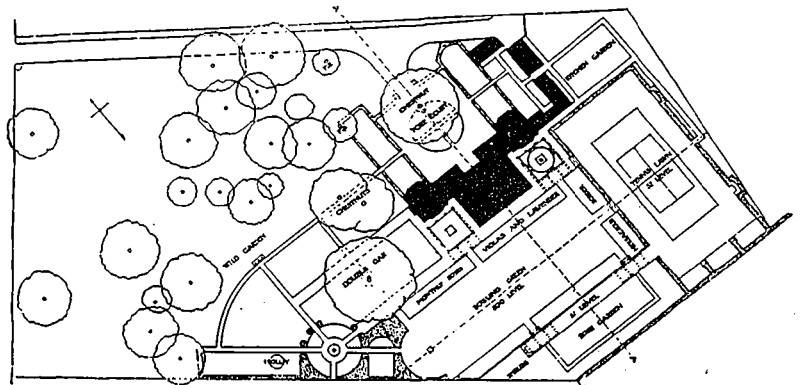
BOOK PRIZE BY LESLIE MANSFIELD.

are twelve feet high, and this difference in scale has a large effect on the general outline of the elevations. A gallery has been arranged on a mezzanine floor to the library, and is approached by a little circular stair. This would serve as a convenient book store and a pleasant retreat for a studious owner. The bedrooms are admirably planned, but, with an unusual generosity, the largest room is allocated to a guest. On the second floor there are not only two good servants' rooms, but an extra bedroom in excess of those laid down in the conditions is provided. The elevations of the house have a distinctive character. In some respects they show the result of the increasing attention paid to the classical work of the early nineteenth century, but the curved gable on the south side does not rhyme very happily with the rest of the design. The loggia is not very well placed, as there is no direct access to it from the house except from the servants' quarters. Mr. Rose's garden design is very ambitious, and the great lily pond seems rather out of scale with the house. In color, the house would be interesting, for Mr. Rose specified brick walls of a dark orange color, with dark grey bricks for the quoins and other dressings. For the roof, he contemplated using dark grey pantiles of the kind which at present seem to be got best from Holland—a state of things which does not do very great credit to the English tile maker.

Fourth Prize.—The design of Messrs. Geoffry Lucas and Arthur Lodge, which secured fourth prize, shows a very practical plan. The reception-rooms are all in the main block, and the kitchen quarters and garage in an annex. The authors have taken the opportunity allowed by the conditions of putting one of the family bedrooms in the attic. The general scheme of the house is so satisfactory that it is a pity it has not been invested with a greater air of distinction. The elevations are sound, but it must be confessed they are also dull. The impression given is that with rather more time and thought the design would have been much more successful. The house is put in the right place, and good use is made of the existing trees, but the authors are a little optimistic if they suppose that yew hedges would flourish under wide-spreading oaks. One of the less satisfactory features of the garden is the very curly drive, but clearly this has been so con-

trived with a view to saving the maximum number of trees. The same good effect, however, would have been achieved if the drive had been brought up the northeast boundary. The design is represented by an attractive perspective drawing, which, however, was not received in time to be judged *qua* perspective.

Book Prizes.—The design submitted by Mr. Brantwood Maufe, to which a prize of books to the value of ten pounds has been awarded, has considerable merit. The garden front is now illustrated by a perspective, drawn by Mr. Charles Gascoyne. Mr. Maufe has devised a very extended plan, and the house is only one room thick. The arrangement of the rooms is practical enough, except that the staircase is placed too much at one end. It would be necessary to walk over fifty feet to get from the dining-room door to the foot of the stairs, and the

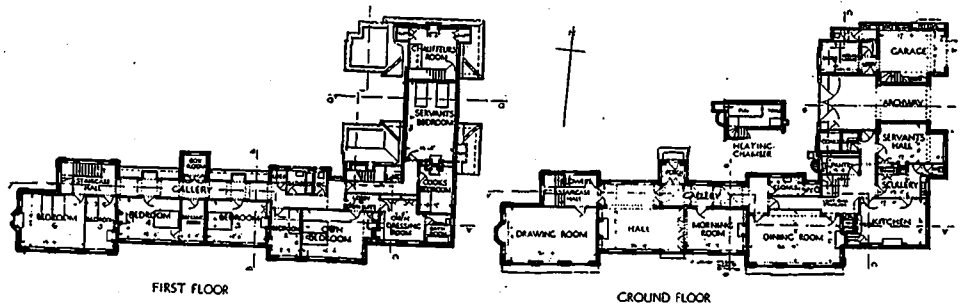
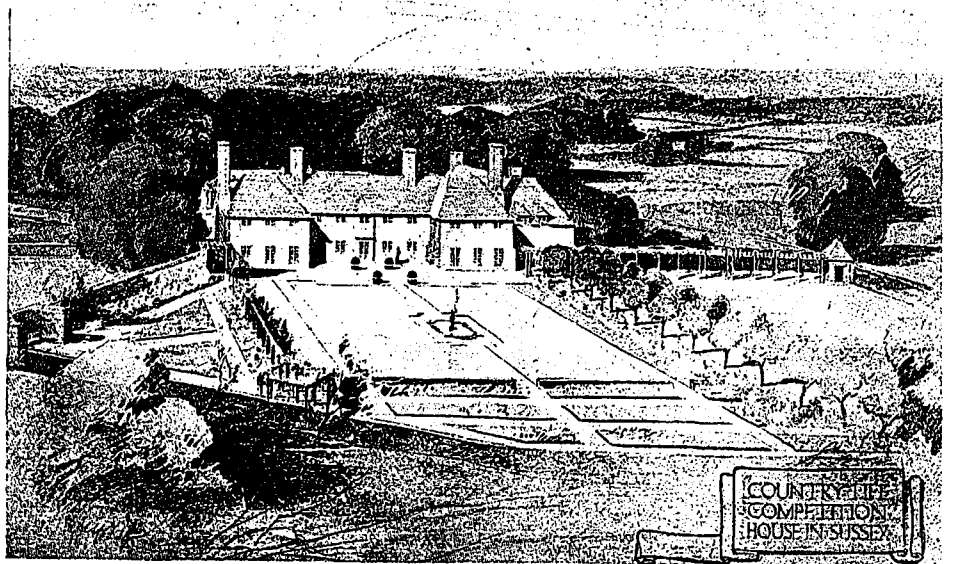


FIRST PRIZE, GARDEN PLAN.

traveller would have to pass through the sitting-hall. The kitchen premises are well arranged, and the garage is joined to the house, being divided from it on the ground floor by an archway. A very good point in the bedroom plan is that the six family bedrooms and the two dressing-rooms all face south. The garden plan is characterless.

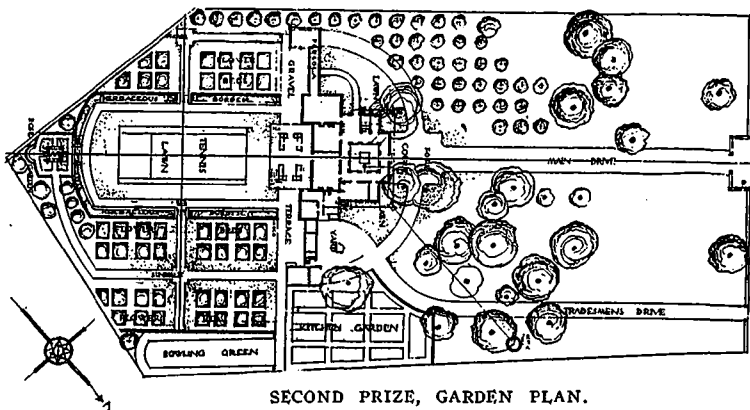
Mr. Leslie Mansfield's design, to which a book prize has also been awarded, was represented not only by plans, but by a very neatly made model, of which photographs are now reproduced. The elevations are conceived in rather too markedly a cottage spirit for a house of such dimensions, and the sloping roof over the loggia on the garden front would not have a very happy effect. The best feature of the scheme is the treatment of the servants' quarters, which are admirably practical, and the little kitchen court connecting the house with the garage is also well contrived. The reception-rooms are spacious and well placed, but the provision of bays in the drawing-room and library, connected by a set-back loggia, is not a very mature piece of design. The bedrooms on the first floor are satisfactory, and the servants' bedrooms are, as in most cases, on the attic floor.

Perspective and Model Prizes.—The perspective prize has been awarded to Mr. Charles Gascoyne for a drawing of great merit. He is so well known as the interpreter of other men's designs for the purposes of the Royal Academy Exhibition that it is needless to discuss his technique here. It is sufficient to say that he combines the gifts of showing the architecture faithfully and of presenting it in a pictorial way, which is none the less attractive for being

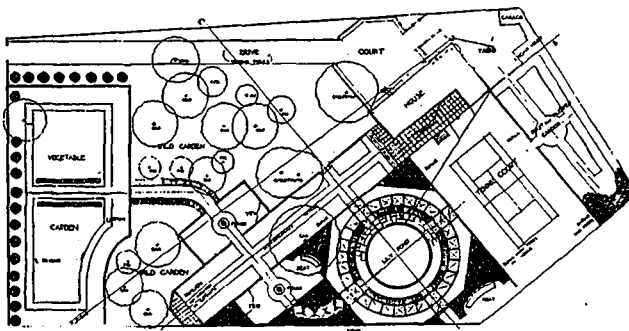


BOOK PRIZE BY E. B. MAUFE.

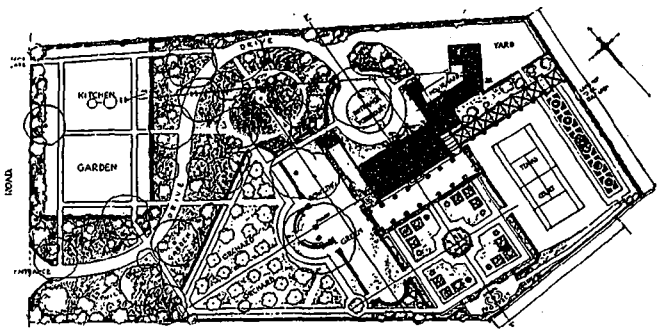
explanatory of the design. His drawing shows the scheme for the house submitted by himself, in conjunction with Mr. George Nott. It is full of architectural feeling, and the entrance front, not shown in the perspective, is especially attractive. The house is planned as a right angle, and the forecourt is formed by the two inner sides of the angle, and by wing walls ending in attractive brick posts. It is a little difficult to imagine a motor-car manoeuvring in such a confined space. The ground floor plan is satisfactory in respect of the disposition of the main reception-rooms, which are flanked by a pair of garden rooms connected with the house by pergolas. It has two marked defects. One is the arrangement of the lavatory and cloaks lobby, which block what would otherwise be a through corridor from the main hall to the trades entrance. The other is the provision of the garage immediately adjoining the library. One rather trembles to think what the student in the library would say when the chauffeur was carrying out some small repairs to the car on the other side of a nine-inch wall. It is a pity that these practical points were not better thought out, as otherwise the design would have deserved a prize other than that awarded to the perspective. The garden has been sparsely designed with a very pleasant little yew-hedged garden, a tennis lawn similarly enclosed and a large parterre on the south



SECOND PRIZE, GARDEN PLAN.



THIRD PRIZE.



GARDEN PLANS.

FOURTH PRIZE.

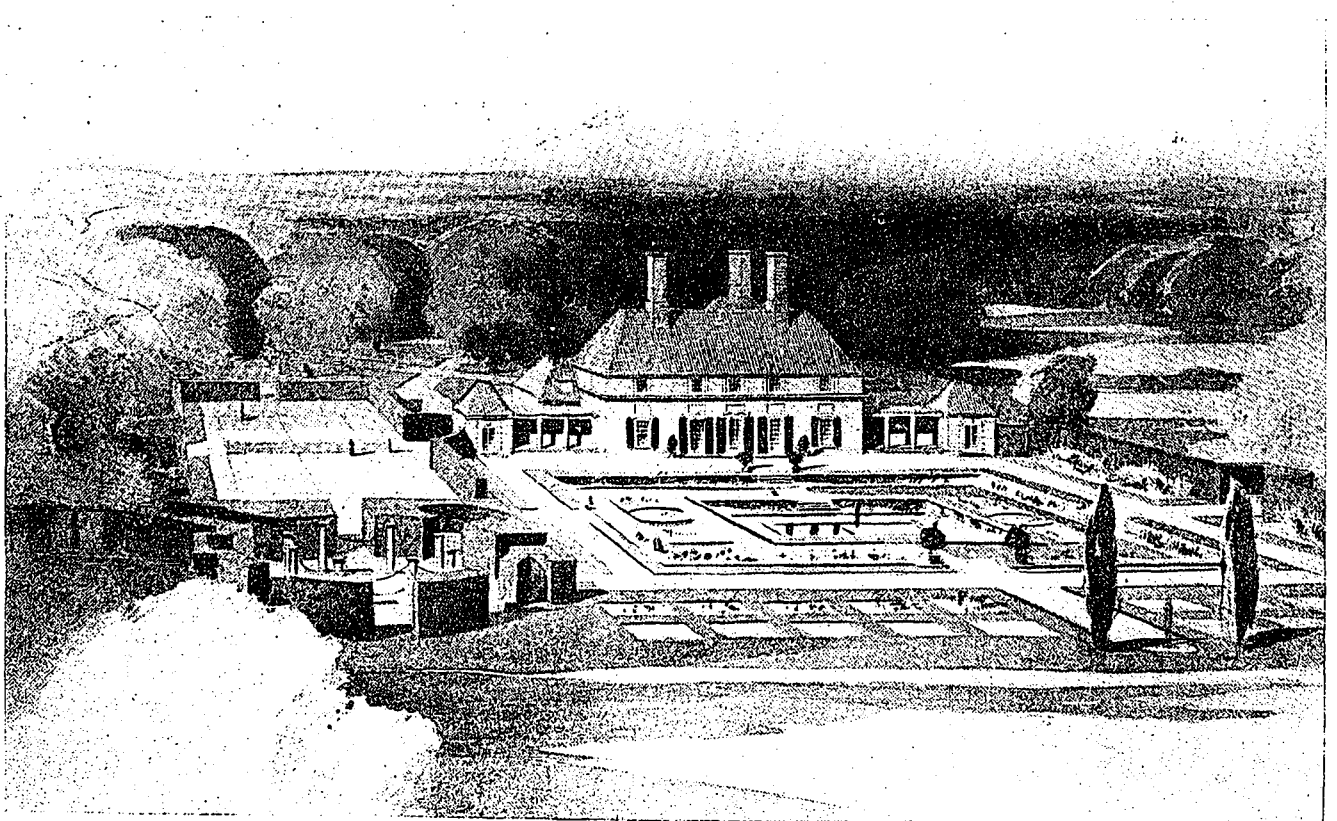
side, in which a sunk pool forms an attractive feature.

The prize for the best model has gone to Mr. Lionel Crane, and two photographs of it are now reproduced. Unfortunately, its pleasant coloring can only be imagined, but emphasis must be laid upon this feature of it, because of the admirable idea of the house which is thereby given.

A model is to be regarded as a perspective sketch in the solid, and the merit of the perspective is not in the meticulous accuracy with which it shows every brick, but in the faithfulness and charm with which it gives a general impression of the building portrayed. In the model of a country house the main qualities to be looked for are, first of all, accuracy of scale, but, secondly, an artistic quality which commends the building to the eye, and regarded in this light, Mr. Crane's model meets all the requirements. With regard to the design which it interprets, Mr. Crane put himself out of court by setting the house at the edge of the approach road, with the

result that the splendid views to the south would be entirely blotted out by intervening trees. Even if it were to be assumed that these trees would be cut down—a quite incredible assumption—the southward rise in the ground would be enough to destroy the possibility of a view. In point of planning the house is satisfactory, and Mr. Crane has provided a good balcony on the garden front, with doors from two of the bedrooms. The little gables treated in white roughcast look rather spotty, and one may be somewhat doubtful about the wall which partly encloses the forecourt on the north side. Like some other competitors, Mr. Crane takes rather an optimistic view as to the ease with which long motor-cars can be manoeuvred in confined spaces.

The pleasing feature of this competition lies in the fact that the first prize design is to be actually constructed; in fact work has already been started. The competition considered as a stimulus to artistic skill has been justified by the results.



PRIZE PERSPECTIVE BY CHARLES GASCOYNE.

Competition for Two Semi-Detached Cottages

Held by "The Brickbuilder," Boston, Mass.

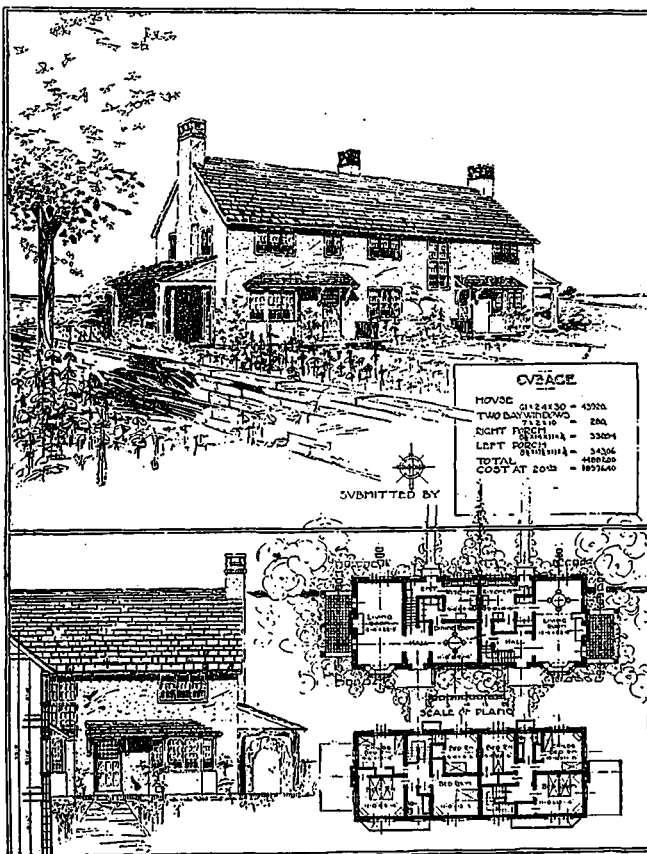
THE problem of a small two-family house is one which has been so often treated as to render anything new extremely difficult of attainment. Moreover, the necessity of basing these particular designs upon the use of stuccoed surfaces of largely uniform character had a tendency to restrict the designs to three general types, namely, the Old Colonial, the English country house, and the Spanish. Under these circumstances the variety of solutions submitted and the general high order of merit was a matter of both surprise and satisfaction to the jury. The results of this competition are an excellent indication of the general advance in design and composition to which the younger generation of American architects are so largely contributing, and, in particular, testify to a very high average of good taste and a strong feeling for simplicity. These facts rendered the duty of selecting the ten best designs one of particular difficulty, as many of the drawings submitted were of almost equal excellence with those premiated.

First Prize. Was awarded for exceptional imagination and originality in the use of the material, this being the primary requisite upon which the judgment was based, according to the terms of the programme. This drawing also showed a command of composition and grouping which extended even to

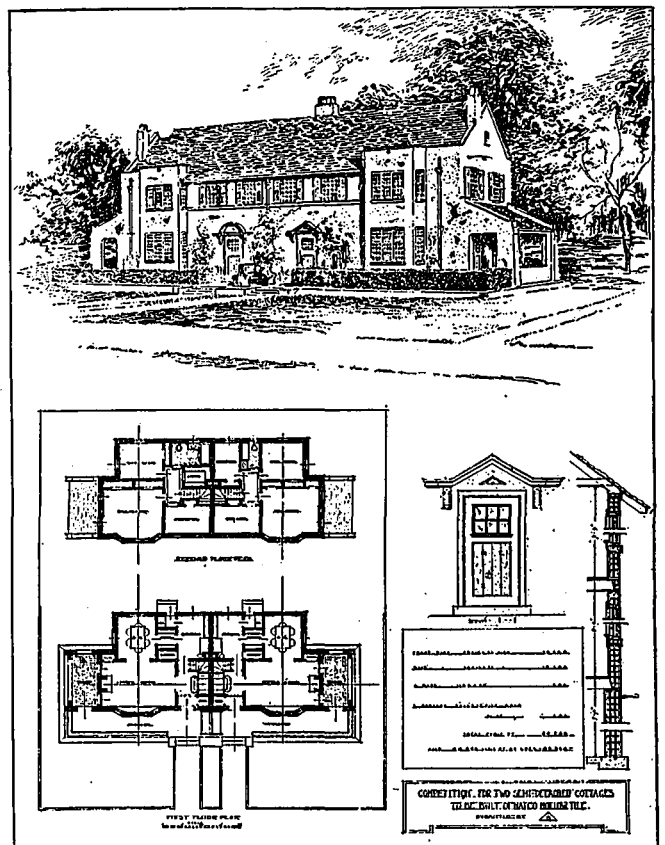
the arrangement of the accessories in connection with the rendering, which is particularly to be commended.

In plan, this project is less practical than some of the others. In particular, the rooms marked "Den" are too small to be used for this purpose and might better have been denominated "Coat Rooms," as their real use seems to have been dependent upon the requirements of the exterior effect. On the other hand, this plan shows staircases with square landings, a feature largely neglected in many of the other plans, where winders were the rule. Certain other features, such as the recessing of a space for the kitchen stove, are also to be commended.

Second Prize. Was awarded to a scheme less interesting in design than the one already mentioned, but showing more careful study in the arrangement of the plan and better knowledge of livable conditions. In particular the grouping of the service in such a way as to be convenient to the street and as not to interfere with the use of the garden, is a point of particular value. This arrangement concentrates the plumbing while keeping the main entrance entirely separate and in direct communication with the garden at the rear. It also carries out the intentions of the programme with reference to bedroom facilities. There is no doubt that this would give greater practical satisfaction to an owner than the first prize,



MENTION DESIGN BY L. E. VARIAN.



MENTION DESIGN BY R. L. STEVENSON.

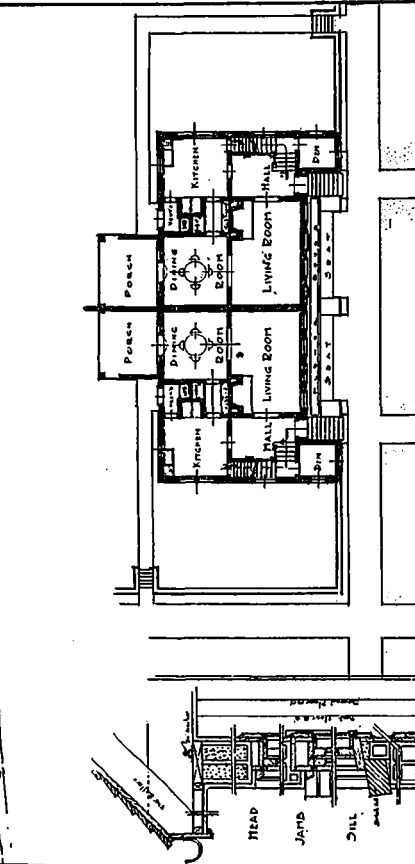
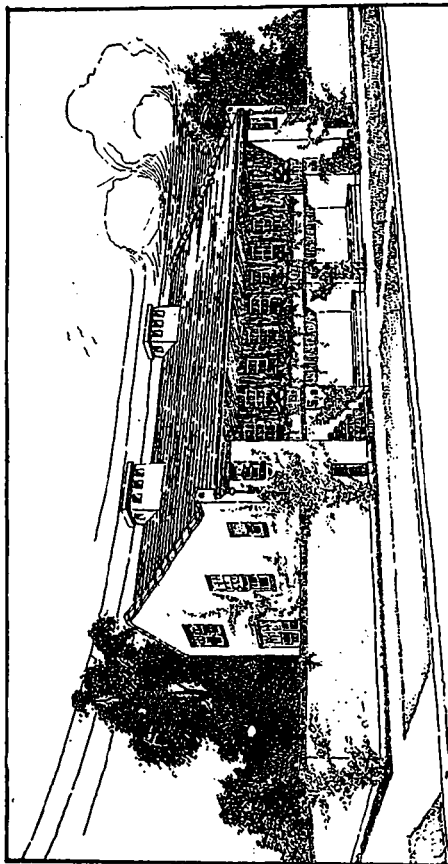
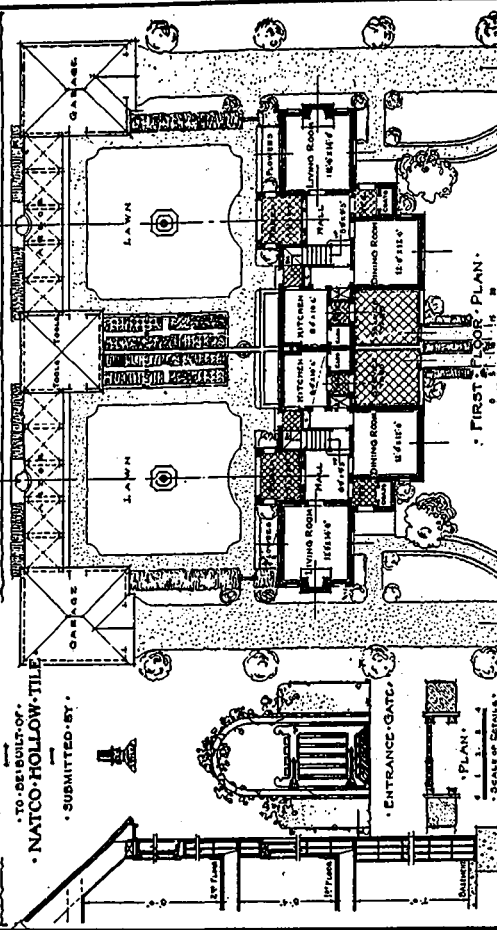
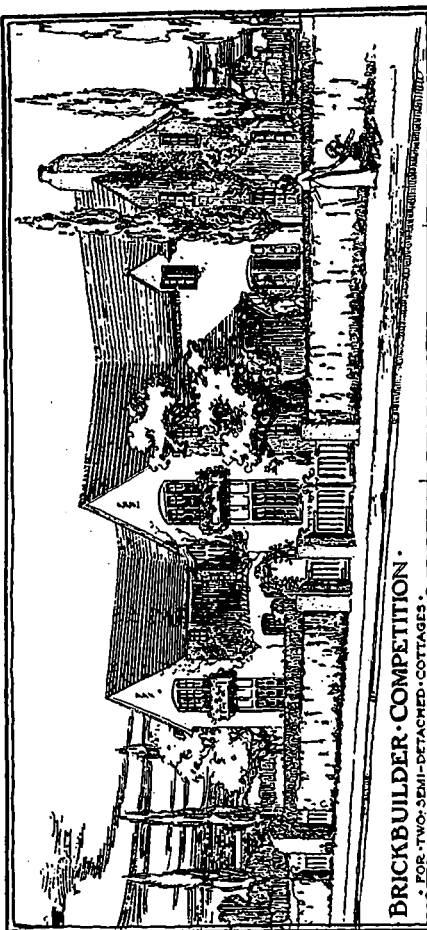


TABLE OF CUBAGE & COST

64'-18" 2d Floor	107.68
84'-7 1/2" 1st Floor	116.243
216'-8 1/2" (1)	9.12
216'-8 1/2" (2)	672
84'-18" 85c	7,680
216'-12" 66c	2,448
117'-9 1/2" Porches	668
85'-0 1/2" 2d Bktr	325
84'-15 1/2" 1st Bktr	2,902
64'-16 1/2" 2d Bktr	2064
TOTAL CUBAGE	44,992
PER CU-FT	20
COST COMPLETE	\$899,640

FIRST PRIZE DESIGN,
BY H. A. SULLWOLD.



SCHEDULE

EXCAVATION	250
MASONRY	450
STUCCO & PLASTERING	1,800
CARPENTRY	3,700
SMALL METAL	125
PLUMBING	700
HEATING	500
PAINTING	200
LIGHTING	350
HAIRDWARE	150
MISCELLANEOUS	200
TOTAL	8,000
4 SEASON EXCISES PER CU-FT	40.00

COMpetition FOR TWO SEMI-DETACHED COTTAGES.
SECOND PRIZE DESIGN,
BY TOMPKINS & BRODSKY.

although doing less for the advancement of architectural design. The exterior is, however, better than it appears, as its effect is marred by the rendering.

Third Prize. Was given to a simple and attractive design. It would be improved in plan by dividing the living room from the dining room, and as the cubage was well within the requirements, both living and dining rooms, together with the bedrooms above, might have been enlarged to advantage. While this design is well adapted to the use of tile, the actual detail of the construction was poorly indicated and showed a lack of knowledge of the material to be employed. The perpendicularity of the two centre windows is also disagreeable, but there is a nice feeling in the detail of the door.

Fourth Prize. Was awarded to a design which, although simple and well considered, was somewhat lacking in originality. In plan the entrance halls are narrow and unsatisfactory, owing to the service arrangement which necessitated a closing off of the staircase. This drawing is commended for good general composition and excellent presentation.

The six drawings following the prizes have been given equally honorable mention and the order in which they are discussed bears no relation to their respective merits. That by P. C. Dunham shows a simple and attractive exterior with a distinctly home-like charm. It is also very agreeably presented and in particular the free-hand rendering of the plan eliminates much of the stiffness which characterizes the presentation of other drawings. In the mention design submitted by R. H. Bullard is shown a good

livable plan with proper separation of service yard from garden. Certain practical points are, however, forgotten. In particular, no kitchen chimney is shown and the design would, therefore, be unsatisfactory in parts of the country where the gas stove and fireless cooker are not in general use. R. L. Stevenson's drawing, while attractive, is to be criticized for the treatment of the tops of the walls of the bay windows, which in actual construction would result in staining and disintegrating the stucco surface. The difference in the two doorways is out of keeping with the otherwise symmetrical treatment of the elevation. The bay windows also appear to be incorrectly shown in perspective, as they give the effect of rectangular projections which, in point of fact, would have been much better than the sloping bays shown in plan. The mention drawing of Lester E. Varian shows a simple, straightforward plan, but commonplace and lacking in originality of design. The presentation is also unfortunately complicated.

The Jury of Award was composed of Frank C. Brown, Boston; Abram Garfield, Cleveland; William H. Schuchardt, Milwaukee; Hugh Talant, New York; Waddy B. Wood, Washington.

The problem called for two small semi-detached cottages located in a town, or small city, and costing not over \$9,000. The cost of the cottages was to be figured at twenty cents per cubic foot. First consideration was given to the æsthetic fitness of the design to the material employed, second adaptability of the design to the constructive requirements of the material, and third, excellence of plans.

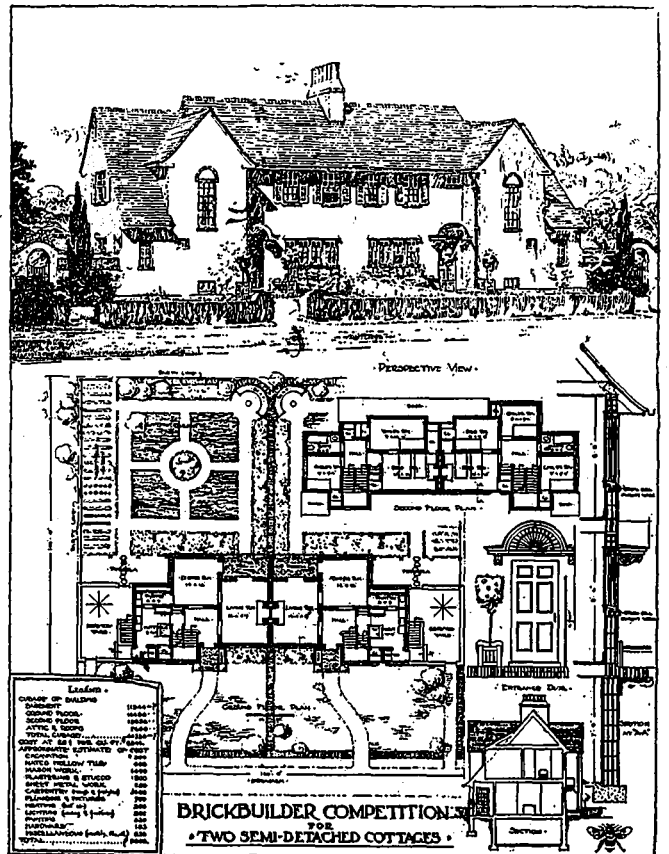
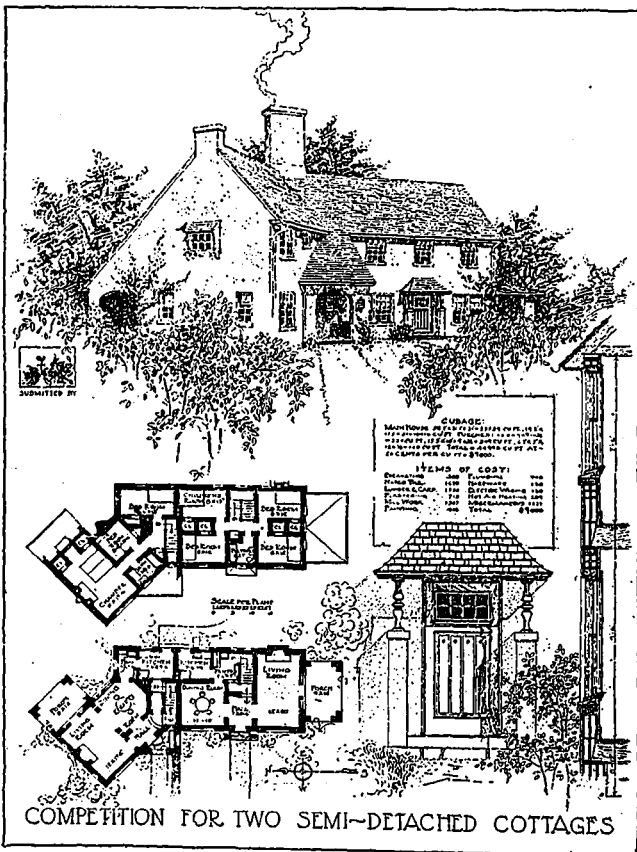




FIG. I.

Leaded Glass as a Decorative Feature in English Homes

John Y. Dunlop, A.B.I.C.C.

ORNAMENTAL MATERIAL and every sort of decorative art are employed to add beauty in appropriate settings, and the English architects have been able to avail themselves to a great extent of one ornament—leaded glass—the crowning invention of the Gothic artist. This glass at one time largely influenced the design of the finest buildings, and thus was able to reflect a glory on them which nothing else has approached. The peculiar excellence of this material over other decorations is that it is luminous and the light which comes

streaming through the window conveys to the eye the strong contrast between the light and the opaque masses.

In England the smallest wayside cottage has its lead glass windows, which in the most of cases are designed in some way to add to the charm of the house. Nowadays there is a tendency to increase the use of this material for decorative purposes which is due to the growing use of casement curtains and to the prevailing idea of the up-to-date housekeeper who wants to do away with the use of blinds.



FIG. II.



FIGS. III, AND IV.

LEADED GLASS AS A DECORATIVE FEATURE.

ENGLISH HOMES.

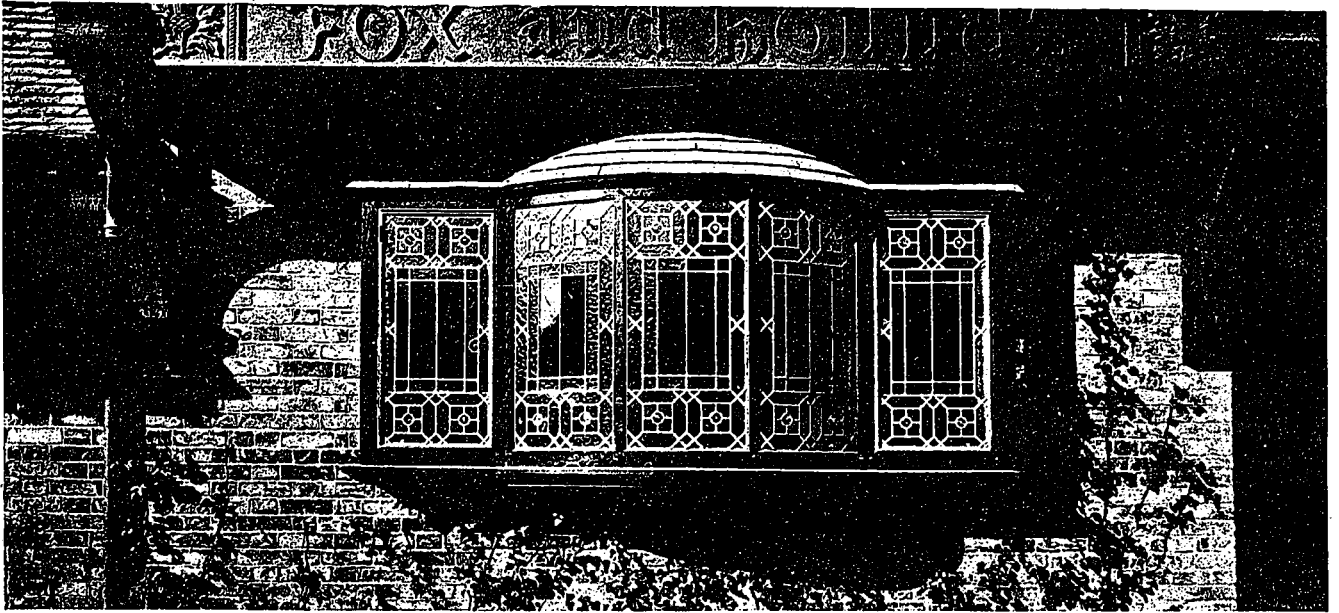


FIG. VI.

There are, of course, excellent reasons for this change in window decorations. The old-fashioned

Venetian blinds are objectionable, as they collect dust, which can only be removed with great difficulty, besides being complicated and always getting out of order. Heavy curtains are also unavoidably collectors of dust, and especially when they are hung on heavy and insecurely fixed cornices with heavy fringes which are impossible to dust.

The recommendation of leaded glass or partly leaded glass windows applied to all houses. It was not a protest against this material when architects helped on this overwhelming popularity of clear glass which has caused its wholesale use. There is no doubt that the necessary conditions of health are air, light and warmth, but at the same time we must have an absence of

damp, dirt and dust. Therefore it is evident that the window decoration is an essential and important

part of the problem of house arrangement.

Dust enters our houses through the fresh air inlets from without, and is formed within by the wear and tear of our furniture and the combustion of fuel in our fireplaces. Dust is deposited everywhere, clings to our curtains and margins of books, and is of the most varied composition. On this account the window is a question upon which the architect is compelled to spend a certain amount of thought so that the incoming dust may be arrested.

The natural outcome is in making the window decorative; in the small modern building we find the windows treated in three different ways: Glazed with clear glass throughout;



FIG. V.

wholly glazed with leaded glass; partly glazed with leaded glass.

Of the first arrangement we will have very little to say; still by close observation we must admit that it is very popular and that it is conducive to health. But we must also consider the essential aims of the internal arrangement of the house which are conducive to health and comfort.

Our windows must be arranged for fittings which will be convenient, elegant and clean, and which will give a soft light and free passage to the air. They should also permit of a good view from the inside and not from without, thus securing the same privacy as if they were opaque. Opening leaded lights so far as suitable to the climatic conditions are very satisfactory. The ultimate cost may be a little more than for plain glass, but it is money which is going to supply some essential for the comfort of the house, and every penny spent in this way goes to make the home more valuable and enjoyable.

It has always been a peculiarity of English architects that they have devoted more attention to leaded glass than their colleagues of the other isles. There must have been a period at which time these architects worked with some feeling and sentiment over the design of these windows.

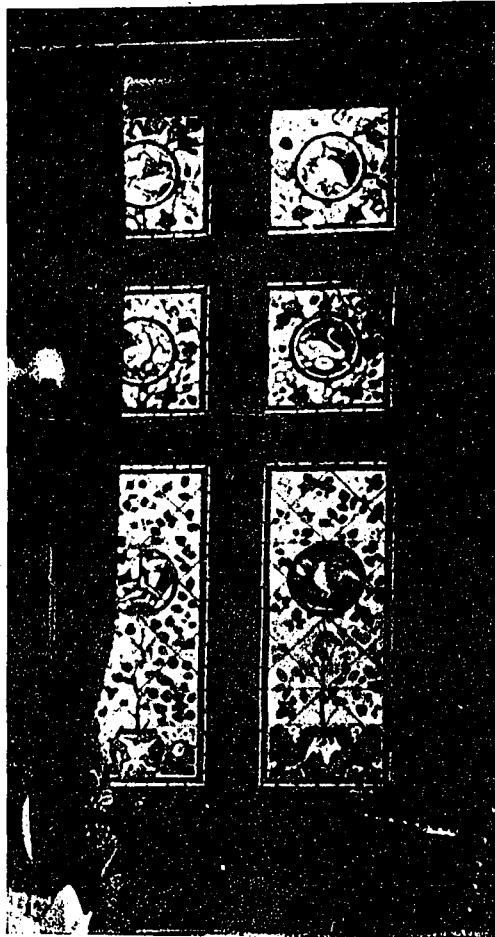


FIG. VII.

The typically English use of leaded glass in wayside cottages is shown at figs. I., II. and III., in each of which the design contributes in some way to the æsthetic charm of the house. Fig. IV. shows how this decoration gives an accent to the front of an old wayside inn. Fig. V. shows a detail of the southwest gable and Fig. VI. a bow window on the ground floor.

The variety of the geometrical patterns chosen breaks the plain lines of the front and lends a charm apart from the contrast in color which the designs afford.

Fig. VII. shows an internal view of a dining-room window, while fig. VIII. furnishes an example of a window in the hall-way. In each of those patterns the quality of glass determines the color from which has been obtained a glowing lustre of color comparable only to the beauty of gems. In each of these windows the glass is fitted into frames, for the days are now past when it is considered advisable to insert the glass into grooves in the stonework of windows. These frames are of two kinds: sash windows and casements, each class having its peculiar advantages and disadvantages. Sash windows are essentially British in their origin and development, and in some parts of the country

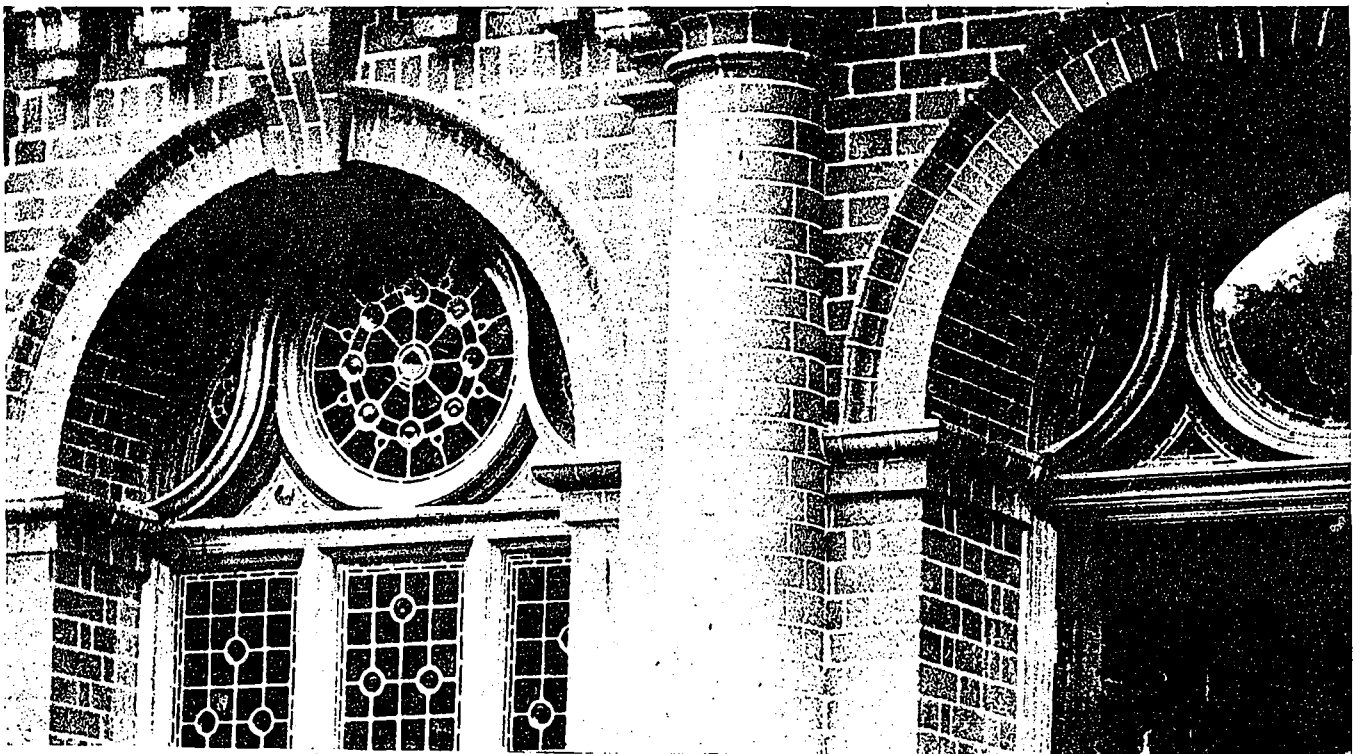


FIG. VIII.

very little else is used. Figure IX. shows a design with leaded glass and made very effective by the introduction of those simple ornamental glazed panels. In the most of domestic architecture the character of the design of those panes of glass is more impressive when kept very simple in treatment. A simple leaded draping or pattern of small com-

pass introducing roses of a deep shade furnishes a pleasing and harmonious effect.

Another point to be considered is the fact that the glass for this work should be fairly thin, as no advantage can be obtained in using thick glass for this distinctive decorative feature of the home, while the thin furnishes a more pleasing effect to the ensemble.



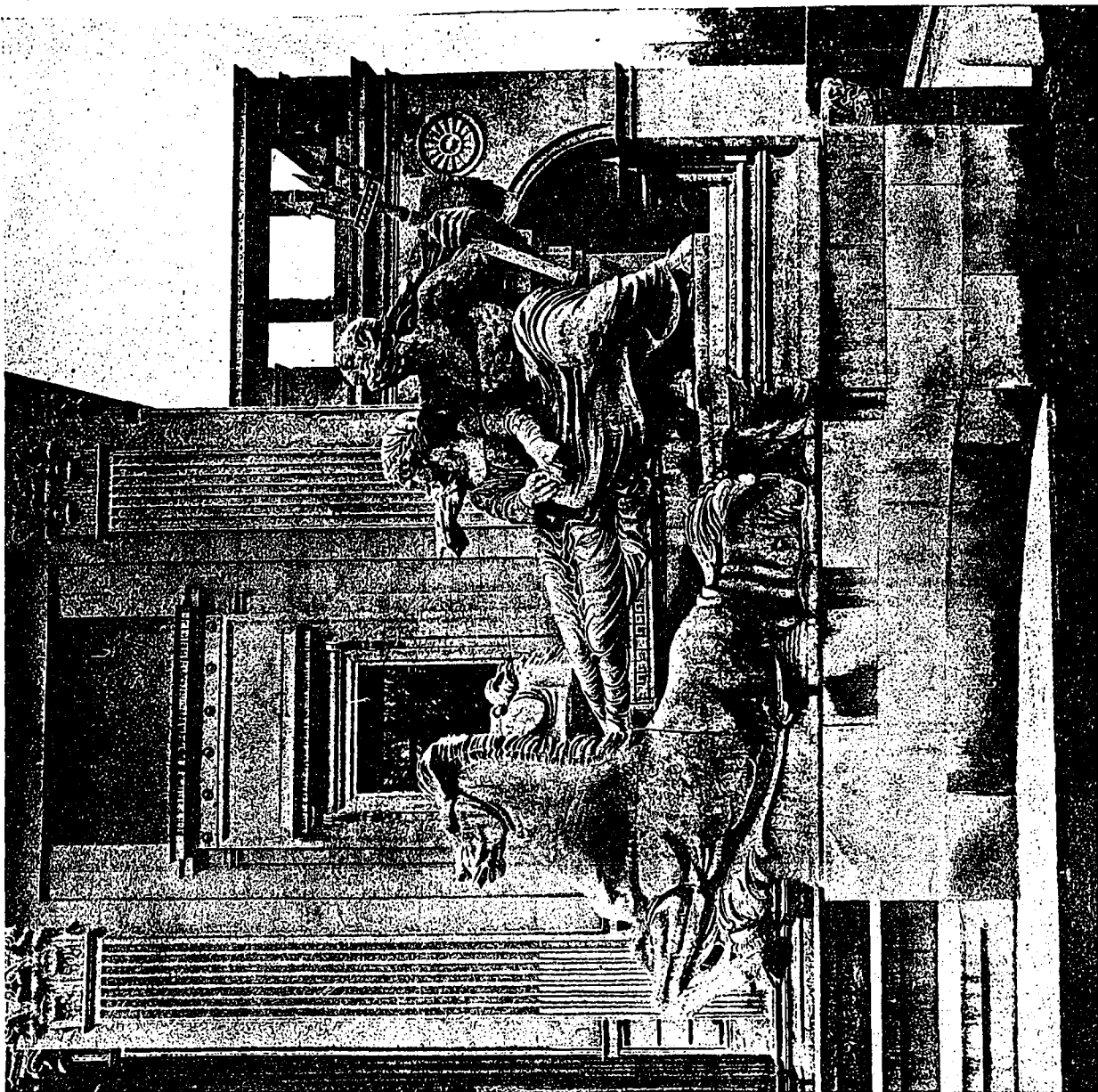
FIG. IX.

DISCOVERY has just been made that the originator of the American "skyscraper" or "gratteciel" was not an American architect after all, but a Frenchman, a Savoyard, who lived three centuries ago. At the Bibliothèque Nationale in Paris there is preserved a volume written by this architect, whose name was Jacques Perret of Chambéry, in 1601, describing a skyscraper of the author's invention. "This grand and excellent pavilion, in which one can lodge 500 persons in comfort and luxury," was to be of 160 feet frontage, 145 feet in width, and with walls ten feet thick. Perret did not foresee the use of iron and steel as building materials. The edifice was to rise twelve stories and have a little pavilion on the roof surrounded by terraces, and was thus to reach an altitude of 350 feet, "which," says "L'illustration," "is, of course, hardly to be compared with the gigantic buildings of 480 to 650 feet which Pierre Loti saw on his recent visit to New York. At the same time, Perret's design is certainly the ancestor

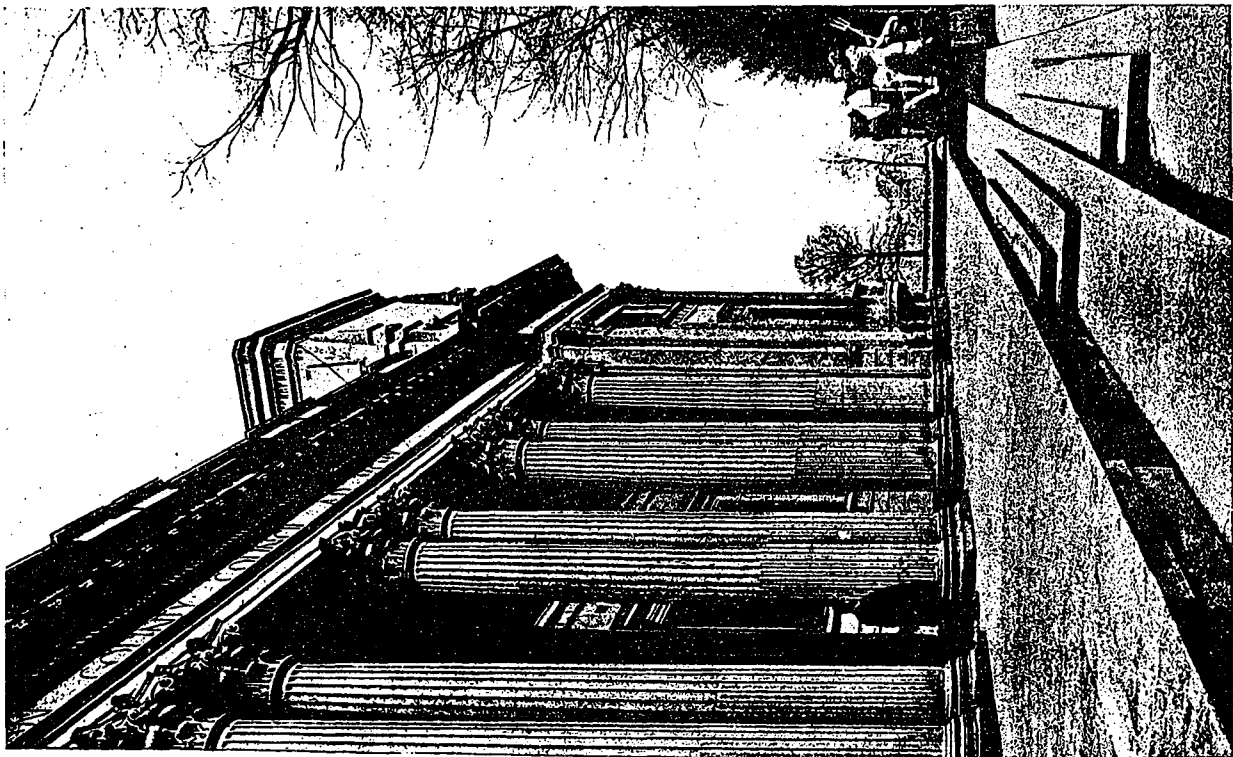
of the American skyscraper of 300 years later—an audacious idea conceived by a Frenchman."

* * *

A *UNIQUE* engineering problem is the construction of sufficient houses to quarter the men employed on the task of constructing the gigantic tunnel through the Selkirk range of the Rocky Mountains at Glacier, B.C. One of the problems the contractors had to face was the drifting snow in winter, which made it well nigh impossible to proceed with the work in a satisfactory manner, so they conceived the plan of building a village on stilts. The proposition was placed in the hands of a well known architect and he was asked to draw up plans which, when finished, will cost \$50,000. The floors of the houses, which will be of substantial construction, are to be eight feet above the ground; the streets will have no sidewalks, but will have a walk in the centre, also eight feet above the ground level and connected with the doors of the houses by little bridges.



From Architectural Review, London.



E. VINCENT HARRIS, AND
T. A. MOODIE, ARCHITECTS.

THE GLAMORGAN COUNTY HALL, CATHAYS PARK, CARDIFF, WALES.

UNIVERSAL APPROVAL is accorded the "Ancient Monuments Act" passed by the recent Parliament in London, England. The late Lord Avebury led the way in bringing the subject to the notice of Parliament, and in 1882 Mr. Shaw-Lefevre (now Lord Eversley), as First Commissioner of Works in Mr. Gladstone's Government, passed the first Ancient Monuments Act. It extended only to monolithic and other prehistoric remains, and was purely permissive in its character. The owner of such a monument might place it in the guardianship of the Commissioner of Works, and it then became an offence on the part of anyone (including the owner) to injure or deface the monument. In 1900 these provisions were extended to any "structure, erection, or monument of historic or architectural interest," with the exception of a structure occupied (otherwise than for caretaking) as a dwelling house, but the application of the Act still depended upon the consent of the owners of monuments.

The fabulous sums offered by Americans to transport ruins across the Atlantic has only been conjured up to raise the market value of ancient monuments. Another serious matter is the purchase of old structures to despoil it of its intrinsic value for the enrichment of modern buildings.

The London "Times" says it is obvious that in relation to such traffic the mere scheduling of monuments or any other arrangement devoid of some machinery for arresting destruction merely attracts the destroyer. Hence the existence of the Royal Commissions which have been at work for the last five years examining and scheduling the places of historic interest in England, Scotland and Wales, and which have already made valuable reports, is an additional reason for protective legislation. At the same time the Commissions form a nucleus for an authoritative advisory body to share with the Commissioners of Works the responsibility of restrictive action.

These considerations have been in the minds of the framers of the new Act, which not only amends but consolidates the existing law. In the first place, it authorizes the purchase of monuments either by the Commissioners of Works or by the Council of any county or borough, or the Common Council of the City of London; but such a purchase can be carried out only by agreement with the owner. The gift or devise of a monument to the same bodies is also authorized. The alternative machinery of guardianship is then provided, as in the existing Acts, and the effect of guardianship is explained.

By constituting the Commissioners of Works or the local authority guardians of his monument the owner does not divest himself of any right of property except that of destruction, active or passive; in other words, the guardians of the monument may restrain the owner from injuring it, and may, concurrently with the owner, do any work necessary to maintain and protect it.

So far the Act follows on previous lines, and can only be applied with the consent of the owner. On

this stem is grafted the compulsory machinery of the Act. An Ancient Monuments Board, representative of the three Historic Monument Commissions, the Societies of Antiquaries of London and Scotland, and other artistic bodies, is to be constituted by the Commissioners of Works, and upon their report that any monument is in danger of destruction, removal or damage, and that the preservation of the monument is of national importance, the Commissioners may make a preservation order, placing the monument under their protection, and while such an order is in force the monument cannot be demolished, removed, added to, or altered without the consent of the Commissioners.

There is a further piece of machinery designed to keep the Commissioners of Works acquainted with the area of their work. They are, after notice to the owners, to prepare and publish a list of monuments of national importance, and when a monument is included in this list the owner must, under a penalty, give a month's notice to the Commissioners of any proposed work of demolition, removal, alteration, or addition.

The influence of French legislation may be traced in the new Act. In France the grip of the State on buildings and remains of interest has long been effective. In the time of the great Napoleon, the acquisition of any private building merely to prevent its destruction was authorized, and in 1837 a Commission des Monuments Historiques was appointed with the Minister of Public Instruction and the Fine Arts as its president. In 1887 a registration of monuments was initiated, and powers of compulsory acquisition, where the owner objected to registration, conferred. Nor is there any disposition to leave this machinery idle. Three general inspectors of historic monuments and a large staff of architects are attached to the Commissions, and the annual grant for the upkeep of monuments is substantial, amounting to as much as \$600,000 in one year.

* * *

CONSTRUCTIONAL work on the seven hundred foot terminal pier at Deep Water, Nova Scotia, is progressing rapidly. Approximately two thousand reinforced concrete piles are being driven into the sea-bottom varying from eleven to twenty-three tons dead weight. The work is carried on by means of a one hundred and twenty foot scow equipped with four engines, the main one controlling the carriage, raising and lowering the sixteen ton steel hammer. The other engines are used for driving in the great "spuds" whereby the scow is made fast to the bottom. These "spuds" are thick wooden beams, 95 feet high, two of which are placed at the bow, and a third at the stern. At the forward end of the scow are two steel derricks whereby the concrete piles are lifted into place and then driven in by the hammer, which derricks are operated by the engines on the scow. The carriage at the forward end of the pile-driver is placed on rollers and can be adjusted so as to place the hammer directly over the pile

which has been lowered into the water. Two pile-leads, 74 feet high, are set up on the carriage between which the hammer is worked. Iron rods are driven into the ends of the piles and these in turn are fitted into hollow pipes at the bottom of the hammer, which is then slowly lowered until it rests upon the wooden top, placed on each pile. When all is ready the pile-hoist is removed and the hammer begins its work driving the piles. Reinforced concrete constitutes the floor laid upon the tops of the piles. For this purpose two lofty wooden towers have been erected. At the bottom of these will be placed mixers from which the concrete will be sent up to the tops of the towers and thence distributed by chutes. The shed is also of concrete with steel bars embedded in it, and covers an area of 136,000 sq. ft. There will be two stories, the lower being devoted to the handling of freight and the upper to the handling of passengers. Four railway tracks are to be laid down on the pier, two to run on either side of the shed and two to run through the centre of the building. On either side of these central tracks will be roadways for horse-drawn vehicles. Accommodation will be made on the lower floor for railway and customs offices. The upper floor, which will be taken up with immigration offices and accommodation, will be so constructed that, if there is a sufficiently large staff, the immigrants from two liners, one on each side of the pier, can be handled together with ease. The shed will be fireproof and at the same time fire escapes will be erected in the case of any local conflagrations. With the exception of the windows, doors and strengthening bars, the whole building will be of concrete.

* * *

ALL ENQUIRIES regarding the competition of the proposed Government buildings at Ottawa shall be addressed to the Secretary of the Department of Public Works, Ottawa, Ont., and all such enquiries must be typewritten and submitted on plain paper without heading or signature and must be received on or before the 30th day of October, 1913, they will be answered by identical communication to all competitors. By order, R. C. Desrochers, Secretary, Department of Public Works.

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A CATALOGUE illustrating the various light-ing fixtures of Parian ware has been issued recently by the Gill Brothers Co., of Steubenville, Ohio. The Canadian selling agent for this ware is the Canadian General Electric Co. of Toronto.

* * *

A VOLUME relating to the by-law for regulating the erection and to provide for the safety of buildings in the city of Toronto, passed April 1st, 1913, has been issued, bound in red leather. It contains all matters enacted by the council of the corporation of the city.

* * *

"*CANADA TO-DAY, 1913*," just issued in bound form by Simpkin, Marshall, Hamilton & Kent Company, is alive with general matters relating to the progress and prosperity of the Dominion. It contains over four hundred illustrations and a specially designed colored map of the various provinces.

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THE METHOD of burning brick by producer gas in a continuous kiln has been installed in the plant of the Sun Brick Company at Toronto. The bricks, after being dried by radiated heat, are placed in one of a series of chambers, preheated by the surplus heat being drawn from burning and cooling chambers and gradually brought to a degree of heat sufficient to ignite the gas. By means of an electric pyrometer system the exact temperature is automatically registered on a dial which permits of a constant flow of gas, thereby furnishing an even temperature throughout the chamber. This method insures a uniform color and metallic hardness which is essential in the making of first class products.

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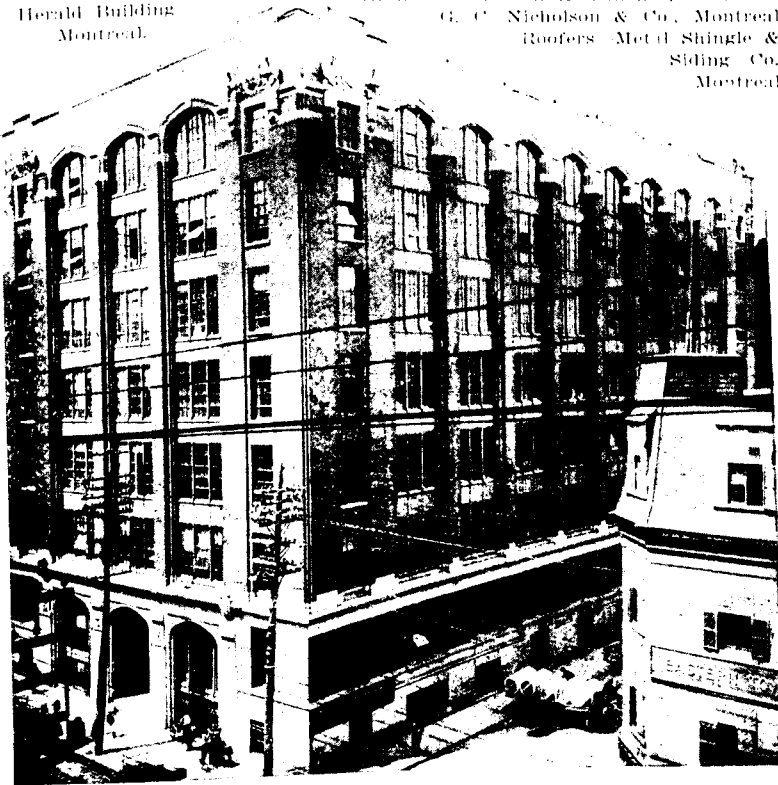
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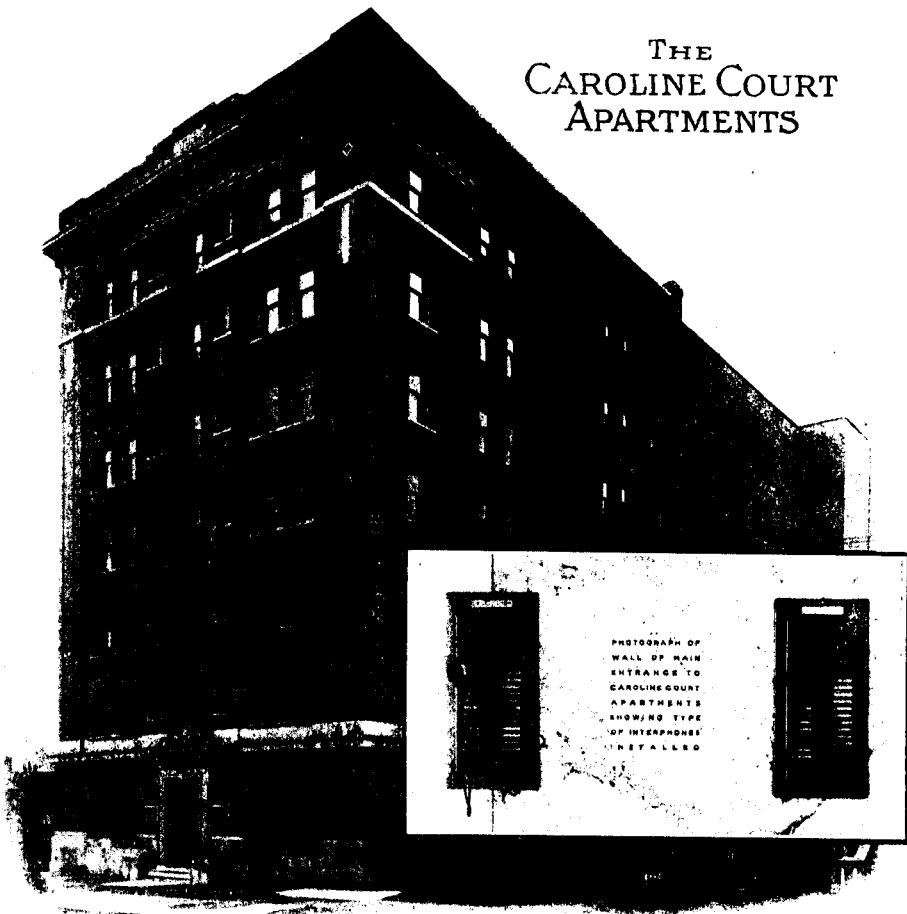
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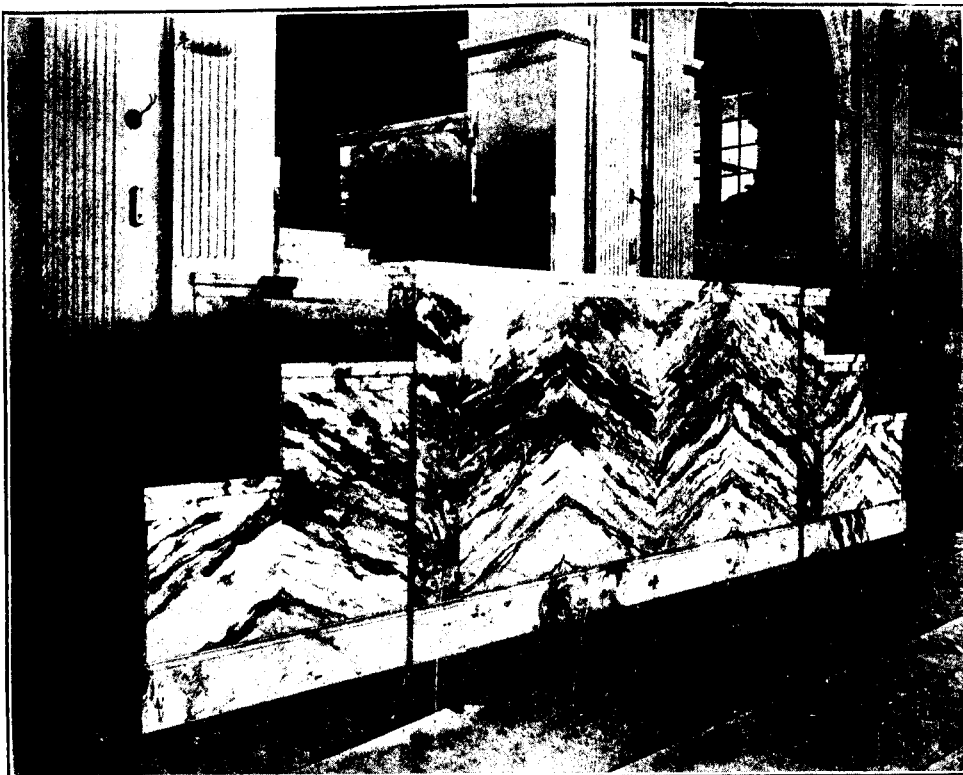
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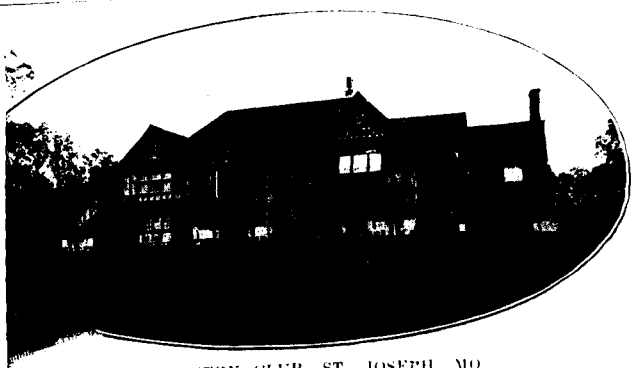
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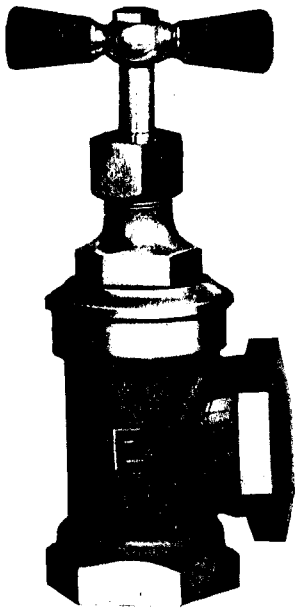
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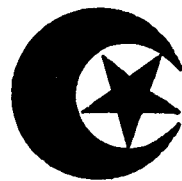
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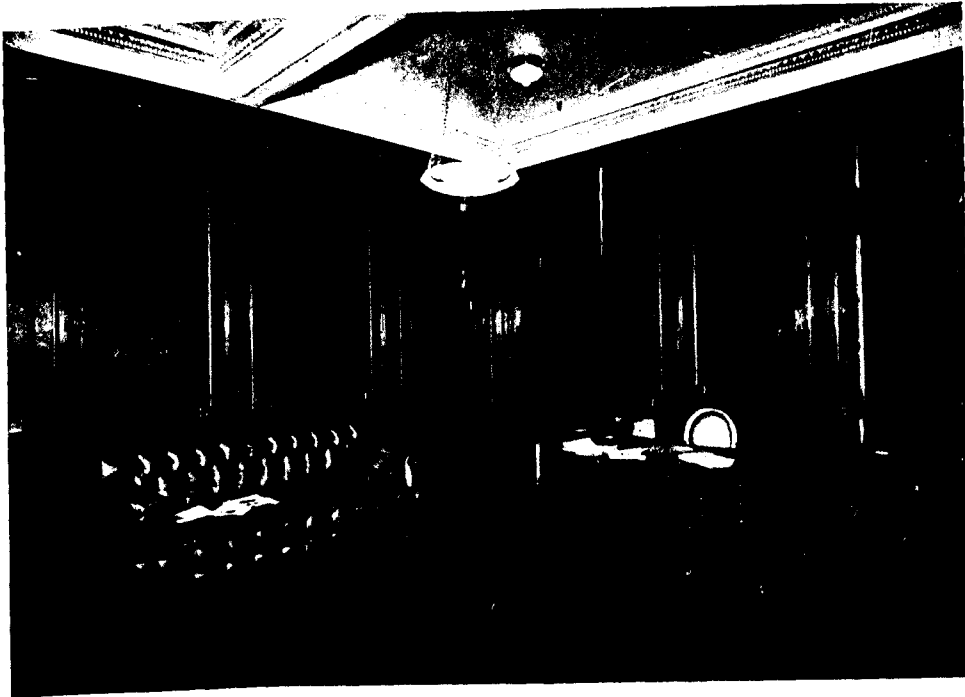
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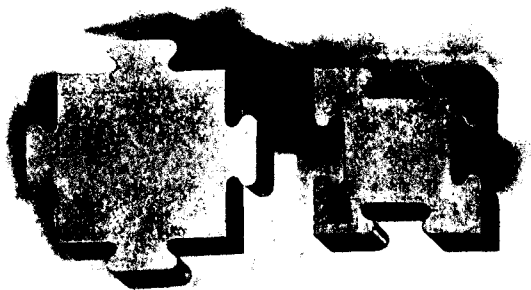
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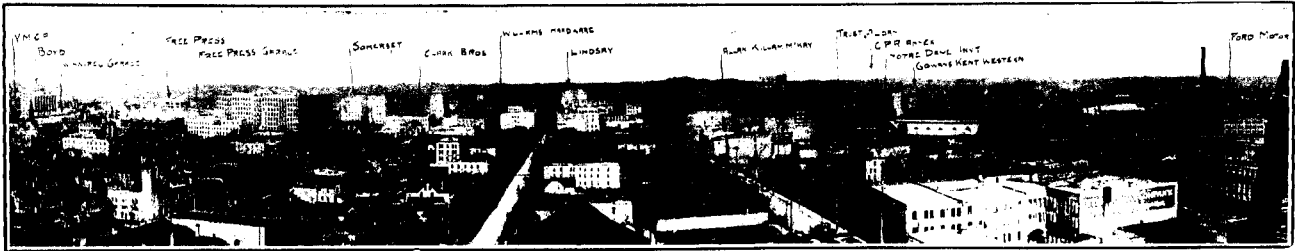
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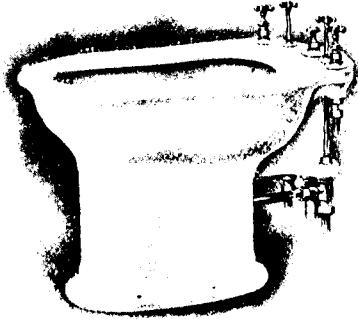


Fig. H026

This Bidet is highly recommended by eminent medical authorities for use in private houses, hotels and hospitals. There is a hot or cold water supply for the basin in order that it might be used as a sitz bath. A separate hot or cold water service provides a douche which is the means of giving great relief to persons suffering from Hemorrhoids (commonly called Piles). The Bidet is also most effective in the treatment of many ailments peculiar to women.

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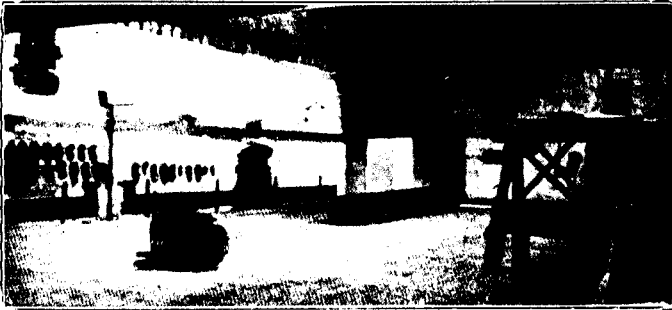
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When subjected to this sort of usage, concrete quickly crumbles, while the stoutest wooden floors begin to splinter and wear out in a short time. Wooden floors are objectionable because they become slippery and are not fireproof.

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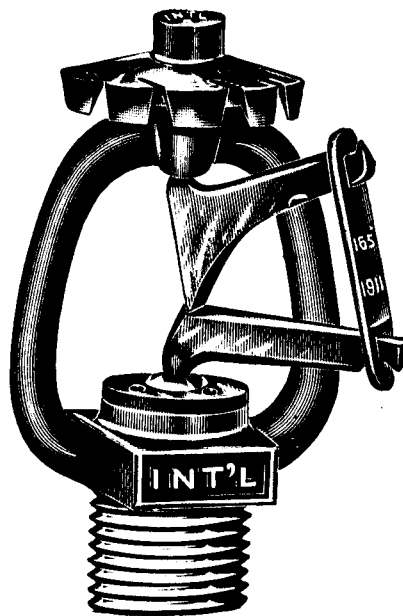
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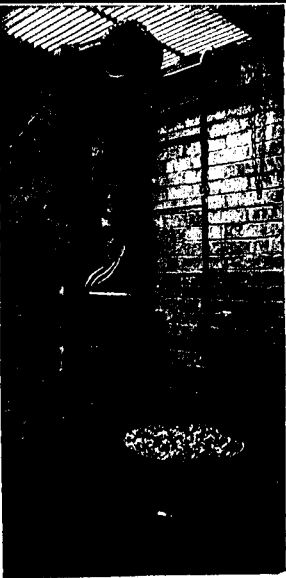
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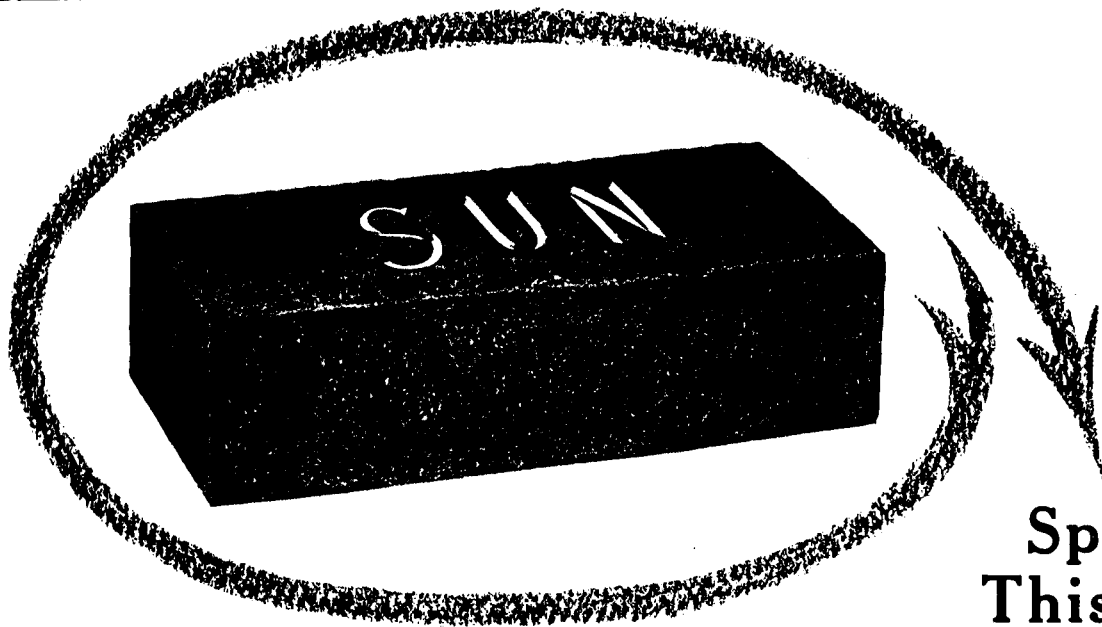
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