

VOL. 8 No. 3.

MARCH, 1915

\$3.00 per Year  
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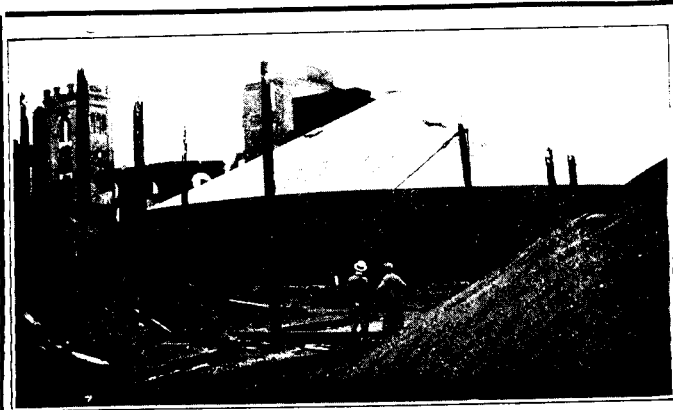
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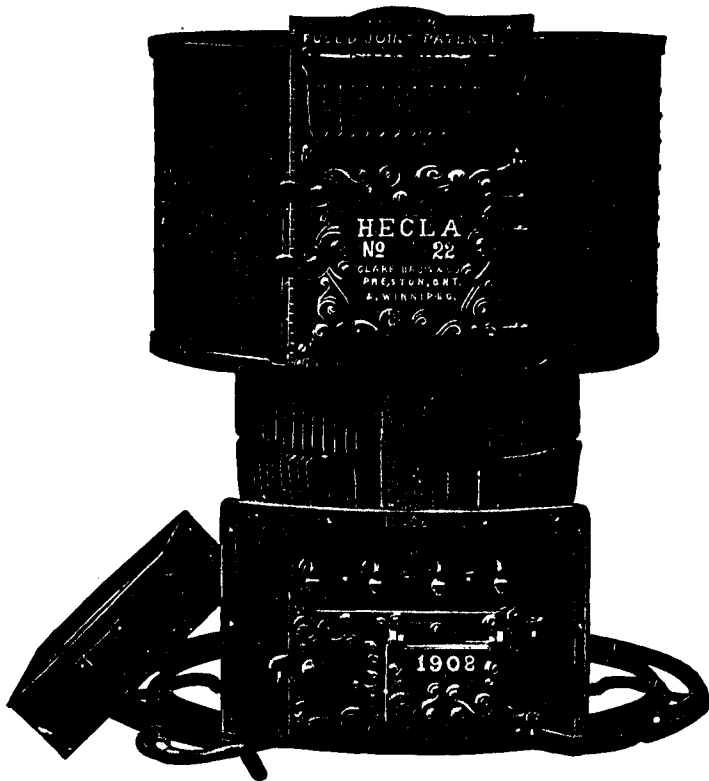
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- |                                |                                 |                                |                              |
|--------------------------------|---------------------------------|--------------------------------|------------------------------|
| Transportation Building        | Art Gallery                     | Scroggie Building              | City Hall and Annex          |
| Dominion Express Building      | Harbor Elevators, Nos. 1 and 2  | Jacobs Building                | Frontenac Breweries          |
| Bank of B.N.A. (Head Office)   | G.T.R. Elevator, Windmill Point | Goodwins Limited               | Ford Motor Company           |
| Ritz Carlton Hotel             | Canadian Rubber Company         | Imperial Theatre               | All Bell Telephone Exchanges |
| Birks Building                 | Canadian Vickers Limited        | Princess Theatre               | Bordeaux Jail                |
| Royal Trust Company Building   | C.P.R.—                         | Lindsay Building               | Grey Nunnery, St. Laurent    |
| McGill University—             | Windsor Station and Train Sheds | Post Office—                   | Sommer Building              |
| Medical and Engineering Bldgs. | Place Viger Hotel and Station   | Head Office, St. James St.     | Westmount High School        |
| Syndicate Building             | Canada Cement Co.               | Two Uptown Offices             | United Shoe Machinery Co.    |
| St. Lawrence Sugar Refinery    | Reford Building                 | G.T.R. Point St. Charles Shops |                              |
| Canadian Sugar Refinery        | St. George's R.C. Church        | Montreal City Filtration Plant |                              |
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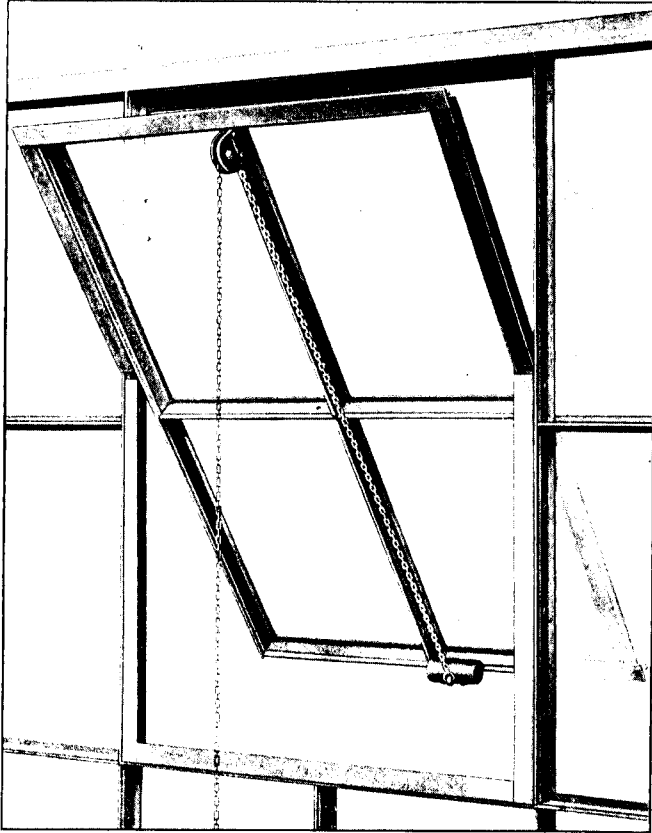
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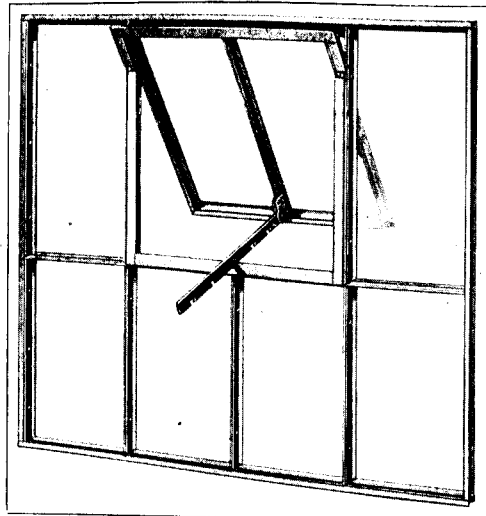


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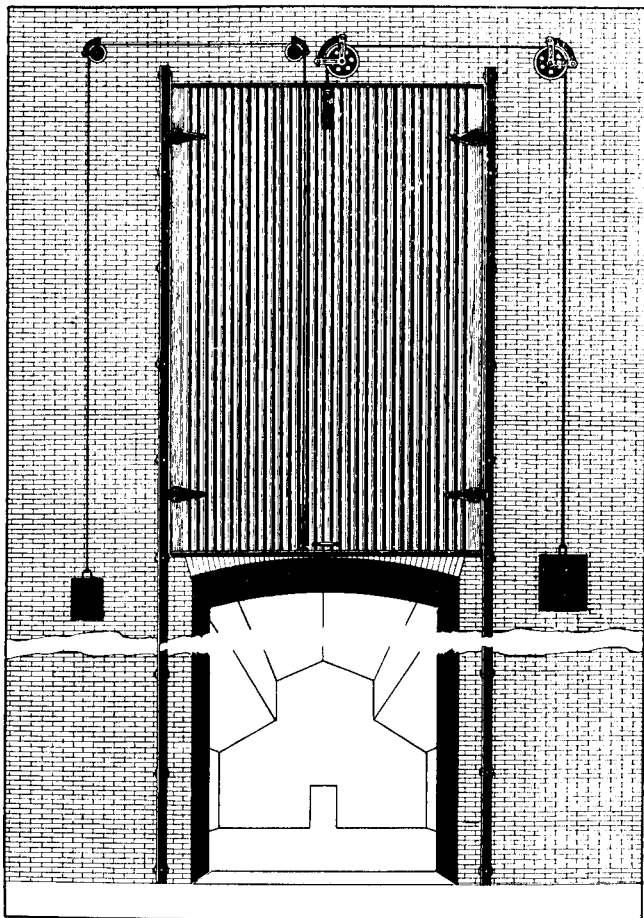
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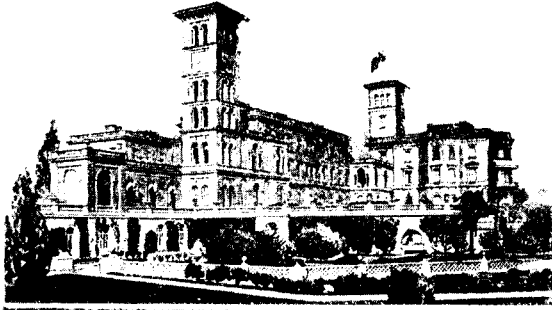
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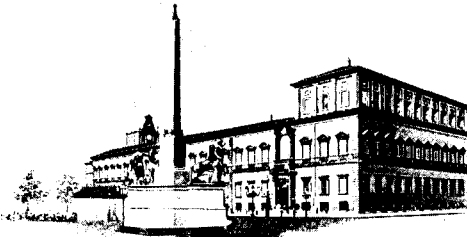
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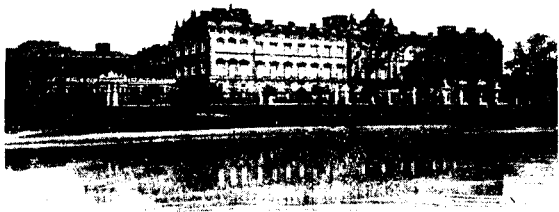
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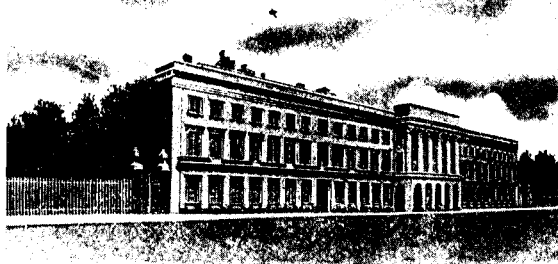
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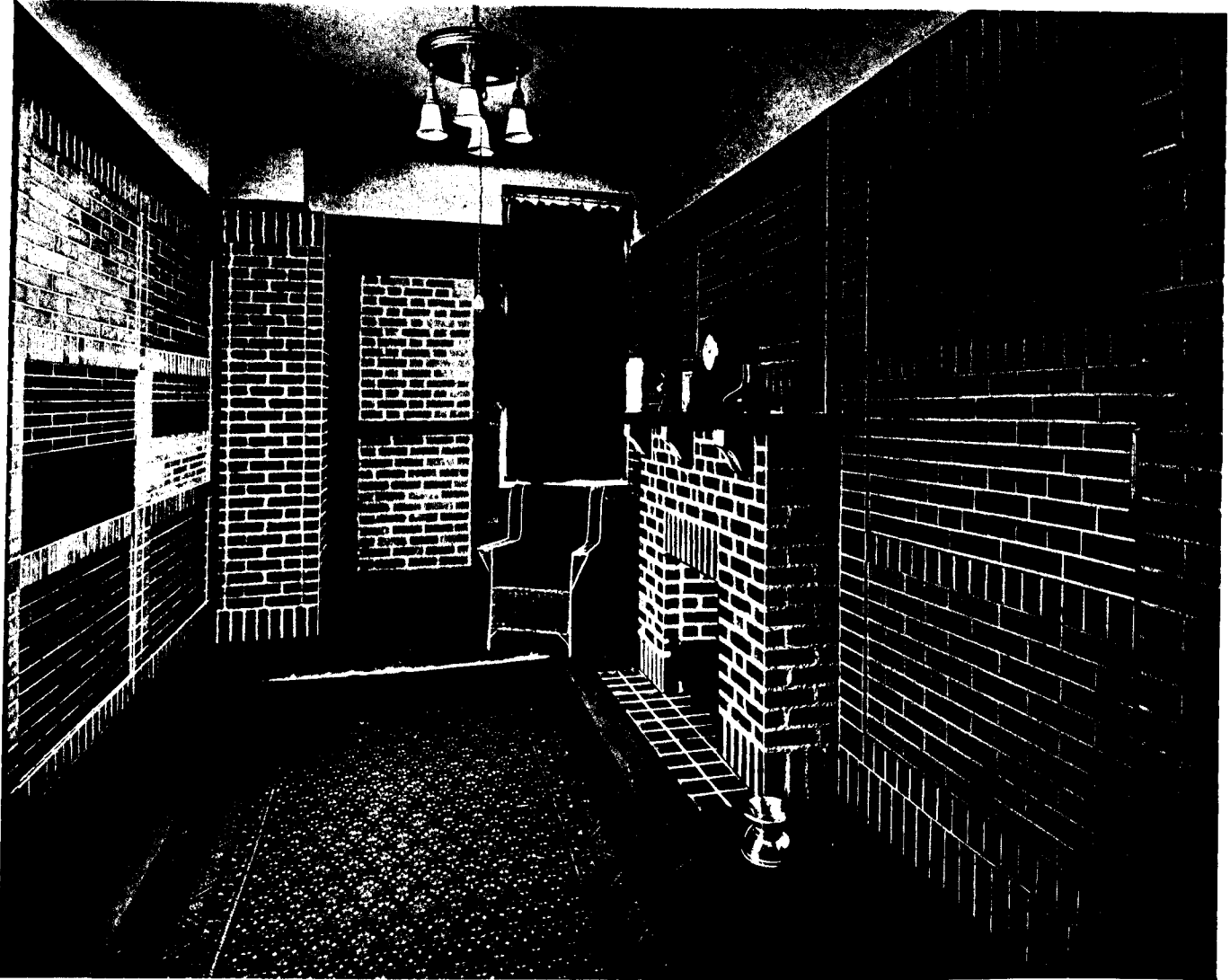
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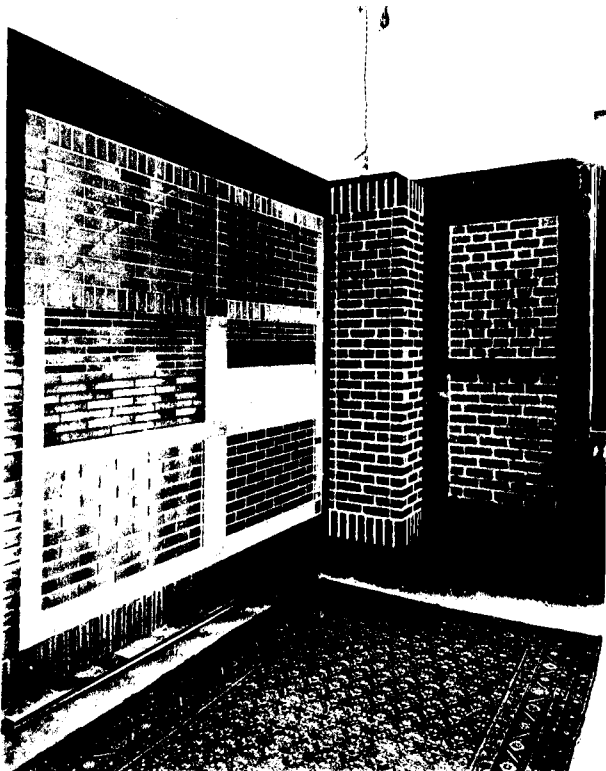


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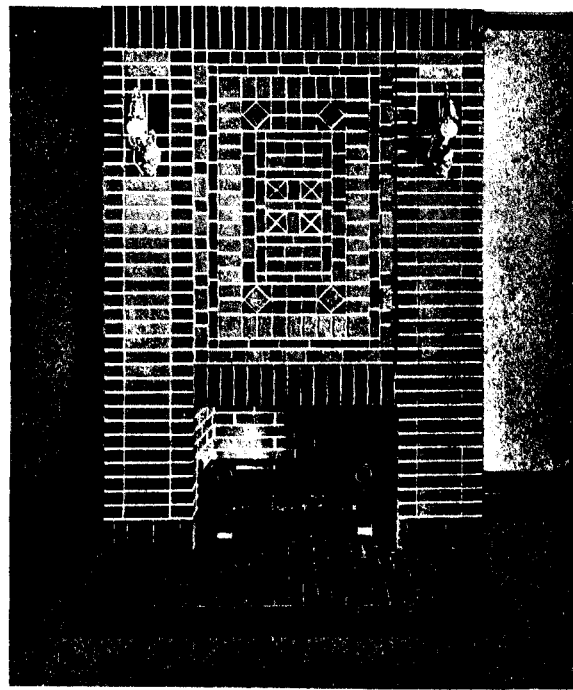
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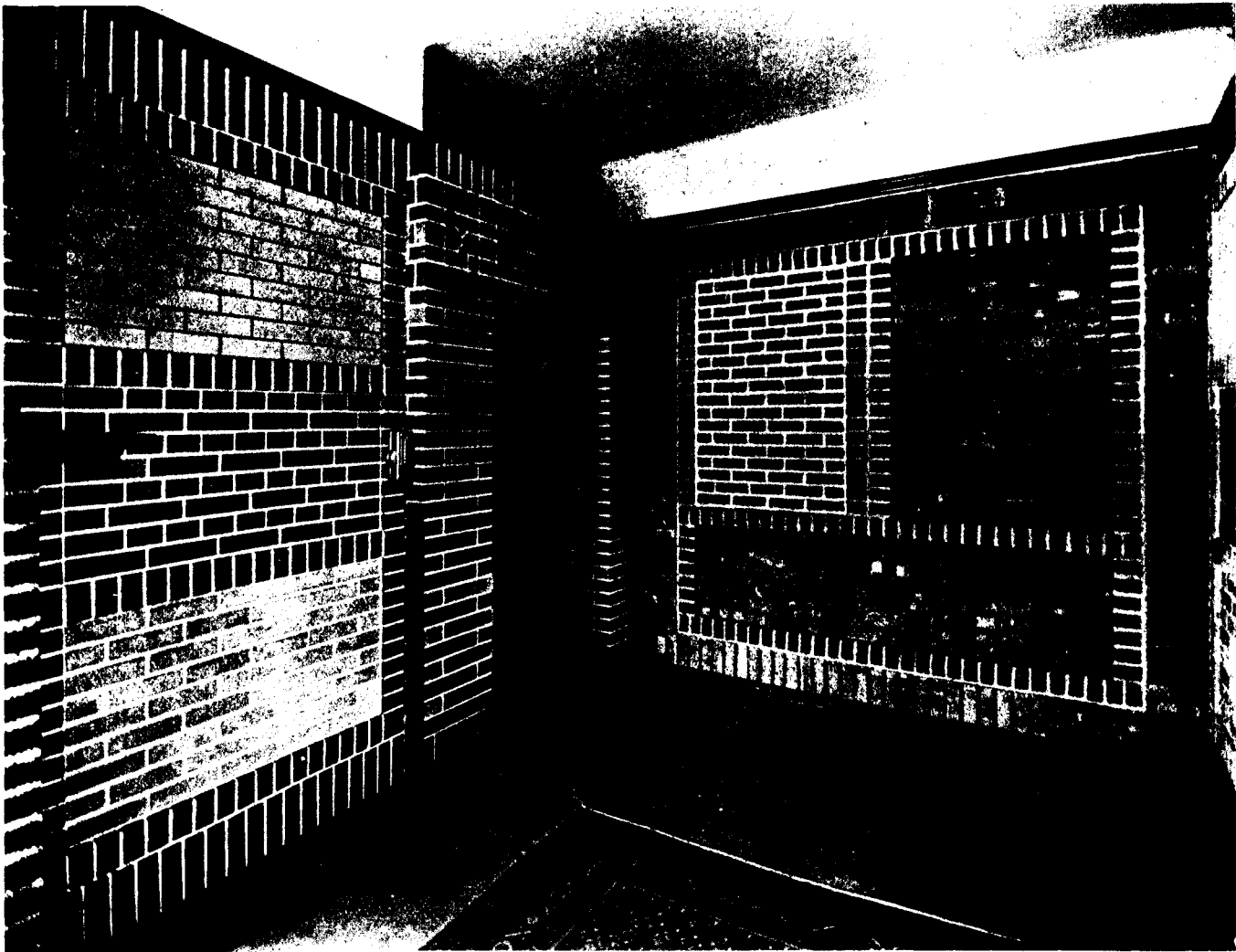
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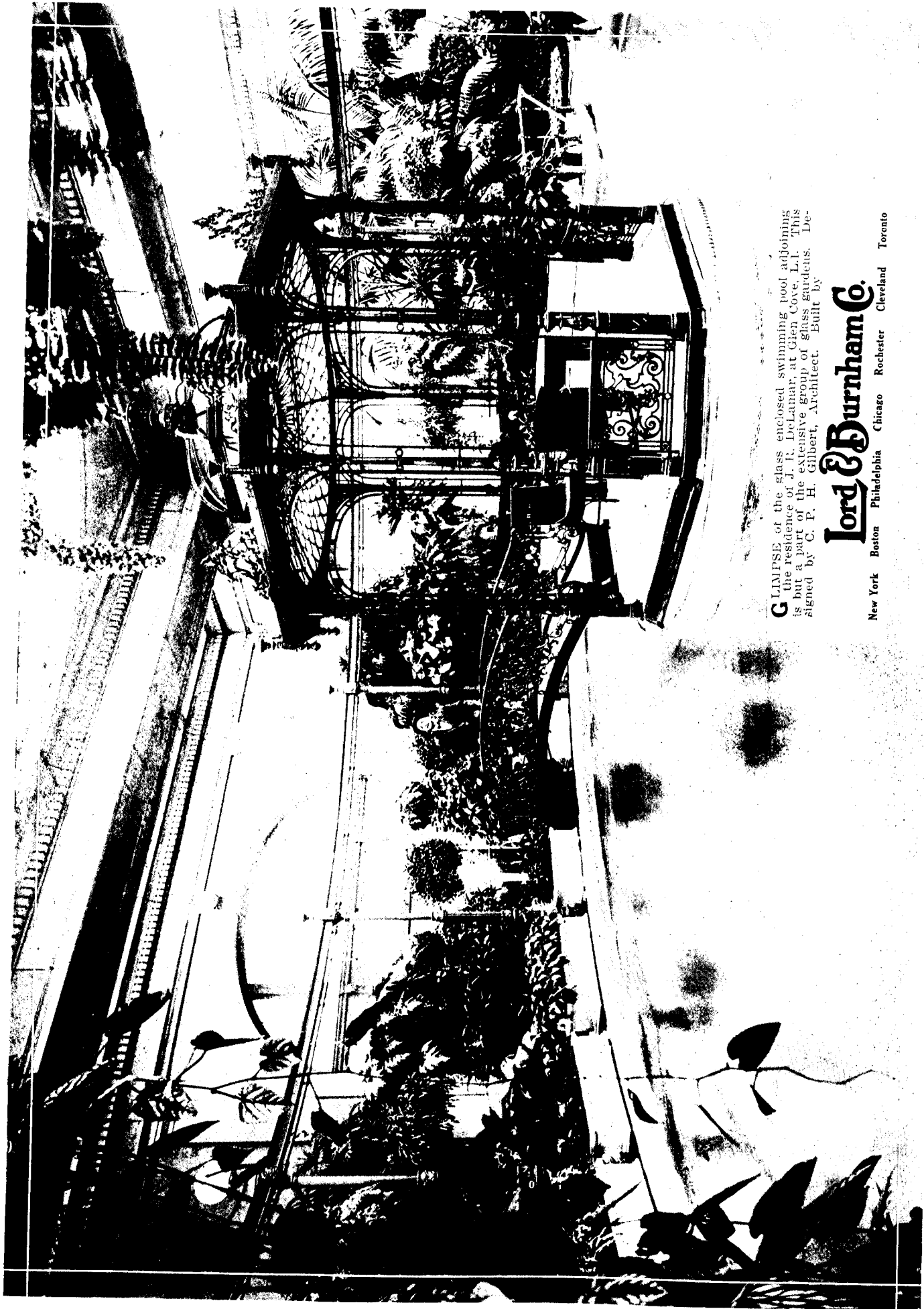
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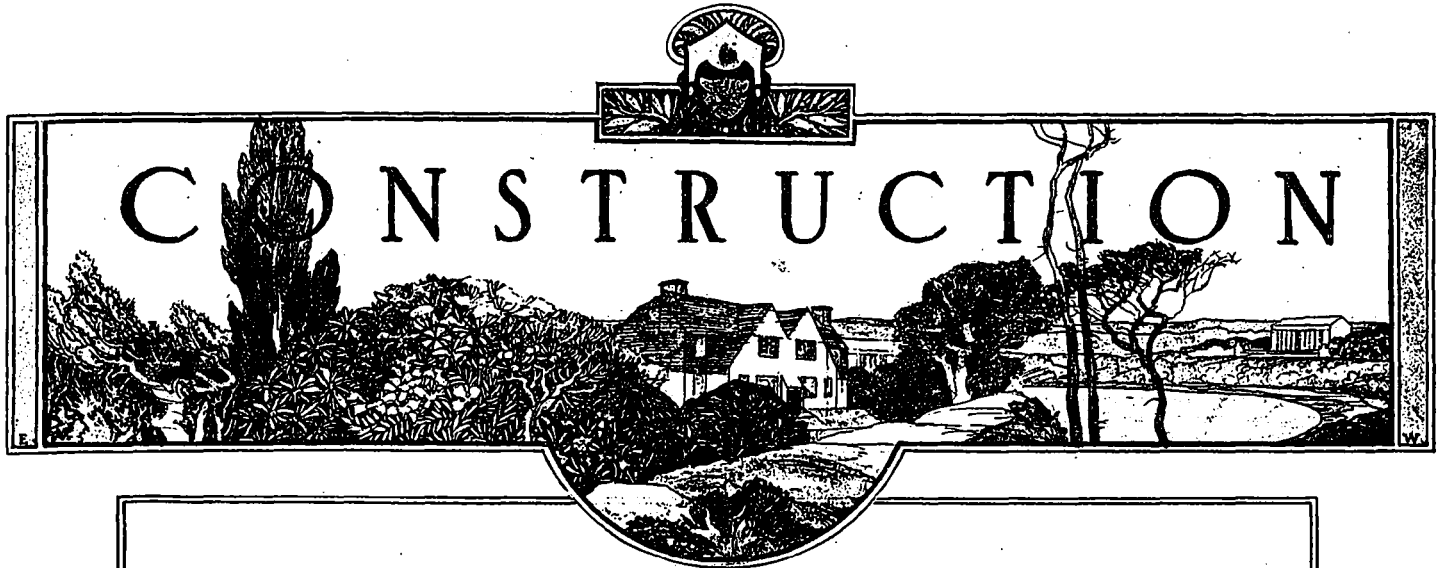
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March, 1915

Vol. 8, No. 3

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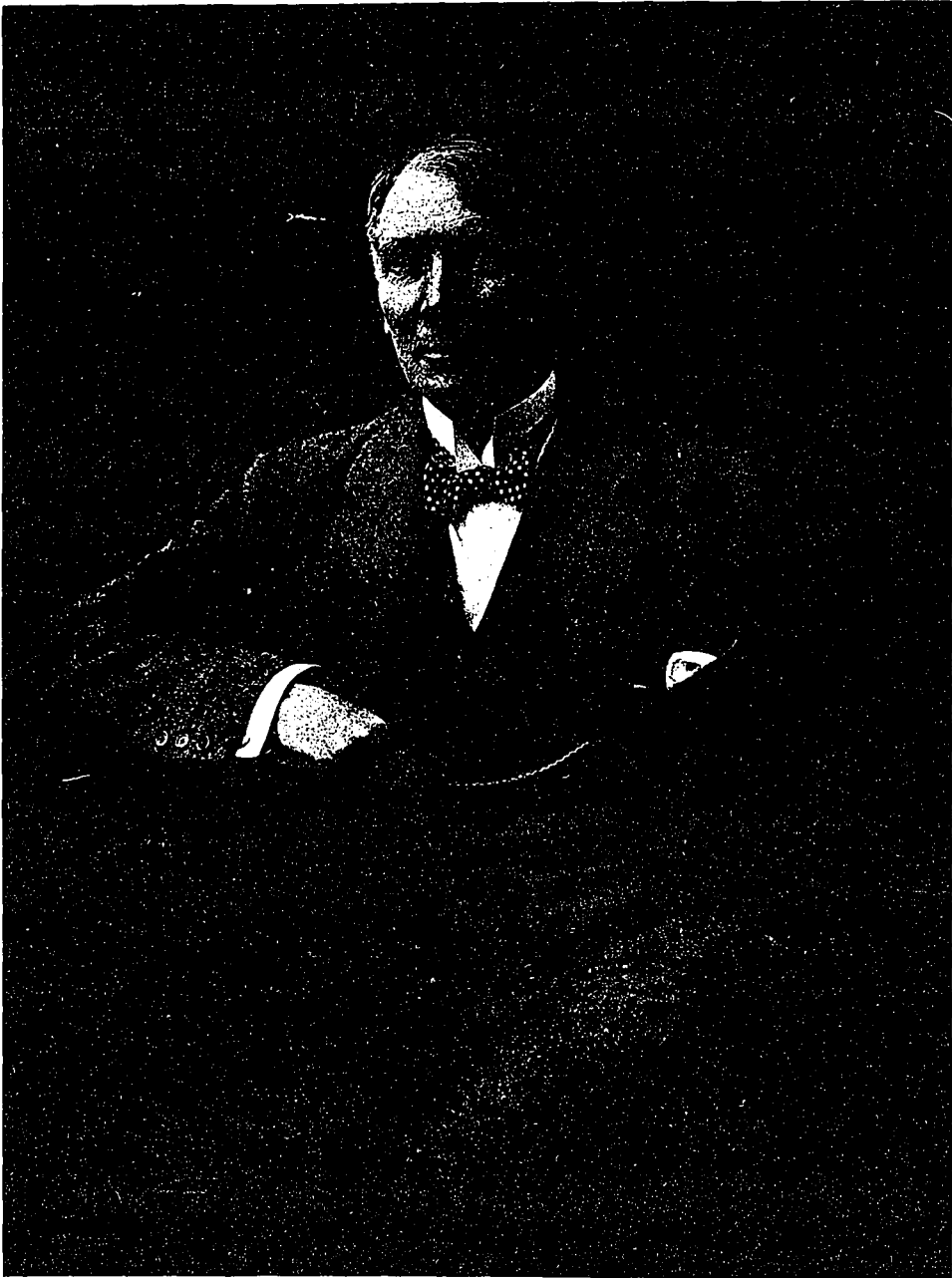
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FRANK DARLING, R.C.A.  
ROYAL GOLD MEDALIST, 1915.

# The Royal Gold Medal, 1915

The bestowing of the Royal Gold Medal for 1915 upon Frank Darling, of the architectural firm of Darling & Pearson, Toronto, is a matter of sincere gratification to every Canadian. Congratulatory expressions in our daily papers and professional magazines, as well as from prominent members in the realm of arts and letters, reveal a feeling akin to patriotic pride. And it is well within the rights of every person interested in the welfare of legitimate art to enjoy with Mr. Darling this marked distinction conferred for the first time upon a Dominion citizen. In former years the medal has commended the efforts of eminent architects in England, U. States, France, Austria, Italy, Germany, and Holland. To-day it has recognized the conscientious endeavor of Canadian men to raise the esthetic standards of architecture to a level commensurable with that of other nations, older and farther developed. The recipient is well known for his skill in the art of design, his love of the beautiful and his integrity towards the moral principles of his profession. These qualities, together with a broad grasp of the limitations to art, as well as its possibilities in this, a comparatively new country, has enabled Mr. Darling to exert a profound influence upon the sane growth of architecture throughout the Provinces. Living in a territory of great latitude and longitude, where climatic conditions vary from one extreme to another; where facilities for transportation have been somewhat meagre; where structural materials are obtained at considerable expense and time; where the tendency to commercialize all building projects has been rampant—living among these conditions foreign to the experience of European architects; it will be universally felt that the honor conferred upon Mr. Darling is a high tribute to one who has persistently devoted his efforts towards the artistic and moral development of his work.

The Royal Gold Medal is bestowed annually by the British Sovereign upon the individual selected by the Royal Institute of British Architects. The choice is invariably an architect, or a man of science and letters with architectural instincts, who is deemed most worthy to receive this well merited distinction. The custom was instituted by Queen Victoria in 1848, and the medal awarded each succeeding year, excepting the date of her death, 1901. Founded as an appreciation for distinguished services rendered in the realm of architecture, it has encouraged the members of the profession to unite in a wholesome endeavor to raise the quality of design to an exceptionally high standard. The broad, comprehensive grasp of the original idea, which has lasted over one-half a century, is revealed by the fact that the gift has been confined to no one country, but conferred upon men of various nationalities whose life and energies have been devoted to the pure and broadening influences of their work. The intrinsic value, which has proven an incentive not only to the recipients, but also to others who have imbibed the spirit of their endeavors, is evidenced in the character of buildings erected throughout the countries wherein they lived. Naturally, therefore, we are pleased to see the medal come to Canada, for it bespeaks of keener competition, nobler architecture, and a deeper regard for the moral standing of our profession.

Frank Darling, the son of Rev. W. S. Darling, for many years Rector of the Holy Trinity Church, Toronto, was born at Scarborough, Ontario, in 1850. He was educated at Upper Canada College and Trinity College School, after which he began his preliminary work in the field of architecture. In 1870 he went abroad, continuing his studies under the tutorship of George Edmund Street and Sir Arthur Blomfield. Five years later he started upon his professional career and formed his present partnership with John A. Pearson in 1895. Mr. Darling's name is associated with many of the prominent structures in Canada, the largest number being erected in Toronto and vicinity. Among these might be mentioned the Toronto General Hospital, C.P.R. Building, Royal Ontario Museum; C. G. Electric offices; buildings for the Toronto University and Trinity College; head offices for the Bank of Nova Scotia as well as the Dominion, Union and Standard Banks; and innumerable residences. At Winnipeg are many examples, including the General Post Office, Grain Exchange, and homes for the Union, Nova Scotia and Imperial Banks. In addition to the planning of a Canadian Bank of Commerce for nearly every city of importance, might be mentioned the Sun Life at Montreal; Ontario Mutual Life at Waterloo; Canada Life at Vancouver, and Bank of Nova Scotia at Kingstown, Jamaica. This list could be greatly amplified, as no part of the Dominion has failed to come under the influence of his creative genius, but it is sufficiently large to show the varied character of the work as well as the general excellence in design and structural attainment. It seems quite fitting to add the name of Darling to the list of former recipients

who are honored, respected and admired as great men in the field of architecture—men like Cockerell, Barry, Fergusson, Street, Webb, Viollet le Duc, Garnier, Pascal, Hunt, McKim, and Dorpfeld.

#### AN APPRECIATION—By F. S. Baker, F. R. I. B. A.

Canada is proud of Frank Darling, upon whom is to be conferred the Royal Gold Medal, which might be called the "V.C." of architecture, for it represents brave deeds accomplished, not without sacrifice. It is doubtful if any previous recipient of the medal was more innocent of its approach or more surprised upon receipt of the news. If I may venture, I would say let the people of Canada fully realize what this means. It means that Canadian architecture as exemplified by the works of Frank Darling has been found worthy by a council of distinguished architects in London, representing the Royal Institute of British Architects, to rank with that of the great nations of the world. A moment's thought will show the importance of good architecture in the appearance of our country and the impression given its visitors. It is distinctly uplifting.

Therefore this tribute to one of Canada's gifted sons is more far reaching than it might appear, and while the whole country from the Atlantic to the Pacific honors and acclaim him, the man himself, modest to the extreme, would be the first to say that the "Royal Gold Medal," although conferred upon him as the medium, is really conferred upon our beloved native land, Canada. It was the commissions of its people, and the courage of its people to spend money upon art which made possible the outward demonstration of his genius and masterful ability. Thus an architect upon whom is conferred this great honor shares it with the owners of his buildings, whose good taste and wise instructions often add to their artistic merit. That more honors, though none, perhaps, which he will more appreciate, may be in store for him is my personal wish.

#### AN APPRECIATION—By Edmund Burke.

It is said that "poets are born and not made"—some architects are.

Frank Darling's father started out to make him a banker, but a hard-headed manager put him through an examination in arithmetic, and on seeing the result, pronounced the candidate unfit to be entrusted with financial transactions which might lead the institution into deep water sooner or later. In his maturer years Mr. Darling has, however, fully offset the cold shoulder, and great monetary institutions have been pleased to entrust him with the spending of millions on their palatial buildings.

Half a generation after the middle of last century saw him, a youth of sixteen, introduced to the drawing board in Henry Langley's office on the southeast corner of King and Jordan streets, where now stands one of his great bank buildings. The writer happened to be the sole pupil at this time, boasting six months' experience, while the same number of months Mr. Darling's junior in years—and his adoption of the profession, by the way, was about as haphazard as Mr. Darling's, having been sent to his uncle's office to finish out his college holidays as a punishment for getting into some boyish scrape, now long forgotten. Such are the slight circumstances which sometimes shape one's future destiny. The scapegrace, by his own choice, foolishly, chose not to return to school.

In those days the profession was looked upon by many as a haven for boys who were not able to qualify, or manifested a distaste for the Church, Law, or Medicine, who had no aptitude for business, or who "could not dig and were ashamed to beg." The odd boy in the family had a penchant for drawing, therefore, the distraught father an Architect would of him make. Those were the days when a student was not troubled with exams., and after his legal guardian had performed the necessary formalities he was turned loose in the office to study, work, or trifle as the mood took him.

Our principal was a pupil of Wm. Hay, of Edinburgh, who practised in Toronto for a few years, erecting, among other buildings, the General Hospital on Gerrard street east. He was a Gothicism, and under him Mr. Langley had as good a training in this style as any local man of his time. Naturally, the pupil imbibed the master's predilections; and all work approaching the ecclesiastic had to be Gothic in character. Mr. Darling had his full share in the best work the office afforded, and in addition to various churches and residences, made many of the drawings for the old Lieutenant-Governor's residence (now demolished), the Toronto General Post Office, and the Metropolitan Methodist Church, and at that early date began to manifest an individuality which developed as his powers grew.

When Mr. Darling had finished his pupilage in his home town and became a student or improver in the office of such a master of Gothic as George Edmund Street, of London, it looked as though no other style would find favor with him, and on his return to Toronto to practice a very considerable portion of his earlier work was in that style, notably St. Luke's Church and Trinity College Chapel, the latter probably the strongest of his designs.

In the early thirties of his age he competed for the Ontario Legislative Buildings, producing a clever design in Gothic, which, if erected, would have been a credit to the Province, and which would undoubtedly have been adopted but for the treachery of an alien assessor. This design made evident the fact that a strong leader in his profession was in our midst, and gave promise of a brilliant future. With social opportunities and a host of friends impressed with his ability, his commissions have steadily grown in number and importance. His design, in 1907, in the competition for the Departmental and Justice Buildings at Ottawa was also Gothic of a type similar to that of the Ontario buildings, and would have harmonized thoroughly with existing structures.

One could have wished that his university buildings had followed at least some phase of Gothic, which would have been more in harmony with the grand old Main Building than the type of free Classic which he has chosen for most of the groups erected from his designs. While his contention that Norman Gothic was too expensive in construction, and not suitable for the lighting requirements of the buildings projected may have had force, a collegiate type of Gothic would have filled the requirements and would have given the various groups a unity which is now largely destroyed.

Mr. Darling's successes have probably been greatest in his banking buildings, notably that of the Canadian Bank of Commerce in Montreal, while his Winnipeg Post Office and the C.P.R. and Dominion Bank buildings in Toronto indicate his high abilities in other structures of a public character.

The architects of the Dominion have reason to be proud of their confrere, who has been honored with the Royal Gold Medal through the Royal Institute of British Architects, and this first compliment paid to a Canadian is fully appreciated.

To Mr. Darling the surviving members of the Old Guard, the Toronto Architectural Guild, with a host of others, offer their most hearty congratulations with the hope that he may be long spared to enjoy his well-earned distinction.

AN APPRECIATION—The Builder, London.

In recommending Mr. Frank Darling, of Toronto, for the Royal Gold Medal the Royal Institute of British Architects not only pays a just tribute to the long and honorable career of a fine artist, but also recognizes the great progress that architecture has made in Canada during recent years. To this progress no one has contributed more than Mr. Darling. Starting practice at a time when architecture as a fine art could hardly be said to exist in Canada, he did good pioneer work. In circumstances not altogether favorable to the production of the finest architecture he has not so much carried on its traditions as recreated them. Fortunate in his opportunity, he has always striven to justify it. In selecting an architect from Canada the institute creates a precedent of considerable interest, and to Mr. Darling falls the unique distinction of being the first architect from any of the Dominions to be acclaimed by the Royal Institute of British Architects as a worthy recipient of the highest honor it has in its power to bestow.

A COMPLETE ROLL OF THE ROYAL GOLD MEDALISTS.

- |                                 |  |  |
|---------------------------------|--|--|
| 1848 Charles Robert Cockerell.  | 1872 Baron Von Schmidt, Austria                          | 1895 James Brooks.   |
| 1849 Luigi Canina, Italy.       | 1873 Thomas Henry Wyatt.                                 | 1896 Sir Ernest George, A.R.A.                                   |
| 1850 Sir Charles Barry.         | 1874 George Edmund Street.                               | 1897 Dr. P. J. H. Cypers, Holland.                               |
| 1851 Thomas L. Donaldson.       | 1875 Edmund Sharpe.                                      | 1898 George Atchison.  |
| 1852 Leo Von Kleuze, Austria.   | 1876 Joseph Louis Duc, France.                           | 1899 George Frederick Bodley.                                    |
| 1853 Sir Robert Smirke.         | 1877 Charles Barry.                                      | 1900 Professor Rodolfo Amadeo Lanciani,<br>D.C.L., Oxon., Italy. |
| 1854 Philip Hardwick.           | 1878 Alfred Waterhouse.                                  | 1901 (Not awarded, owing to the death of<br>Queen Victoria.)     |
| 1855 J. I. Hittorff, France.    | 1879 Charles Jean Melchior, Marquis de<br>Vogue, France. | 1902 Thomas Edward Collett.                                      |
| 1856 Sir William Tite.          | 1880 John L. Pearson.                                    | 1903 Charles F. McKim, U.S.A.                                    |
| 1857 Owen Jones.                | 1881 George Godwin.                                      | 1904 Auguste Choisy, France.                                     |
| 1858 August Stuler, Germany.    | 1882 Baron Von Ferstel, Austria.                         | 1905 Sir Aston Webb, K.C.V.O., C.B., R.A.                        |
| 1859 Sir G. Gilbert Scott.      | 1883 Fras. Crammer Penrose.                              | 1906 Sir Alma-Tadema.  |
| 1860 Sydney Smirke.             | 1884 William Butterfield.                                | 1907 John Belcher.   |
| 1861 J. B. LeSueur, France.     | 1885 H. Schlimmann, Germany.                             | 1908 Honore Daumet, France.                                      |
| 1862 Rev. Robert Willis.        | 1886 Charles Garnier, France.                            | 1909 Sir Arthur John Evans, D.Litt., F.R.S.                      |
| 1863 Anthony Salvin.            | 1887 Ewan Christian.                                     | 1910 Sir T. G. Jackson, Bart., R.A., F.L.D.                      |
| 1864 E. Viollet-le-Duc, France. | 1888 Baron Von Hansen, Austria.                          | 1911 Wilhelm Dorpfeld, Ph.D., D.C.L.,<br>P.S.A., Germany.        |
| 1865 Sir James Pennethorne.     | 1889 Sir Charles T. Newton.                              | 1912 Basil Champneys.  |
| 1866 Sir M. Digby Wyatt.        | 1890 John Gibson.  | 1913 Reginald Blomfield, R.A.                                    |
| 1867 Charles Texier, France.    | 1891 Sir Arthur Blomfield.                               | 1914 Jean Louis Pascal, Membre de l'Institut<br>de France.       |
| 1868 Sir Henry Layard.          | 1892 Cesar Daly, France.                                 |  |
| 1869 C. R. Lepsius, Germany.    | 1893 Richard Morris Hunt, U.S.A.                         |  |
| 1870 Benjamin Ferrey.           | 1894 Lord Leighton.                                      |  |
| 1871 James Fergusson.           |  |  |



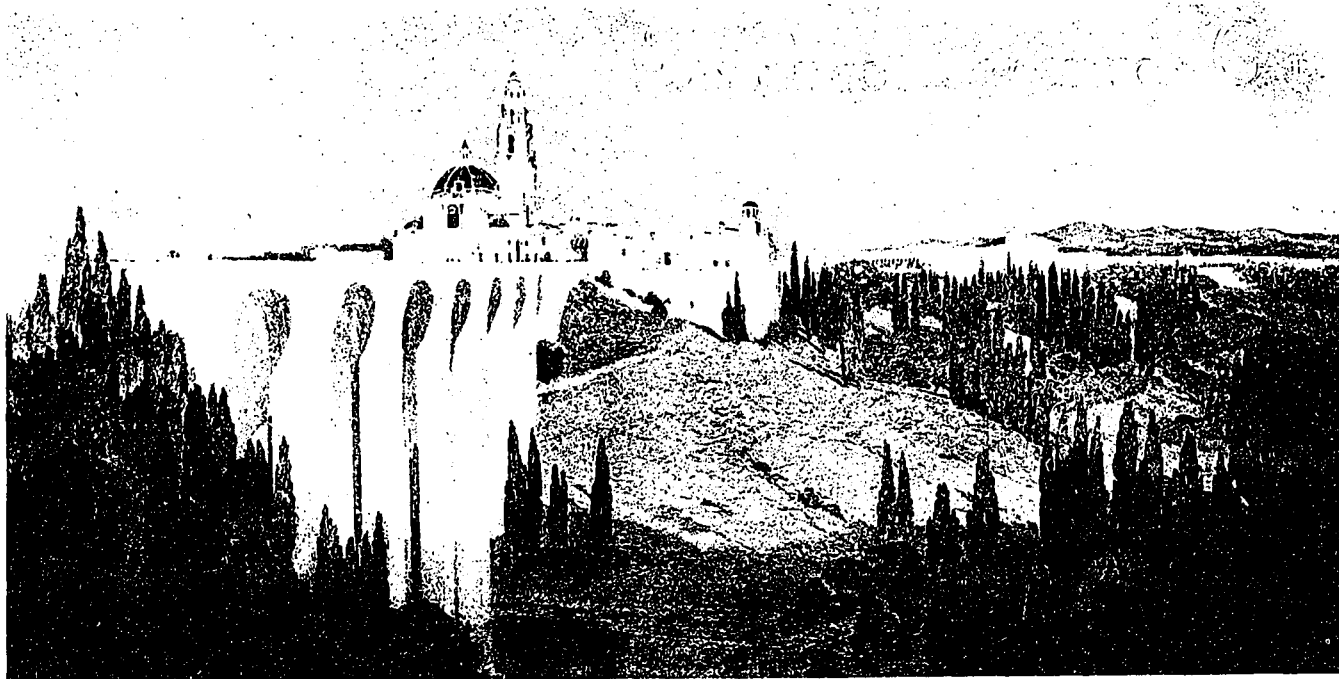
EL PRADO, THE PANAMA-  
CALIFORNIA EXPOSITION,  
SAN DIEGO, CALIFORNIA.

*The Panama California Exposition held in San Diego the resultant of a fixed idea relative to constructive work in exhibits and architecture.*

TO THINK of San Diego with less than forty thousand inhabitants, and located far from any railway centre of importance, opening to the world an exposition of one year's duration seems incredible. Especially since San Francisco is also celebrating the great engineering project of the Panama Canal with a universal exposition, treating in tangible form the progress of the past in its civilizing influences. Realizing they could not hope to succeed with a scheme resembling the great fair at 'Frisco, the people of San Diego decided to shape their efforts so as to accomplish the acceleration of agricultural development in that section of the State. They interested only those whose goods would create a market in the local territory, which naturally led to a constructive exhibition. One of the first results was to induce the International Harvester Company to reserve two hundred and forty thousand square feet of land, including an orchard, demonstrating the use of their implements under actual field conditions. In ten weeks ninety per cent. of all available space was contracted for by the leading manufacturers in America. Another endeavor was to maintain a high standard in the games and "thrillers." Nothing old was allowed, as evidenced by the refusal of "Creation," which proved the greatest attraction at the St. Louis Exposition. The same vigorous censorship was utilized in all phases of the work. Instead of the lifeless exhibits, action, novelty and interest were demanded; as a result the method of weaving, knitting and manufacturing various fabrics is being demonstrated, while craftsmen are carving ivory, enamelling jewelry, beating copper and weaving hats. In respect to outdoor exhibits there are acres of citrus fruits; model ranches of vegetables and berries; fruit farms; sheep sheared by electricity; cows milked by compressed air—all true pictures of the capabilities of machinery and brains. Having settled on an ingenious fair, with creative exhibits throughout, it was essential to furnish the proper architectural setting. And the choice is characteristic of all the decisions made by the committee in charge. Re-born, as it were, the Spanish-Colonial style is not only attractively beautiful, but it affords a Renaissance of romantic art and architecture which should be a vital part of the present life in Southern California. Surrounding the buildings are groups of multicolored foliage representing all parts of the world, including the Scotch heather, the green and red pepper trees from Brazil, the acacias from Australia. The site, buildings, exhibits, gardening—all unite into one perfect symphony, the result of common sense ideas.

*"Build Now" is becoming a much discussed topic in papers of all description on account of the unusually low cost of materials and wages.*

"BUILD NOW." It is hard to find an influential newspaper or magazine which is not endeavoring to persuade its readers to grasp the significance of the above words. And no public medium is following the dictates of its conscience or working for the best interests of its patrons if it does not urge them to "build now." There are ample reasons for emphasizing this fact at the present time; chiefly the low levels reached in building materials resulting from the war depression. It is safe to predict that structural steel, iron, brick and cement will not be as cheap for many years to come. In fact all products have reached a comparatively low basis and should offer a strong inducement to the man who has any idea of erecting a home, enlarging his factory or adding one more structure to meet the growing demand of commercialism. Committees who were ready to proceed with society temples, churches, libraries, etc., could bring about a twenty-five per cent. saving by taking advantage of the present low prices. Another item is the cheapness of labor, brought about by the lack of confidence in the future development of our country by capital and consequently the lack of employment for those belonging to the various trades. Many promises augur well for Canada during the present year. A conference was held recently in Winnipeg between the Canadian Manufacturers Association and farmers' organization relative to opening up the vast area of untilled acres in the Western Provinces. Their scheme to populate the vacant prairie with peasants made homeless by the war will eventually bear fruit and be the means of helping to right conditions. Many of our industries have been given large orders for various commodities required in the warring nations. The Government is also alleviating the situation by going ahead with her contracts for vast improvements. Premier Asquith announced in the British House of Commons that over one hundred and fifty million dollars would be devoted for the use of self-governing dominions in order to remove the necessity of their making loans. This will, in itself, help at a time most critical. The general falling off in building figures naturally brings about better results. As some one has suggested, competition is keener, and in order to meet it companies are forced to think out new methods for reducing the cost of an article without impairing the quality. The shrinkage of internal consumption as well as the loss in export trade has caused the manufacturer to lower his prices. Surely no time for the erection of needed institutions could be more profitable to all concerned than the present.




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Opening Day  
January 1st, 1915

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Morning brings the silver to the sea,  
The hills are gilded, all as one,  
The blue heavens bend, caress transcendently  
The halcyon Harbor of the Sun;  
The colors of her country's flag unfurled,  
To-day calls San Diego to the world:  
"Hither, good peoples, feast with me  
Under the palm and olive tree!"

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Written by  
John Vance Cheney

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Lark and linnet from the canyon come,  
The mesa sends a greeting-song,  
While bees among the roof-tree roses hum,  
And soft winds run warm ways along;  
'Tis Nature's welcome blent with pastoral praise  
Of old ranchero and adobe days,  
Wherein the acacia's mocking-bird  
Tries angel strains pale Serra heard.

The cradle city of the Golden State  
Signals every ship that roves;  
Veer, proud beaks, steer in the Silver Gate,  
Honor your hostess of the groves,  
The orchards, vineyards, and the Hills of  
Dream—  
On them all the shadow and the gleam  
Of apt romance, jealous for men  
And days that will not come again!

Listen! deep in the rabbit's chaparral,  
Hark! in the rivered sycamore,  
The live-oak and the pine, wood-voices tell  
New things with those oft told before;  
As from the singing-tree of Araby,  
The winds are weighed with gracious prophecy  
Of a fair city, like to none—  
Our Plymouth of the Setting Sun.

Here Saxon purpose shall instruct the day,  
Cancel from time in valorous hours, play,  
The conqueror house him, blue-eyed children  
White-bosomed mothers mind the flowers;  
Here, haply, science mount to prouder place,  
Art's forehead wear some rich, indigenous  
Sunward Cuyamaca don grace,  
The crown once worn of Helicon.

Ride to her, ships, glide through the Isthmian  
Way  
To her called of the Destinies;  
Rank, at her feet, far round Cabrillo's bay,  
The pageantry of argosies!  
Sail to her, nations, come; but from her breast  
Pluck not the olden peace, the rose of rest,  
The mystic trust the Mission had,  
The padres, in God's russet clad.

Morning brings the silver to the sea,  
The hills are gilded, all as one,  
The blue heavens bend, caress transcendently  
The halcyon Harbor of the Sun;  
The colors of her country's flag unfurled,  
To-day calls San Diego to the world:  
"Hither, good peoples, feast with me  
Under the palm and olive tree!"



# Panama-California Exposition, San Diego, Cal.\*

F. R. MAJOR

SOMETIMES known as the "San Diego Exposition," but more properly mentioned as the Panama-California Exposition, this great epitome of Spanish architecture and ancient traditions was opened January first, 1915. Located in the Balboa Park, it dominates the city and bay with its commanding site some three hundred and fifty feet above the sea level. Vessels one hundred miles away can readily distinguish the great light from the dome of the California State building, which forms the entrance feature, in conjunction with the Fine Arts building. From the commanding height one can look up the valleys through the finest fruit section of the country to the low hills of Mexico, less than twenty miles away, or back to the high peaks of the Sierras. In the foreground is a sweeping canyon, three years ago a barren waste, to-day a thick jungle of palm, acacia, eucalyptus and cypress, flashing here and there with brilliant wild flowers.

The possibilities which flowers suggest have been utilized to the utmost, also the climate, which knows neither frost nor severe heat, but a steady twelve months temperature and abundant water supply from the hills, which comes seldom on the coast. The buildings fronting on the Prado and the plazas carry long, arched arcades, over whose pillars climb the blazing vines of Southern California; the iron gratings being concealed by low shrubbery, beds of gladiolus and poinsettia; the lawns lined with black acacia. The patios are thick with floral life which grows rampant to the small rug-covered balconies; to the towers and domes, to the archways where mission bells swing.

Where the canyon is a hundred yards distant there is a broad lawn with an occasional pergola, over whose beams are woven the rose, honeysuckle and bougainvillea, while a border of other flowering plants is arranged along the edge of the gulf. There are formal gardens and cool walks beneath the palms; also a quiet grove of pepper trees between which appear frail vistas of the buildings on another plateau, or the sturdy Point Loma, where are concealed the guns of Fort Rosecrans, or the rocky outlines of

the Coronado Islands, lying in Mexican waters.

The rose trellis surrounding the Exposition grounds includes six hundred and fourteen acres, but outside is the remainder of a fourteen hundred acre park which has been improved in a similar manner, so that it might be included in exposition property. Unlike most world's fairs of the past, San Diego has ample space for the better display of her beauties, and in that factor finds a highly important attribute to the general harmonious beauty. The large buildings at San Francisco do not appear at this Exposition 600 miles south, for San Diego has utilized nature wherever possible, placing many of the industrial exhibits out of doors.

Appreciating an extraordinary opportunity to stray from the world's fair conventions, San Diego created a new idea in architecture, new in respect to exposition building, although a renaissance of the Spanish art and architecture which was established on the lower coast in the latter part of the eighteenth century. By one of those sins of omission which it is hard to explain the glories of that school had been allowed to die out. San Diego chose to revive them, and in doing so has revealed anew the remarkable possibilities of this style, and also has given the world something approaching a sensation in the architectural treatment of exposition structures.

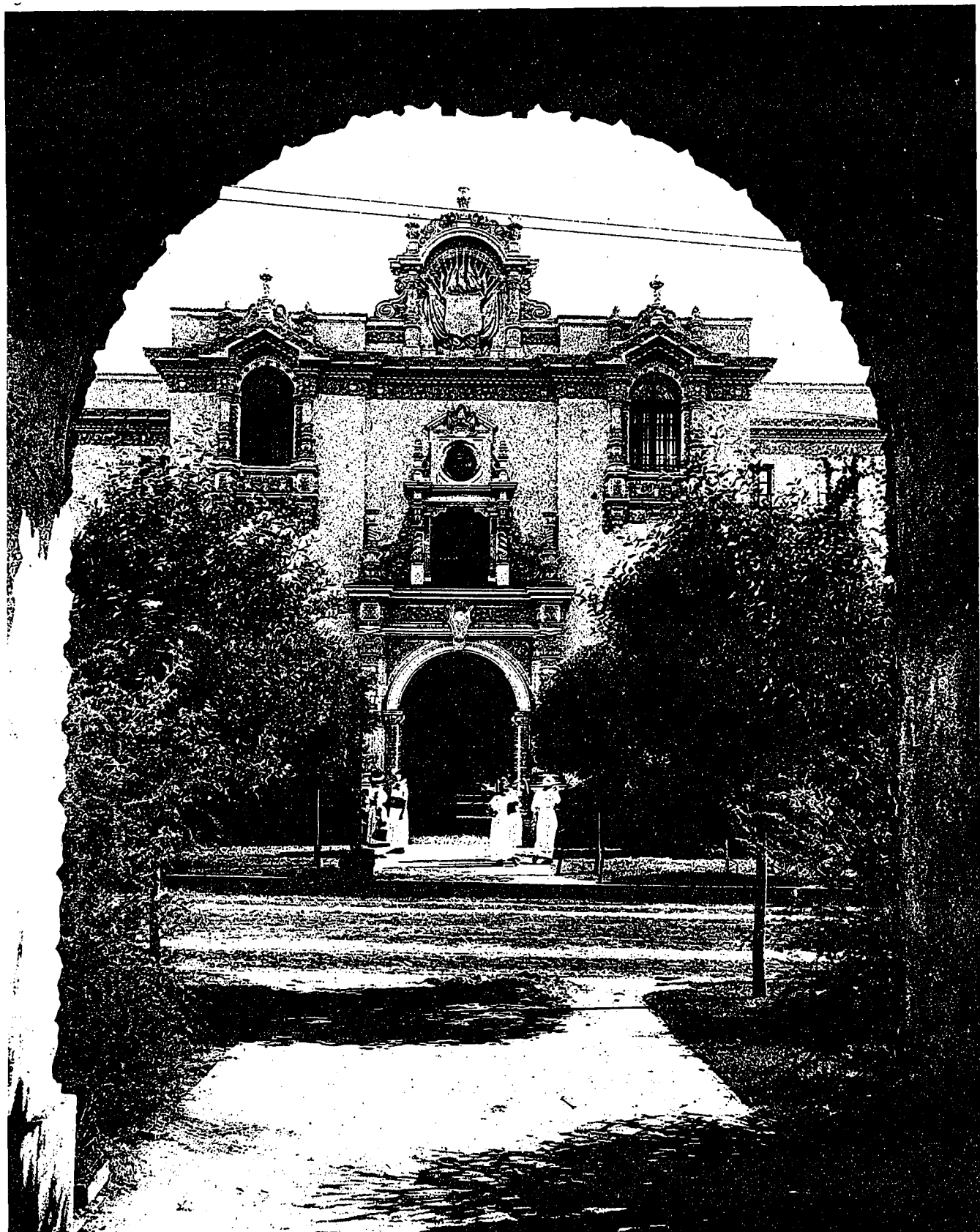
To the artist who has traveled extensively through Spanish America, the exposition will reveal some interesting suggestions of famous buildings already familiar. The buildings, as stated, are of the Spanish Colonial, after the various types of cathedral, old and new mis-

sion palaces, country residences, and municipal buildings, portraying throughout the general ideas and details which can be noted in many places of Central and South America. Thus the Home Economy building resembles the hacienda of the Conde d'Heras; the Indian Arts building suggest the Sanctuario de Gaudaloupe at Guadalajara, Mexico. In the Science and Education building are found points resembling the cathedral at Puebla, Mexico, while in the Varied Industries building, often designated as the



DON SEBASTIAN VISCAYNO.

\* Illustrations copyrighted by Panama-California Exposition.



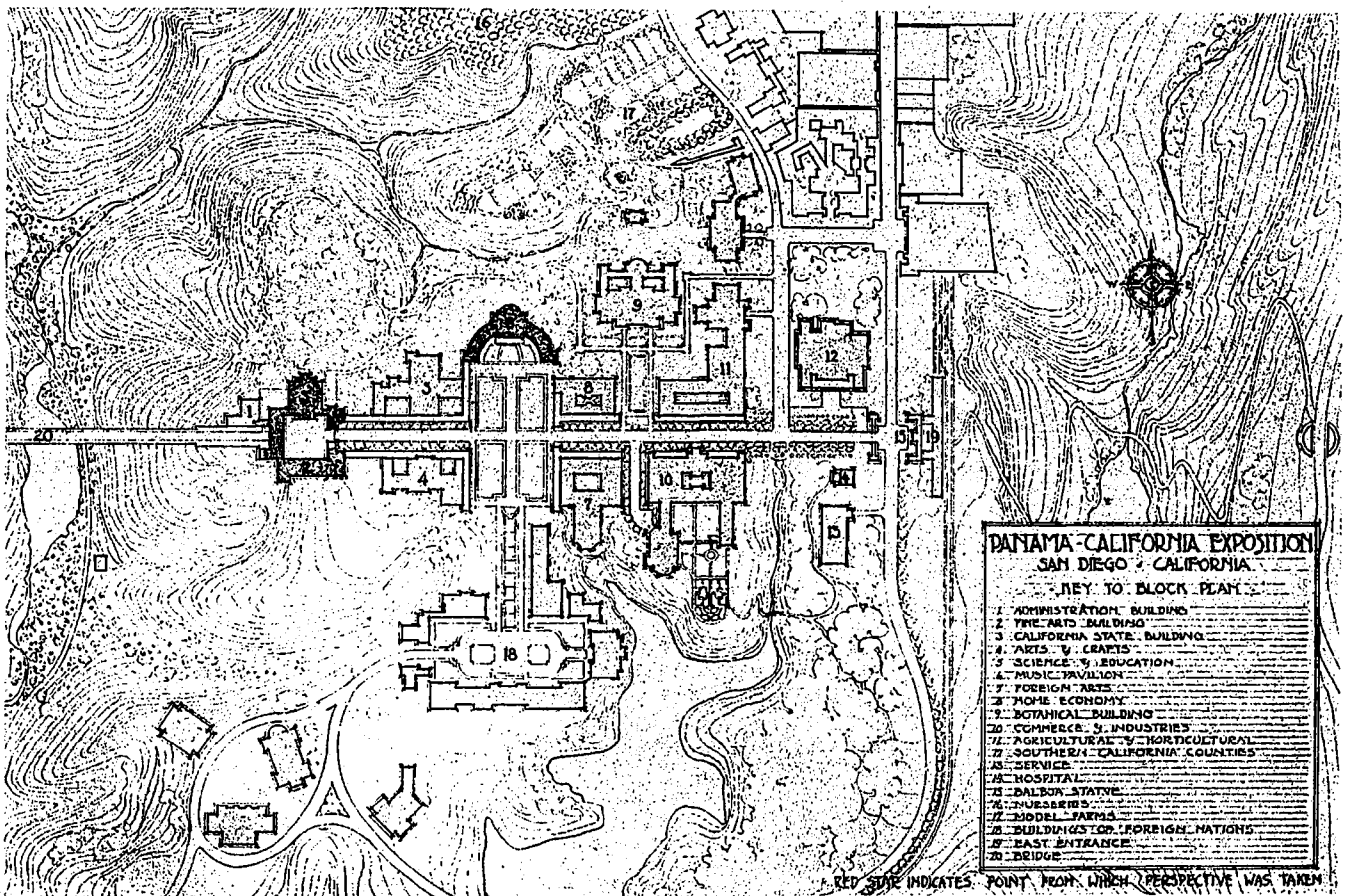
NORTH FACADE OF  
THE FOREIGN ARTS  
BUILDING AT THE  
PANAMA-CALIFORNIA  
EXPOSITION, SAN  
DIEGO, CALIFORNIA.

Agricultural and Horticultural building, are resemblances to the eighteenth century monastery at Queretaro, Mexico. The California State building adheres somewhat closely to the beautiful cathedral at Oaxaca, Mexico.

The San Joaquin Valley building is typical to any one of half a dozen municipal buildings in Spanish America, although the minor details originated in the mind of the architect. The building of Kern and Tulare Counties suggests strongly a number of palaces, while the unique building which New Mexico has erected is a copy of the old mission on the rock of Acoma in New Mexico, with a few details introduced from the church at Cochita. In the Painted Desert,

well, the triple group costing something in excess of \$500,000. From an engineer's standpoint the bridge is interesting chiefly by reason of its importance in railroad construction, a feature which has attracted wide attention from the heads of various companies. Each pier sustains the weight of one-half the arch on each side, with a space of about one inch left to break the arch and to afford space for expansion of material without affecting the strength of the structure.

"Our great difficulty," explained the chief engineer for one of the northern transcontinental roads, "has been in bridging streams which are seasonably turbulent. A single span across such a stream is extremely expensive, and the

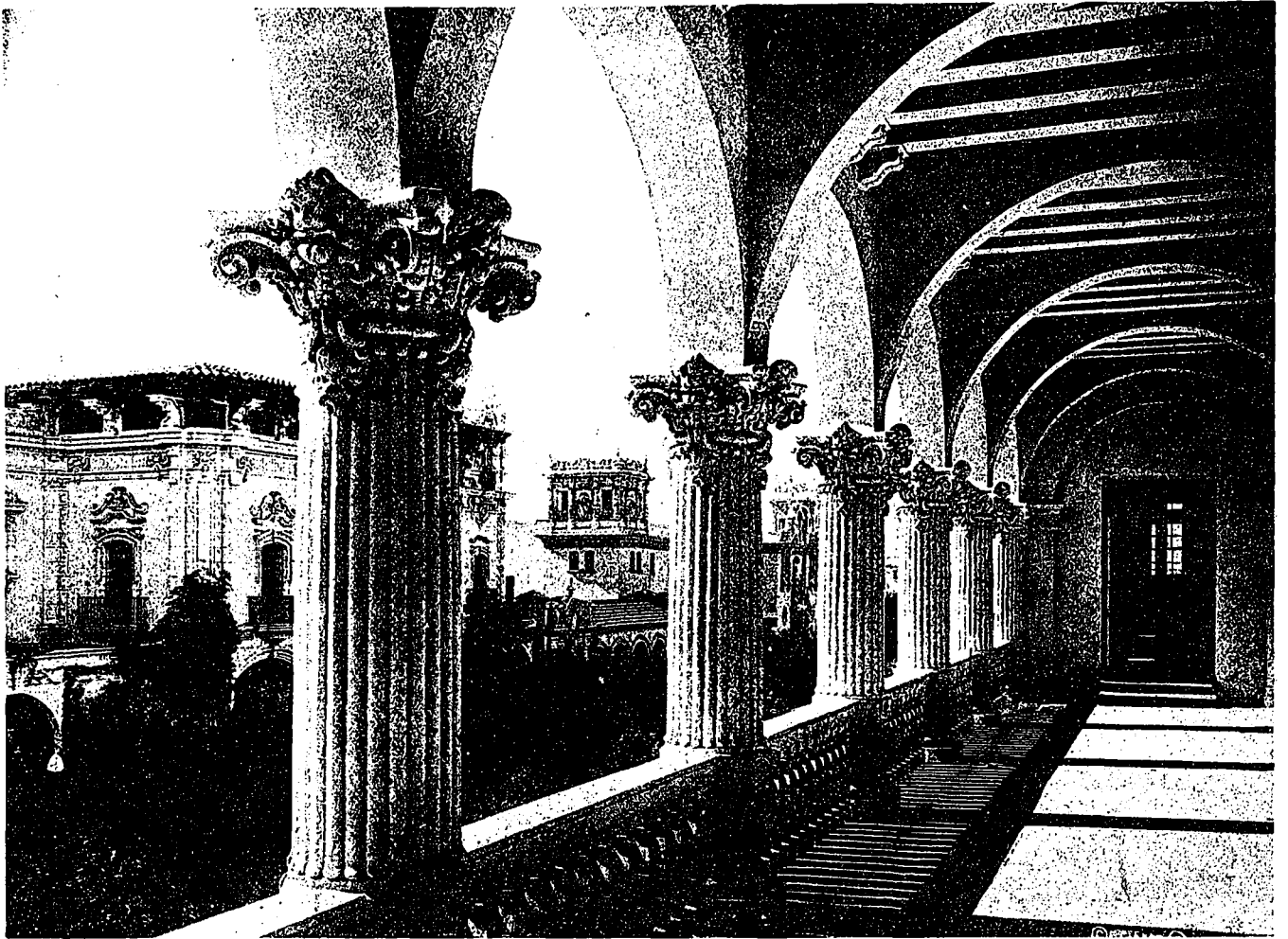


these resemblances are equally marked; the larger pueblos being copies similar to those at Hopi and Taos. The interior of the lower structure, where the Rio Grande tribes are quartered, is a replica of the ancient Governors' Palace, El Palacio Real of Onate at Santa Fe. The buildings and small structures throughout the Painted Desert are exact imitations of typical scenes in the great Southwest.

The principal approach to the grounds is across the great Puente Cabrillo, the first large cantilever-unit viaduct of reinforced concrete to be erected, its seven piers rising from a pool in the canyon one hundred and thirty-five feet below. The puente may be considered as a portion of the west group, comprising the California State building, and the Fine Arts building, as

piers we might erect are in danger each year of being washed away or weakened so that the whole structure must be rebuilt. This, I believe, is the answer. Each pier is a unit; hence, if one is washed away the others will remain, and temporary beams can be laid across the gap so as not to interfere with traffic while the washed-out unit is being replaced. This will mean not only a decreased construction cost, but the saving of traffic revenue which at present we are forced to sacrifice during the rebuilding."

After crossing the Cabrillo bridge, beneath which is a small lagoon reflecting its great arches, we enter through a florid gateway to the Prado, on either side of which are erected the main buildings. This long vista is interrupted by the statue of Balboa, situated just within the



A LOGGIA OVERLOOKING EL PRADO.

east entrance. The first group consists of the California State building and the Fine Arts surrounding a small plaza. Both edifices are of reinforced concrete, with concrete stone facades. The California State building is designed similar to an old Spanish cathedral, with its rich and intricate entrance treatment, large colored tile dome and lofty tower.

The Fine Arts building, with which it is joined by a double arcade, is entirely different in design, following the quiet, almost severe, lines of the Old California Mission, with the rough adobe cloister, roofed by rough wooden beams, and the deep window recessions practically the only ornament appearing about its blank walls. The interesting feature is that two buildings so entirely different in character, but both of Spanish Colonial design, can stand in such close proximity and still harmonize. This is one of the rare beauties of the Spanish architecture, whose spirit and design has been followed with painstaking accuracy throughout the grounds.

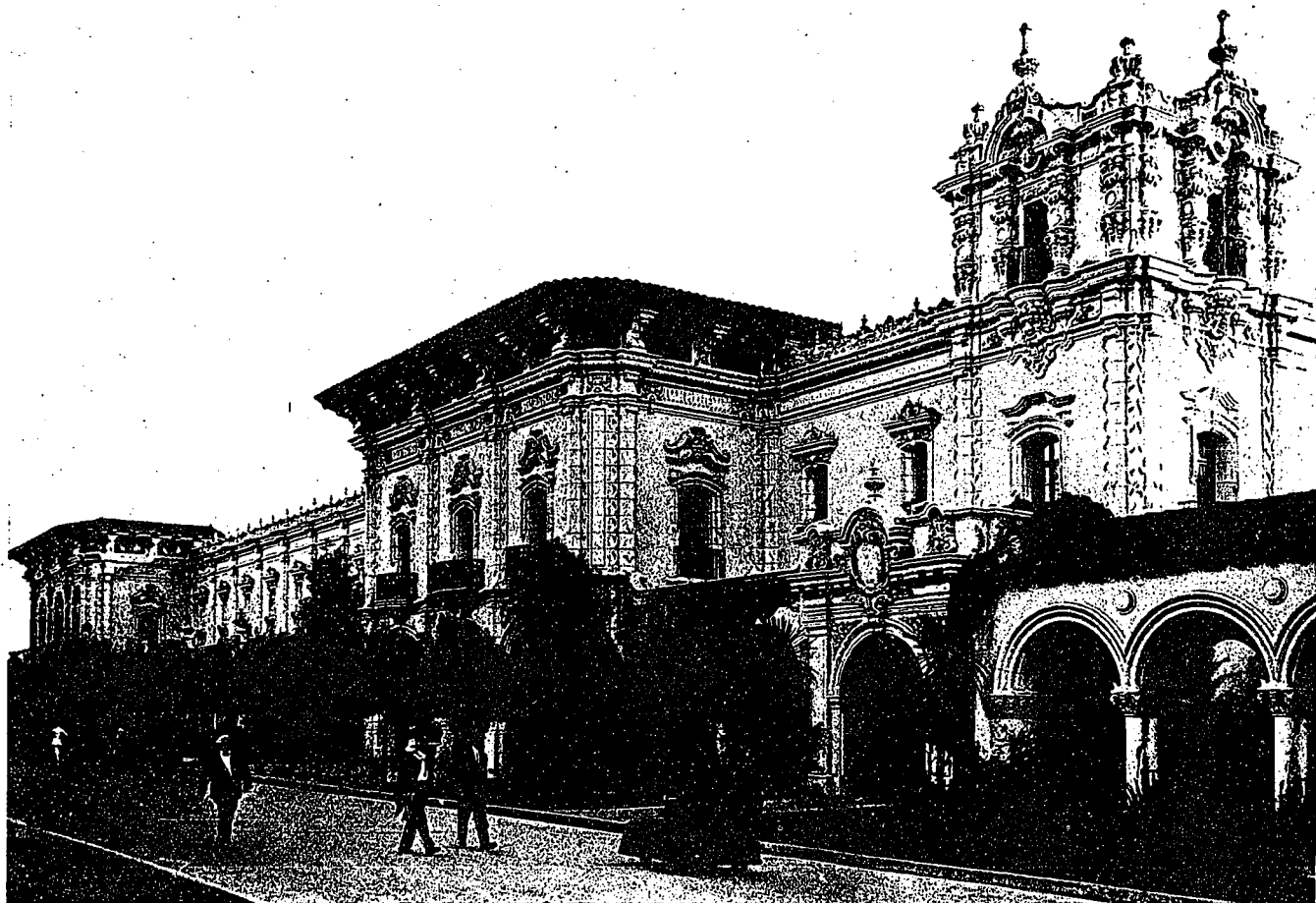
Off on the lower plateau, for example, where the State buildings stand, is the New Mexico building, also Spanish Colonial, and also mission, but of the older mission type which came into being a century and a half before the California type. It partakes of the Pueblo Indian style, with straight lines, no arcade, and rugged

simplicity throughout, and yet is as unmistakably Spanish as the fine old cloistered mission of later date. On the lower edge of the Plaza de Panama, some five hundred yards beyond, is another type, the palace, and a bit further the municipal building. Away beyond, at the foot of the "Isthmus," which is San Diego's name for the old-time Midway, or Pike, is a structure purely Moorish, with the pointed arch, the arabesque, the minaret and the other Moorish features which eventually became absorbed in some measure by Spanish architecture itself. At the east end of the Prado one of the buildings has the colored cornice, a blaze of crimson and gold, the only one of the main buildings to carry that feature.

## SAN DIEGO EXPOSITION

P. Taylor

No single feature of California, aside from the majestic wonders of the State, has attracted more interest than the old Spanish missions which stretch all the way from San Diego de Alcalá to San Francisco de Solano. No other spirit of architecture is so completely in harmony with the California landscape. Certainly none is associated more definitely with the rare old Spanish traditions which still live in California's life of the present day, and yet there



COMMERCE AND INDUSTRIES BUILDING.

has been a singular neglect of the Spanish-Colonial type in the construction of new buildings along the coast.

This circumstance was fully realized by the management of the San Diego Exposition five years ago, when plans were being made for the buildings which should stand on top of the lofty mesa which looks down over the sea and back over the canyons to its mountains. The exposition might have gone ahead and erected buildings of Greek or Roman type, or other conventional types which have appeared at all world's fairs of the past. Beyond a doubt the result would have been beautiful, for all buildings are beautiful when they are set in the gorgeous landscape which is possible in California as a whole, and in Southern California in particular.

Beautiful the result might have been, but nothing would have been created. Consequently the exposition adopted a different plan, and now offers to the world something which is not only wondrously beautiful, but also is creative, in that it has brought about a genuine renaissance of the glories of Spanish art and architecture, and something which is productive of a very great appeal to the romantic tendencies which linger in the most prosaic. The impression of the architects who have seen the exposition in the city of the far Southwest is that

there has been revived an art which should have been revived decades ago, but which, now re-created, is destined to take on new life and strength and to last for many years to come.

The visitor comes to the edge of Balboa Park from the wharves or the railway station, passing en route buildings typical of a busy twentieth century city. The rattle of street cars and the hum of modern industry fill the way. One bursts through a grove of palms to find himself at the end of the quarter-mile Puente de Cabrillo, rising from the depths of a lagoon in the canyon far below. After crossing this impressive viaduct you come to the great stone highway, not spick and span as though it had been built especially for this occasion, but softened by the sandblast; chipped here and there to bring about the appearance of antiquity.

It is just such a gate as might have stood at the portal of a city in old Spain of two or three or four centuries ago. Entering through the gateway, immediately the hum and bustle of the twentieth century tidewater city die away. At one side is an impressive cathedral, copied in many essential details from the magnificent cathedral at Oaxaca, Mexico. At the other side is a plain old mission of the California type, and right away is noticed the charming feature of this Spanish-Colonial architecture; the

ornate cathedral faces squarely into the sombre old mission, and yet there is no clash, no discord.

Down the El Prado are rows of black acacia set in verdant lawns; on either side beyond the lawns, is a thick hedge of poinsettia, its crimson flashing brilliantly against the green of the coprosma and the other shrubs. Just beyond this hedge rise the long Spanish arches which

Everything is Spanish-Colonial, and yet there is variety sufficient to lend fresh charm to the ensemble. Openings in the long arcades lead into quiet patios, whose calm is broken only by the splashing of a fountain of Pan. Rose-covered gateways lead into pergolas which dot the broad lawns adjoining the buildings and stretch back to the brink of the canyons; curious exedras are arranged in the botanical gardens; stone

balconies look out over the gulches which have been planted with an endless variety of semi-tropical plants. These canyons furnish a most important feature of the general landscape.

One reason for the extraordinary results which San Diego has brought about with a limited amount of money is that Balboa Park supplied a site which is quite incomparable in exposition work. The great mesa occupying the centre of the fourteen hundred acre park is cut by deep ravines whose contour furnishes admirable opportunity for the development of most appealing treatments. The canyons, like the mesa, were originally of hard-baked adobe in which grew nothing except cactus and sage and chaparral, but by the liberal use of dynamite, by ploughing, harrowing and watering, they have been made to bloom into a succession of great gardens which probably have no peer in America.

The height of the bridge has been accentuated by the use of Italian and Monterey cypress. Beyond the zone where these trees are used, is a wealth of eucalyptus and acacia. Some of the trees are the varieties

which bear the brilliant crimson and golden blooms. The end of one canyon has been devoted entirely to a variety of palms, which are also used extensively elsewhere in the general scheme. The brilliant canna and the soft grays of the acacia *Baileyana* and some of the rarer grasses have been used to add further color.

Not only was San Diego endowed at the outset with this admirable site, but it was also blessed with the quite invaluable gift of a changeless climate, that knows no frost or torrid heat, and allows the most amazing riot of hundreds of varieties of trees, shrubs, clambering vines and small blooming plants. Over all the arcades



PATIO, SOUTHERN CALIFORNIA COUNTIES BUILDING.

line the arcade stretching from La Puerte del Ceste clear along the Prado. Here is another old mission of the California type, and over across the canyon a mission of the older New Mexico type, quite as much Indian as Spanish. In one place is a building of the pure municipal type seen to-day in all Spanish-American cities; in another a rustic residence, and there an urban palace. Another building at the end of the Isthmus—the name given to San Diego's amusement street like the Pike and Midway of previous years—introduces the Moorish arabesque, minaret and other features which have been partly adopted by Spanish America itself.

sweeps this display of vines, with the purple bougainvillea used extensively in the Plaza de Panama, the brick red bougainvillea along El Prado; roses in one patio, clematis in another, jasmine and honeysuckle elsewhere. The effect of this floral display is of great importance.

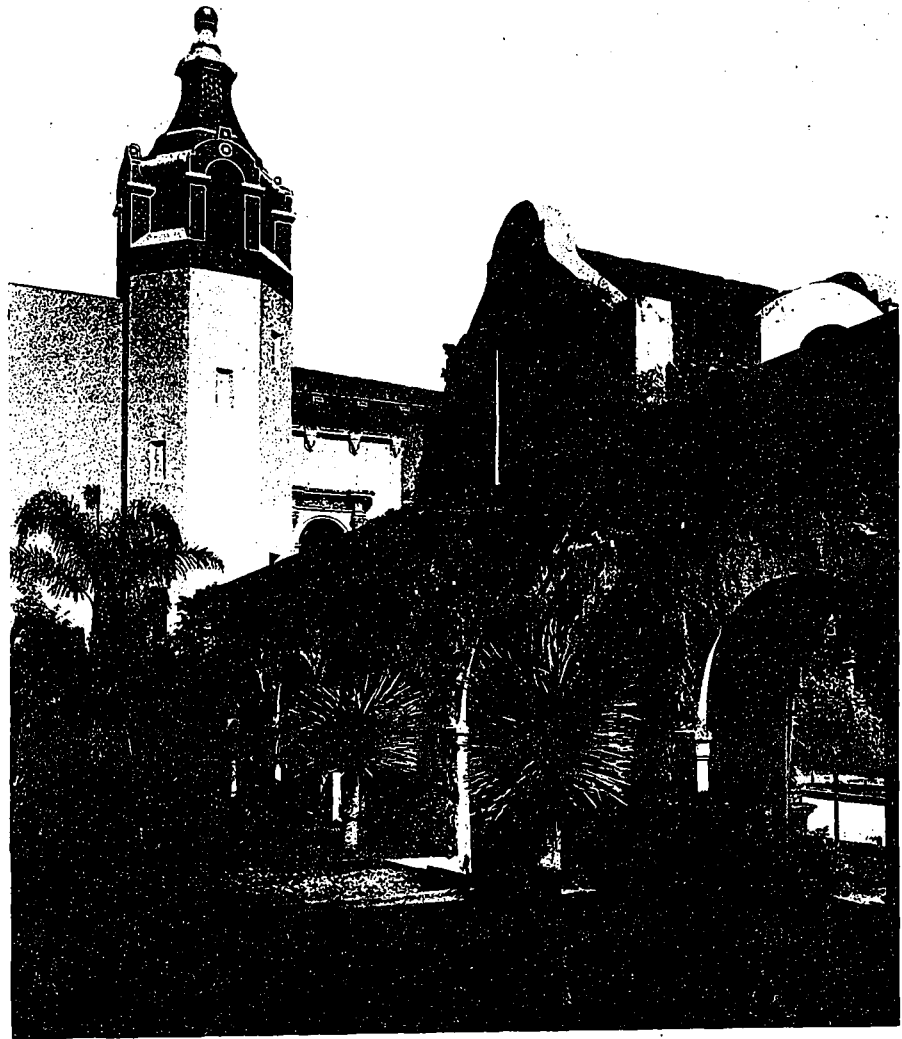
There is another point which impresses the architect and the engineer alike. There has been little at previous world's fairs more genuinely depressing than the sight on the day after the fair closed when the tearing down of the buildings began. The structures at San Diego have been built to stay—that is, those structures which are entitled to permanency. The smaller buildings along the Isthmus, being erected purely for amusement, will be demolished immediately.

The great west quadrangle, dominated by the California State Building, built entirely of steel and concrete, will be used to house the museum exhibits which have been donated to the exposition with the definite understanding that they are to remain as long as the building itself stands. The wealth of rare flowers in the Botanical buildings is assembled for permanent use, as that is also erected of steel and concrete. The Administration building, the fire station, the hospital and the other service buildings are for permanent park use. The great music pavilion which stands at the lower end of the Plaza de Panama, is of similar construction, and becomes the property of the city immediately after the exposition company is dissolved. All other buildings are of staff and plaster, but placed on a firm backing of metal lath. Furthermore, the entire absence of frost, sudden changes of temperature, gales and drenching rains from this particular section of the San Diego valley makes certain a much greater degree of permanency than would be possible elsewhere. The life of these buildings is figured at from twenty to thirty years.

The supplementary features which have been introduced by the exposition management to carry out the Spanish ideas are in a rare spirit of harmony. Not only are the buildings purely Spanish, but the guards and attendants at the exposition throughout 1915 are attired as con-

quistadores and caballeros; the bandsmen are dressed in Spanish uniform; the dancing girls who appear in the Plaza de Panama and at different points along El Prado, are dancing girls in the bright costumes of old Spain. Some of the fiestas which will rank as special events are the fiestas of the Spanish-American countries.

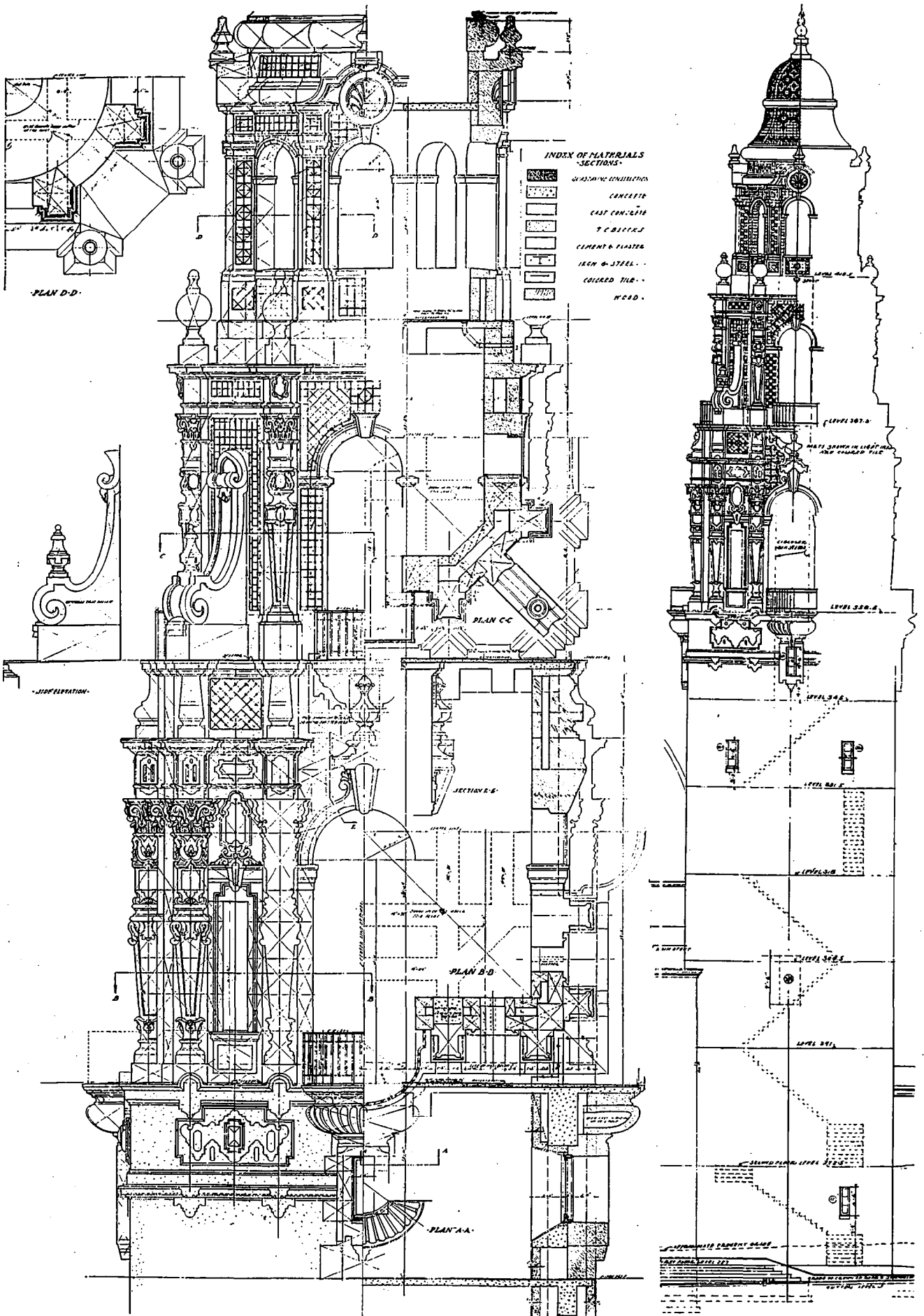
In the field of special events are the religious ceremonies of the Aztec and Toltec, and other ancient red races, inseparably associated with the architecture itself. Very little is left to the imagination, save the feat of transporting ourselves backward three or four centuries and realizing that this magic city on the mesa is the



PATIO, SCIENCE AND EDUCATION BUILDING.

place dreamed of by Cabrillo four centuries ago, and by the succession of conquistadores and padres who followed after. It is an Exposition Beautiful in appearance and in spirit alike.

With the exception of the west quadrangle, which was the work of the architectural firm of Cram, Goodhue & Ferguson, the designing of the exposition was the work of Frank P. Allen, Jr., well known in exposition work.



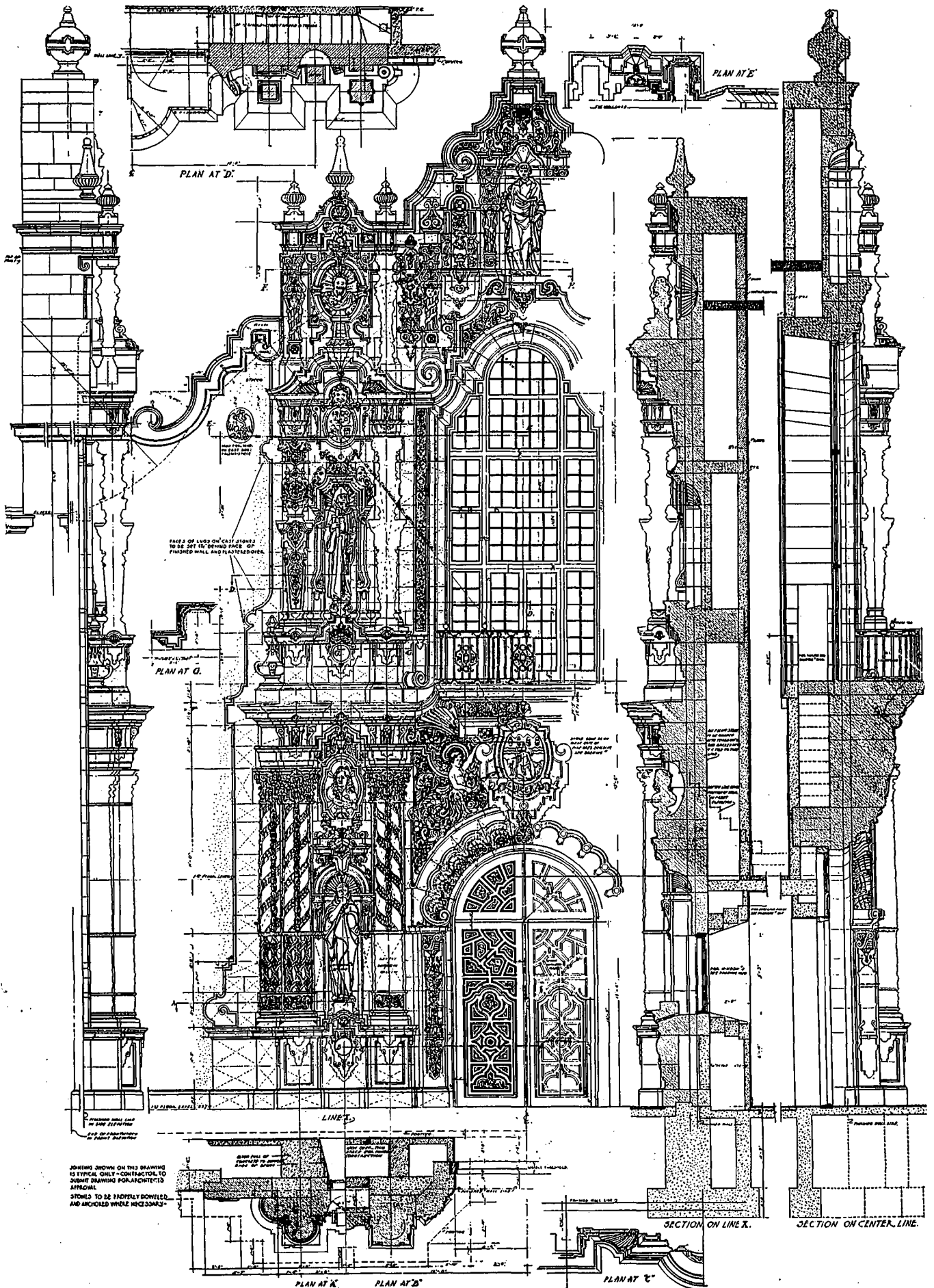
DETAILS OF TOWER, CALIFORNIA STATE BUILDING, SAN DIEGO, CALIFORNIA.

GRAM, GOODHUE & FERGUSON, ARCHITECTS.



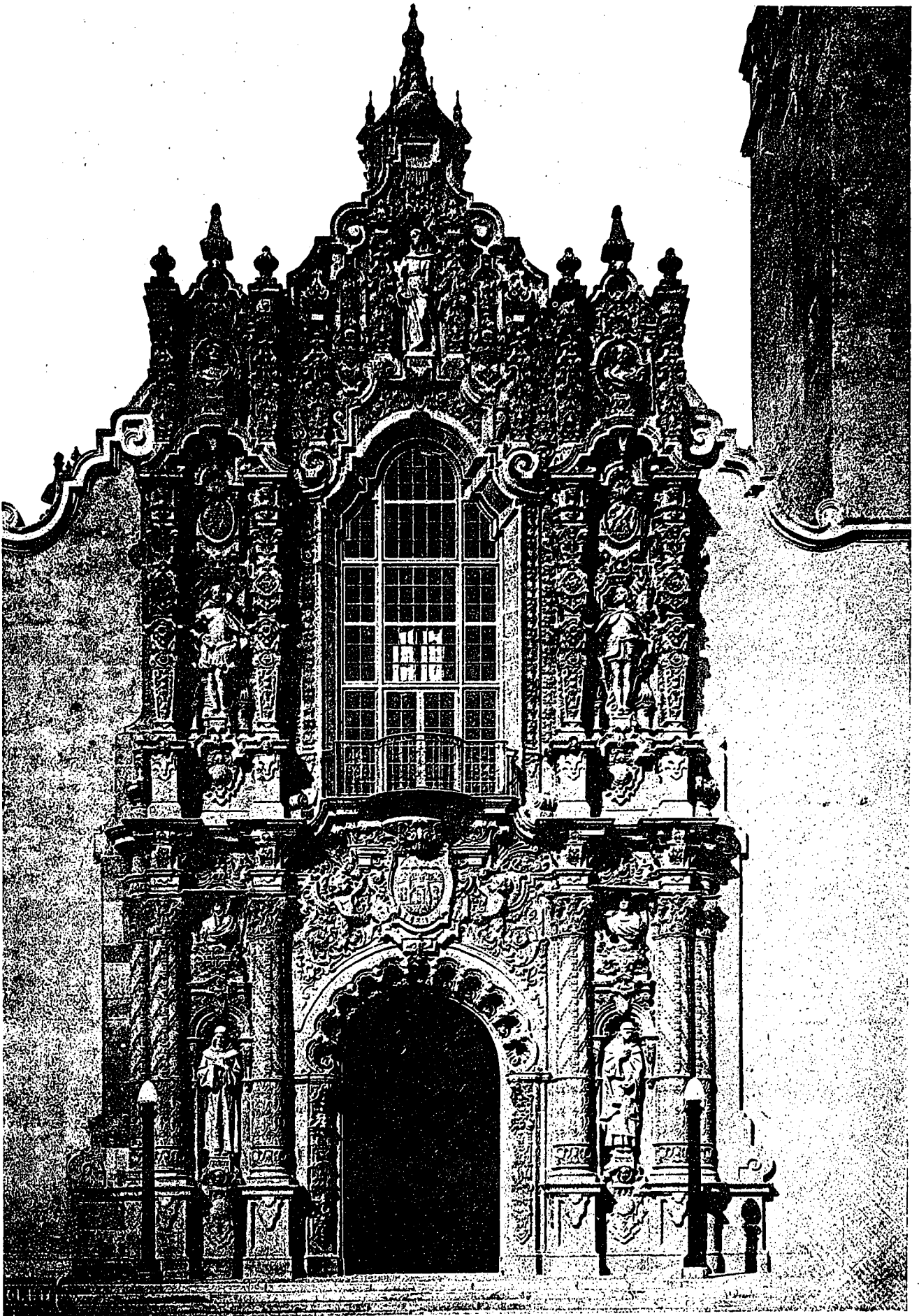


CALIFORNIA STATE BUILDING, SAN DIEGO, CAL.



DETAIL OF MAIN ENTRANCE, CALIFORNIA STATE BUILDING, SAN DIEGO, CALIFORNIA.

CRAM, GOODHUE & FERGUSON, ARCHITECTS.

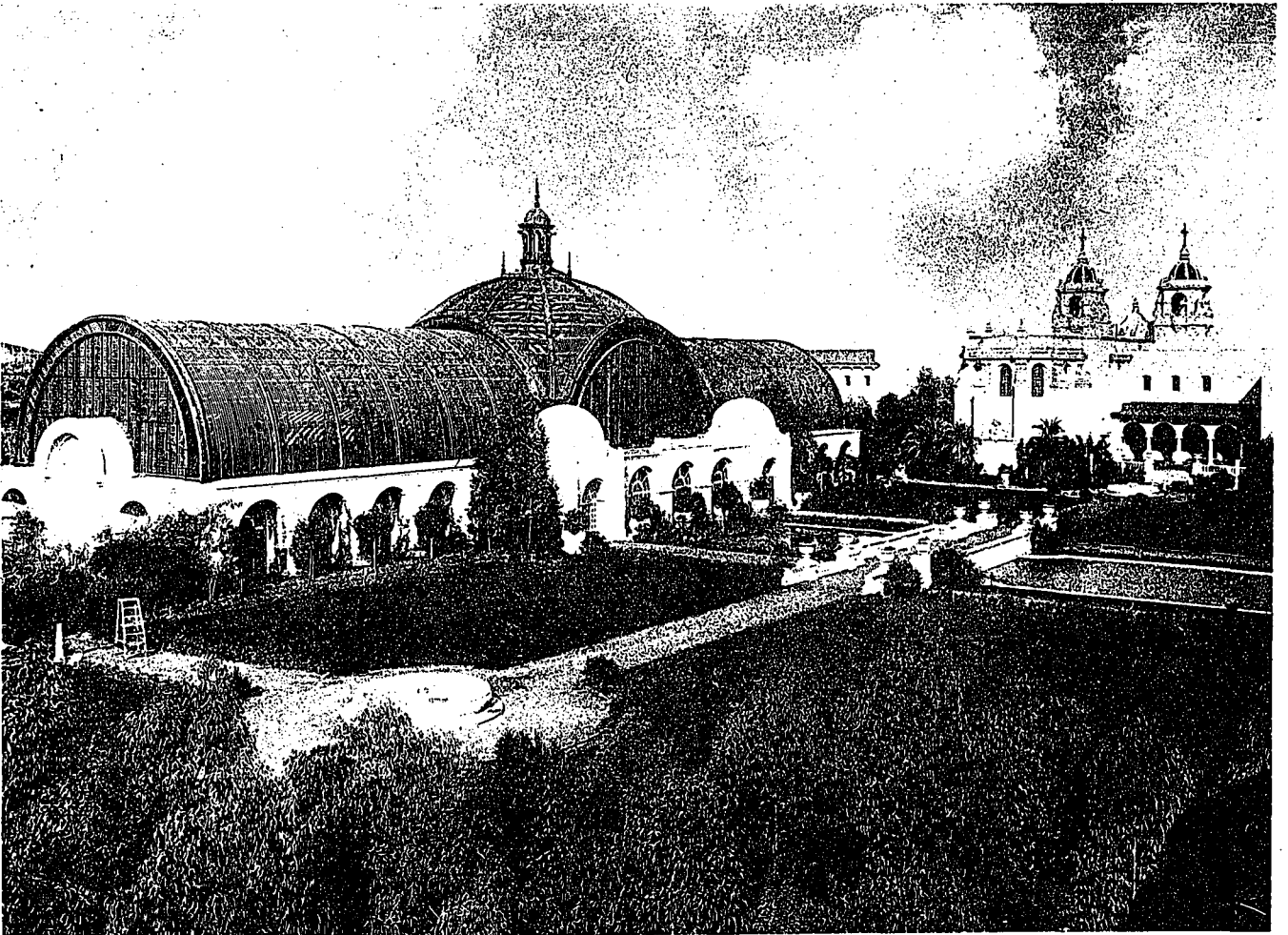
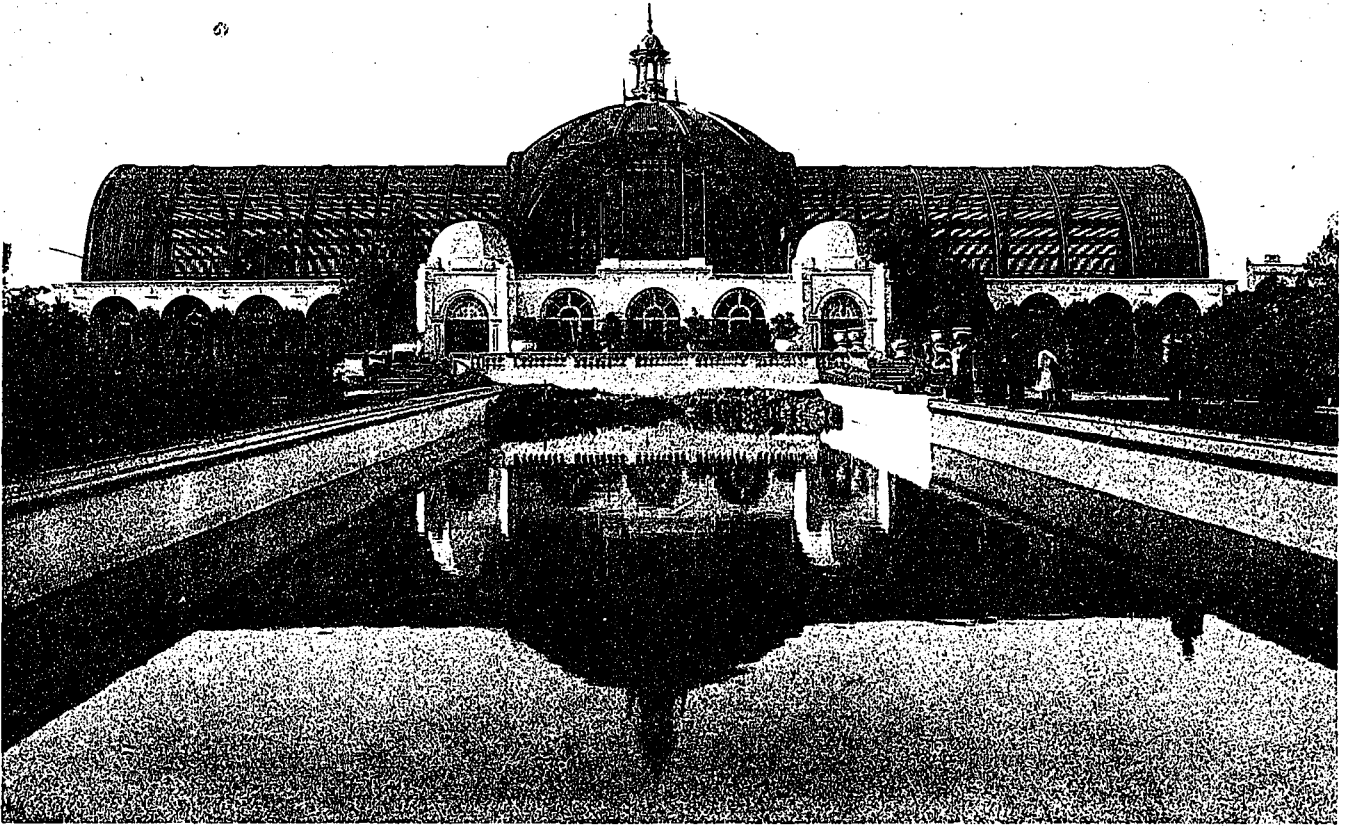


DETAIL OF MAIN ENTRANCE, CALIFORNIA STATE BUILDING, SAN DIEGO, CALIFORNIA.









TWO VIEWS OF BOTANICAL BUILDING AND GARDENS.  
PANAMA-CALIFORNIA EXPOSITION, SAN DIEGO, CAL.

THE great St. Louis exposition did not make running expenses. When Buffalo closed the doors of its show, the State of New York had to cover a heavy deficit. The management of the Jamestown fair could not pay its debts; its affairs are still in the hands of a receiver. New Orleans has not yet returned to the United States Treasury the money it borrowed to make its exposition go.

These sobering facts confronted San Diego four years ago when the wave of enthusiasm had passed, leaving in the hands of the committee signed pledges for contributions aggregating several million dollars. "Can we do it?" they asked one another.

Viewed from a distance, say from Chicago or St. Louis, the attempt to hold a twelve months' exposition in the lower left hand corner of the

locking directors, malefactors of great wealth, corn kings from Dubuque and wheat barons from Kansas and Dakota appeared every winter in large flocks of private cars, but the mass of the people, the filling between the upper and the nether crust, knew as much about San Diego as it did about Louvain or Lemberg. The aggregate geographical knowledge of the New Jersey Legislature, for instance, was so limited that it placed San Diego right alongside of San Francisco while in fact the two cities are as far apart as Chicago and Buffalo. And San Diego was at the end of a branch line, hitched to the country's steel arteries of trade by a single track.

The Wise Men of the East opined that San Diego had bitten off more than it could chew.

San Diego, having the money safely in hand, calmly, courageously reviewed the situation.

It admitted that St. Louis, Jamestown, Buffalo had been financial failures. But San Diego advanced the counter-proposition that the two expositions held on the Pacific Coast had been brilliantly successful from every standpoint. Portland cleared a handsome amount above its running expenses, and Oregon dates its awakening, its rejuvenation from the Portland fair; Seattle started with a debt of six hundred thousand dollars before the gates were opened. This debt was paid out of the receipts and enough was left over to pay the stockholders a dividend. Seattle had, within a radius of one hundred and fifty miles, approximately six hundred thousand people to draw from; within a like circle San Diego has eight hundred and fifty thousand souls and their pocketbooks at its disposal.

Pondering upon these things, San Diego cheered up considerably. Its confidence grew when it began to calculate the drawing power of that novel journey, a trip through the Panama Canal. And it became supremely confident of potential success when it dwelt on the magnetic pull of the triple attractions of 1915: the great world's exposition at San Francisco, its own Panama-California exposition and the everlasting exposition that reaches from the glaciers and geysers of

the north to the sequoias, the waterfalls and the Grand Canyon of the south.

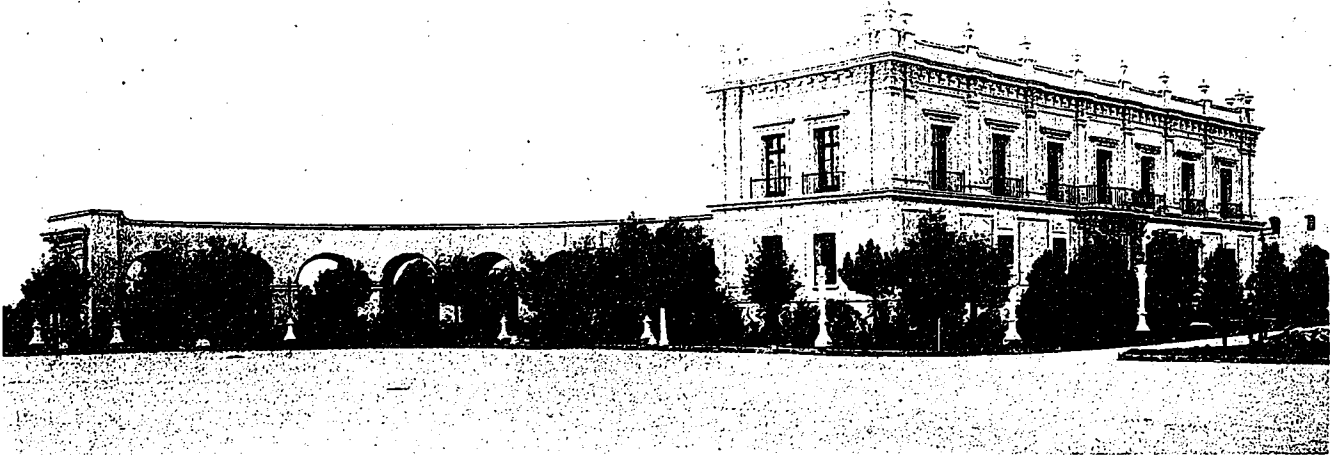
But the success of the San Diego exposition was *potential* only. A bare hook catches no trout even in the best pool. A mere exposition would not draw the crowds. To win out, to attract visitors in droves, to draw them through the gates again and again, San Diego must offer something entirely new, startlingly original, must build an exposition of surpassing charm and beauty.



EAST ENTRANCE TO VARIED INDUSTRIES BUILDING.

country, in a small city facing the empty Pacific and abutting on the line that separates bull-fight from prize-fights, seemed preposterous. Like the project itself, the very name San Diego, confusingly similar to the American pronunciation of the Cuban Santiago, had an outlandish flavor. San Diego was almost unknown east of the Rockies; in truth, polo players the world over knew well the lightning-fast Coronado field; battalions of Army and Navy people built homes in the lemon groves overlooking the bay; inter-





KERN AND TULARE COUNTIES BUILDING.

*Nueva Espana* by the Silver Gate was San Diego's solution of the problem.

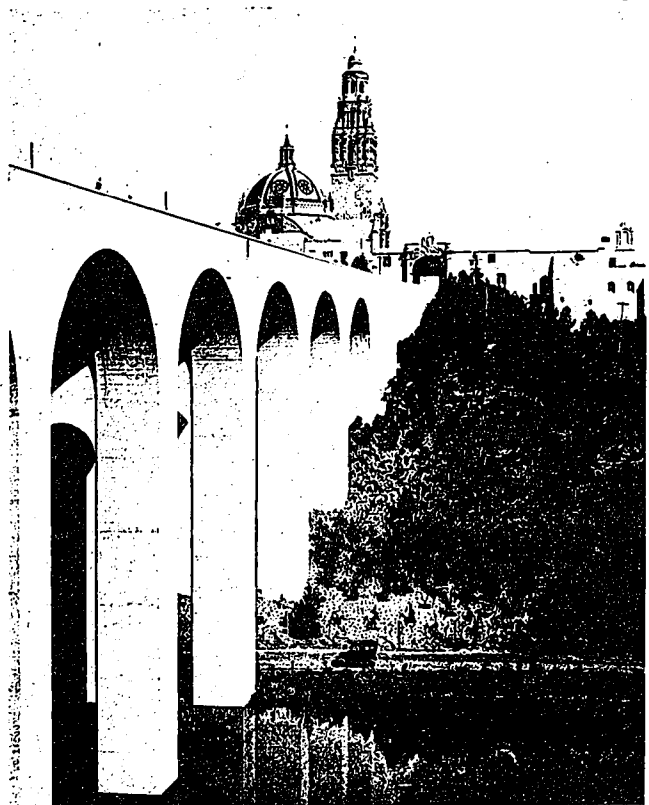
Moorish architects, Moorish craftsmen designed and executed the immortal palaces of Old Spain. When Ferdinand and Isabella had driven the Saracens from Iberia and confiscated the Moorish treasure they added the rich ornamentation, the bizarre elements of the French baroque to the Moorish groundwork of the new palaces. In New Spain, in the treasure house of the Americas, the *nouveau riche* Colonials, anxious to surpass the mother country in the splendor of their mansions, increased the wealth of the ornamentation. This wonderfully effective, boastfully rich style of architecture was chosen as the dominant note of the exposition. The mansions, the palaces, the cathedrals and public buildings of Cartagena, of Monterey, of Mexico City, of New Spain's most resplendent capitals were selected as models and reproduced along the brow of the ridge that overlooks the city, the glinting bay, the blue sea. Six Californian districts, realizing the artistic value of a finished, complete picture, allowed the exposition to design their buildings and to place them so that they formed integral parts of a harmonious ensemble.

San Diego has not erected groups of unrelated buildings scattered here and there over the grounds. San Diego has built a city, not an exposition. It has selected the architectural jewels created during the most sumptuous epoch on the Spanish Main, adapted them to its purposes and arranged them with infinite care along the calles and plazas and prados to create a perfect illusion. Even the hospital and the quarters of the fire department were made to serve as harmonious parts of the Spanish city.

The focal point of the remarkable picture lies just beyond the main entrance, beyond the audacious hundred-foot-high arches of the white bridge thrown across a deep canyon. Like unto the parapet of a fortified city, so the massive walls of the buildings rise from the far slope of

the canyon, barring the way except where, at the end of the bridge, a noble arch gives access to a rectangular court of austere simplicity, one side filled by a tile-floor chapel, ascetic in its stern lack of adornment. On the opposite side looms the bulk of the exposition's dominant structure, of California's own building.

It is a cathedral, of a design so startling, so extraordinary that, standing alone, it would be an oddity. The square base of the detached tower, the sides of the facade rise to the cornice absolutely plain, devoid of the tiniest ornamentation, massive as the strength of the Lord, simple as the strains of the Angelus. And in the centre of the facade, reaching around the wide doors from the ground to the peak of the pitched



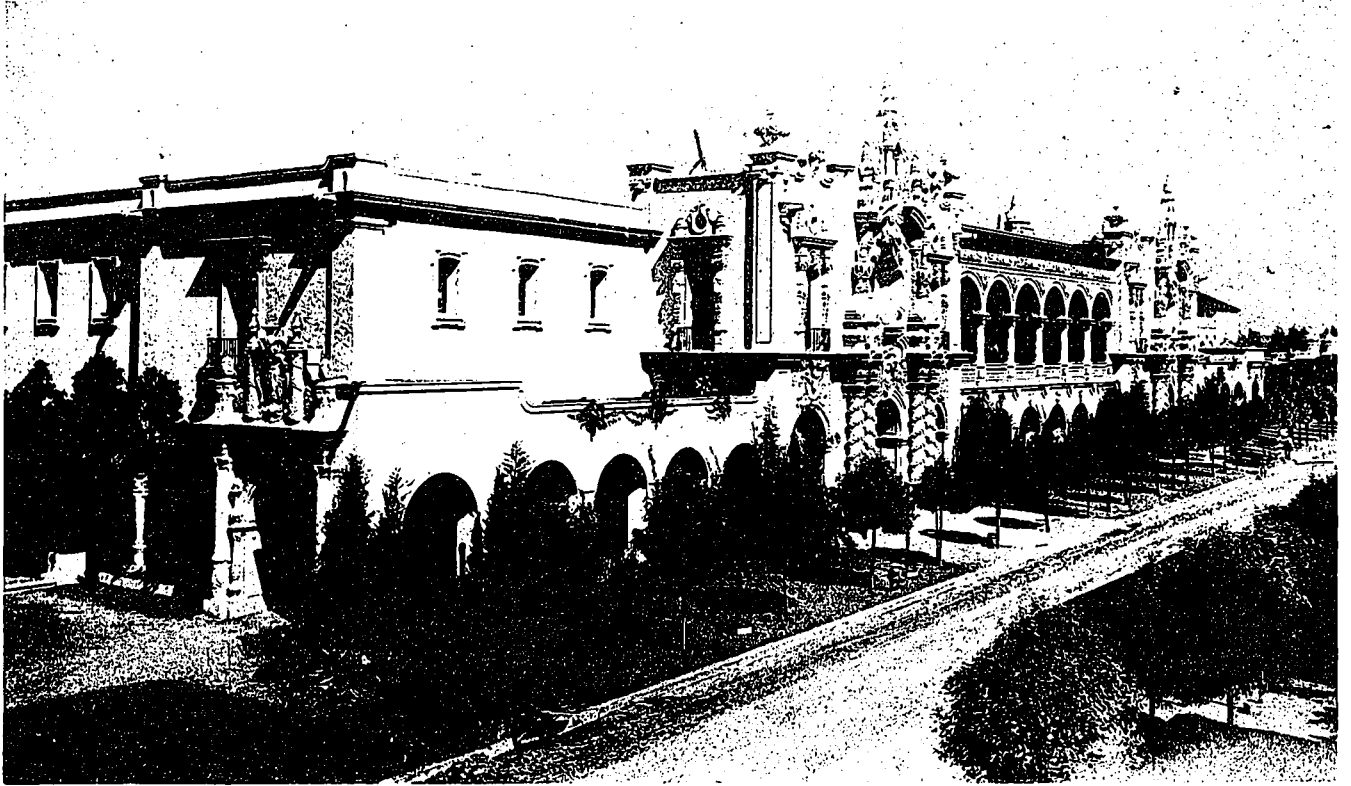
PUENTE CABRILLO.

roof, there rises a gigantic sculptural panel telling the history of the Californian missions in such a riotous display of carved detail that the contrast almost hurts the wondering eye.

But the contrast does not cease with the facade. Above the square base rises a many-storied tower as boldly ornamental as the base is plain, inset with tiles of blue, black and yel-

the temporary construction begins. The illusion of permanence and solidity is complete to the finest detail. So solidly have these structures been built, so carefully has the plaster been put on the metal lath that they will last longer, show fewer traces of deterioration than the average Californian apartment house.

There is no discernible difference between the



VARIED INDUSTRIES BUILDING.

low, girdled with balconies of glistening bronze, surmounted by a golden sphere that carries Coronado's galleon as a weather-vane.

The roof of the nave has still another surprise, a tiled dome so vivid in color that its hues are discernible from the bay, many miles distant. The dome and the tower are the landmarks of the exposition. They dominate the picture, appear at the end of green vistas, are framed in numberless arches and give the visitor the motif as he enters.

Beyond this pile of concrete and steel lies secular Hispanola, the creamy-white Spanish city with the cupolas of blue and gold, of black and yellow, with its swarms of pigeons fluttering from a hundred towers.

At previous expositions the buildings plainly revealed what they were; naked ribs of staff gazed unashamed through holes in the plaster even before the lights were turned on; a week after the opening noble columns of Carrara marble displayed the two-by-fours of their skeletons and revealed their origin.

Not so in San Diego's exposition. Except for the trained eye it is almost impossible to detect where the steel-and-concrete work ceases and

real roof tile and the plaster imitation. It was a difficult problem to wipe out this difference, but the builders solved it. After numberless experiments they oiled the plaster tiles, gave them a coat of zinc, finished them off with common brick ground into dust and lo! the thing was done. In both permanent and temporary structures the patios, the enclosed courts, are paved with heavy brownish tiles; though the difference in cost between the real thing and the make-believe is astonishing, neither eye nor foot can tell one from the other.

Laying aside for the moment the beauty and unity of design, the attention to detail, the solidity of construction, there is still another, a most important factor that adds life, color and character to the picture.

Refresh your memory. Resurrect the view-books of the Chicago, the St. Louis, the Buffalo, the Omaha expositions. Scan the pictures closely. Note the blank, bare walls of unbroken white, the utter lack of a green cover except along the very base; note the monotonous clumps of puny bushes, the utter lack of shade, of sizable trees. It could not be done. Nature was shackled; the best, most expensive efforts of the landscape gardener were dwarfed to in-

significance by the ponderous masses of architecture in a climate that put plant life to sleep from September to April.

In San Diego plant growth rarely ceases. Eucalyptus rise from the seed to a height of fifty feet in less than five years; walnut saplings add twelve feet to their stature in a season; out of the castor bean a shade tree will grow in two years; nasturtiums and geraniums become weeds, calla lilies and daisies are used as hedges.

San Diego's is the first exposition able to give the landscape architect an unrestricted opportunity to produce results.

Four century plants were the pride of the St. Louis exposition gardener's heart; at San Diego no one took the trouble to count them. A single poinsettia flower is worth a dollar in New York on Christmas day; at San Diego thousands of the crimson blossoms are now standing out vividly against the background of creamy walls. Chicago's flower lovers are now putting earmuffs on their potted azaleas and oleanders; at San Diego man-high jungles of the glorious shrubs fling their perfume joyously into the gentle wind. Red clusters of the pepper berries are swaying in the lacy foliage; broad banana leaves with wine-red midribs, the graceful fronds of the *cocos plumosa*, the broad fans of the Canary Island palm, the drooping branches of the same date palm over which He rode into Jerusalem are silhouetted sharply against the smiling sky, against the softly resplendent facades of the Spanish palaces.

And the odors! Ten thousand flowering acacias are now bursting into flaming, odoriferous bloom; by-and-by the heavy perfume of the orange blossoms will pervade the exotic city; from January to January each month will have its attar of roses, its own perfume, its special wealth of blossoms. And every month the grass will be green, the air soft and cool; every month thrush, mocker, linnet, finch and oriole will be singing in the trees, in the foliage of a dozen hues whose colors fill the canyons and arroyos between the palaces. Never has there been such an exposition, one vast botanical garden, the finest, rarest specimens of plant life growing and thriving in the open air. Whosoever loves flowers and trees will find it hard to leave San Diego's exposition.

Were the Wise Men of the East right? Or did San Diego succeed in creating an exposition that strikes a new note, that is different?

The constructive note is only one voice in the great exposition chorus; did it sing alone, the fair would be monotonous. San Diego's show

does not lack the variety that is the spice of life, war news and expositions. Though the exhibits in a score of buildings erected by Western States and their subdivisions are devoted to the constructive campaign, the splendid palaces erected with the exposition's own funds present a different picture.

Industry, commerce, trade, art, education, science, achievements and processes in every branch of human endeavor are on parade in the resplendent palaces; the number and variety of the outdoor exhibits is greater, thanks to San Diego's climate, than at the largest of past expositions. Even the gigantic organ, gift of John D. Spreckels, stands outdoors under the blue sky.

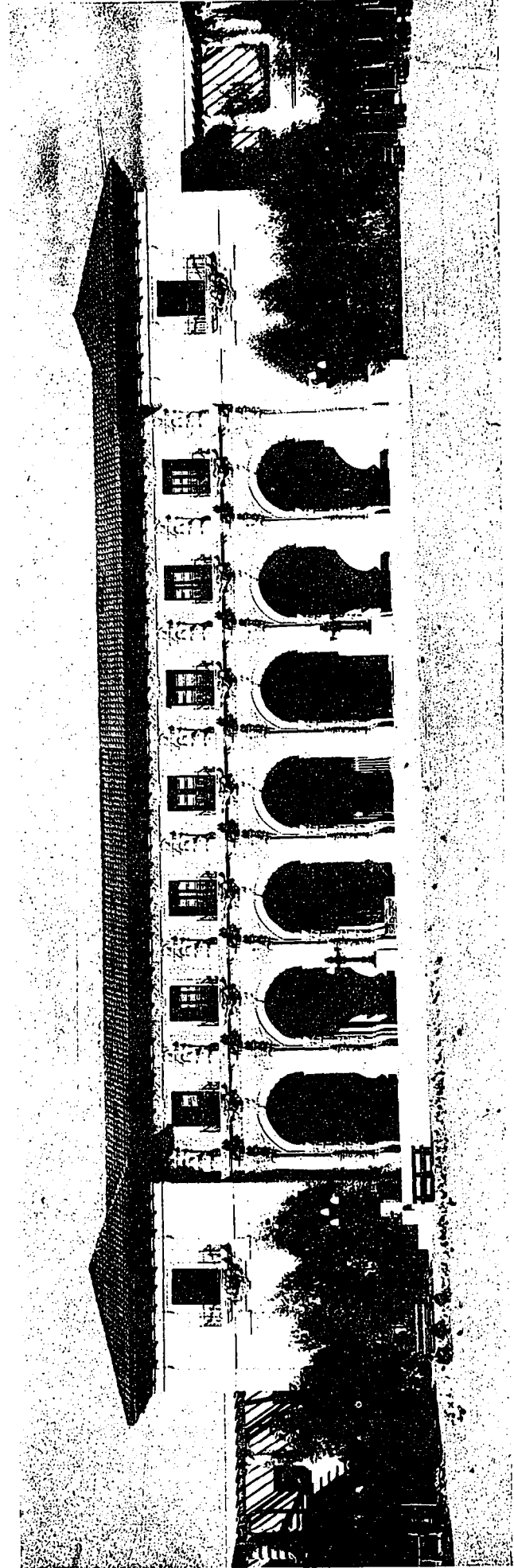
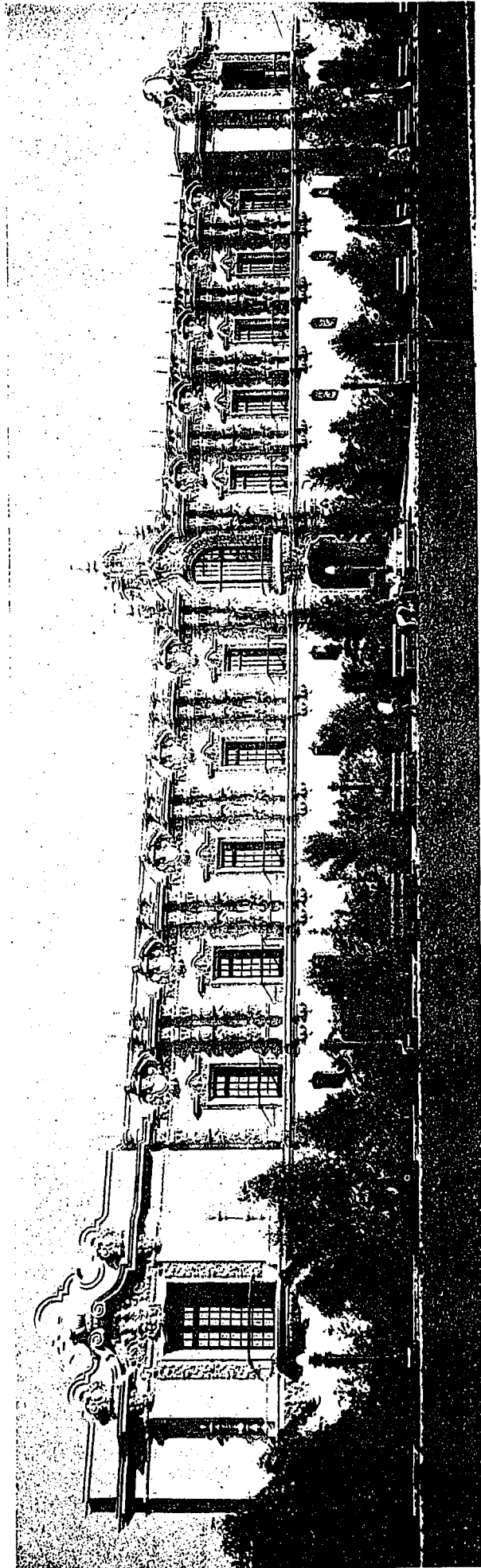
Nor has the Street of Thrills been neglected. It is half a mile long and filled on both sides with



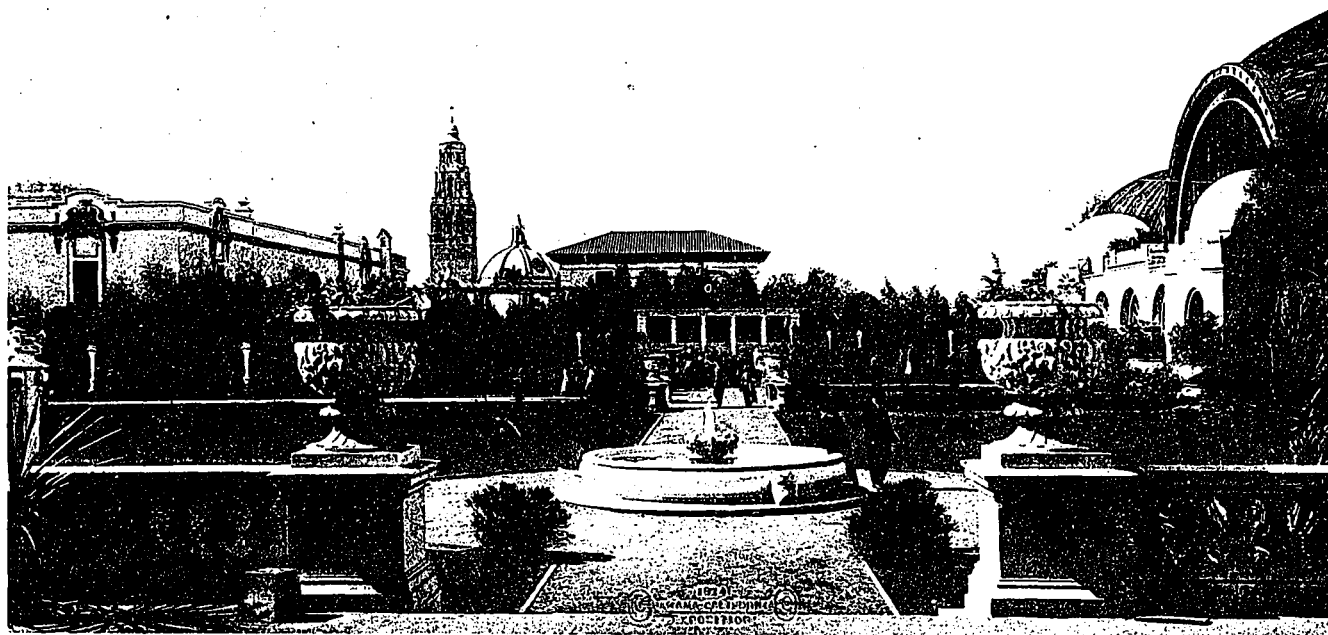
ENTRANCE TO VARIED INDUSTRIES BUILDING.

novel amusement devices. There'll be no lack of clean fun on the "Isthmus."

The exposition management exercises direct supervision over all steps taken to receive the visitors, to inform them of the available accommodations, over the transportation to hotels and apartment houses, over the rates charged and the service rendered. No visitor is to leave with a complaint on his lips or rancor in his heart.



TWO BUILDINGS OF LOCAL INTEREST AT THE PANAMA-CALIFORNIA EXPOSITION, SAN DIEGO, CAL.



BOTANICAL GARDEN, LOOKING WEST.

Last fall the general manager and the directors of the biggest concern manufacturing agricultural implements came to San Francisco, towing an appropriation of a hundred thousand dollars for an exhibit. They saw the rising walls of the City of Color by the Golden Gate, nodded beaming approval, cut the rope, left the appropriation and departed—due east.

San Diego lies six hundred miles due south of San Francisco. San Diego likewise was building an exposition; San Diego also wanted an appropriation for an exhibit from the biggest concern manufacturing agricultural implements. When the directors headed due east, ignoring the existence of the second exposition, San Diego rolled up its sleeves, took a deep breath and began manipulating the levers until its joints cracked.

San Diego succeeded, pulled the general manager of the biggest agricultural implement

concern back across the continent. He came, without his directors, without an appropriation, but with an exceedingly active prejudice. He did not want to come. To his mind the trip was a waste of time, and he did not hesitate to say so when he reached the office of the Director-General. His firm was spending a hundred thousand dollars on an exhibit covering twenty-five thousand square feet of floor space at the Big Fair; he could see no reason why the claims of the San Diego exposition should not have been turned down politely by correspondence.

The Director-General smiled. That is one of his peculiarities, this friendly, disarming, quiet smile forever breaking out beneath the cropped red moustache. Also, he talked, quietly, in an even, level, friendly voice. And he talked to the point, talked straight business.

When the general manager of the International Harvester Company departed from San



VIA DE LOS ESTADOS.

Diego he left behind him a reservation for one hundred and twenty thousand square feet of space. In Chicago he put the case before his directors. They authorized him to sign a contract for two hundred and forty thousand square feet of space. Also, they authorized him to erect a special exhibit building at San Diego; furthermore, they authorized him to plant an orchard in which to demonstrate the use of the implements under actual field conditions. The building is now ready; the orchard blossomed this spring, is being irrigated and cultivated regularly.



EXAMPLE OF ELABORATE DECORATION.

You know and I know that times were hard last fall; we both know that individual firms as well as nations held back last year, trimmed sails, cut expenditures. How, then, did the Director-General with the freckles, the red moustache and the frank, boyish smile succeed in opening the purse and arousing the exhibit enthusiasm of a skeptic implement manufacturer at a time when the corn-belt farmers were renewing their notes?

The answer is very simple.

He took the manufacturer upon a statistical mountain and showed him the biggest undeveloped market for agricultural implements in the United States; then he showed the manufacturer, proved it by the books, how the fair would open its gates without a cent of debt, but with a nice lump of cash left in the treasury; thereafter he took him through the grounds and showed him just how the Panama-California Exposition at San Diego was to help develop this potential market. In his talk the exposition chief left the moonshine on the silvery bay, kept

his feet on the solid ground of cross-indexed, double-checked facts, and presented a business proposition that landed the implement man's signature on the dotted line.

Skeptics by the score have traveled over the same route with the Director-General. All of them ceased scoffing after they had seen and listened; went home thoroughly convinced that the fair in the southwest corner of the country would not only be an assured financial success, but that it would also have a pronounced effect upon the character and management of future expositions, would give a tremendous stimulus to the growth of the southwest.

Of skeptics there had always been a plentiful supply ever since San Diego in 1910 proclaimed that it would hold a twelve-month exposition to celebrate the opening of the Panama Canal. It did not seem reasonable that a town of less than forty thousand inhabitants, located at the end of a branch line, should succeed in putting on a show really worth while seeing, without mortgaging its last shirt and breaking its financial back. Portland, with almost two hundred thousand

population, had been helped out by a fat appropriation from the State of Oregon for an exposition of much smaller size than the projected San Diegan enterprise. Seattle had two hundred and seventy thousand people when it undertook its fair, yet Seattle raised only twelve hundred thousand dollars and was six hundred thousand dollars in debt when the gates were opened. How could little San Diego, barely one-sixth of Seattle's size, expect to

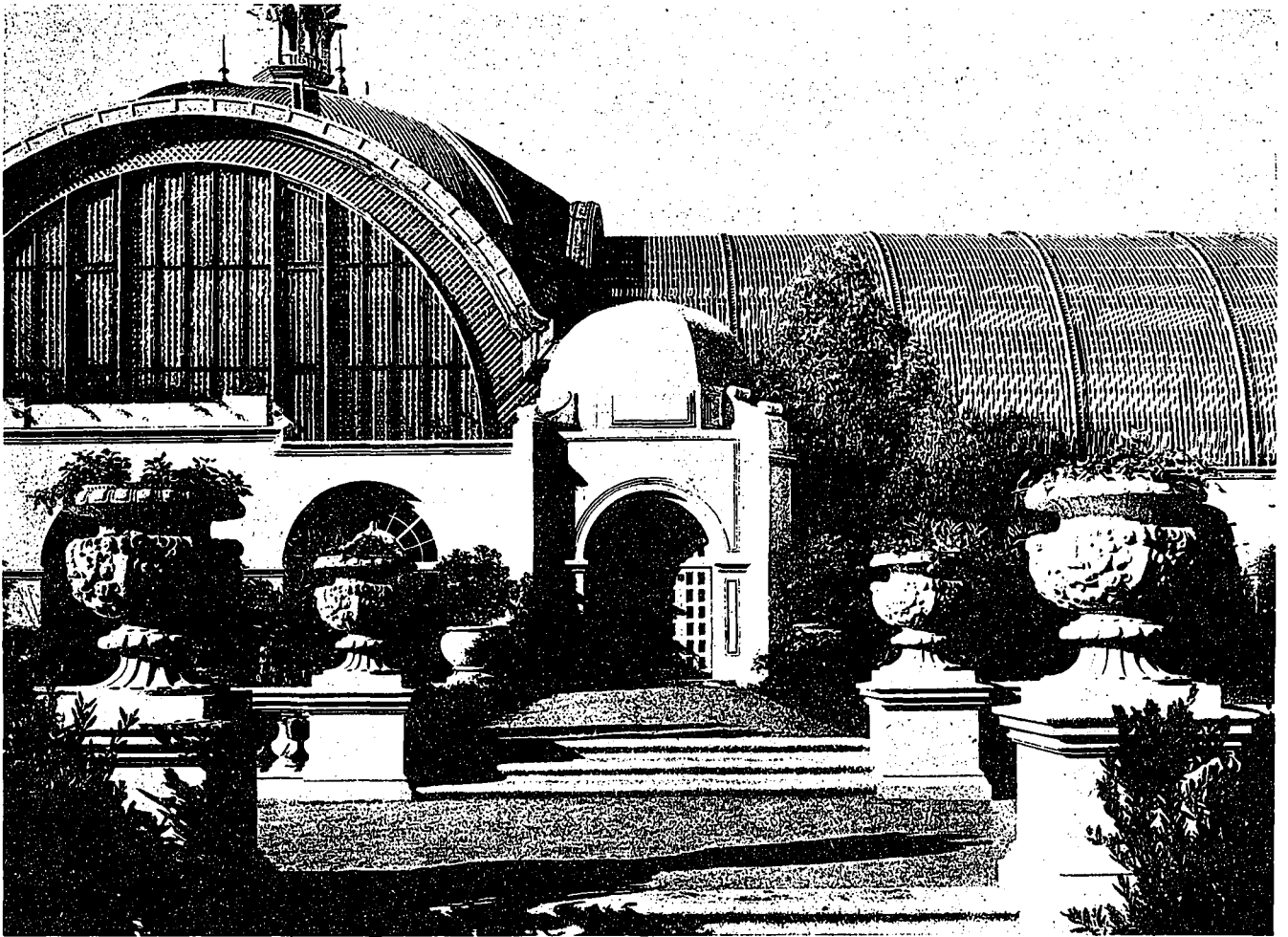
finance and carry through an exposition of greater magnitude? It seemed preposterous.

But San Diego did it! San Diego by subscriptions and municipal bond issues raised three million dollars without going beyond the city limits, thanks to D. C. Collier, the enthusiast whose boundless faith and energy started the ball rolling and kept it going. Collier's efforts financed the exposition; Frank P. Allen, Junior, the man who built Seattle's fair, looked after the physical features of the project, planned the grouping and design of the buildings, got ready to transform the barren slopes

individuality, of a differentiating purpose more pressing than at San Diego eighteen months ago.

A rancher supplied the individuality, furnished the purpose, solved the problem. They made him Director-General, put the exposition into his hands as a reward. It was this rancher who landed the International Harvester Company for the biggest exhibit ever made anywhere by an individual firm.

H. O. Davis, the man with the quiet voice and the boyish smile, did not seek the office. He would still be raising blue-blooded stock at Yuba City if the supervisors of Sutter county, Cali-



ENTRANCE DETAIL TO BOTANICAL BUILDING.

and deep arroyos into a fairyland of tropic foliage. Eighteen months ago the blue-prints were ready for the builders—but the spirit, the exact, specific purpose of the projected exposition had not yet materialized.

San Francisco's exposition was universal, all-inclusive. It proposed to record, in visible, tangible form, the progress of civilization in all its phases; it was to be the final summary of man's past achievements. San Diego could not do the same thing on a smaller scale; San Diego could not even segregate Latin America and chronicle its achievements, because the South American republics would be represented at both fairs. Never was the need of a distinct, outstanding

fornia, had not appointed him exposition commissioner, charged with the duty of arranging the county's exhibit at the two Californian fairs. In this capacity the rancher—he was a newcomer in California, having sold his manufacturing business in Chicago only a few years previously—came to San Diego, bubbling over with ideas that attracted the attention of Allen, the builder. Allen asked the rancher to stay; Collier, father of the exposition, made him assistant to the president and went abroad. Within a few months the board of directors appointed the newcomer Director-General, discharged all committees except the executive committee, gave the new chief a free hand and told him to carry out his ideas; to build an exposition with

a constructive purpose. That purpose was the settlement of the still unproductive arable lands in the southwest quarter of the United States, the acceleration of agricultural development in San Diego's potential trade territory, an area that comprises a million square miles covering the southern part of California, all of Arizona,

that could be made productive either by irrigation or by dry-farming methods, checking and verifying the figures thus collected most carefully.

The totals obtained in this painstaking survey surprised the Director-General. They showed that in 1913 eight million irrigated and non-irri-



VIEW FROM CANYON CABRILLO.

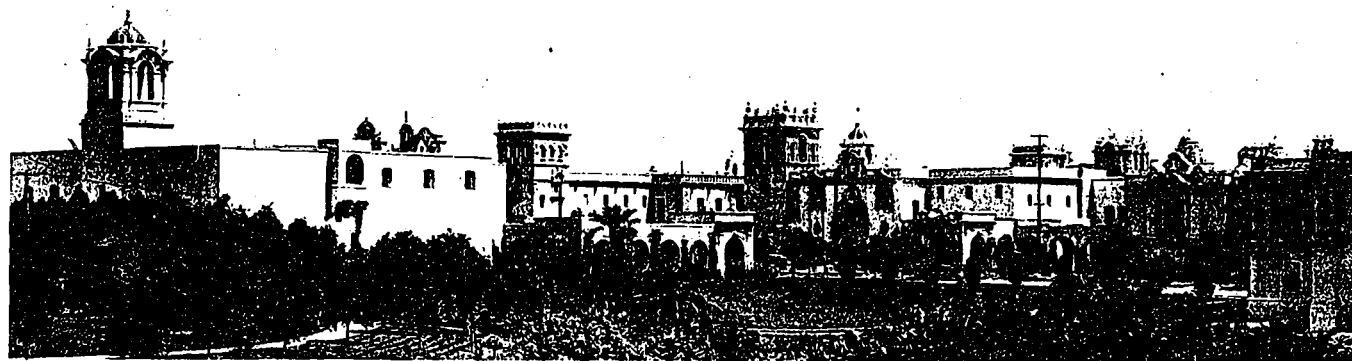
western Texas and New Mexico, a part of Colorado, the southern half of Utah and Nevada. In this territory the Panama Canal will enable San Diego to lay down goods for less money than it costs to ship them from the manufacturing points in the East or Europe, across the continent by rail.

"Holy Gila Monsters!" said the Illinois tourist. "Do you mean to say that there is anything worth developing in that country? Why, it's drier than a Kansas town after a revival campaign. How much room for real farms, not cattle ranches, is there in that desert country? You got to show me the green spots."

No one knew. The Director-General did not know. But he proposed to find out. Hiring a corps of statisticians, he investigated every county, every valley and plain containing more

gated acres were producing crops in the southwest; they also showed that this territory in addition contained forty-four million acres of untilled agricultural land, and water enough to irrigate almost half of this immense area.

In Western Canada less than twenty million acres are in crop this year. These twenty million acres, with a short growing season and rigorous winters, have pulled a hundred thousand American farmers across the line every year for a decade; these twenty million cultivated acres have built the cities of Winnipeg, Calgary, Edmonton, Regina, Saskatoon, Prince Albert and a score of lesser towns. In the southwest the survey showed that forty million virgin acres were available for settlement, half of them susceptible to irrigation and specialized intensive cultivation. There was room for seven hundred thousand new farms, for a farm popu-



PLAZA DE PANAMA.

than fifteen hundred cultivated acres in the territory. He enumerated every acre, irrigated or dry-farmed, in the region, determined the principal products of every valley, the rate at which production had grown between 1909 and 1913, compiled data on the rainfall, the length of growing season, on transportation and educational facilities. Above all, he ascertained how much raw land was left in every county or valley

of five millions over and above the total present population of sixteen hundred thousand souls. In the establishment of these seven hundred thousand new farms a billion dollars' worth of lumber would be needed for buildings and fences; they would require at the start twenty million dollars' worth of plows and harrows, twenty-six million dollars' worth of rakes, over a hundred million dollars' worth of pumps and engines. For farm equipment, tools and



implements, for building material, furniture and household necessities, those seven hundred thousand new farms would offer an initial market worth five billion dollars to the manufacturers. Would they go after this business with an exhibit at San Diego?

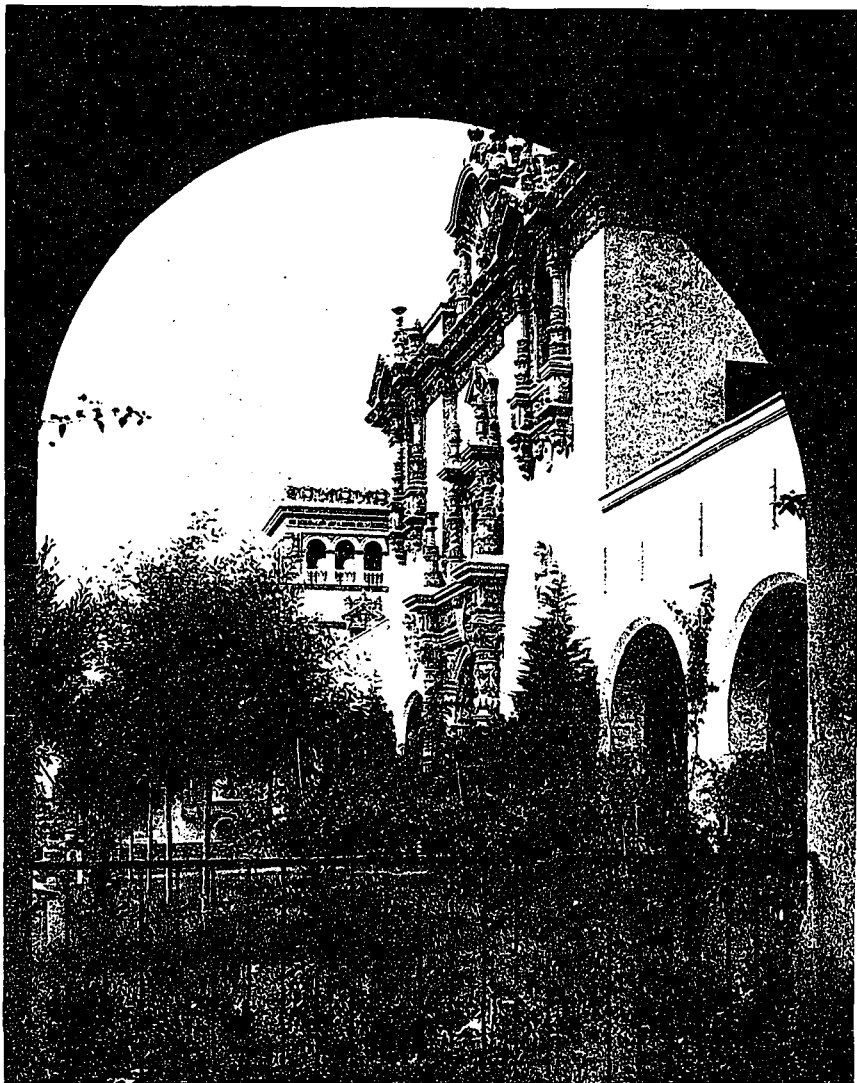
Having compiled these detailed data, Director-General Davis did not begin his campaign for exhibits until March first of last year. On that date he sent out six high class salesmen to present the statistics and arguments to a selected list of manufacturers. Within ten weeks ninety per cent. of the available space was gone, contracted for by manufacturers whose eyes were suddenly opened to the magnitude of the virgin field in the southwest. The remaining ten per cent. did not go begging. The Director-General was saving the space for emergencies, was actually turning down proffered exhibits.

And when the commissioners of States, counties and districts arrived with their exhibit plans, they ran full tilt into that same inflexible determination to have a constructive exhibition. They were asked to put up exhibits of real value to the visitors, exhibits that would visualize the opportunities in the southwest at a glance. It was the Director-General's idea to have a large-scale wall map part of every State's or county's exhibit. This map was to show every railroad line, the accurate dimensions of every town, every mile of road and its character, every school-house in its right location, every forty-acre field of grain, alfalfa and other field crops, every orchard and vineyard. In addition, these maps were to show not only the available area of irrigable virgin land and its location, but the character of this raw land, the quality of its soil, its adaptability to the production of alfalfa, fruits or vegetables. The Director-General opposed the indiscriminate exhibition of embalmed fruit, tall cornstalks, sheaves of grain and giant vegetables. He insisted upon a show that would furnish the visitor in a week with more accurate, reliable information, with a better picture of agricultural conditions and opportunities in the southwest than he could hope to obtain through a year's expensive travel.

And he censored the exhibits. They had to be not only instructive, meaty, of practical value,

but they also had to be true. Misleading exhibits were worse than no exhibits at all, the Director-General insisted. He gained his point. The old-time boom stuff, the yodeling of the land speculator with the heat-treated, vanadium steel conscience will be conspicuously absent at the Panama-California Exposition.

Novelty is the cornerstone upon which the success of any exposition is built. The mere size of Chicago's White City, the mass and variety of its exhibits and amusements, the sham mag-



FOREIGN ARTS BUILDING.

nificence of its classic structures, lifted it far above any preceding effort. And since the World's Columbian Exposition the builders have found it extremely difficult to surpass the Chicago climax. At San Diego, however, a new exposition note has been struck. It is best expressed in the experience of the men whose fantastic attraction was the strongest money-getter on the St. Louis Pike. They came and asked for a concession.

"What kind of a show do you want to put on?" inquired the Director-General.

The visitors' chests expanded visibly.

"Creation!" they replied in unison. "The biggest drawing card at the St. Louis Exposition." And they leaned back to let the announcement take effect.

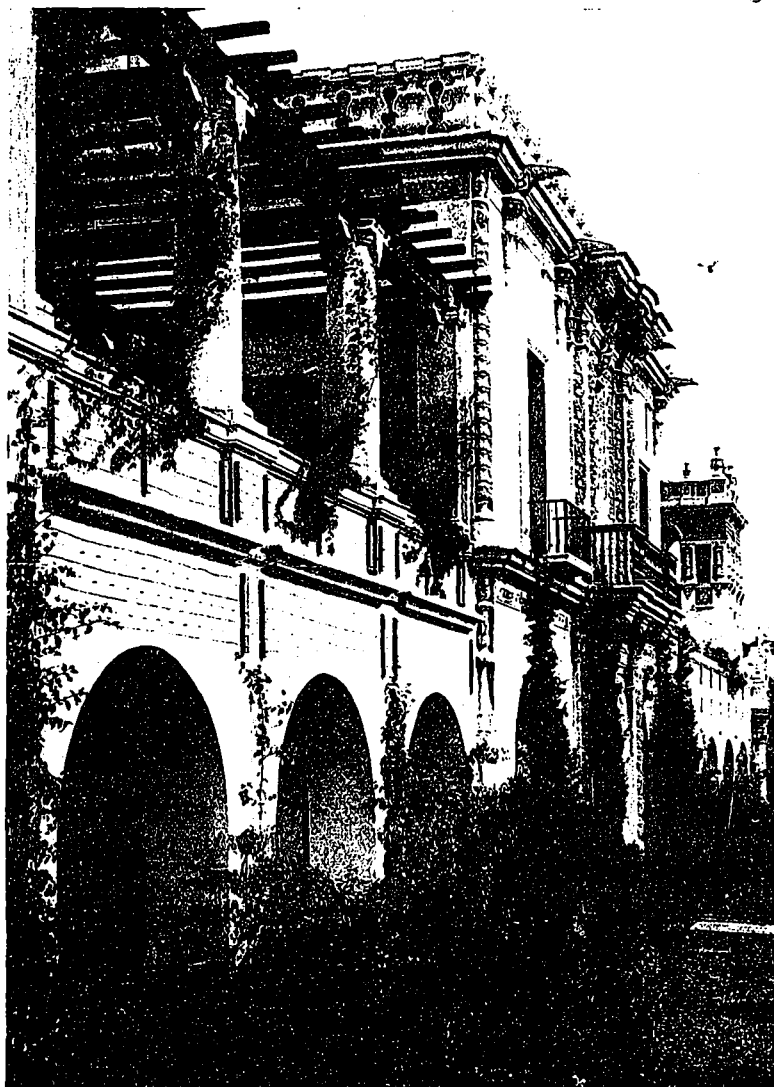
"I'm sorry," replied the Director-General, "but you can't have any space unless you devise something different. Your attraction has become identified in the popular mind with the St. Louis Exposition. We can't afford to imitate even if you would draw the crowds. Think up something fresh, something new and we'll welcome you with open arms."

Nor did the Director-General limit this policy to the multitude of amusement devices. With

these lifeless exhibits in our buildings. We demanded action, novelty, interest—and we got it. We will exhibit processes, not the product alone. In our textile exhibit, eight looms installed by different manufacturers will show the exact method of weaving various fabrics. Underwear, hosiery, knit goods, woollen and cotton fabrics will be made right before the visitor's eyes. We won't have an exhibit of Japanese art handicraft. We'll have the craftsmen themselves carving in ivory, weaving the tall Formosan hats, beating copper, lacquering and enameling jewelry. Our traction engines won't stand in solemn rows like wooden horses; they'll be out on a hundred-acre field in active competition, each one trying to show that it can plow the deepest furrow, haul the heaviest load in the shortest time at the lowest cost. There will be life, action, movement in all our exhibits. Seventy-five per cent. of their number will show processes of production or the use and application of the product. Those that do not lend themselves to this treatment will be historical in character, will show the evolution of the appliance from its crudest form to its present perfection. And there won't be endless repetitions. We have limited every line of industry, every branch of manufacturing, to two exhibits, except, of course, agriculture and everything pertaining to it, in order to avoid monotony and tiresome duplications."

More than any exposition ever held, San Diego is laying stress upon outdoor exhibits. Sheep will be sheared by electricity, cows milked by compressed air, fruit trees sprayed by gasoline, under the deep blue sky the year around. And there will not be a single "Keep Off the Grass" sign anywhere within the grounds.

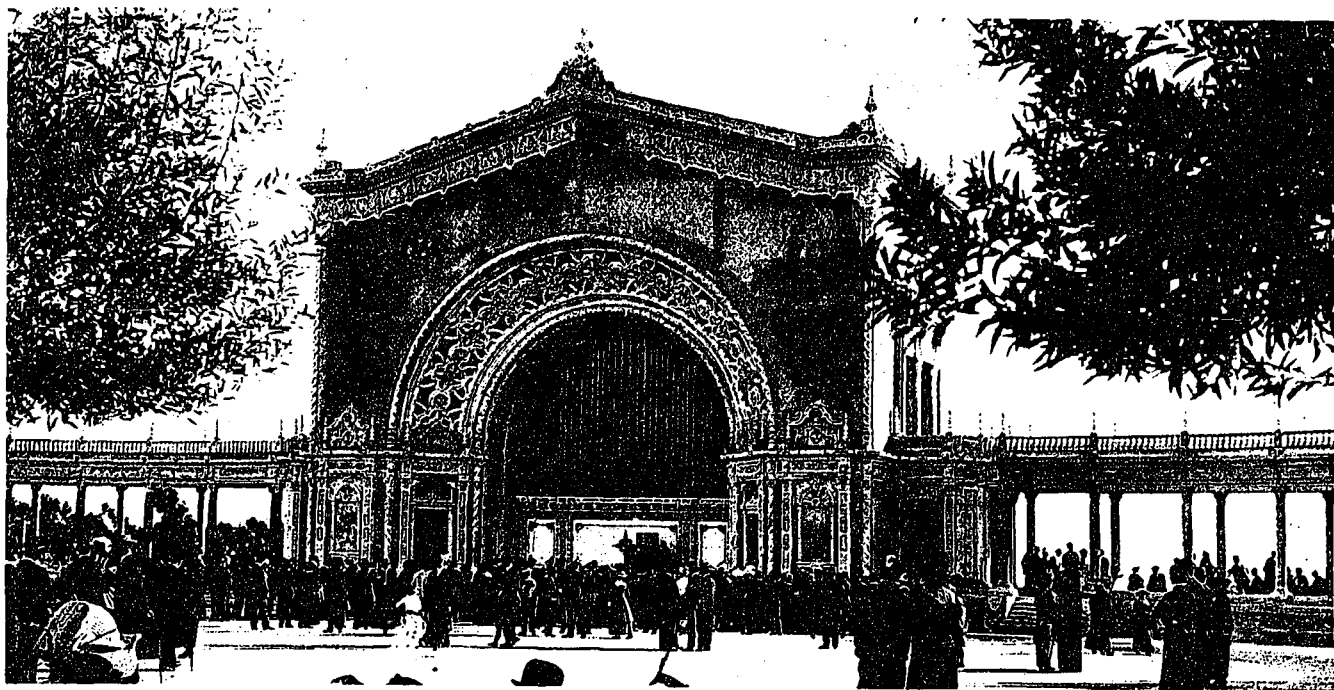
A visit to the average exposition is not a vacation; it is hard, strenuous, albeit pleasant, work. San Diego's exposition will be restful. Green lawns have been spread everywhere, winding paths lead through the groves of exotic trees, shady belvederes with spacious seats have been built at a hundred points, exposed to the cool breath of the Pacific trades, offering vistas of the city far below, of glinting bay and blue ocean, of the Coronado islands' purple silhouettes on the far horizon. All around the exhibit buildings, green arms reaching into the spaces between them, is a sea of multicolored foliage brought from the far corners of the earth, of flowering shrubs and ornamental bushes whose odor and color are even now pervading the buildings. Strange combinations impossible in



HOME ECONOMY BUILDING.

equal rigor he applied it to the exhibits themselves.

"The time for the mere exhibition of finished products in a state of dignified repose has passed," he explained. "Rows upon rows of polished electric motors, stacks of beautiful fabrics, miles of commodities, machines and products endlessly repeated weary the eye, tire the feet and bore the brain. The same thing can be seen any day in a department store, a wholesale house or an art bazaar. We refused to have



OUTDOOR ORGAN.

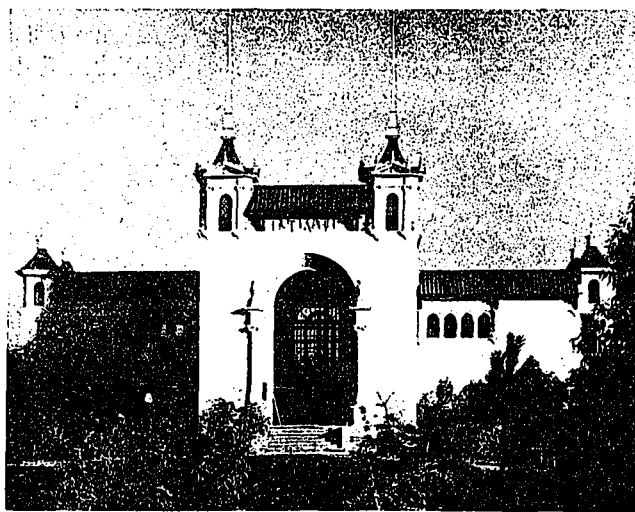
other climes are to be seen. Scotch heather is blooming in the shade of green-and-red pepper trees from Brazil. Slender cocoa palms from the South Seas and flowering sweet-scented acacias from Australia—there are twenty-seven varieties of them—line the streets; bougainvilleas of deepest purple, rising from green lawn, climb the creamy walls of the palaces around the Plaza; bougainvilleas glowing with color borrowed from the heart of the red flame cover the facades of other groups. The greatest botanical garden in all the world is but a poor lifeless catalogue of single specimens compared with the wealth of massed plant life at San Diego's exposition. And every species of plant will be a living exhibit, plainly marked with its workaday common name and adorned with its stilted scientific cognomen. For the nature lover San Diego's exposition will be a source of costly delight, again and again he will deposit his obolus at the gate to explore the close ranks of the world's flora.

It takes a great deal of money to keep an exposition open and running twelve times thirty days. Some of the recent shows could not keep going five months without a deficit. San Diego, about as far from the geographical centre of population as it is possible to get without dropping off the map, fully realized the magnitude of the task ahead of its exposition management. To make the fair a financial success, more people had to be drawn through the gates from a longer distance than at any previous exposition. And the visitors of the first six months must bring the crowds during the last half of the show; they must be sent home so filled with enthusiasm that their descriptions will bring their friends to the Silver Gate. This enthusiasm, however, could not be aroused by an exposition

of the home-cooked variety. It must be novel, and it must have a foreign exotic flavor. Therefore San Diego built an exposition that does not look like an exposition at all.

Some of the buildings are permanent, consist of reinforced concrete and steel; others are of the usual staff-and-plaster construction; but the eye cannot discern the difference. They all look as though they had been built for the ages. So careful and painstaking has been the modeling, so close the attention to the fine details, that the sumptuous carvings of the rich facades produce a perfect imitation of hewn stone effects; real tile and imitation are used side by side, yet the uninitiated cannot tell one from the other, and the tile floors of the monastic patios would puzzle even an expert.

In all its details the San Diego exposition gives a true picture of the richest, most beautiful part of a Spanish colonial city. Even the



UTAH BUILDING.

pigeons are there, hundreds of them cooing in the towers of the palaces. The names of the streets, avenues and boulevards are all in sonorous Castilian; the gatekeepers, guards and attendants will appear in Spanish costumes; Spanish dishes will be served in Spanish restaurants, even the advertising copy of the exposition will be flavored and spiced with quotations from the Spanish poets in the original.

To obtain the early visitor's enthusiastic cooperation, Director-General Davis has gone to extraordinary lengths. He is determined that every visitor shall receive full value for every dollar he spends within the grounds. The contracts with the concessionaires dispensing food and drink within the enclosure provide not only a rigid regulation of rates and prices, but they also provide for a strict supervision of food preparation and service. Every kitchen will be on exhibit; no partition can be used except it be made of plate glass. All the ice cream, candy and lemonade must be made in full view of the audience. Unclean, questionable or crooked attractions have been excluded. Every possible precaution has been taken to protect the visitor against fraud or deception within the grounds.

But the Director-General has gone a step farther. The exposition management's protective hand will greet the visitor before he lands in San Diego, before he has reached the grounds.

"We have decided that the exposition shall not be used as a cloak behind which extortion can be practised," declared the Director-General—without a smile. "We will see to it that even during the months of the greatest crush every visitor can obtain a clean, comfortable room for a dollar and a half a day, for two dollars and a half a day with private bath. All hotels, rooming and apartment houses are under

contract to fix their rates for the exposition year, this rate not to exceed the price demanded during the height of the tourist season in an ordinary year. Under the contract this rate cannot be raised, and every room must have a card stating this price on display. The contract provides for a penalty of a thousand dollars for violation of its provisions, and the exposition



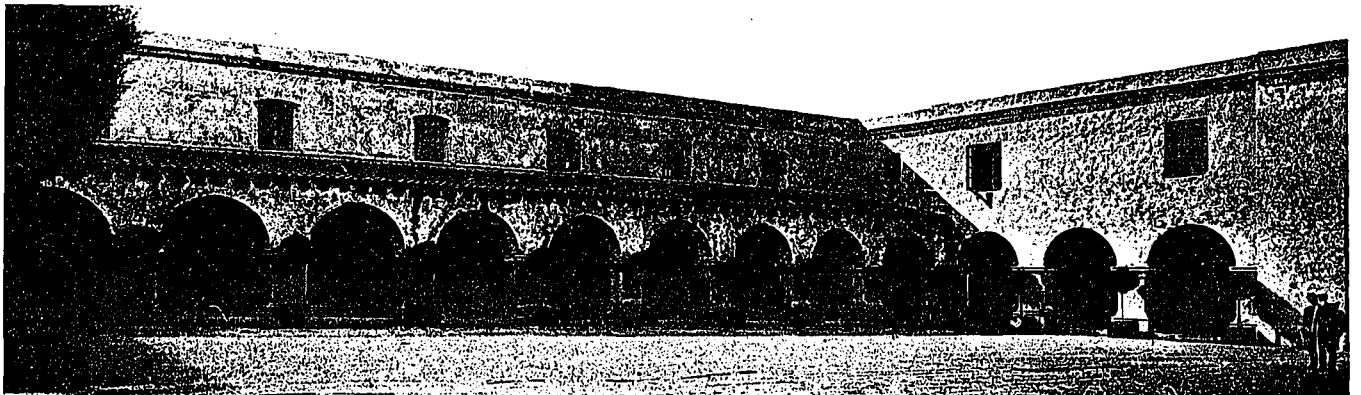
MONTANA STATE BUILDING

stands ready to refund to every visitor the amount of the overcharge beyond the rate as contained in the published lists. We want the visitor to depart with a sweet taste in his mouth, and we are going to see that he does."

In reply to my question, "How much money will you have to borrow on your gate to complete exposition?" it was shown that they had on hand a fund of sixty thousand dollars from the sale of concessions. That fund is untouched, draws four per cent. and is growing. They will have money to lend instead of borrowing it, and will open with \$100,000 in the treasury.

"Don't judge San Diego by the standard of previous expositions," said the Director-General. "It isn't fair. We are all new in the business. We had no precedent to cling to. We were forced to proceed on entirely new lines, make our own way irrespective of what others had done."

That is the reason why the Panama-California Exposition will be an unprecedented success.  
—By W. F. Woehlke, in "Sunset."



PLAZA DE CALIFORNIA.

# Building for Bowles Lunch Room, Toronto

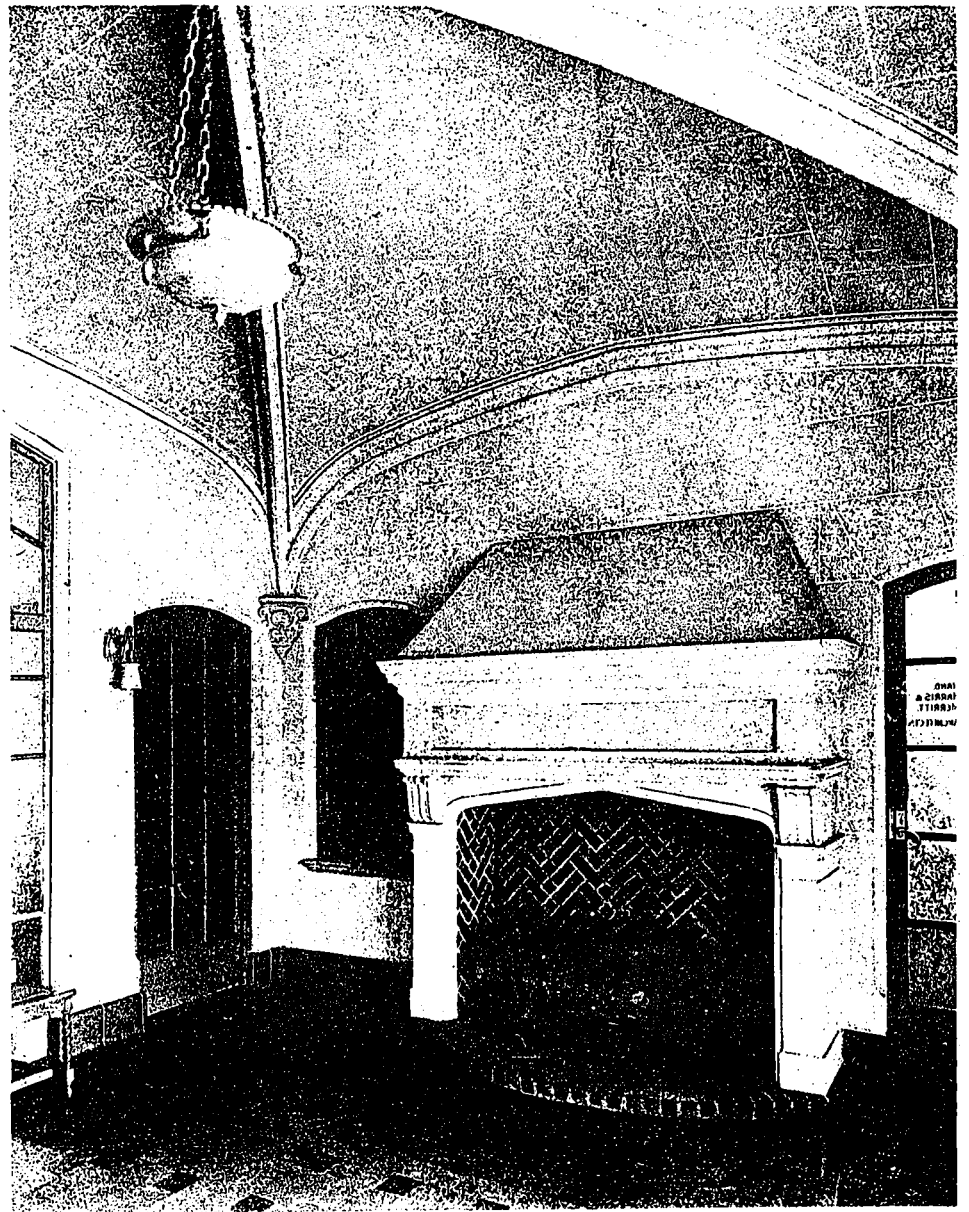
HAND, HARRIS & MERRITT, Architects

SO much has been written of the problems and the success, or possibly failure, of our architects to design fittingly the tall building that we have perhaps overlooked what may well be an even more difficult problem, that of designing a small building to be placed immediately against the mass of a tall one—one that cannot from the nature of its intended use be made monumental in scale as is possible in the case of a bank structure. The building for Bowles' Lunch Room at 7-9 King street east, Toronto, is a particularly happy and successful solution of this problem, in which the architects have combined the delicacy and refinement of the period in English architecture made historical by the brothers Adam, with just that touch of modernity which these masters might have given if they had at hand the materials now available. The building has the atmosphere of having been designed in the spirit of the times when four-storied buildings were being erected in our cities. It is interesting to observe the use of a matte finished enameled brick as a structural unity with the design and the skillful blending of the color so that none of the quaintness is lost. This affords a relief from the usual glaring white glaze and marks a great advance in the possibilities of this material, which, in spite of its many recommendations, has been heretofore avoided by architects notwithstanding the practical necessity in these days of using a material which can be cleaned without detriment to its texture or appearance.

The building is used entirely for the purposes of the owners, the basement being devoted to the barber shop, lavatories, and a most interesting room for pocket billiards. This latter with the corridor show most suggestive examples of the use of

brick in interior work and some very clever tiling in the floors and ceiling of the entrance hall. The entire ground floor is given over to the lunch room, finished in cream white veined statuary marble, with a light Formosa marble base; the tiling above in tones to harmonize, while the pattern on walls and ceiling are brought out with rich ivory. The lighting is of the semi-indirect type, in this instance using genuine alabaster globes which result in a most pleasing warmth of color.

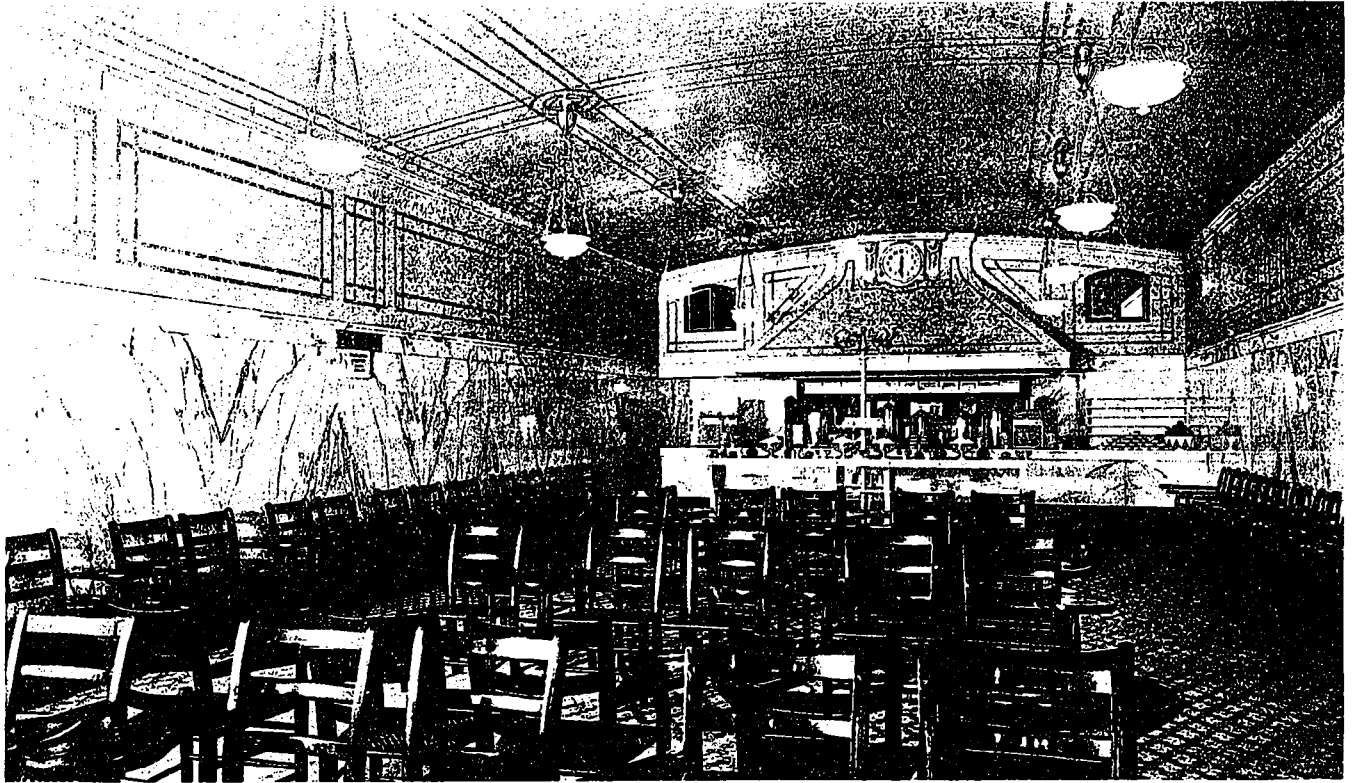
The next two floors are devoted to billiard rooms, with panels of leather and painted fabric, the stripping and cap moulds in walnut. The top floor has been fitted up for the use of the architects, Messrs. Hand, Harris & Merritt, and fittingly completes a building each floor of



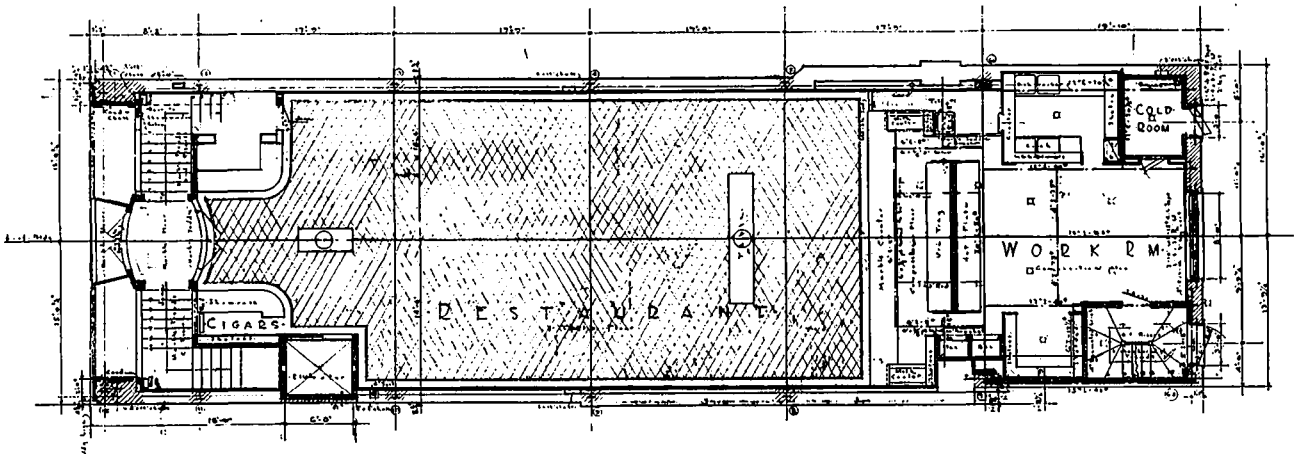
RECEPTION HALL, ARCHITECT'S OFFICES.

which has many features and details of interest. The building is ventilated throughout, the fans being located in the housing on the roof.

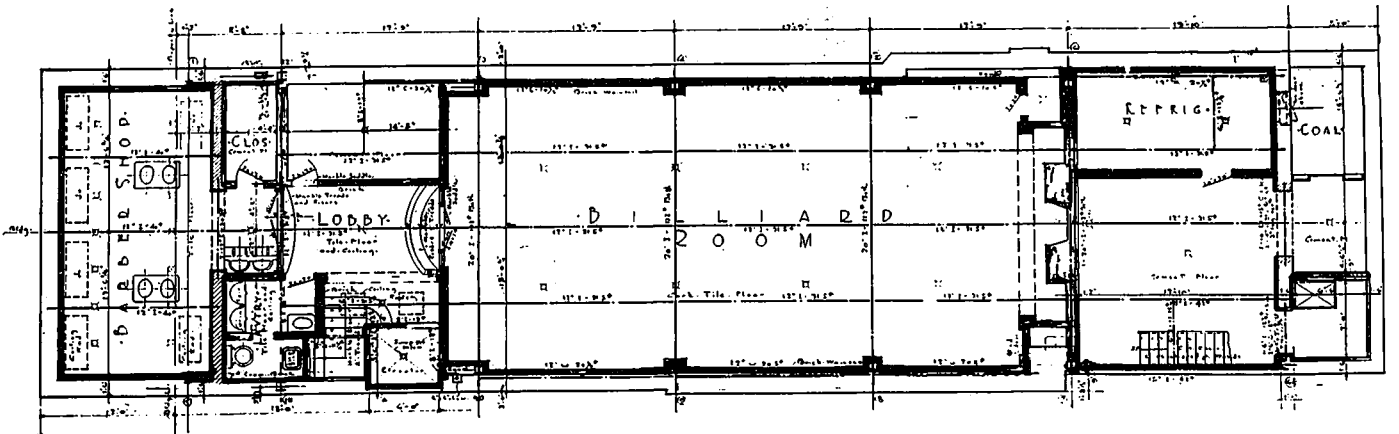
Access to the several floors is obtained by a high speed automatic elevator in addition to the stairs. The cost was approximately \$175,000.



RESTAURANT.



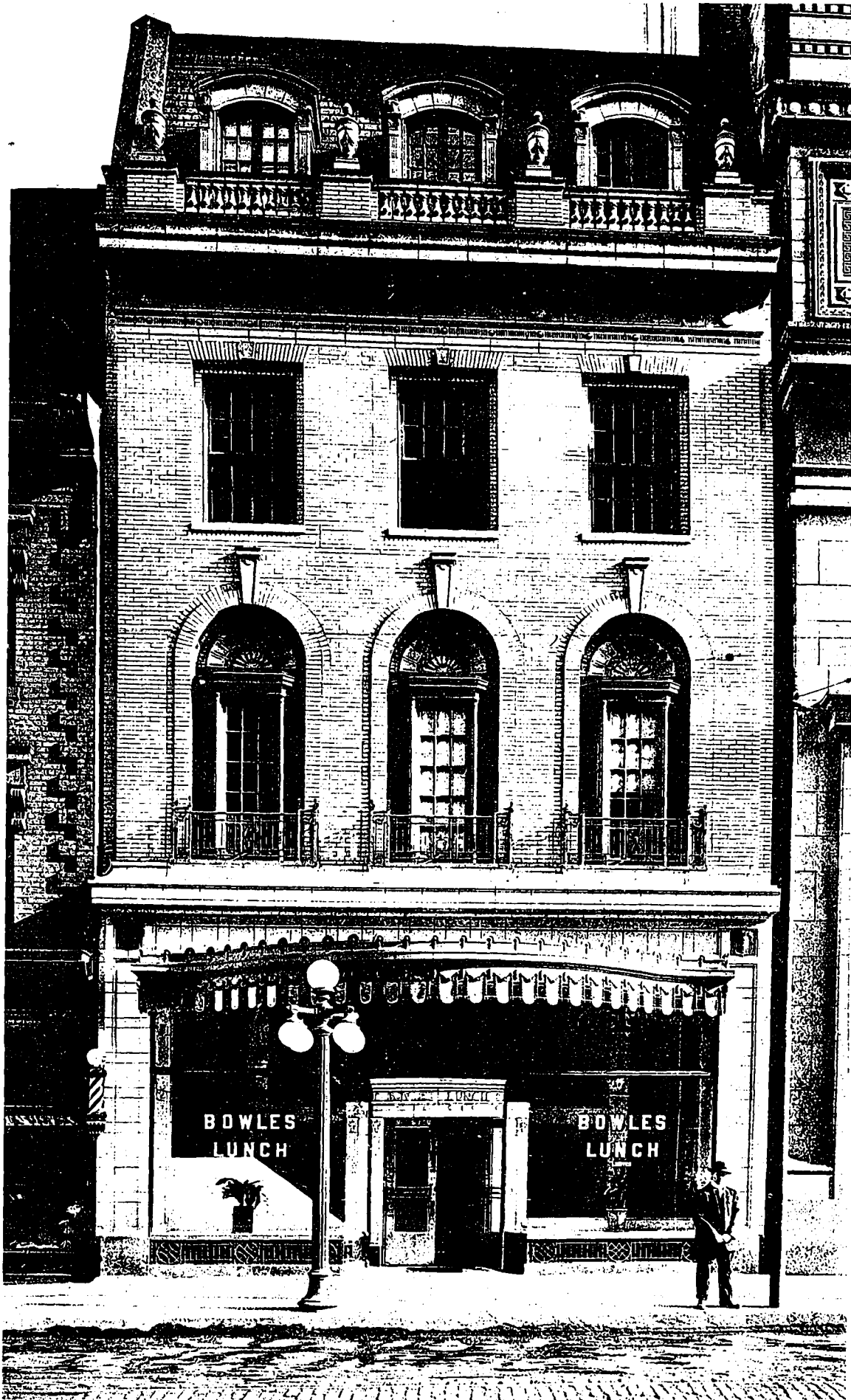
GROUND FLOOR PLAN.



BASEMENT PLAN.

BUILDING FOR BOWLES LUNCH ROOM, TORONTO.

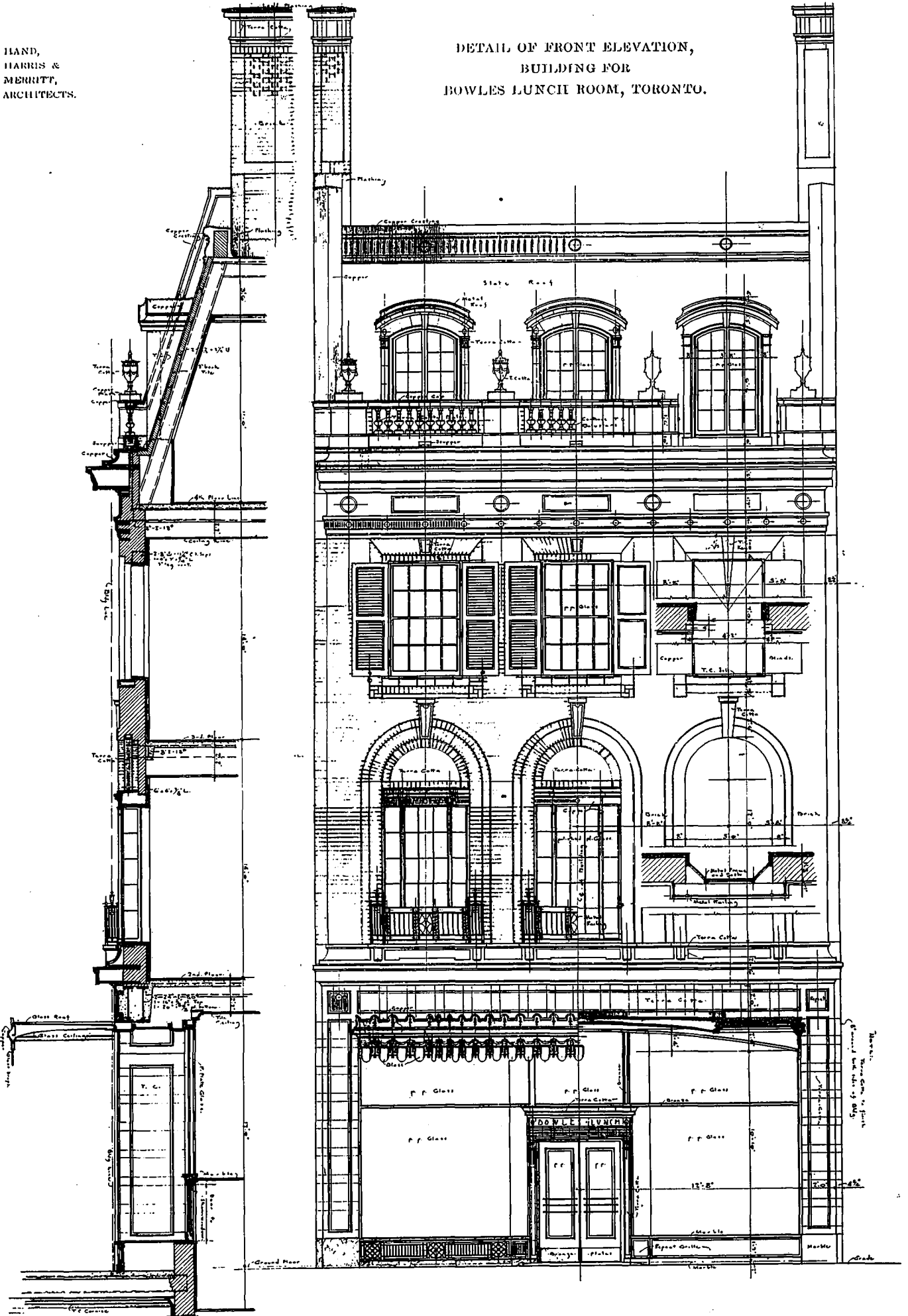
HAND, HARRIS & MERRITT, ARCHITECTS.



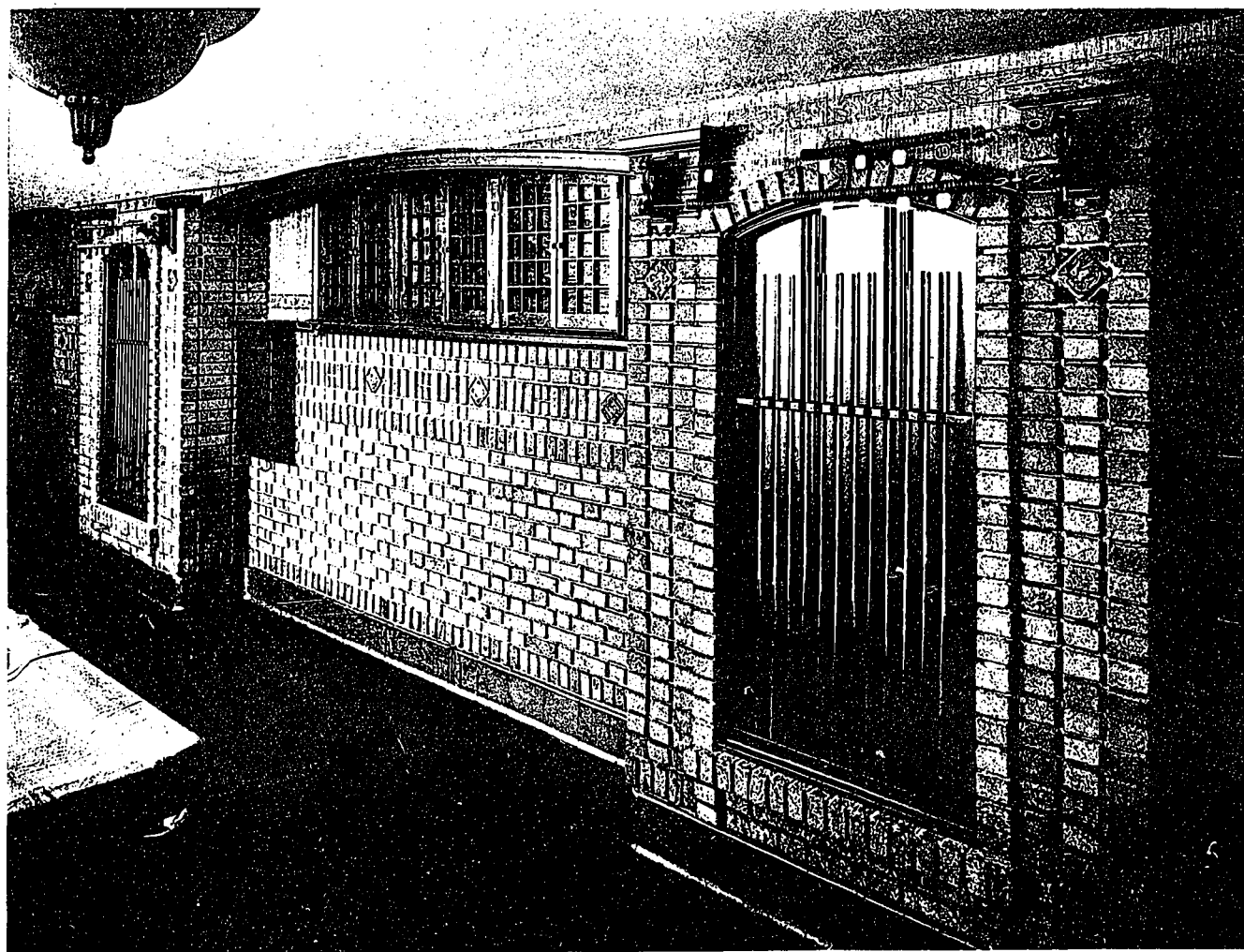
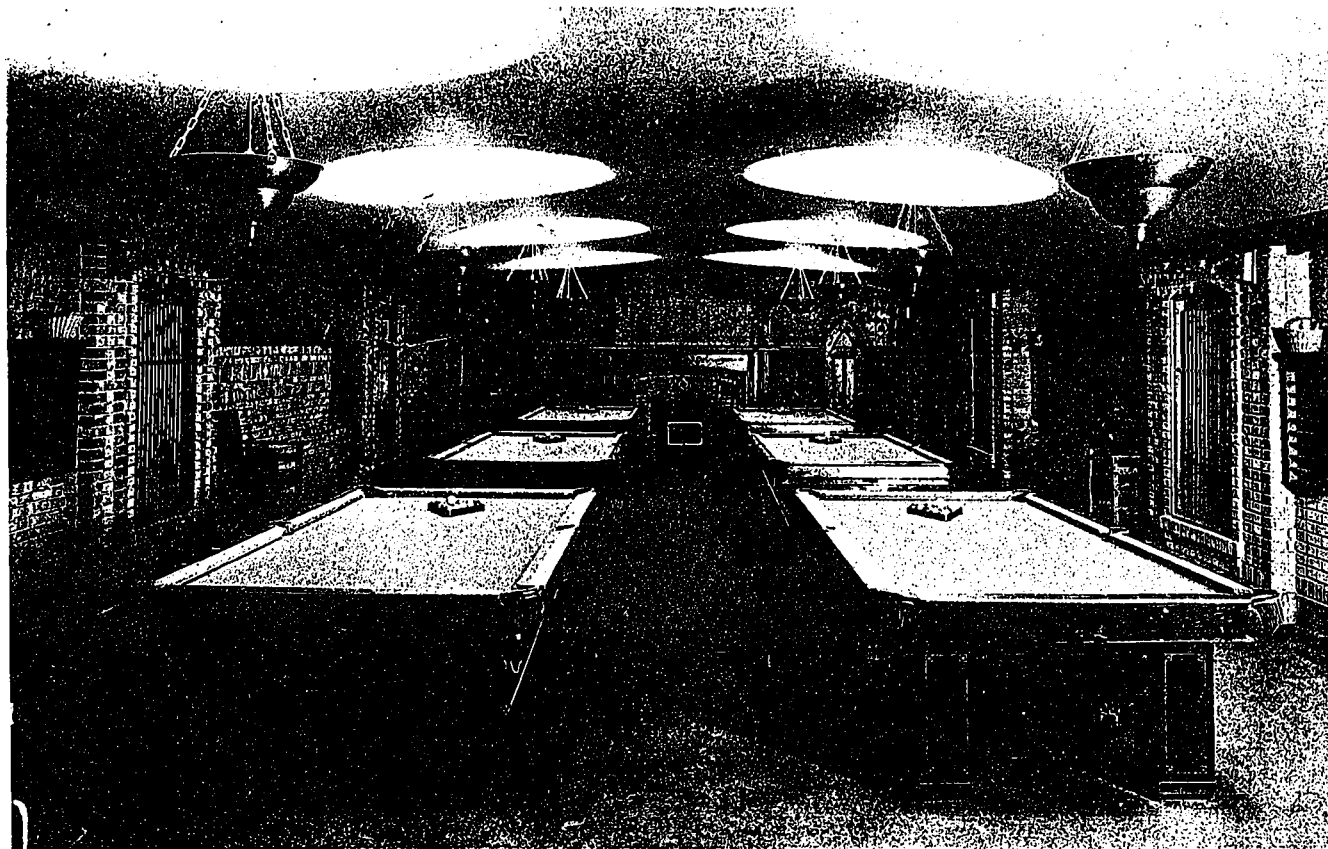
BUILDING FOR BOWLES LUNCH ROOM, TORONTO.  
HAND, HARRIS & MERRITT, ARCHITECTS.

HARD,  
HARRIS &  
MERRITT,  
ARCHITECTS.

DETAIL OF FRONT ELEVATION,  
BUILDING FOR  
BOWLES LUNCH ROOM, TORONTO.







BILLIARD HALL IN BASEMENT FOR BOWLES LUNCH ROOM, TORONTO.

# CONSTRUCTION

A JOURNAL FOR THE ARCHITECTURAL  
ENGINEERING AND CONTRACTING  
INTERESTS OF CANADA



FREDERICK REED, Editor

H. GAGNIER, LIMITED, PUBLISHERS

Corner Richmond and Sheppard Streets,

Toronto - - - Canada

BRANCH OFFICES:

MONTREAL—171 St. James Street

NEW YORK—156 5th Avenue

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

**SUBSCRIPTIONS.**—Canada and Great Britain, \$3.00 per annum. United States, the Continent and all Postal Union countries, \$4.00 per annum, in advance. Single copies, 35c.

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

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

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

**Vol. VIII Toronto, March, 1915 No. 3**

THE Canadian Ice Machine Company, Ltd., announce the removal of their head office, shop and warehouse to 82 Chestnut street, Toronto.

\* \* \*

WM. CONNERY, for several years a member of the firm of Ellis & Connery, Architects, Manning Chambers, Toronto, has withdrawn from partnership, and opened offices in Suite 410, fourth floor of same building.

\* \* \*

ELLIS & ELLIS have formed a co-partnership for architectural practice, and will continue the offices in the Manning Chambers, Toronto, of Ellis & Connery, recently dissolved. The members of the firm are J. A. Ellis and his son, H. C. Ellis, formerly with Charles A. Platt, architect, New York City.

IN THE *Luxeberry News*, published every month, Berry Brothers, in commenting on their advertising for 1915, say: "Never was more care used in selecting the mediums in which to place our advertising for 1915. We feel that here is the opening of a big year, a better year and we are prepared to do our part. Will you do yours?" Among the list of magazines employed for their various announcements are the following architectural publications: *American Architecture*, *Architect Record*, *Architecture*, and *CONSTRUCTION*. The company has opened a new branch in Savannah, enabling them to give better service to their southern trade.

\* \* \*

ARCHITEC-TONICS, the Tales of Tom Thumtack, architect. New York: The Wm. T. Comstock Company. Cloth, illuminated, 5 x 7, 175 pages, 100 illustrations. Price, \$1.50 net. This is the first time that architects can claim to have recognized literature in the field of fiction. We have stories about millionaires, manufacturers, all kinds of business men, farmers and quite a little about engineers, but never a word about an architect. Here it is and it is presented with all the taste that an architect is supposed to have. The book is designed from beginning to end, from the gorgeous illumination of the cover, the book plate, the frontispiece and title done in colors and the many illustrations of the various stories which fit the point and tell the tale, there is evidenced a fine workmanship that is unusual in fictional literature. These are a series of tales about the experiences of an architect. They tell his views of life in little stories, about the things which happen when buildings are built, lived in and torn down, the tales of the office and the architect's views of the client. There is humor and fun and pathos. They are little tales from real life and they are told briskly and with lightheartedness. Nothing since the days of Cruikshank has equalled the cleverness of the illustrative sketches. The book will furnish recreation for many besides the professional man, and every one who knows an architect ought to have a copy just to acquaint himself more fully with the species.

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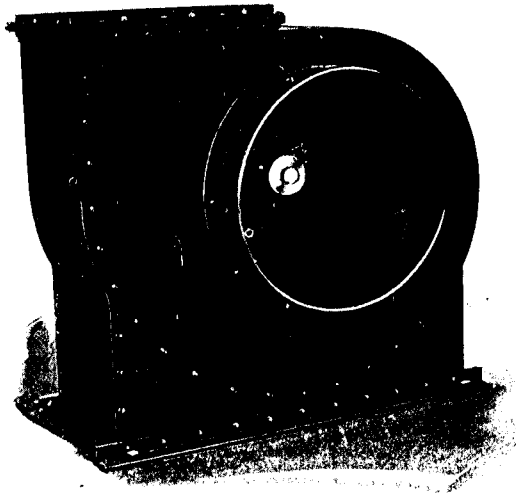
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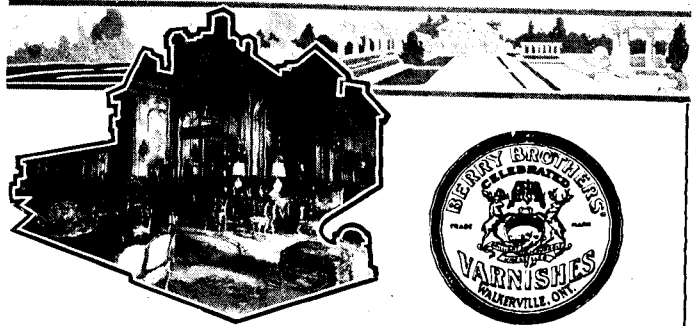
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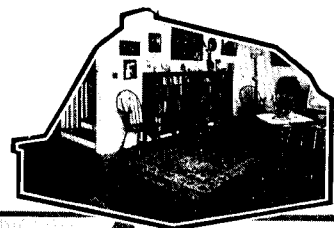
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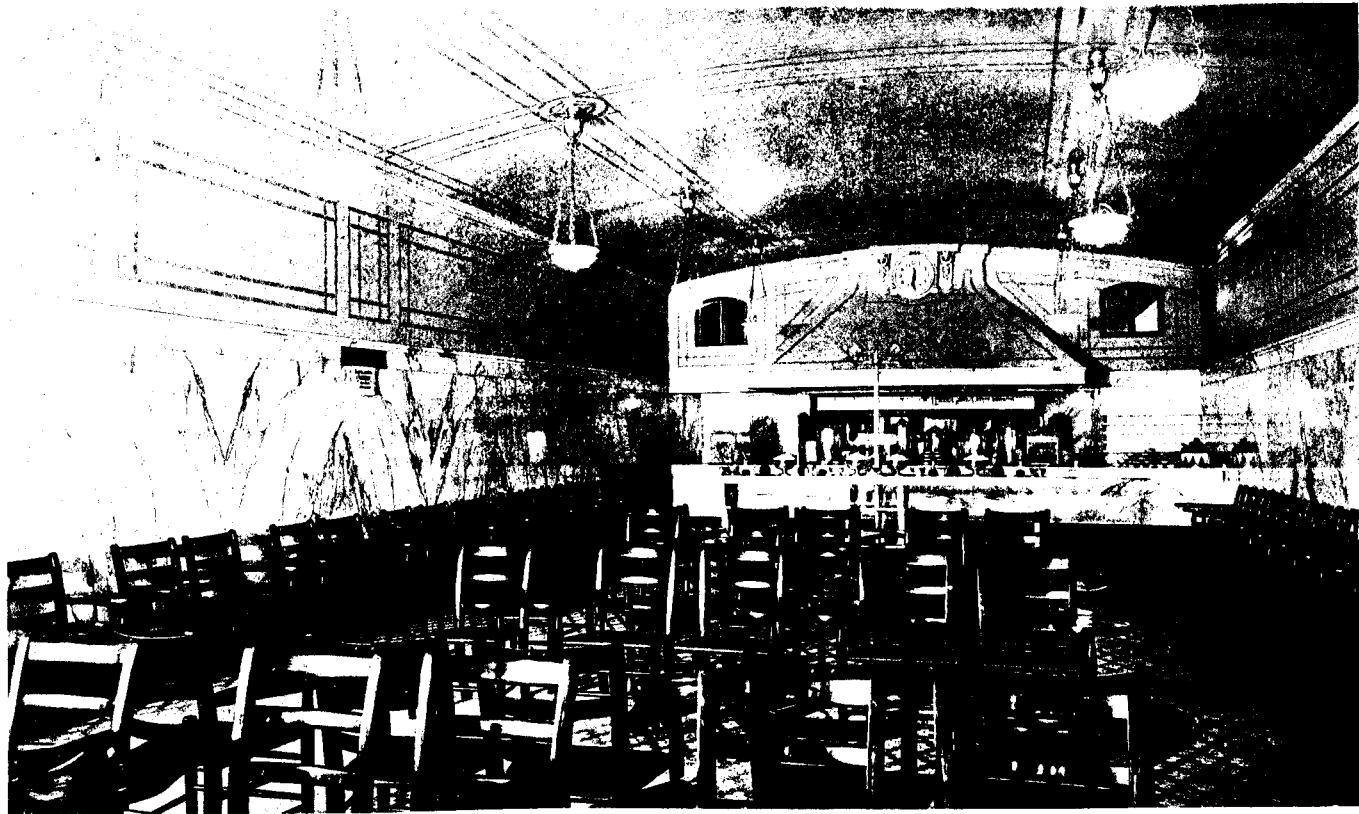
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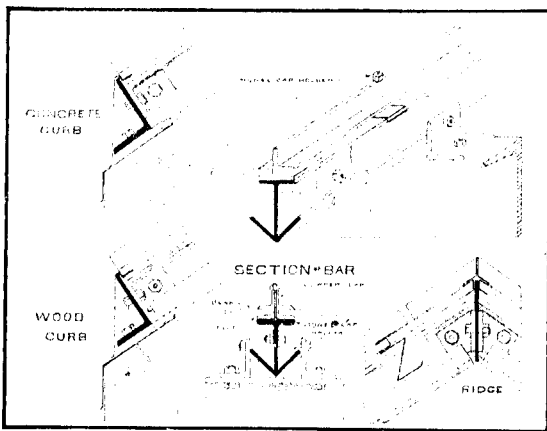
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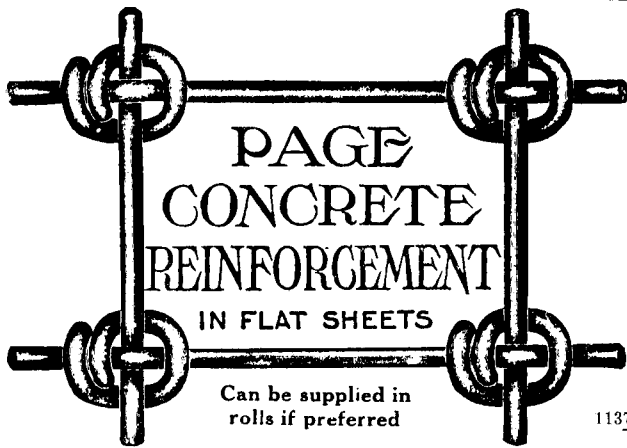


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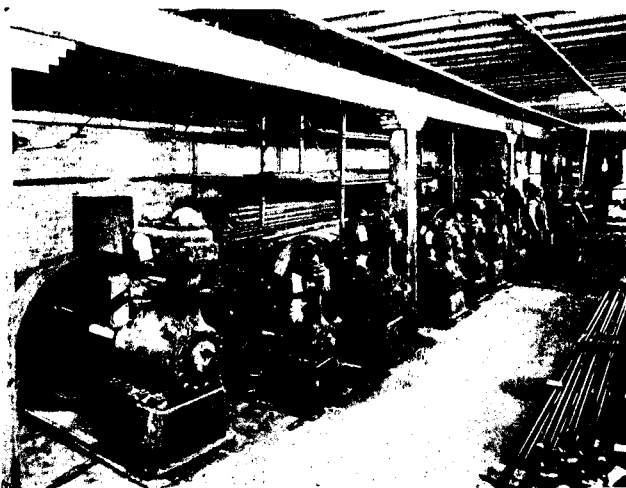
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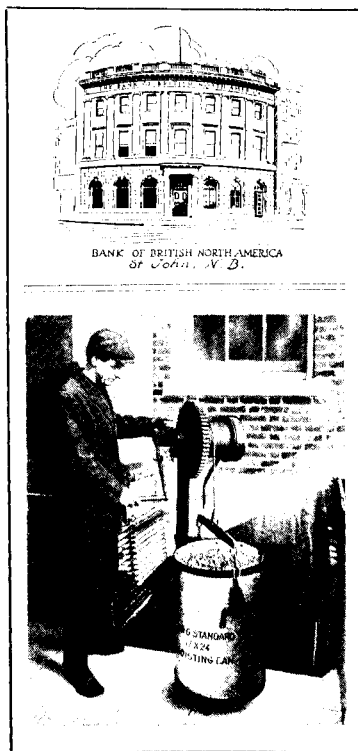
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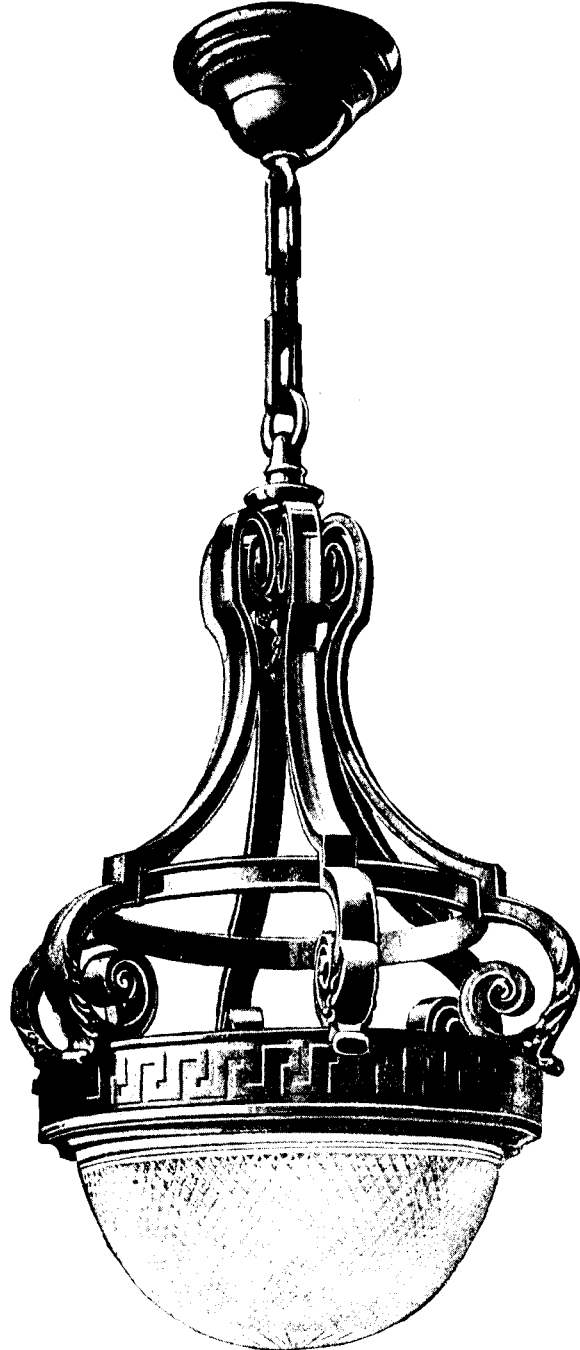
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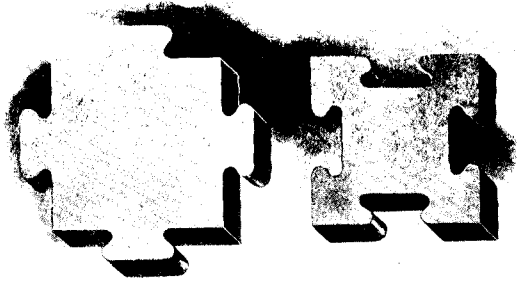
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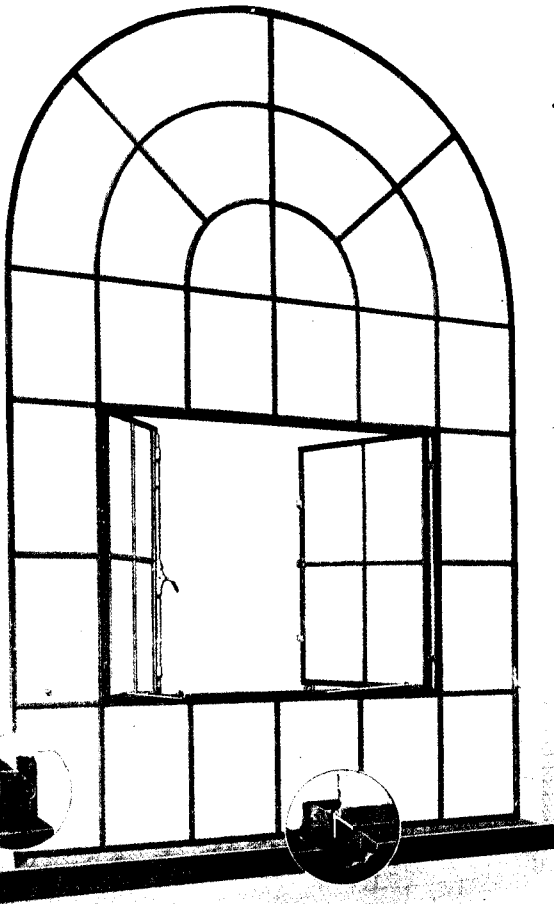
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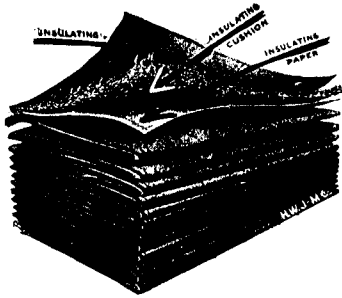
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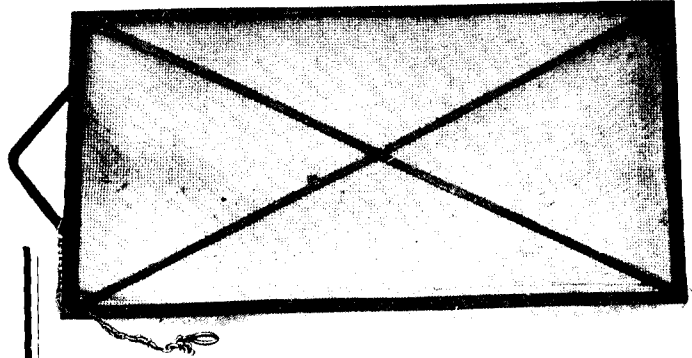
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Crown Gypsum Co., Ltd.  
Hynes, W. J.
- Plate and Window Glass.**  
Consolidated Glass Co.  
Toronto Plate Glass Co.
- Plumbers' Brass Goods.**  
Robertson Co., James B.
- Plumbing Fixtures.**  
Canadian H. W. Johns-Manville Co., Ltd.  
Robertson Co., James B.  
Standard Sanitary Co.
- Porcelain Enamel Baths.**  
Canadian H. W. Johns-Manville Co., Ltd.  
Robertson Co., James B.  
Standard Sanitary Co.
- Refrigerator Insulation.**  
Canadian H. W. Johns-Manville Co., Ltd.
- Refrigeration Machinery.**  
Canadian Ice Machine Co.
- Reinforced Concrete.**  
Canada Wire & Iron Goods Co.  
Noble, Clarence W.  
Pedlar People, The.  
Trussed Concrete Steel Co.
- Relief Decoration.**  
Hynes, W. J.
- Roofing Paper.**  
Canadian H. W. Johns-Manville Co., Ltd.
- Roofing.**  
Canadian H. W. Johns-Manville Co., Ltd.  
Patterson Mfg. Co.  
Pedlar People, The.
- Roofing (Slate).**  
Ormsby, A. B., Ltd.
- Roofing (Tile).**  
Dartnell, E. F.
- Rubber Tiling.**  
Gutta Percha and Rubber Co.
- Safes (Fireproof and Bankers').**  
Goldie & McCulloch Co., Ltd.  
Taylor, J. & J.
- Sanitary Plumbing Appliances.**  
Canadian H. W. Johns-Manville Co., Ltd.  
Robertson Co., James B.  
Standard Sanitary Co.
- Shafting, Pulleys and Hangers.**  
Goldie & McCulloch Co., Ltd.
- Sheet Metal.**  
Leslie, A.
- Sheet Metal Workers.**  
Galt Art Metal Co.  
Pedlar People, The.  
Sheldons Limited.
- Shingle Stains.**  
Cabot, Samuel, Inc.  
Robertson Co., James B.
- Sidewalks, Doors and Grates.**  
Canada Wire & Iron Goods Co.  
Dennis Wire and Iron Works.
- Skylights.**  
Reed, Geo. W. & Co.
- Slate.**  
Robertson Co., James B.
- Stable Fittings.**  
Dennis Wire and Iron Works.
- Staff and Stucco Work.**  
Canadian H. W. Johns-Manville Co., Ltd.  
Hynes, W. J.
- Steam Appliances.**  
Sheldons, Limited.
- Steam and Hot Water Heating.**  
Sheldons Limited.
- Steel Concrete Construction.**  
Noble, Clarence W.  
Pedlar People, The.  
Trussed Concrete Steel Co.
- Steel Doors.**  
Canada Wire & Iron Goods Co.  
Dennis Wire and Iron Works.  
Pedlar People, The.
- Structural Iron Contractors.**  
Dennis Wire and Iron Works.  
Dominion Bridge Co.  
Reid & Brown.  
Structural Steel Co., Ltd.
- Structural Steel.**  
Dennis Wire and Iron Works.  
Dominion Bridge Co.  
Reid & Brown.  
Sheldons Limited.  
Structural Steel Co., Ltd.
- Telephone Systems.**  
Northern Electric Co., Ltd.
- Terra Cotta Fireproofing.**  
Dartnell, E. F.  
Don Valley Brick Works.
- Tile.**  
Dartnell, E. F.  
Don Valley Brick Works.
- Valves.**  
Robertson Co., Jas. B.
- Varnishes.**  
Ault & Wiborg Co.  
Berry Bros., Ltd.
- Vaults and Vault Doors (Fireproof and Bankers').**  
Goldie & McCulloch, Ltd.  
Taylor, J. & J.
- Ventilators.**  
Pedlar People, The.  
Sheldons Limited.
- Wall Finishes.**  
Berry Bros.  
Dartnell, E. F.
- Waterproofing.**  
Ault & Wiborg Co.  
Cabot, Samuel, Inc.  
Canadian H. W. Johns-Manville Co., Ltd.  
Dartnell, E. F.  
Stinson-Reeb Builders' Supply Co.
- Waterworks Supplies.**  
Canada Wire & Iron Goods Co.  
Robertson Co., James B.
- Window Guards.**  
Canada Wire & Iron Goods Co.  
Dennis Wire and Iron Works.
- Wire Cloth.**  
Canada Wire & Iron Goods Co.

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For permanent walls and ceilings, hard wall plasters are necessary. They are meeting the demand of high-class construction work as no other plastering material can do.

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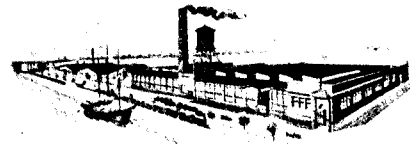
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