

THE AMERICAN ARCHITECT

FOUNDED 1876



THE LOWER TOWN, DINAN

VITRÉ AND DINAN

TWO ARCHITECTURAL SHOW PLACES IN BRITTANY

By SAMUEL CHAMBERLAIN

Illustrated with Drypoints, Lithographs and Sketches by the Author

FROM the moment one emerges from Vitré's Gothic railway station, (by no means as horrible as it sounds), it is evident that the place is not content to be just another French town. A jagged profile of towers and turrets looms up above its encircling girdle of oaks and chestnuts. The vista of a grotesque and impossible street of tottering houses prompts one to plunge into the heart of this astonishing melange of glorious antiquity and commonplace modernity. It is alternately dull and brilliant. There are perfect, unchanged medieval corners, made to order for the brush of a Vignal or a Montagné, and again streets of dull drabness, devoid of all charm.

Vitré has streets as Spanish as those of Segovia, steep hillside streets, roughly cobbled and flanked with squatty, whitewashed houses. Even the strings of peppers, the mangy dogs and malodorous gamins are not missing. Housewives sit and knit on the doorsteps and shout the village gossip in shrill tones. And there are bleak, wind-swept spots with immaculate little Breton houses silhouetted against an empty sky, as though the sea lay just beyond the hill. Only a lighthouse would be needed to complete the picture. Crowded in the dingy rue Baudrairie is a jumble of soaring XVI century houses whose overhanging eaves almost arch the roadway, a bit of rural Normandy not to

(Copyright, 1926, The Architectural & Building Press, Inc.)

be bettered in Rouen. Fat old XI century towers crop out in odd courtyards and exquisite Renaissance doorways linger where one least expects them. Vitré is decidedly a town of rare moods and phases.

The doddering old wooden arcade shown in the accompanying lithograph served as a model for a set in the Opera many years ago. The obese old houses lean heavily on their supporting pillars like gouty octogenarians on creaking crutches. Many of them are covered with a dusty tapestry of ragged slates no larger than playing cards, lavender and blue and mineral green, tacked on with gay irregularity and studded with yellow moss. They resemble nothing more than the spottings of some gorgeous antique snake. A noble Renaissance mansion rises up proudly in the midst of its battered predecessors. Two incorrigible and unprecedented gargoyles leer forth from its cornices and its ambitious outer portal is worthy of Bourges.

The chateau is one of the most virile bits of military architecture in all Brittany. It is amazing in its immensity, its dramatic size and its purity of style, despite many evidences of recent restoration. The facade, with its moat and its bulbous twin towers, is strongly reminiscent of Langeais. It has the same glorious, time-wrought color, but it surpasses Langeais in its overpowering site on the brink

of the ravine. A musty library, a forlorn collection of stuffed birds and a modest little museum are hidden away in the vast cubage of the chateau, and even the regal installation of His Portliness the Mayor takes up little or no space in this tremendous triangle of stone.

The church of Notre-Dame, purest Gothic save for a few sorrowful afterthoughts, is remarkable for its two pulpits, one on the exterior in finely chiselled stone and the other a lacy Gothic marvel in carved, gilded wood which shimmers in the cool mystic alley of the nave, reflecting a thousand opalescent tones from the stained glass windows.

Sagging stone doorways with keystones carefully dated grace most of the old houses in Vitre. The stonework as a whole is worthy of considerable study. The stone sometimes assumes a dead, gray-blue color, but often it is shiny and agate-like in varied shades of amber and burnt sugar, strange browns and metallic greens and yellows. When painstakingly mortared with cream-colored joints the effect is superb. There is also a soft hued limestone which forms the ground floor of many an old house, usually veined with rust-colored streaks, a most harmonious material. The outskirts of Vitre are built upon a peculiar, slate-like formation of rock, which juts forth countless



VITRÉ

Samuel Chamberlain

VITRÉ

FROM THE ORIGINAL DRYPOINT BY SAMUEL CHAMBERLAIN

flat wafers at a sharp angle. Many of the poorer houses are built up of these peculiar stones, most of them thinner than a best seller, and the resultant texture is a welcome contrast to the cold granite blocks so common elsewhere in Brittany.

The architect of the town gloomily informed me that the natives of Vitré, and especially the municipal authorities, possess small appreciation of the crumbling beauties of the town, and that little effort is being made to preserve them. Hints of the majesty and the quaintness of feudal Vitré still remain, but sadly enough, the greater part of the tremendous fortifications have succumbed to the wreckers. The magnitude of the principal gateway was such that a respectable company of workmen took more than a year to demolish it and clear a path of progress for the railroad. In regard to which, all faintly ironical references to the leisurely methods of Continental workmen have been carefully omitted.

The scowling severity of Vitré has softened with the disintegrating centuries until now it is like a smiling, battered old warrior, mellow and harmless. Vitré is known as the "Doorway to Brittany." One only regrets that Brittany as a whole cannot live up to the expectations created by this illustrious portal.

Dinan, by way of contrast, knows and appreciates its own beauty, proclaims it loudly with posters and makes every effort to justify its fame as a "ville d'art celebre." Tourists flock here in

careening charabancs and in plump little launches which putter down the placid Rance from Dinard and St. Malo. It is a town of countless antique shops, (83% bogus), and English "Tea Lounges," persuasive cab drivers and boiled potatoes, but for all of that, it is one of the loveliest spots in Brittany.

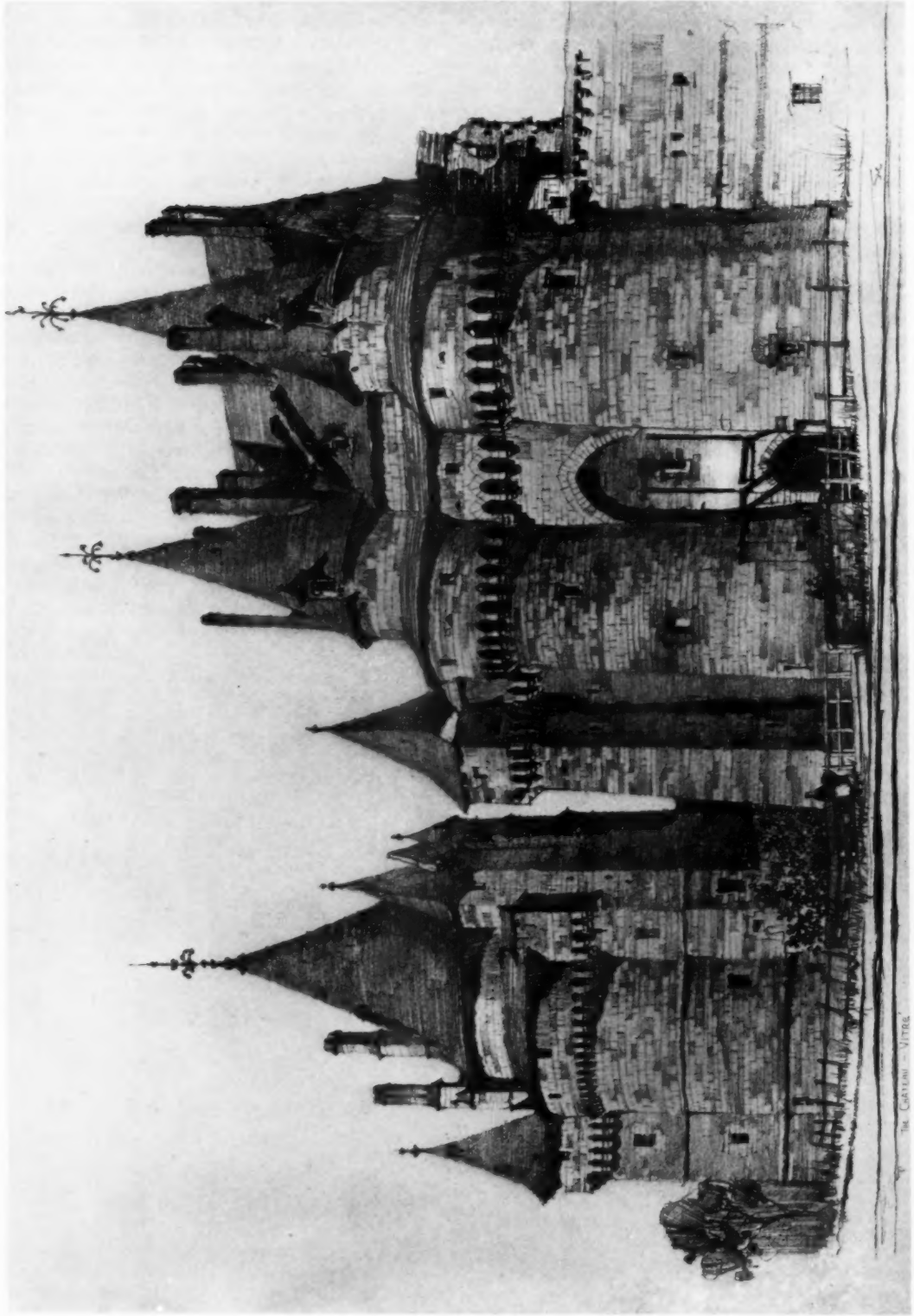
Like so many towns in the region, Dinan is built high upon the ancient fortifications which blustered but fell before the periodical pelting of the English invaders. The ramparts and towers are fairly intact, for they are built of the flintiest of granite and three of the heavily fortified gateways are unchanged save for a beautiful bit of tinting done by the rainy centuries. In the sunlight Dinan can be a hard, dazzling city of cold, blue-white granite. In the rain it is dismally, abysmally gray. An encircling ruffle of stately trees, forming an idyllic promenade which can be best appreciated by the love-bitten and the poetically inclined, and a few arcaded streets of slumping old houses give Dinan its principal shelter and shadow.

Dinan still retains a somewhat ferocious profile, although this is softened by two onion-like and rather silly towers which are anything but foreboding. One of these rises out of the quasi-Romanesque church of St. Sauver and tends to burlesque an otherwise noble structure. St. Sauver's triple arched portal has some of the splendor of St. Gilles, fluted with forests of crumbling orange colonettes and enlivened with a mute me-

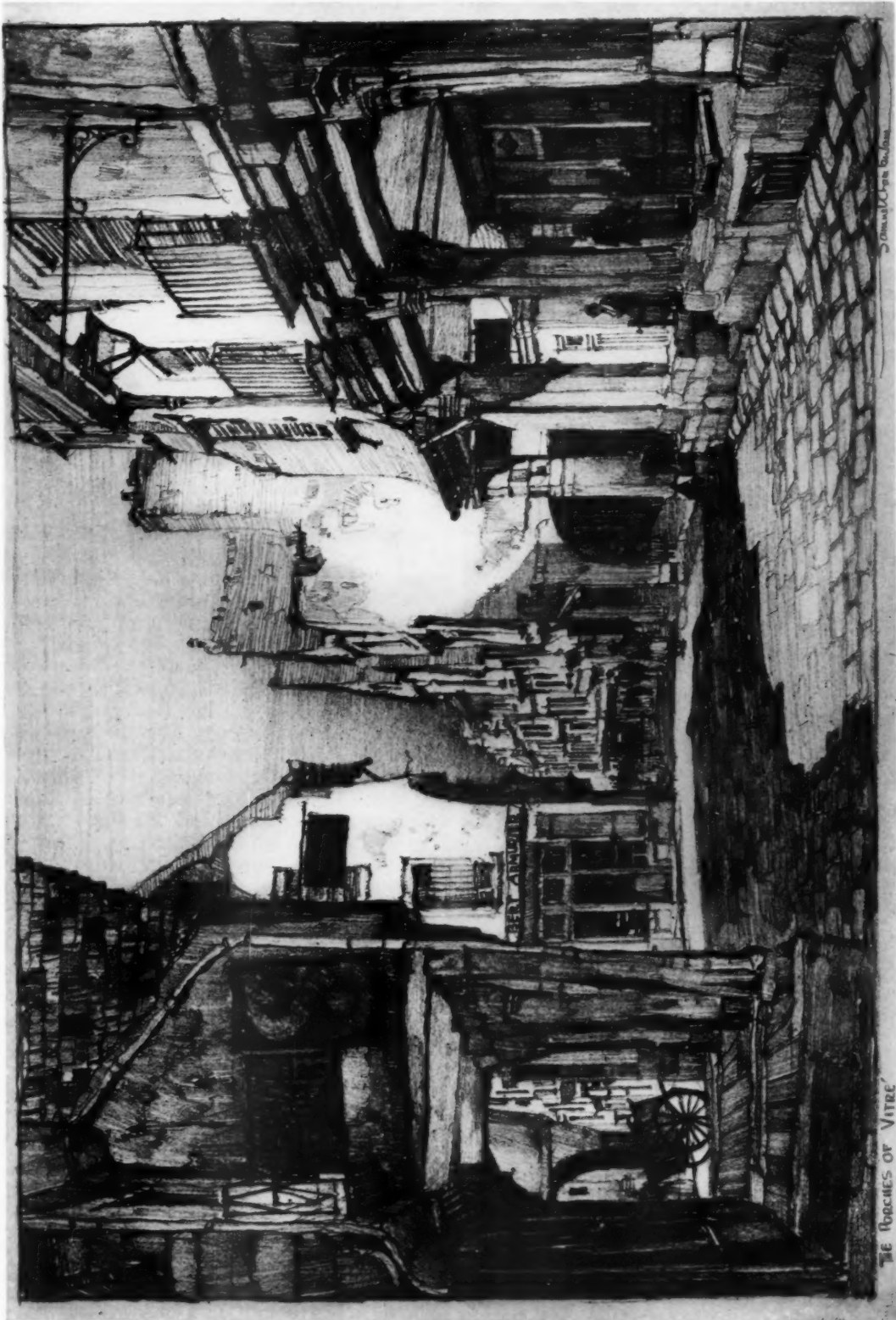


THE VALLEY IN VITRÉ

FROM THE ORIGINAL LITHOGRAPH BY SAMUEL CHAMBERLAIN



THE CHATEAU, VITRE
FROM THE ORIGINAL LITHOGRAPH BY SAMUEL CHAMBERLAIN



THE PORCHES OF VITRÉ
FROM THE ORIGINAL LITHOGRAPH BY SAMUEL CHAMBERLAIN

nagerie of winged granite beasts, long since garmented with moss. A strange foliated tracery flourishes in both of the churches of Dinan. Sometimes it branches out like a wild fern or assumes the graceful pattern of a fountain spray. Two unique rose windows are patterned after a perpetual pinwheel, a diabolical bit of stonework.

The other tower, somewhat tipsy, is a Bruges-like cresting of as fine a clock tower as Brittany can boast. Here is a true and convincing monument of medieval times, complete with a good Gothic doorway and a delightful clock mechanism which produces a solemn fourteen taps at unexpected moments. The massive square base transforms itself into an octagon with a great deal of grace.



ANTIQUÉ SHOP, DINAN

The old Breton type of porched house flourishes at its floweriest in Dinan. Twenty years ago a fire destroyed many of the finest ones, and with them many superb carved beams, but there are dozens of this unbalanced and highly useful type of house still standing, even more than in Vitre. One staggering vista in the heart of the town has been immortalized by the dashing etching by Georges Gobo, and has entertained a squad of squatting lady watercolorists daily every Summer for years. An encampment of calm souls with paint boxes and easels and white parasols belongs to Dinan, and records the charms of the place minutely and exhaustively. Nor has it been neglected by the higher vegetables in the kingdom of art, for the Golden Book in the Hotel de Ville contains the signatures

of many celebrated daubers of the first category.

The rue de Jersual is hereby nominated as one of the most intriguing hillside streets extant. It is a treacherous winding slope, as dizzy and precipitous as the native streets of Algiers, spotted at spasms with the most grotesque of overhanging houses. It cannot quite rival the fantastic stone pathway leading to the summit of Mont St. Michel, (save in the number of postcard and bric-a-brac stands), but on the other hand, it boasts a giddier assortment of antique shops, some of which do a thriving business with the puffing pilgrims. Invariably they display a spinning wheel and a grinning old peasant woman in full Breton costume as atmospheric accessories. Their wares are fairly dubious. Few obtainable Breton antiques are of great value anyway, and the major part of the wood carvings are contemporary home products whittled from old beams and conscientiously worm eaten. There are, however, some good pieces of brass and copper still to be found, and many authentic wooden screens from the closed Breton beds, around which so many Rabelaisian yarns have been spun.

From the dizzy walls of the fortifications the lower town is a sprawling crazy quilt of blue slate roofs and baked ochre walls, two perplexing patterns of parallelopipeds bordering a placid mirror of stream. It is one of the most bizarre valley towns in France.

There are many other features of Dinan worthy of enthusiastic paragraphs, particularly the doorway of the Ancien Hotel de Beaumanoir with its capering granite dolphins and the defiant and blustering statue of the robust DuGuesclin which rises serene in the market place above the bedlam of bleating sheep and bellowing bulls, the site of his memorable hand-to-hand tiff with an English brave who finally bit the dust. In fact, no one could reasonably demand a small town to be more completely equipped with handsome landmarks than Dinan.

Of course it would be gratifying to hear a word of French now and then, to find a simple "bistro" which had not been converted into a tea room and to escape the *Daily Mail's* indignant headlines on every news stand, but Dinan is content with its Anglo-Saxon savor. And, boiled potatoes or not, it is a glorious old town.

GAS AND ELECTRICITY

THE 1925 figures show that New York State produced one-sixth of the electricity and one-fourth of the manufactured gas of the United States. The totals, both records among the States, are for electricity more than 10,000,000,000 kilowatt hours, and for manufactured gas more than 100,000,000,000 cubic feet.

TRAVELING WITH A FOUNTAIN PEN—II

By IRVING K. POND, F.A.I.A.

Past President, THE AMERICAN INSTITUTE OF ARCHITECTS

IN the beginning I dropped a remark concerning fated companionship, a topic upon which I shall enlarge, as to me it is one (or more) of the interesting facts or factors of the cruise. I wanted to take this cruise not for the cruise but for a very definite purpose. There were things I wanted to see and do; things I wanted to read up on and to write about. I took with me a copy of my book "The Meaning of Architecture" to have with me in Egypt while visiting the temples, and also upon the Acropolis. I wanted to check up, on the spot, theories as to the architecture of Egypt and Greece which I had advanced in the book and which, having then never seen the originals, I had evolved in my inner consciousness after much reading and much study of photographs, models and drawings; and, better yet, after years of experience and experiment in creative and constructive architecture. I wanted to be more or less by myself on shipboard and ashore. I wanted to rest physically and mentally. I hate bridge or cards in any game, and loathe the smoking room, and was set for a nice, quiet time by myself while the ship's life went on about me—I in it but not of it—like St. Paul's Christians and the World. I said to myself just a few days before sailing: "Probably I shall not know a soul on board! Wouldn't that be luck!" And then I had a shock. My dear friend Madam C. (a known quantity) met me and said, "Mrs. X. and her sister Mrs. Y. (unknown quantities) are to be on your cruise. Will you take a letter to them?" "Do they know that I am to be on it?" "Yes; I have given them a letter to you!" "All right," said I, "give me the letter. The evil is accomplished; the damage already is done." I sincerely hoped they were the kind that got seasick and

never appeared on deck. Then as if that were not enough, A. called me up by telephone to say that he wanted to give me a card to his old and valued friend Z. who would be on my cruise, or I on his, at least we both had signed up for the same cruise. Again I accepted my fate with what equanimity I could. Anyway Mr. Z. might be played off against Madames X. and Y. and let me out. The hour of departure had come. The ship was about to cast off. Looking over the rail at weeping ones left behind on the pier I beheld the smiling countenance of my good friend N. who had come down to bid "bon

voyage" to his good friend K. but whom he had missed. Spotting me, friend N. called out, "My friend K. is aboard. Look him up!" I held my breath. N. must have caught some fleeting expression of pain in my eyes, some indefinite expression of distress. He departed and on the way to his office sent a wireless to K. stating that I was on board and that he was to look me up! I received knowledge of this in a peculiar manner. The ship sailed on time and, as she put out, luncheon was announced. After that delectable function, at which I found myself placed at a table for three with my face to the wall separating two uncompanionable females, who nevertheless were companions, I went to the port, A deck, garden-saloon to receive my instructions, the passenger list, and a beautifully bound log book on which my name was stamped in gold,—all passengers fared alike in this little attention from the cruise management. I was approached by a man who had been eyeing me for some moments and whom I took to be the house detective. Very politely he asked: "Isn't this Mr. Irving K. Pond?" I nodded affirmatively, whereupon he said, "I am Mr. Walk, architect, etc., and I have seen you at the conventions of The American Institute of



THESE BOYS SERVED US GRACIOUSLY. THEIR TROUSERS FEAR NO RIVALRY FROM OXFORD NOR FROM THE FEEBLE IMITATORS OF OXFORD IN AMERICA



THE HARBOR OF ALEXANDRIA—THE GATEWAY TO THAT MYSTERIOUS EGYPT WHICH IS VISITED SO UNMERCIFULLY BY PLAGUES—THE MODERN ONES BEING FLIES AND TOURISTS

FROM THE BATTLE-
MENTS OF THE CITADEL
WE LOOK ACROSS THE
FERTILE PLAIN WHICH
IS EGYPT: AND THERE
AT THE DESERT'S EDGE
STAND THE PYRAMIDS.
IN THE FAR MIDDLE DIS-
TANCE FLOWS THE NILE
BORDERED BY A FRINGE
OF PALMS



WE LOOK BACK, TO THE
CITADEL AND THE SLEN-
DER MINARETS OF MO-
HAMMED ALI, FROM THE
BASE OF THE PYRAMIDS.
NOW THE NILE IS IN THE
MIDDLE DISTANCE



30

MORE THAN THREE HUNDRED AND SIXTY BEAUTIFUL WINDOWS, PIERCED IN INTRICATE GEOMETRICAL PATTERNS, ADORN THIS MOSQUE. NO PATTERN IS DUPLICATED. IT WOULD HAVE TAKEN ME A DAY TO SKETCH THEM ALL—AND I HAD ONLY THREE MINUTES AT MY DISPOSAL

30

30

THE VISTA THROUGH THE GATEWAY WAS EN-
TRANCING; BUT THE
PICTURESQUE PILE WAS
SUFFICIENT TO ARREST
THE VISION

30



Architects." There was no special reason why he shouldn't have seen me in such surroundings as I had attended numerous conventions of the A. I. A. and by reason of my various offices had been more or less in evidence. So I believed him. Some three or four days later Architect Walk informed me that at a meeting of the "Rotarians" on board ship the cruise list had been scanned for further possible members of the guild and when my name was read some one asked "Does anyone know him?" Architect Walk said he did and K., also present and a Rotarian, remarked "I have a request by wireless to look him up" and asked said Walk to bring us together. And so the Rotarians came to know me.



MINARETS ARE NO NOVELTY IN CAIRO. I SKETCH THIS NEST FROM THE PARAPETS OF THE CITADEL

But worse was to happen. Mrs. Walk introduced me to a lady who had been appointed "Chairlady," or "Madam Chairman," of an important social committee and at her earnest solicitation I promised to officiate at the forthcoming "Spelling Bee"; to pronounce the words and give necessary definitions. Something like this: Spell "Be"—not the winged thing with a sting to its tail; but what Hamlet was in a quandary whether to—or not to—. This task I seemed to have accomplished successfully and to the satisfaction of the throng; with the result that on the morning of the seventh day out I was known by name and face to eighty-five per cent of the ship's company—and withdrawal from general companionship or sulking in my tent were no longer possible to me. The cruise membership numbered at its full three hundred and eighty-five souls. From contacts with the people of other cruises, encountered on shore in the bazaars, museums, and hotels, I came to feel that our company had the edge on the others in respect to general culture and background. Perhaps, however, if I knew the others as I came to know our own I might feel differently.

Now that I had been jarred out of my narrow self-centered frame of mind and had become a social factor; now that I had broken the slender bond

which linked me to the followers of St. Paul, and found myself not only in the world but of it, I could go into Pagan and Jewish and Moslem surroundings, as I did, and find myself at home nor feel that I was condescending in letting my shadow fall athwart a particular threshold. I could discern more readily the good in their mode of life and manner of expression and the weaknesses in our own. I began to feel that outside the treatment of physical ailments, in which matter Occidental science had given us an advantage, we had little of value to offer these others; little of spiritual value. It is difficult to comprehend how one can step from the Mass into the Mosque and not feel that in the latter there is a saner atmosphere, a more intimate and satisfying approach to the ultimate reality.

From the moment we entered Funchal, our first stop, until the end of the cruise we were enabled to get swift glimpses of many phases of life and religious expression in their original environments. The ancient cathedral at Funchal was medieval of



NOT ONLY THE FIRST MOSQUE I VISITED IN CAIRO, BUT THE OLDEST AND MOST DELIGHTFULLY DILAPIDATED. HE WHO RUNS MAY READ, BUT HE WHO RUNS MAY NOT WRITE LEGIBLY. THE HIEROGLYPHS READ "AMR MOSQUE"

a sort below and Saracenic above. In it we got a glimpse of the mingling and interpenetration of two civilizations to the benefit of neither. In Gibraltar I looked in on services in the Roman Catholic Cathedral crowded to the doors with a heterogeneous foreign or non-British element; into the Scotch Presbyterian Chapel fairly well filled by a body of Royal Engineers in uniform; and into the Cathedral of the Church of England where there was a bare dozen of the faithful. As a matter of course, we visited the Cathedral in Granada, but, outside of its connection with Ferdinand and Isabella, little inspiration is to be drawn from it. The Alhambra is the choice spot in Granada as in all Spain. Andalusia was beautiful and the ride between Gibraltar (Algeiras) and Granada a revelation even to one who like myself had been over much of the ground

MEMORANDUM NOTE OF
A CROOKED STREET
SWIMMING IN COLOR. IN-
TENDED TO WHET THE
IMAGINATION AND STIR
MEMORY

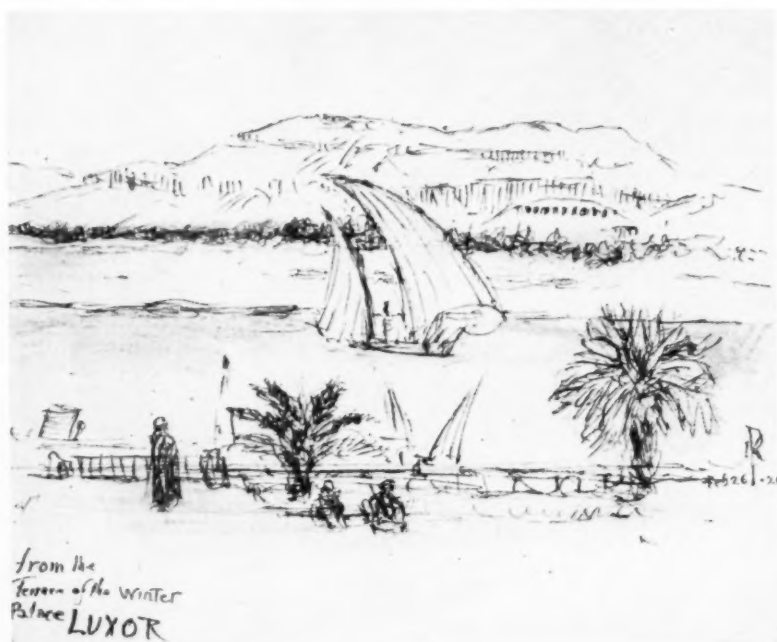


DOWN THROUGH THE
ROSE-AMBER OF THE HY-
POSTYLE HALL, AND ON
THROUGH THE SUNLIGHT
TO THE PURPLE MOUN-
TAINS BEYOND THE
NILE. IN SUCH AN AT-
MOSPHERE LINE IS
IMPOTENT

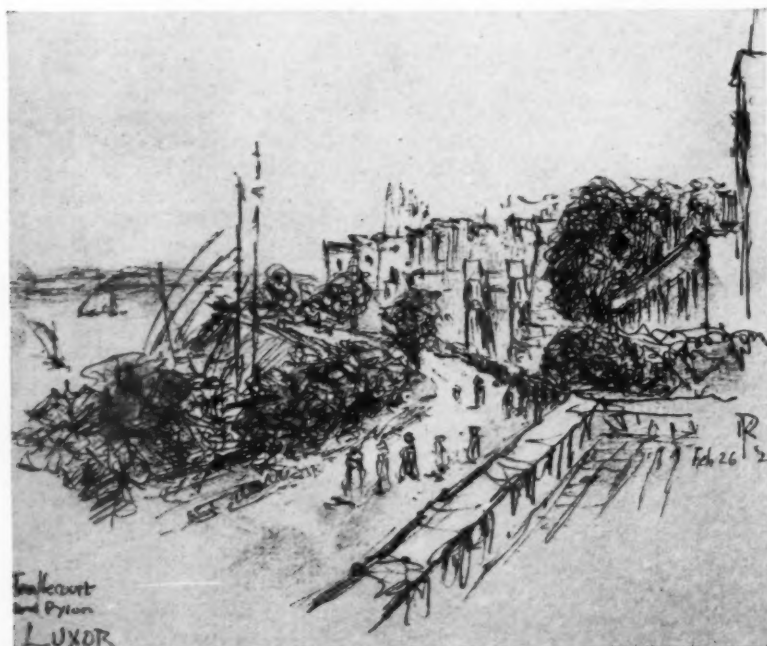
and had known Spain long years ago. A richly cultivated country, picturesque, colorful, with almonds in blossom and olives full fruited, well kept farm and outbuildings—and massive well designed and operated electro-hydraulic plants in the gorges in the mountains; and over all the serene snow capped range of the Sierra Nevada. Then, after Granada, Algiers, part French, part Arabian, the interesting part Arabian; and Biskra in the Desert with a character all its own,—color, action, noise, all in evidence at once. Here our visit coincided with "the Course," the races which are run annually and are attended by tribes which come with caravans and their own bands of music from far,—hundreds of miles,—across the desert.

Gorgeous robes and trappings, richly bedecked horses and camels; long Arabian rifles swung about,

loaded and fired from swift-moving steeds; mock battles between the tribes—all a marvelous pageant

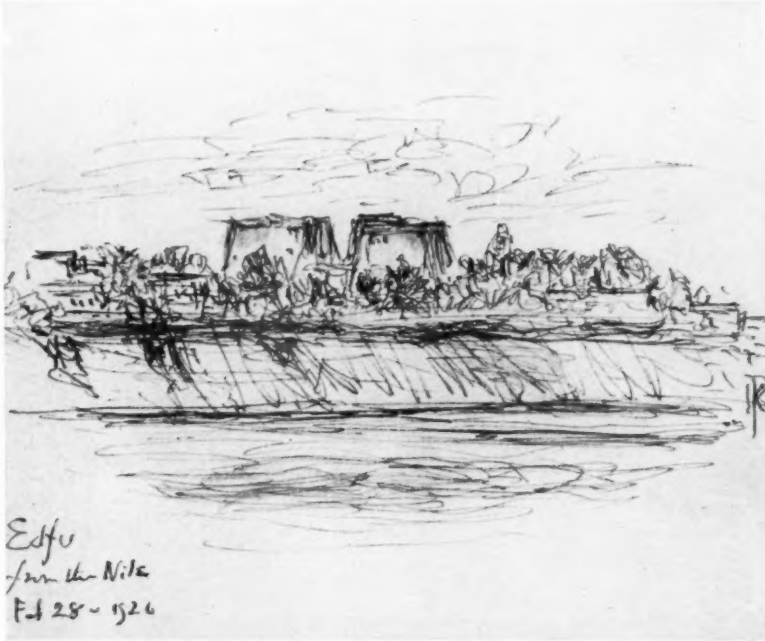


HERE, IN THE BRILLIANT SUNSHINE, ON A TERRACE REMOVED FROM ALL THE EGYPTIAN PLAGUES EXCEPT THE FLIES, I COULD LOOK OVER THE NILE TO THE ROCK CUT TOMBS OF THEBES; AND I DID



HAVING RECORDED AN IMPRESSION OF THEBES, TURNING SLIGHTLY I SKETCH THE WINDING NILE WITH ITS SAILS AND MASTS AND SPARS; AND STUDY THE COLUMNS OF THE COURT AND THE GREAT PYLON OF LUXOR. THE BOUGAINVILLEA WHICH DRAPED THE TERRACE WAS THE MOST BRILLIANT AND LUXURIANT SEEN ON THE CRUISE

of desert life; not staged for us, but we so fortunately circumstanced as to witness it. The stock things the tourists see, the dancing girls of the tribe of Ouled Nail, the dirvish dancers, piercing their cheeks and arms with needles and burning their bodies with irons heated to a glow, these are all well known to the tourists who visit these parts. But we the few—and it was rather a small party of us who went on the North African trip—we the few saw the races and enjoyed the real life of the desert dwellers. Timgad showed us her ruins. Constantine, Tunis, Cairo, unrolled panoramas of their life before our eyes,—Palermo and Syracuse unveiled their beauties for our delectation. Of all this I have scant time for words, and besides, my thoughts



THE PYLONS OF EDFU
DOMINATE A FASCINAT-
ING LANDSCAPE AND
FOR SOME LITTLE TIME
ARE VISIBLE FROM THE
DECKS OF OUR LEISURE-
LY MOVING NILE-BOAT

THE HOT TAWNY "FEEL"
OF THE GENERAL TONE
IS RELIEVED BY YELLOW
GREEN LEAVES AND
MUDDY PURPLE SHAD-
OWS, AND, TOO, BY THE
WHITE, BLACK, AND
DEEP PURPLE OF THE
GARMENTS OF THE
NATIVES



are moving in an altogether different groove.

The days on the Nile between Luxor and Assouan were the most restful of the cruise, not excepting those all too few days of smooth sailing which were vouchsafed us in the Mediterranean. The lapping of the waters against the hull of the stern-wheeler, if a thing not much less flat than a raft can be called a "hull," was soothing to travel-



IN WHICH I EMERGE FROM THE TOMB OF KING "TUT." THE KING HIMSELF WAS NOT AT HOME. BUT WAS IN THE SHOP—UNDERGOING REPAIRS

torn nerves. There was a musical accompaniment, welcome alike to man and beast, in the incessant creaking of the sweeps of the Shadruf and of the cogs of the Sakieh, or endless chains of water buckets propelled by ox, ass or camel; the sound marking the borders of the river as definitely as do the banks themselves. For centuries upon centuries these pumps have been lifting the life-giving waters of the Nile to the irrigating ditches on the upper levels; with the Shadruf, through a succession of pools cut into the bank and each supplied with water from the sack or bucket of the man immediately below. These buckets, generally of skin, are pendant from the sweeps which rose and fell in unison to the constant rhythmic movement of the glistening black bodies of the operators.

Up to the moment we drew 'longside the bank at Edfu, the beggars, the mendicants, the dragomans, the guides, the camel and donkey drivers, the peddlers, the hawkers, and the bargainers, had gnawed intolerably into my nerves and undermined my good nature. All of a sudden, on the banks of the Nile at Edfu, I saw a great light. I saw the human side of it all; and a humorous side there was, arising out of an ingrained human desire to live (it's amusing that human beings think they *must* live) and the necessity to serve for compensation that one might gratify that desire. Into my mind flashed a vision of the hackmen at the railway station in my own native town, grabbing at and fighting for the possession of travelers new-descended from the in-

coming train. I saw again the cabmen of New York and Chicago before curbed by police regulation. I remembered seeing, in these towns and others, barkers on back streets, yes, even on "Main Street," dragging unwilling victims into vile shops to be fitted out with moth-eaten garments. I saw it all! I laughed deep down in me and my pain was gone. I said to myself: These Egyptians, and these others in Madeira, in Gibraltar, in Granada, in Algiers, and these others, still, whom we are yet to encounter, are all human, just like us, only the police have not yet got them cowed. They are just lovable humans, and I began to love them; all but the shoppers—only a tradesman could love a shopper and he doesn't! But these others no longer disturb me. I am glad I went up the Nile, stopped at Edfu and not only saw the wonderful temple, which helped to substantiate my theories, but also witnessed the struggle of some two score donkey drivers to get individual possession of one of the six side saddles which had been reserved



THESE OBJECTS, WHICH IN THE HALF-LIGHT OF THE EARLY MORNING APPEARED TO BE DIMINUTIVE TEMPLE PYLONS, WERE IN FACT GRANARIES CROWNED WITH DOVE COTES OR COLUMBARIA

for certain timorous or old-fashioned ladies of the party: the possession of a side saddle insuring a fare as well as a fair, and a good fat one at that! Edfu gave me a needed lesson in human understanding.

30

ITALY BLOCKS BUILDING IN TAORMINA

TAORMINA, the beautiful city of antiquity, thirty miles from Messina, on the Ionian Sea, with its neighborhood has been placed under the supervision of the National Bureau of Arts to prevent its beauty being spoiled by threatened building operations.

The Island of Capri also has been placed under similar jurisdiction since there, as well as in Taormina, there were indications of speculative building that would mar the beauty of the countryside.

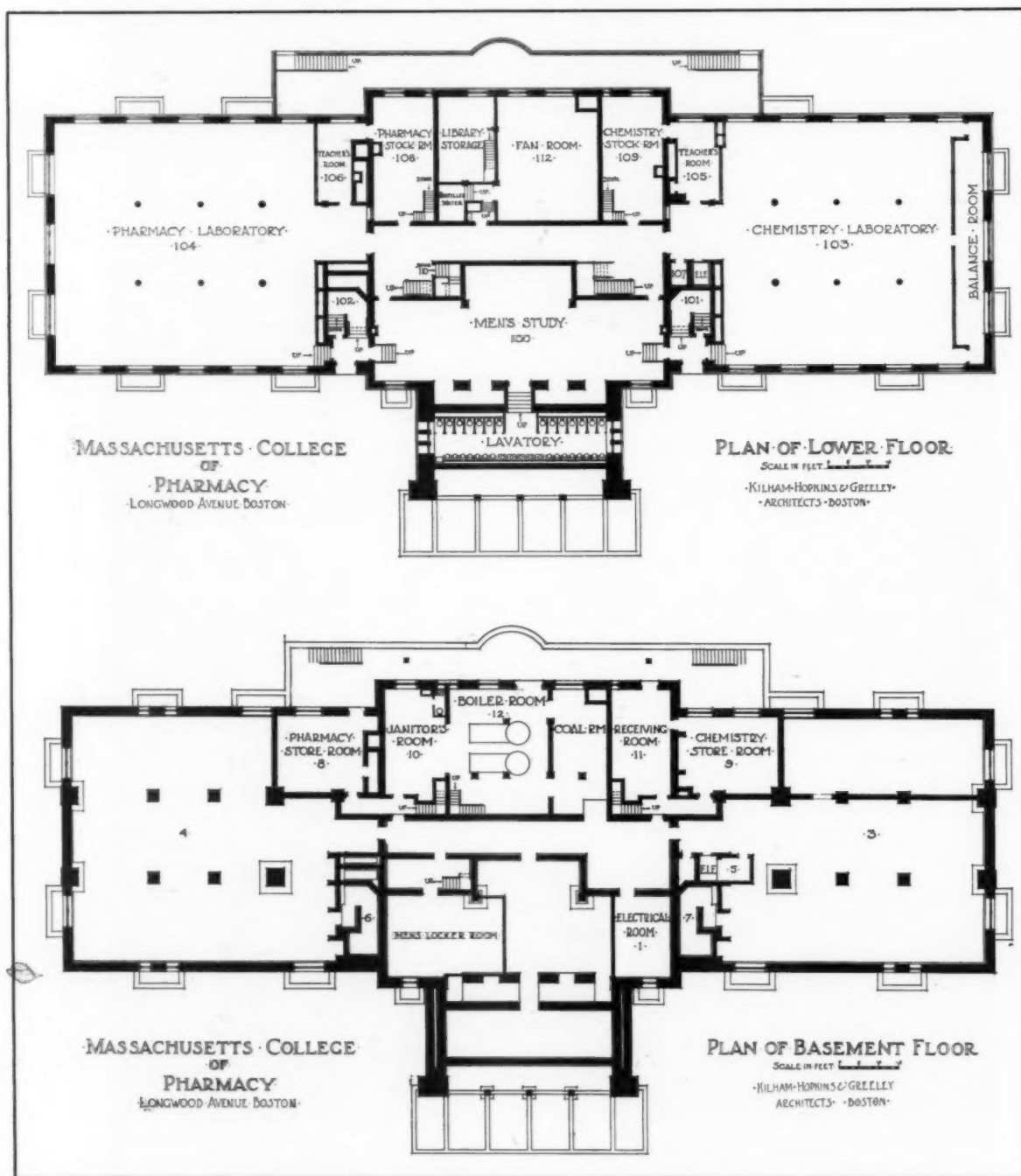


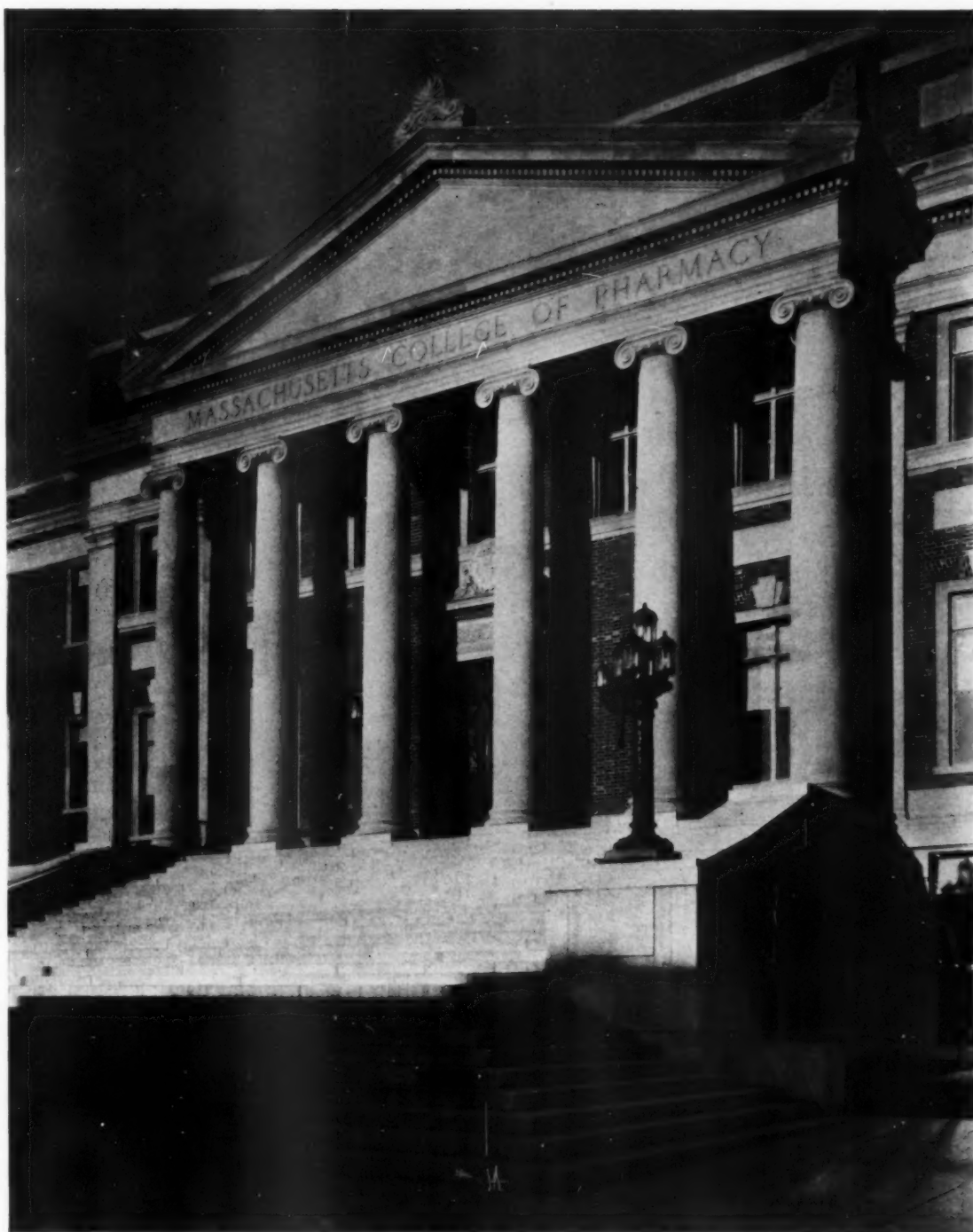
MASSACHUSETTS COLLEGE OF PHARMACY, BOSTON, MASS.

KILHAM, HOPKINS & GREELEY, ARCHITECTS

(See plans on back)

THE AMERICAN ARCHITECT
December 5, 1926 PLATE 297





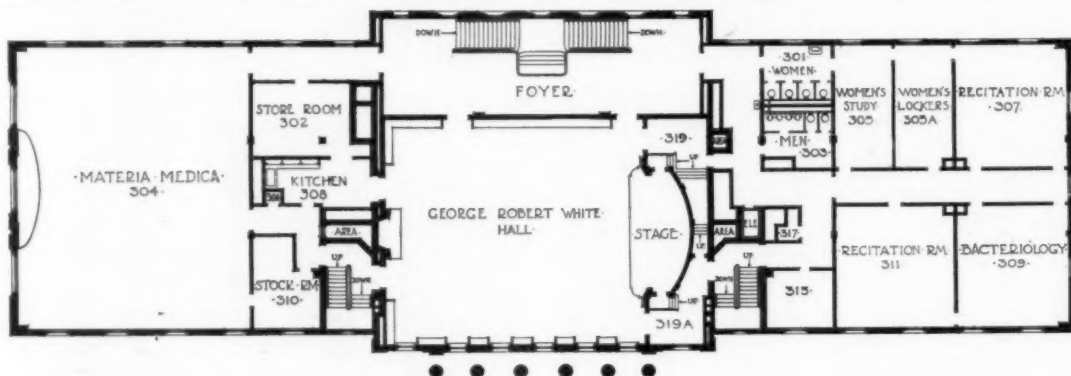
MASSACHUSETTS COLLEGE OF PHARMACY, BOSTON, MASS.

KILHAM, HOPKINS & GREELEY, ARCHITECTS

(See plans on back)

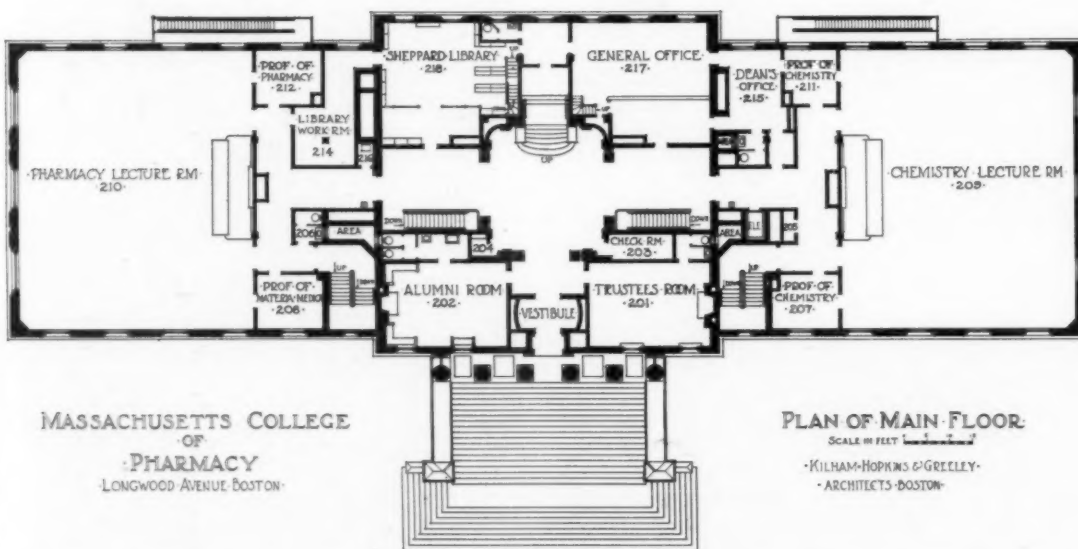
THE AMERICAN ARCHITECT

December 5, 1926 PLATE 298



MASSACHUSETTS COLLEGE
OF
PHARMACY
LONGWOOD AVENUE BOSTON

PLAN OF THIRD FLOOR
SCALE IN FEET
KILHAM-HOPKINS & GREELLY
ARCHITECTS BOSTON



MASSACHUSETTS COLLEGE
OF
PHARMACY
LONGWOOD AVENUE BOSTON

PLAN OF MAIN FLOOR
SCALE IN FEET
KILHAM-HOPKINS & GREELLY
ARCHITECTS BOSTON



MASSACHUSETTS COLLEGE OF PHARMACY, BOSTON, MASS.

KILHAM, HOPKINS & GREELEY, ARCHITECTS

THE AMERICAN ARCHITECT

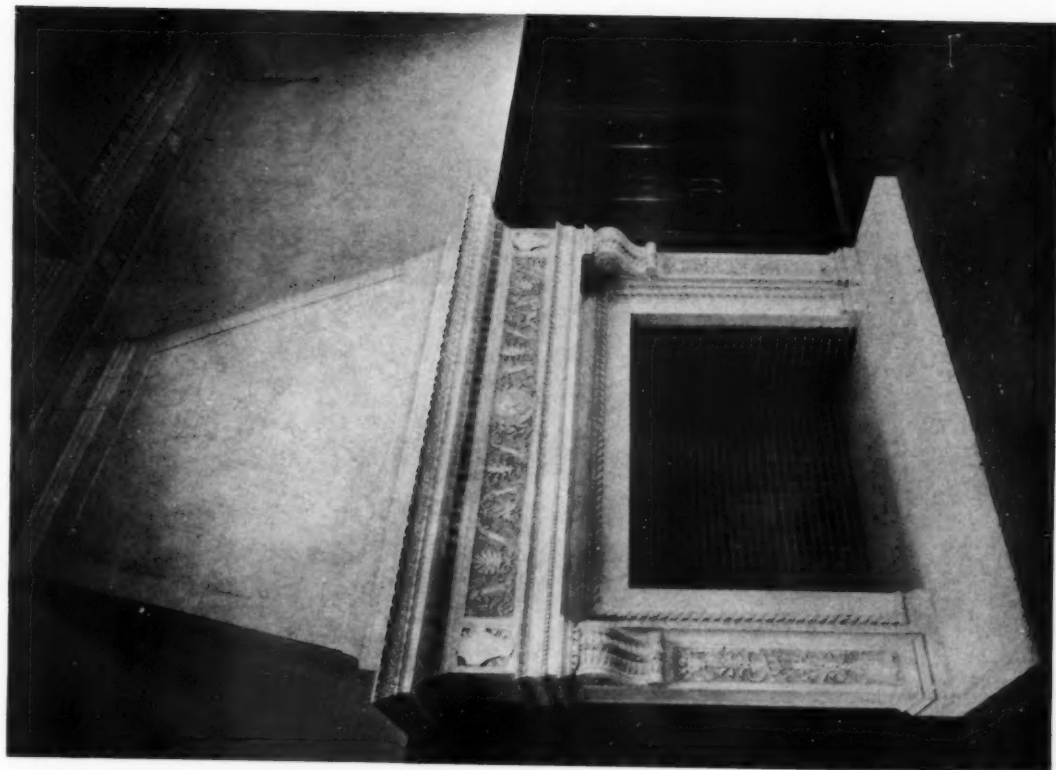
December 5, 1926 PLATE 299



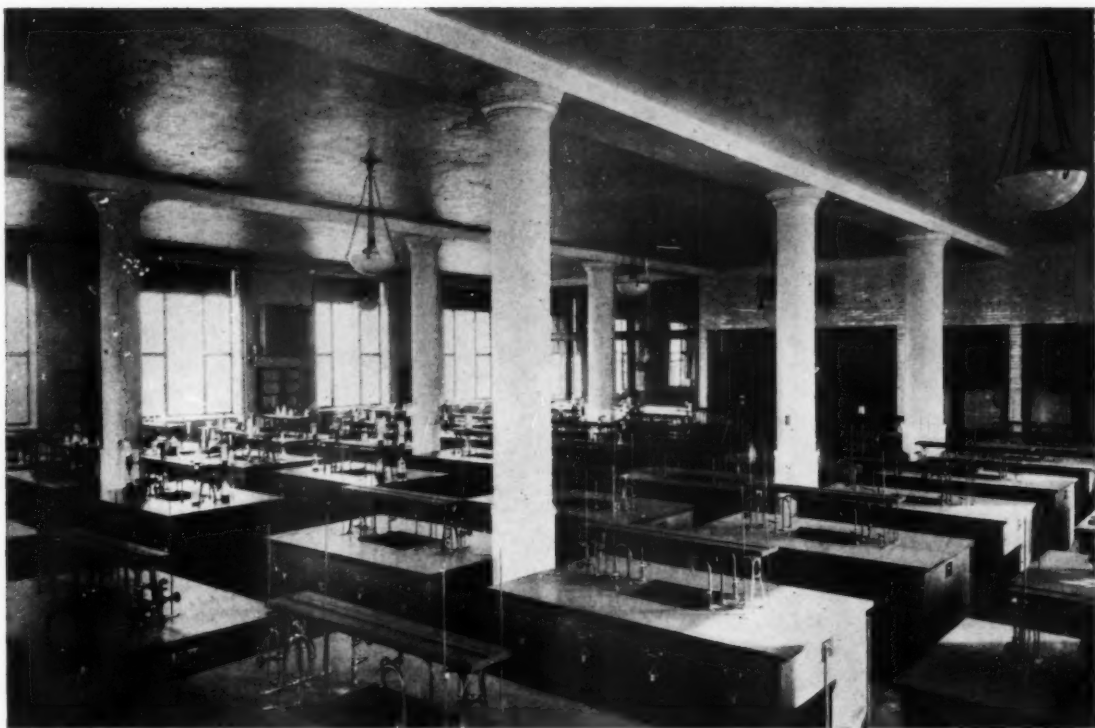
10 7448 (New Collection of Photographs) 126 33-19

Stage-George Robert White Hall

NSC 552



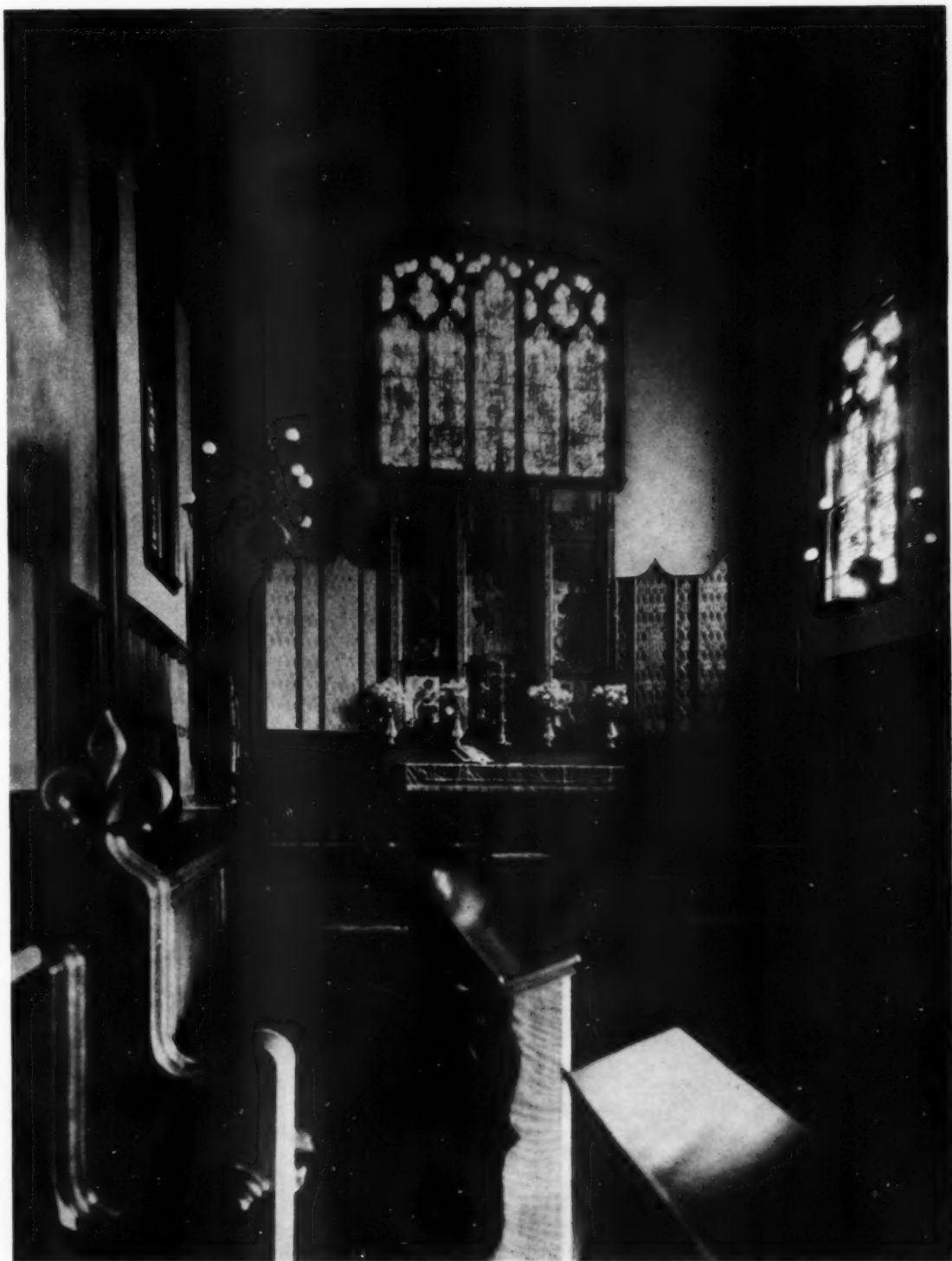
MASSACHUSETTS COLLEGE OF PHARMACY, BOSTON, MASS.
KILHAM, HOPKINS & GREELEY, ARCHITECTS



MASSACHUSETTS COLLEGE OF PHARMACY, BOSTON, MASS.

KILHAM, HOPKINS & GREELEY, ARCHITECTS

THE AMERICAN ARCHITECT
December 5, 1926 PLATE 301



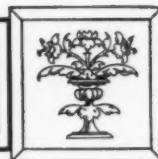
NEW TRIPTYCH, ST. JOHN'S CHURCH, BEVERLY FARMS, MASS.

CRAM & FERGUSON, ARCHITECTS

THE AMERICAN ARCHITECT
December 5, 1926 PLATE 302



EDITORIAL COMMENT



WE have received notice from the secretary of the Third Pan-American Congress of Architects, that the meetings will be held in Buenos Aires, from the 1st to the 10th of next July, both inclusive. Coincident with the meetings of the Congress there will be held the Third Pan-American Exposition of Architecture. Both the Congress and the Exposition will be held under the auspices of the Argentine government.

The United States was represented at the two preceding Congresses and we are gratified to learn that The American Institute of Architects, through its Committee on Foreign Relations, is already taking steps to secure an even larger and better representation on the part of the United States than previously.

The value of the work already accomplished by the Committee on Foreign Relations, of which Professor William Emerson is chairman, has been previously referred to in these columns.

It is logical to assume that in the preliminary work in securing for the United States a fitting representation at Buenos Aires, the Committee of the Institute will be particularly active. It is proper that this country should send to the Argentine an exhibition both large and dignified. If the architects in this country will lend their best co-operation, the desired result will be assured.

IT was recently proposed in Paris to sandblast the exterior of Notre Dame Cathedral in order to restore the original whiteness of the limestone. The project aroused such a storm of criticism that the work was fortunately abandoned. Had this "cleaning" process been carried out, much of the artistic interest of this thirteenth century cathedral would unquestionably have been lost. The external appearance taken on by Notre Dame by reason of the action of the elements during centuries of time, would have been entirely undone. The familiar dinginess of this cathedral known and loved by people the world over, has by this fortunate action been preserved, and at the same time the structure itself has been saved for posterity in that garb in which it is best known and venerated.

With the lapse of years, stone acquires an enveloping coating, and the seasoning of the surface develops a protecting skin. Authorities are agreed that sandblasting, while "cleaning" the dirt from the surface, irreparably injures the seasoned protective surface of the stone itself. Through removal of this seasoned face or skin, the stone becomes more read-

ily susceptible to frost action, and injurious weathering, and it rapidly acquires a new coating of grime. In a short time, if the structure is to be maintained in its original whiteness, cleaning would again be necessary. Repeated cleanings by sandblast would, apparently, only result in the gradual destruction of the stone facing and all the subtle detail that is the artistic charm of the surface.

UNDER the heading "Talks to Students of Architecture" in a recent issue of *The Architects' Journal*, London, W. S. Purchon, A. R. I. B. A., of the Technical College, Cardiff, gives the practicing architect, as well as the student to whom his remarks are directly addressed, some good advice. The article was prompted by recent discussions that have appeared in the foreign architectural press on the general subject of the relationship of architecture and building. These discussions have been centered largely on the inattention given to construction details by designers. General opinion seemed to consider that, by emphasizing architecture as only building, conditions would readily be adjusted. Mr. Purchon insists that a mistaken impression prevails as to the distinction between architecture and building. He reasons that while architecture is of necessity something good, building is not necessarily so. His point appears to be well taken. As to student work, he claims that certain students perform quite creditably under the name of design, but when asked to do building construction, they produce strange crudities. He deems it wiser to suggest, not that architecture is only building, but rather that building in its proper relation ought to be architecture. The distinction is cleverly drawn. We urge a more accurate understanding of Mr. Purchon's views. Later on in the article, Mr. Purchon adds that design is not only an arrangement of construction, but that building construction cannot be good without design. The tendency in this country to designate every product of the architect's conception as belonging to a certain period of style of architectural design, has resulted in a failure properly to consider construction as the heart of design. Certain architectural motives peculiar to the period or style in which it is claimed the building is patterned are applied without regard to the construction, in order to give a touch of the desired character. In fact, ornamentation or decoration is, unfortunately, in the majority of cases, considered quite apart from construction, and is incorrectly applied without meaning wherever space permits. Mr. Purchon concludes

his article with the statement that, when studying materials, the student should consider not only the normal textbook information, but also their colors and textures, and suitability for use in architectural work of varying classes. His final emphasis is placed on the necessity of the student,—and, it should be included, of the architect,—keeping in front of him the object of his studies—the designing and execution of buildings worthy to rank as architecture. The nature of the ornamentation depends on the selection of materials. Certain materials have more decorative value than others; certain products are more amenable to ornamentation than others. It is in the selection of materials of construction, their combination, and the various types of ornamentation that they express, that architecture becomes an art, and it is these facts that every student of architecture should have and every architect carefully and thoughtfully consider.

THE New York *Herald-Tribune*, in its published accounts of the dedication of the Liberty Memorial at Kansas City, omitted mention of the name of H. Van Buren Magonigle, the architect of the Memorial. A reader, in a letter to the editor, protested that it was neither fair nor just to fail to give the architect proper recognition. The New York *World*, finding itself equally guilty, makes belated reparation for the omission. It attempts to justify the submergence of the architect in news notes of the dedication of buildings. It is interesting to detect the mental attitude of the "newspaper man"—the journalistic attitude seems to be largely lacking in the modern newspaper—as expressed in the concluding paragraph of the *World's* editorial. It states:

If it seem strange that a man of such eminence should be so roundly neglected, all that can be said is that he suffers the usual fate of an architect. News, inevitably, is chiefly concerned with those on hand to have their pictures taken. The architect, being invisible, is left out merely because nobody thinks about him. In some ways it is unfortunate; but since an architect of merit rarely lacks for appreciation from those who are competent to judge his work, perhaps in the long run it makes little difference.

"The usual fate of an architect." Why usual? In any mention of an exhibition of pictures, where

"society" lends its presence and the politician attends to keep himself better before the public gaze, it is usual to mention the name of the artist-painter or sculptor. But, when throngs attend the dedication of a monumental building, which is in reality an important collection of the work of an artist-architect, why should the custom of modern newspaper making omit the name of the architect, and display in large type and with much detail of description the names of a lot of people who are only interested in the occasion as a means of publicity for themselves? "The usual fate of an architect." We thank the *World* for those words.

WE learn through a survey conducted by the Associated General Contractors of America that building operations during the Winter months promise to reach a volume unusual for that period of the year. Through these activities, not present in so great a volume in preceding seasons, the year's construction total, it is predicted, will reach a new high level. The result of the survey is based on the fact that a vast amount of building contracts for Winter execution has been awarded, and that the total of these contracts is six per cent greater than the total registered during a corresponding period last year.

With this evidence of the pronounced increase of Winter construction, we may feel sure that with the experience gained each year the volume of work carried forward during Winter months will serve to create a better condition as to labor and result in a readjustment of wages based on employment in certain trades of steady work the year around.

More than seven billion dollars already have been spent this year for construction in the United States. This volume sets another record for building construction and places the industry second in importance in this country, being only exceeded by agriculture. Attention may be called to the fact that a large proportion of this immense total is for buildings done to replace old buildings rather than in way of addition to existing accommodations.

The declining trend of rents for the country as a whole is cited as evidence that the more acute phase of the housing shortage of post war years has abated.

BISCAYNE BOULEVARD, MIAMI, FLORIDA, COMPETITION FOR FILLING STATION DESIGN

EXTRACT FROM REPORT OF THE JURY

THE Jury was very much pleased with the manner in which the gas station problem was approached. Many of the designs show much originality and study of the problem, which today is greatly in need of a solution. Streets throughout the entire country are littered by horrible examples of poorly designed or contractor-built filling stations, with no redeeming features except that of service to the motorist out of gas.

The first prize of \$750 was awarded to H. Roy Kelley, Los Angeles, California, for the best solution of the problem. For both practical consideration and attractiveness, this design was the best submitted. It is a good treatment of a corner city lot. It is possible for three lines of cars to get service at the same time and presents minimum interference for entrance and exit. The service lines are protected against bad weather by covered ways and altogether it is an outstanding presentation. The Jury feels that this design, properly detailed and executed, would prove a practical solution of the problem and that it is a design which would attract both business and the appreciation of the public.

The second prize of \$400 was awarded to Edgar Albright, New York, for an appropriate design for a city corner, where no assurance is had of what will be built on either side. The design is excellent in character nearly equalling, in the mind of the Jury, the one awarded first prize. Of all submitted, it makes the best use of the available land. It was also the leading design in the popular influence.

The third prize of \$250 was awarded to John Donald Tuttle, New York. This design is especially good for a residential section. It is of simple character and good proportions and has real charm. It would require, however, interesting landscape planting to make the most of the design. The plan is good but not carefully studied as to the practical requirements for oiling, storage of materials, etc. The design of the fountain is beautiful and if well detailed would make a very interesting feature and give a fine chance for the use of color.

The fourth prize of \$150 was awarded to William Charles Ullrich, Hollywood, California. It is better than the third prize in that practical requirements have been more carefully studied. The design is the most unusual submitted, showing originality in the use of arches. However, the design lacks charm and refinement which the other prize winners possess.

The Jury was much gratified with the variety of treatment shown in many of the remaining designs, which could not be considered for awards because of the fact that some of the designers neglected highly

important practical requirements, while others produced designs suitable only for minor streets or for roadside locations.

The Jury considers the competition, taken as a whole, a very valuable contribution toward the solution of the filling station problem, and believes that it should be highly successful in reference to the second purpose of the competition, namely, the stimulation of interest in the design of better structures.

DWIGHT JAMES BAUM ELMER C. JENSEN JAMES H. GILMAN	} Jurors
---	----------

PRIZE WINNERS

First prize, \$750—H. Roy Kelley, Los Angeles, Calif.

Second prize, \$400—Edgar Albright, New York City.

Third prize, \$250—John Donald Tuttle, New York City.

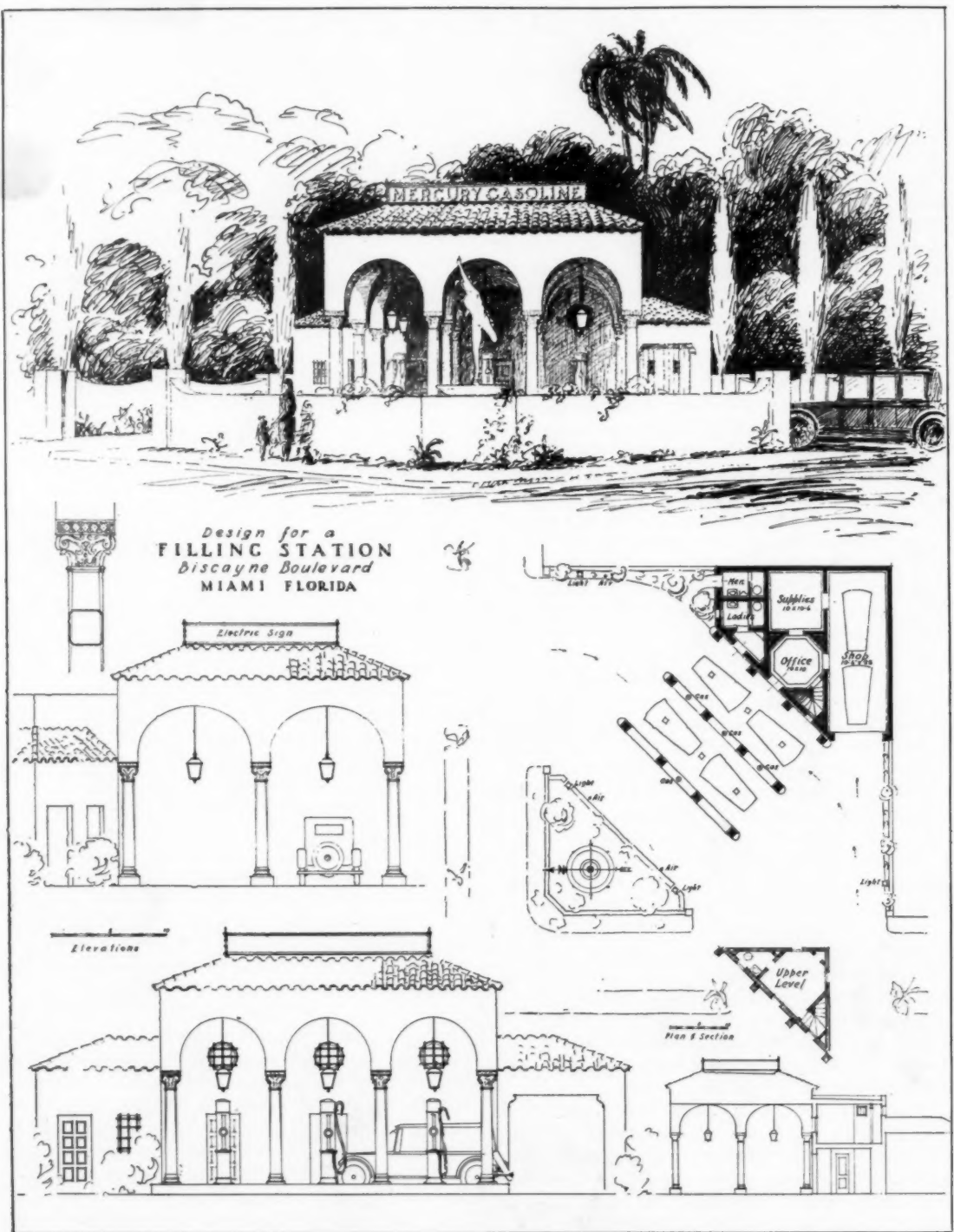
Fourth prize, \$150—Wm. Chas. Ullrich, Hollywood, Calif.

Mentions—Herbert Fritz, River Forest, Ill.; Pierre & Wright, Architects, L. F. Ayers—Associate, Indianapolis, Ind.; Francis Keally, New York City; Samb S. Washizuka, Ann Arbor, Mich.; Albert McNaughton, Atlantic City, N. J.; Francis J. Tarlowski, New York City.

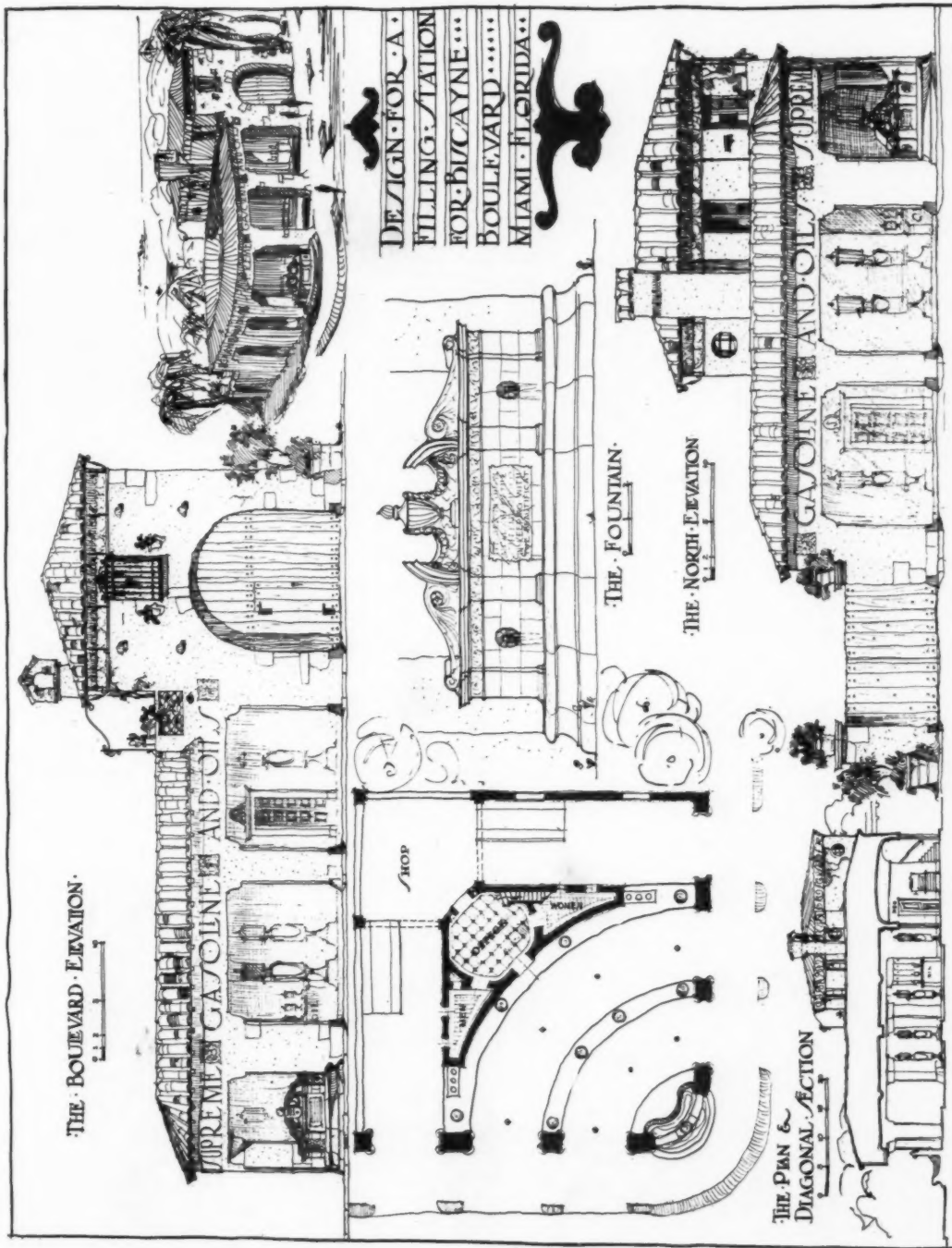
30

MECHANICALLY PRODUCED DECORATION

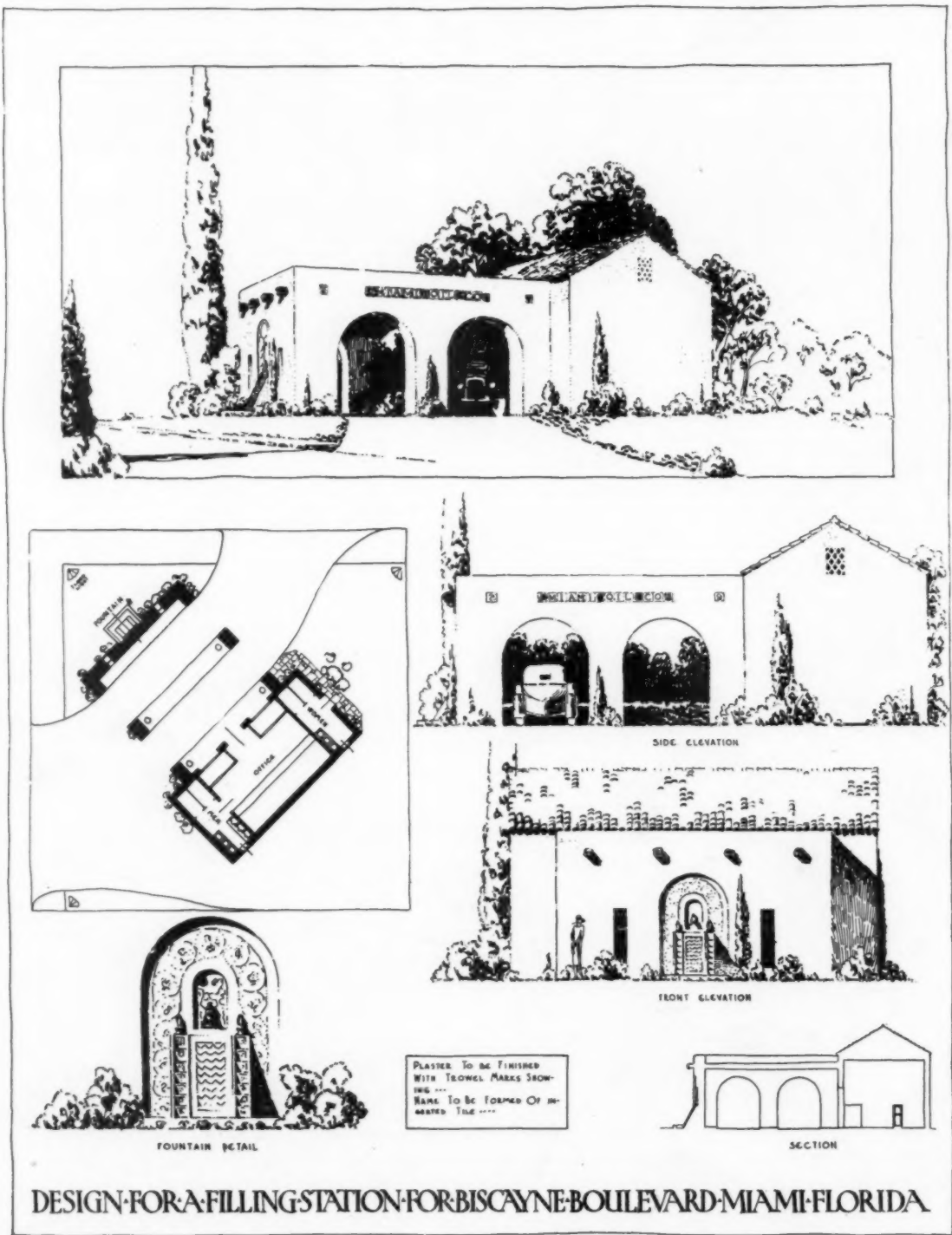
SOME notes in a contemporary on the new Devonshire House arising out of a visit made by the R.I.B.A. to the building, suggest some reflections on the nature of decoration, states *The Builder*, London. We are told that the decoration of the building excites "the hope that our architects will presently discover a way of using mechanically-produced details for the adequate decoration of buildings which are mechanical in construction," and there is added the following rather obscure comment: "thus avoiding the last reproach of reducing human craftsmanship to boredom." But are we not likely to be reduced to boredom by mechanically-produced decoration instead of avoiding it? We have a mechanically-produced railway bridge at Ludgate Hill, embellished with mechanically-produced decoration—and some of us have been reduced to more than boredom for years by it. How shall we avoid this reproach? It appears to us by giving up ornament until we recognize that it is something more than a mechanically-produced thing!



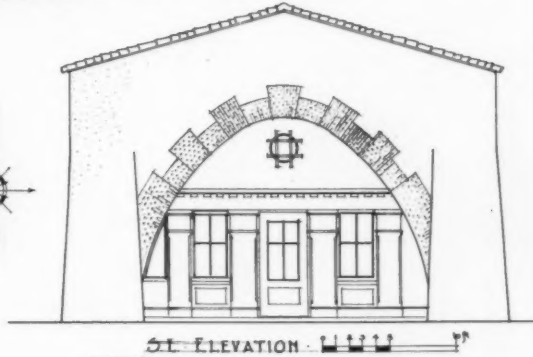
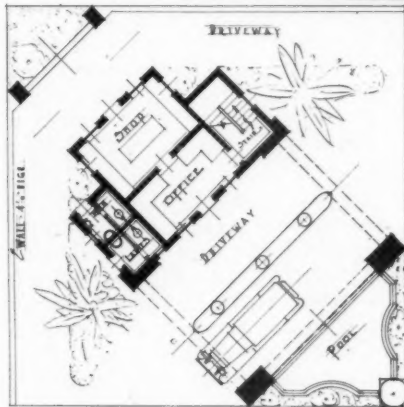
FIRST PRIZE—H. ROY KELLEY, LOS ANGELES, CALIF.
BISCAYNE BOULEVARD COMPETITION FOR FILLING STATION DESIGN



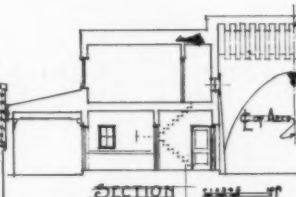
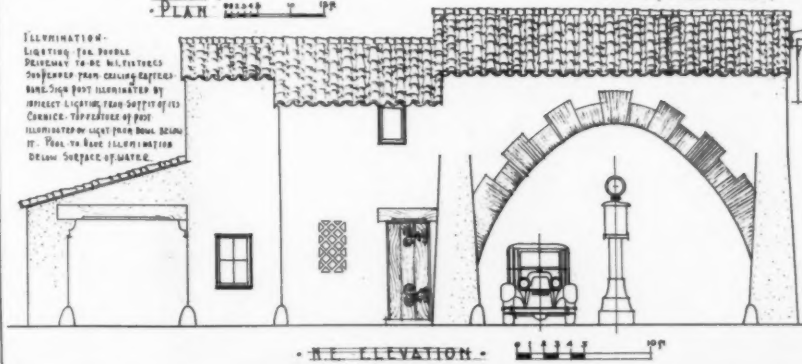
SECOND PRIZE—EDGAR ALBRIGHT, NEW YORK CITY
BISCAYNE BOULEVARD COMPETITION FOR FILLING STATION DESIGN



THIRD PRIZE—JOHN DONALD TUTTLE, NEW YORK CITY
BISCAYNE BOULEVARD COMPETITION FOR FILLING STATION DESIGN



ILLUMINATION—
LIGHTING FOR SERVICE
DRIVEWAY TO BE ILLUMINATED
SEPARATELY FROM BUILDING
BANK SIGN POST ILLUMINATED BY
IMPERIAL LIGHTING FROM SHED OF ITS
CORNER. TOP SURFACE OF POST
ILLUMINATED BY LIGHT FROM SHED BEHIND
IT. POOL TO HAVE ILLUMINATION
BELOW SURFACE OF WATER.



DESIGN FOR A FILLING STATION FOR BISCAYNE BOULEVARD, MIAMI, FLORIDA.

FOURTH PRIZE—WILLIAM CHARLES ULLRICH, HOLLYWOOD, CALIF.
BISCAYNE BOULEVARD COMPETITION FOR FILLING STATION DESIGN

FORT LINCOLN CEMETERY, WASHINGTON, D. C.

HORACE W. PEASLEE, *Architect*

THIS cemetery, designed and carried forward in all its details by Horace W. Peaslee, architect, is located on the Washington-Baltimore Boulevard, at the district line marking the boundaries of the District of Columbia and the state of Maryland. It is interesting not only in its architectural expression, as marking some new and unusual features of cemetery planning, but it occupies a site that is a notable event in the early history of its section.

In Revolutionary days, when the little town of Bladensburg was a thriving port, to which came square-rigged sailing vessels from Liverpool, there were two adjacent properties known as "Chillum Castle" and "Scotland," which had been granted by Lord Baltimore in 1719.

Toward the end of the War of 1812, parts of these lands along the Bladensburg Pike were the scene of the futile defense which the untrained militia under General Winder, and a few hundred seamen commanded by Captain Joshua Barney, offered against the steady approach of British soldiery.

Some fifty years later, the records tell of fortifications thrown up on this same historic ground, now called Fort Lincoln, and of how, at this time, it blocked an attack upon the city on July 11, 1865.

From the time of the original grants in 1719, the tract of land which we know today as Fort Lincoln has carried down in the same family. Today, all along its ridges may be seen the abandoned earthworks, and occasionally there is found some relic of the early engagement. Finally a time came when the family in whose hands Fort Lincoln had continued over so many generations found it impossible longer to hold it intact, and the question

arose as to how it could be developed in such a way as least to disturb, and most to feature, its marvelous scenic beauty. It was decided that this could only be saved by dedication of the ground for a cemetery; and with this decision reached, effort was made to insure the maximum success of the project.

Recognizing first of all that the really discordant note of the average cemetery is the disorderly display of commercial monuments, the first sweeping restriction of the cemetery was that no individual gravestones should be erected above the level of the turf. This excluded at the outset the great bulk of stonework, but at the same time insured a definite and uniform record, by the requirement that each grave should bear a granite slab giving the name and dates of birth and death, the essential record.

The second sweeping regulation was that a large percentage of the lots, those in the centers of the areas bounded by roads, should have no monument sites whatever—only two or three rows of lots along the roadways could have family monuments.

Finally, these monuments are not left for casual development, but each and every stone has to be submitted for detailed criticism by the supervising architect of the cemetery. The difficulties which attended this earlier supervision have gradually been overcome, the co-operation of the monument dealers has in the main been obtained, and the character of the monument being erected in the cemetery today is considerably above the average in any other cemetery. Attention is being focused upon the substitution of quality for cost, and regard is given to refinements of lettering in its carving and in spacing, and to the use of molded bases.



MEMORIAL EXEDRA, PROSPECT PARK, BROOKLYN, N. Y.

AUGUSTUS LUKEMAN, A. N. A., SCULPTOR



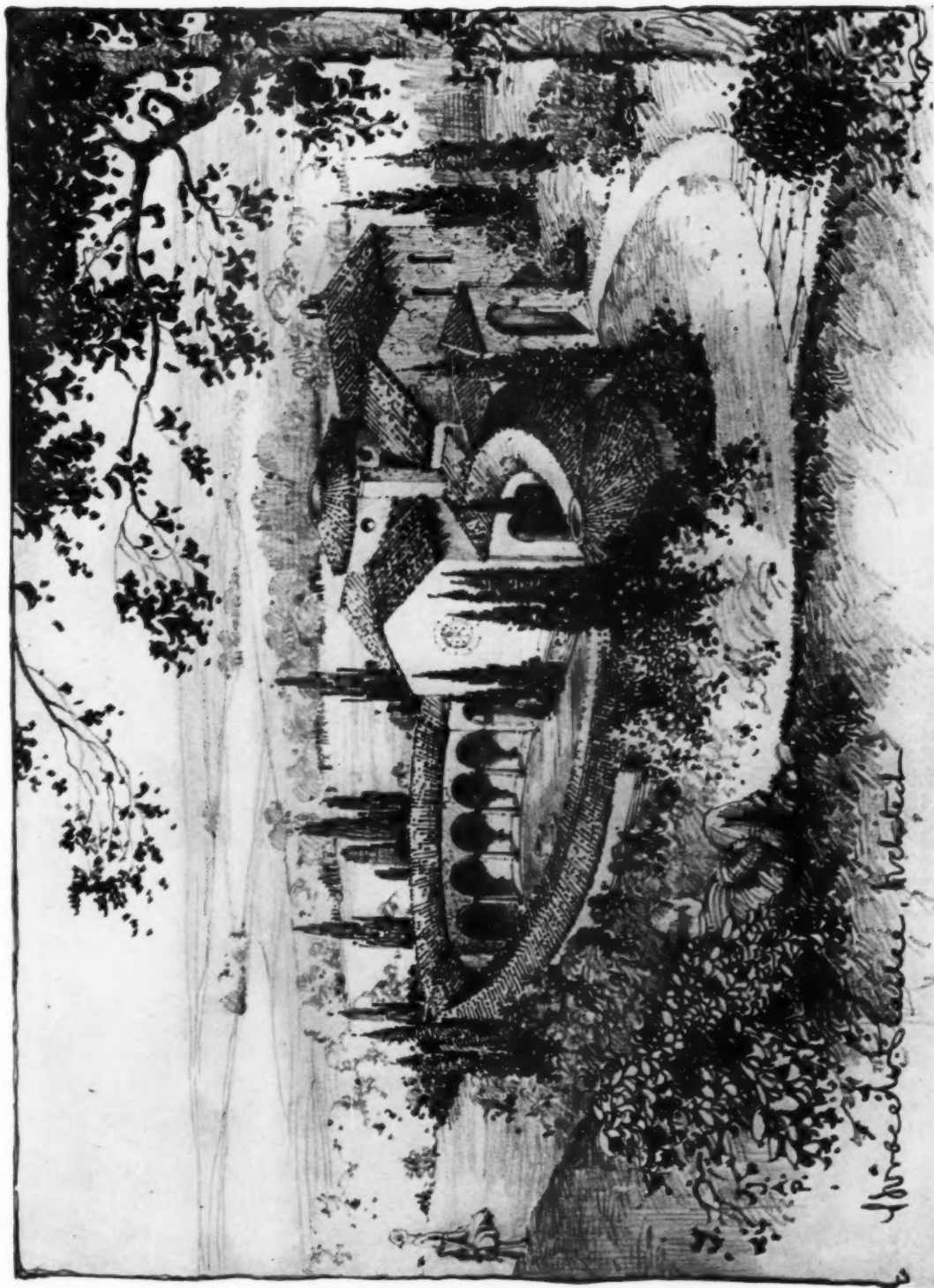
THE ENTRANCE LODGE
FORT LINCOLN CEMETERY, WASHINGTON, D. C.
HORACE W. PEASLEE, ARCHITECT

THE AMERICAN ARCHITECT
December 5, 1926 PLATE 303



DETAIL OF ENTRANCE LODGE
FORT LINCOLN CEMETERY, WASHINGTON, D. C.
HORACE W. PEASLEE, ARCHITECT

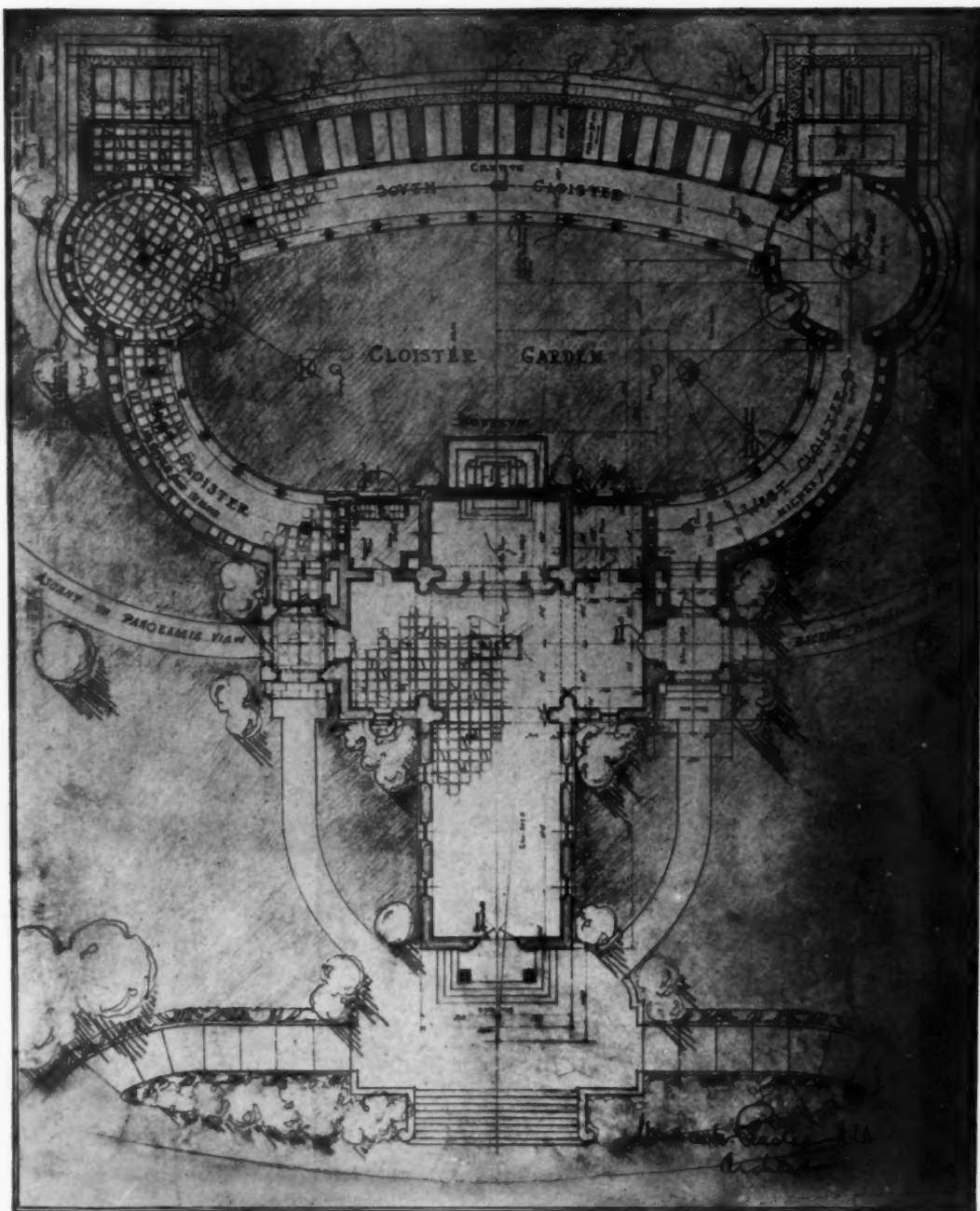
THE AMERICAN ARCHITECT
December 5, 1926 PLATE 304



MORTUARY CHAPEL AND CLOISTERS

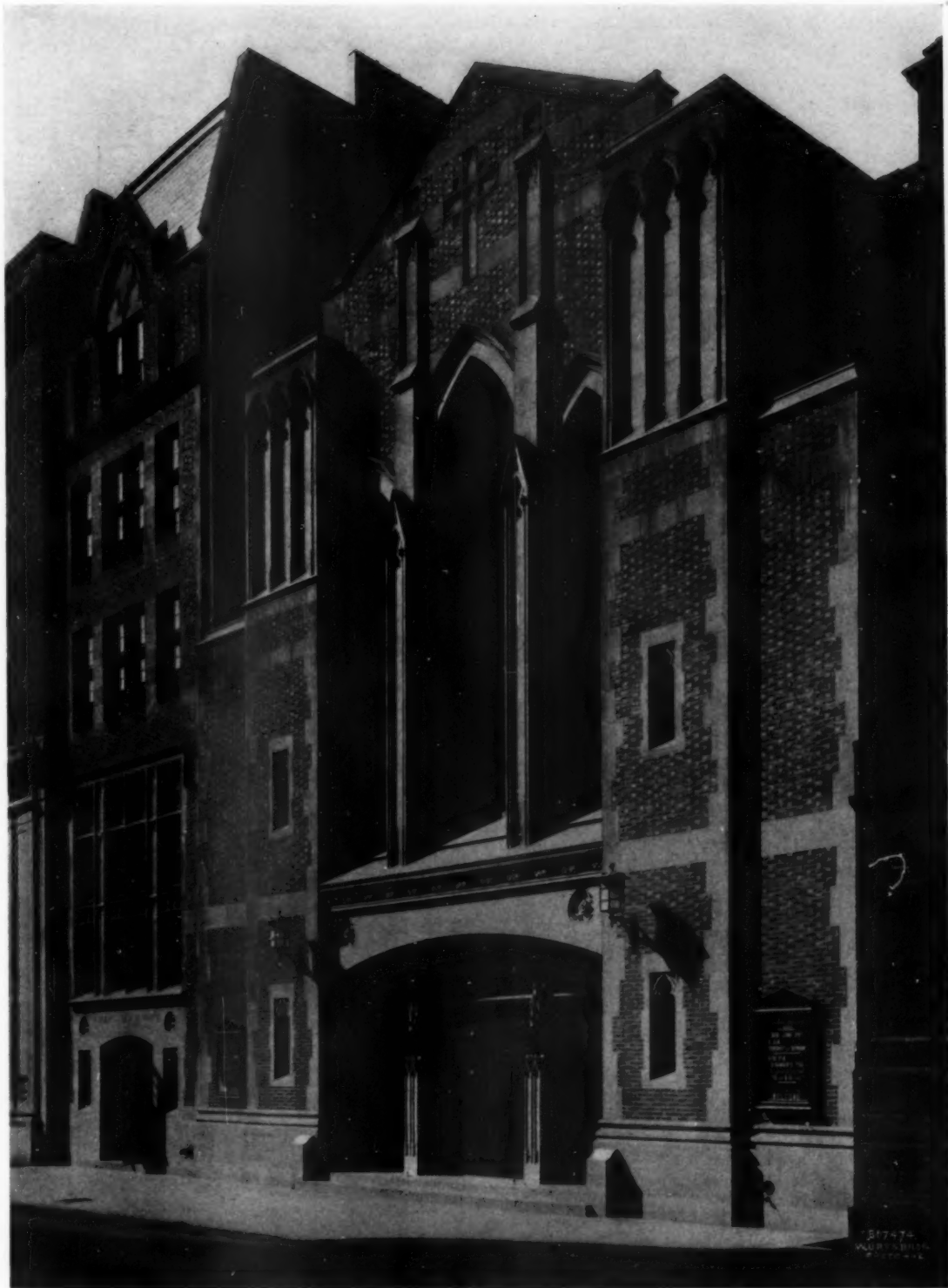
FORT LINCOLN CEMETERY, WASHINGTON, D. C.

REPRODUCED FROM ORIGINAL SKETCH BY HORACE W. PEASLEE, ARCHITECT
(See plan on back)



Copyright, 1926, by H. W. Peaslee

PLAN OF MORTUARY CHAPEL AND CLOISTERS
FORT LINCOLN CEMETERY, WASHINGTON, D. C.
HORACE W. PEASLEE, ARCHITECT

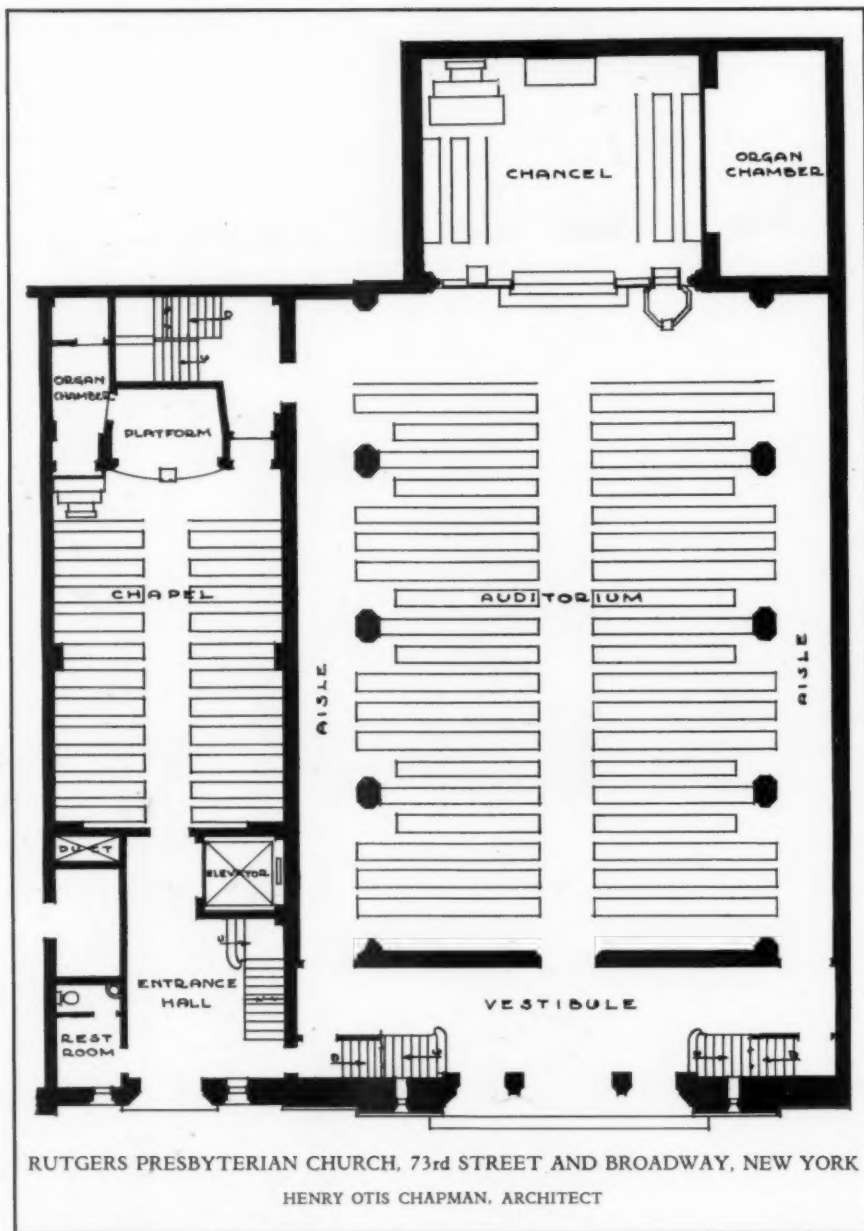


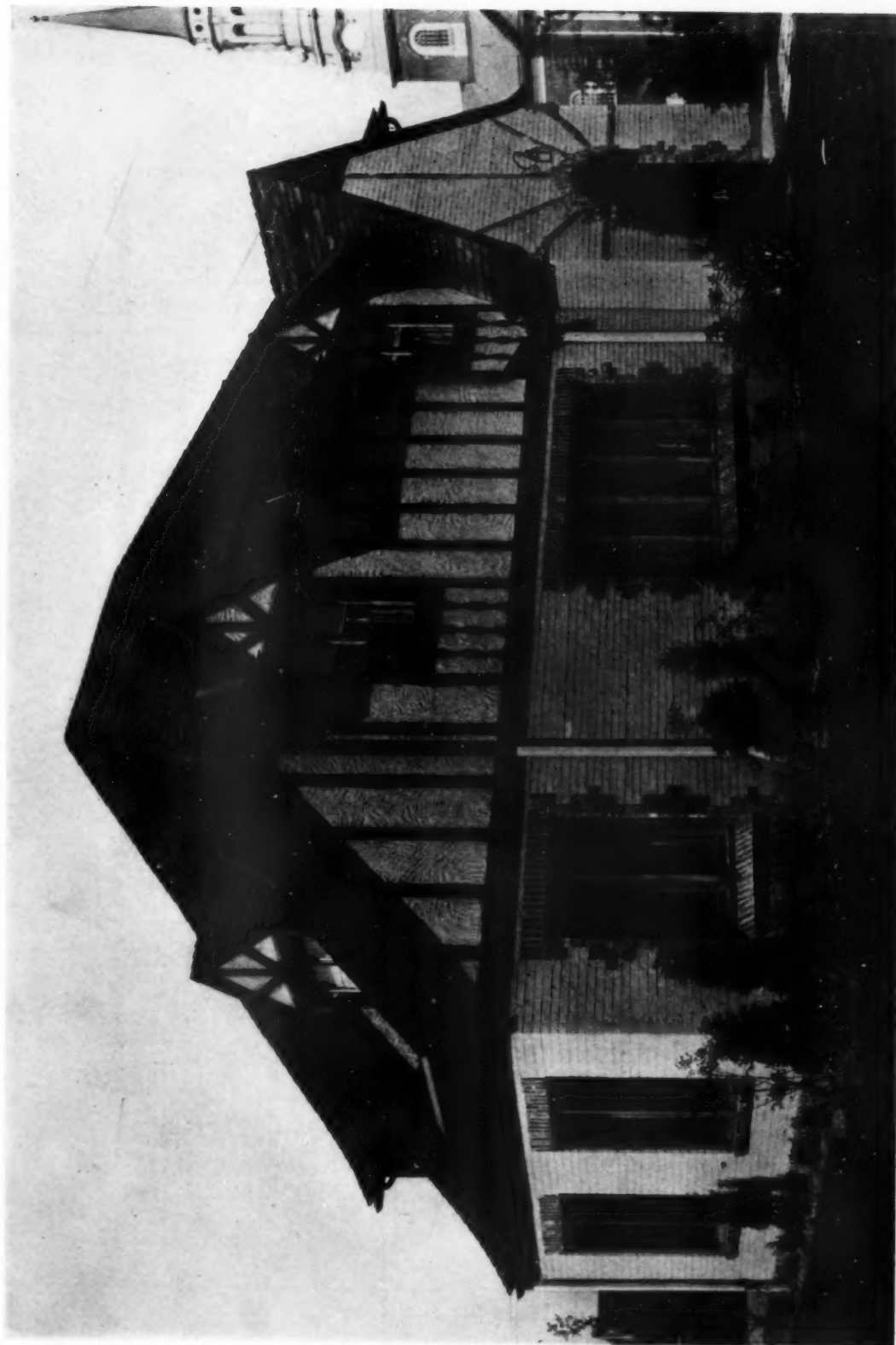
RUTGERS PRESBYTERIAN CHURCH, 73rd STREET AND BROADWAY, NEW YORK

HENRY OTIS CHAPMAN, ARCHITECT

(See plan on back)

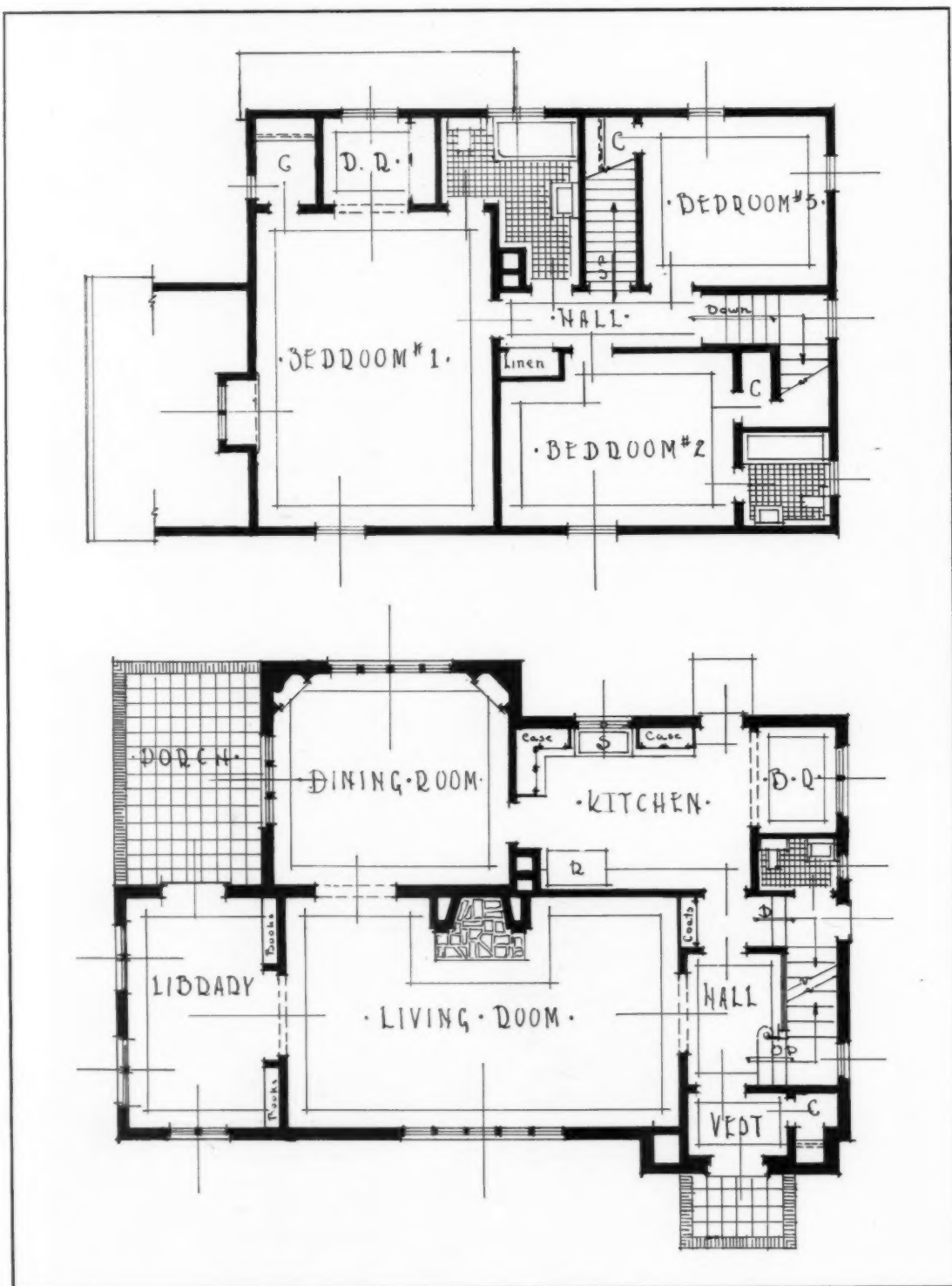
THE AMERICAN ARCHITECT
December 5, 1926 PLATE 306



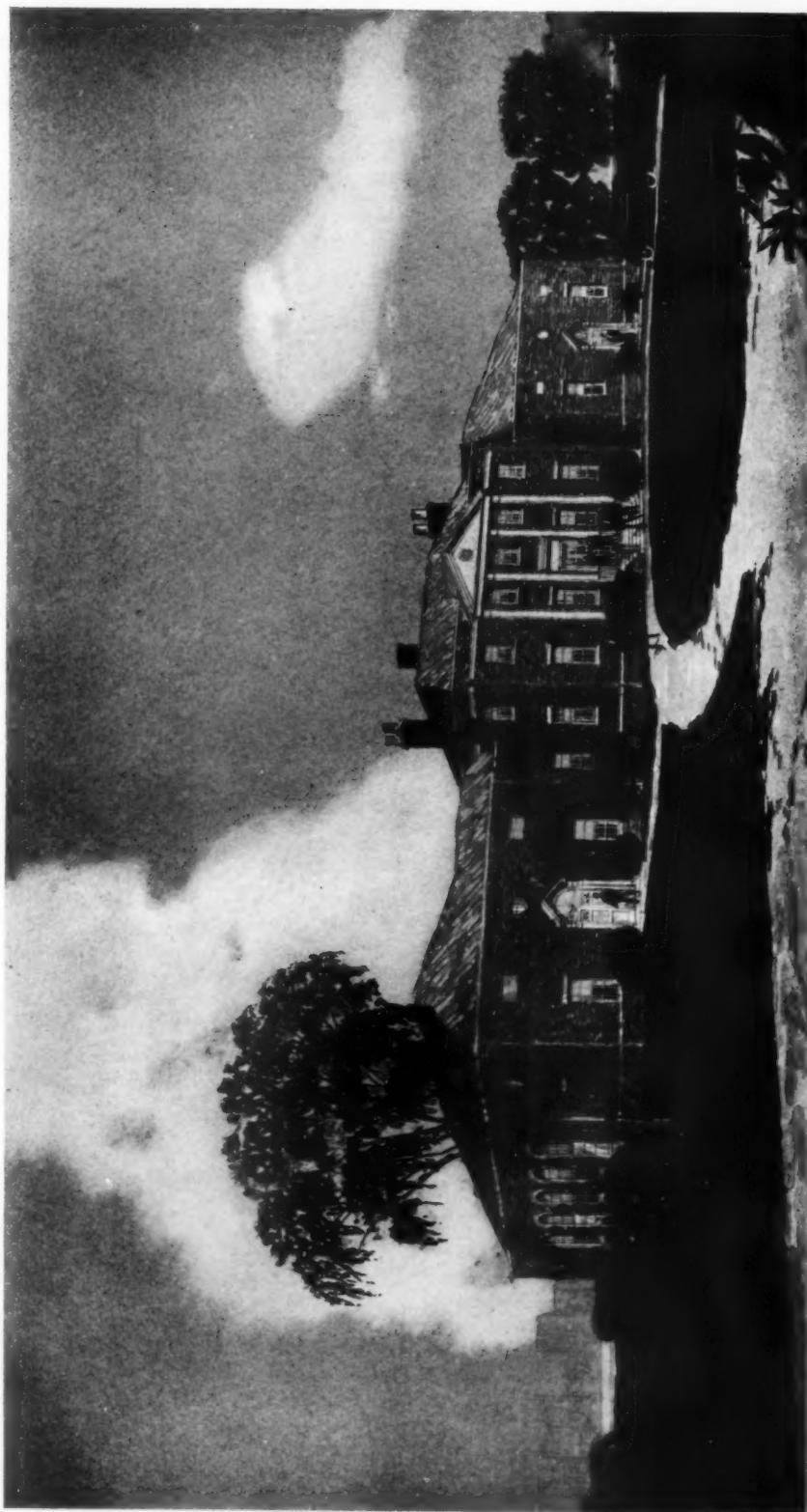


HOUSE AT CLEVELAND, OHIO—CHESTER N. LOWE, ARCHITECT
(See plans on back)

THE AMERICAN ARCHITECT
December 5, 1926 PLATE 307



HOUSE AT CLEVELAND, OHIO—CHESTER N. LOWE, ARCHITECT



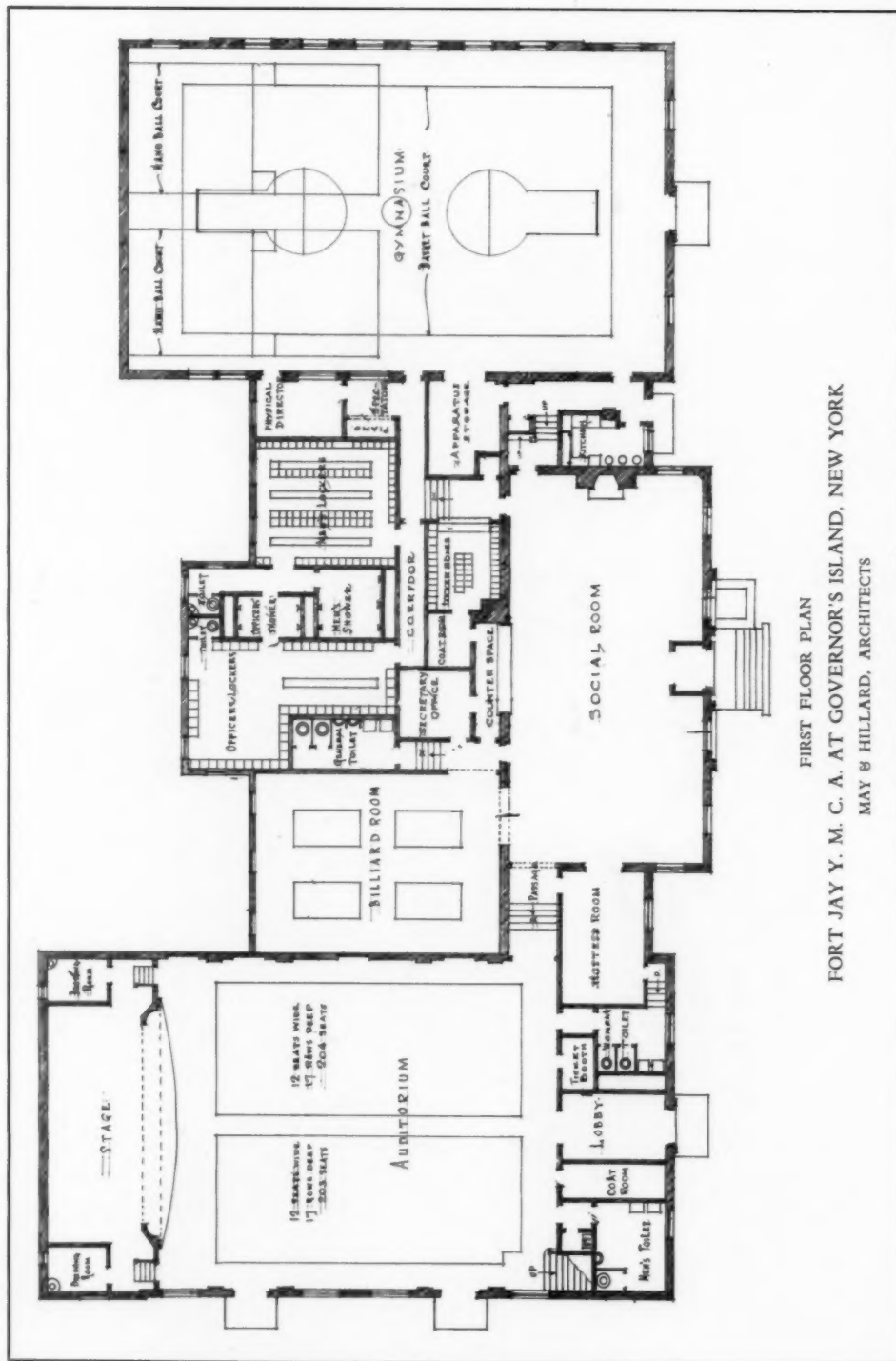
FORT JAY Y. M. C. A. AT GOVERNOR'S ISLAND, NEW YORK

MAY & HILLARD, ARCHITECTS

(See plan on back)

THE AMERICAN ARCHITECT

December 5, 1926 PLATE 308



FIRST FLOOR PLAN
 FORT JAY Y. M. C. A. AT GOVERNOR'S ISLAND, NEW YORK
 MAY & HILLARD, ARCHITECTS



ENGINEERING AND CONSTRUCTION



ROXY THEATRE BALCONY, NEW YORK

By ARTHUR T. NORTH, A. I. A.

BUILDINGS for assembly purposes have been developed, within a comparatively few years, in a notable manner. Auditoriums are now constructed with seating capacities of 5,000 and 6,000 persons, in marked contrast to those old-time theatres and opera houses which had seating capacities of 1,200 to 2,500 persons.

The fireproof theatre and the elimination of columns have made possible increased seating capacities of theatres. With the increase in the seating capacities of the balconies and the elimination of visible supporting columns, a complex problem confronted the structural engineer and architect. These problems have, however, been solved successfully and the limitations of balcony construction have not by any means been reached. It is becoming quite common, in the larger theatres, to find balconies which have a seating capacity in excess of the total seating capacities of the best theatres constructed even twelve years ago.

A striking example of this progress in theatre construction is the Roxy Theatre, New York City. The seating capacity of this theatre is about 6,000 persons, divided approximately as follows:

Lower floor	2850 seats
Mezzanine	1034 "
Balcony	2110 "
Orchestra pit	110 "

Total 6104 seats

It will be seen that the balcony contains $34\frac{1}{2}$ per cent of the total seating capacity. This balcony alone can seat the entire population of hundreds of towns and villages.

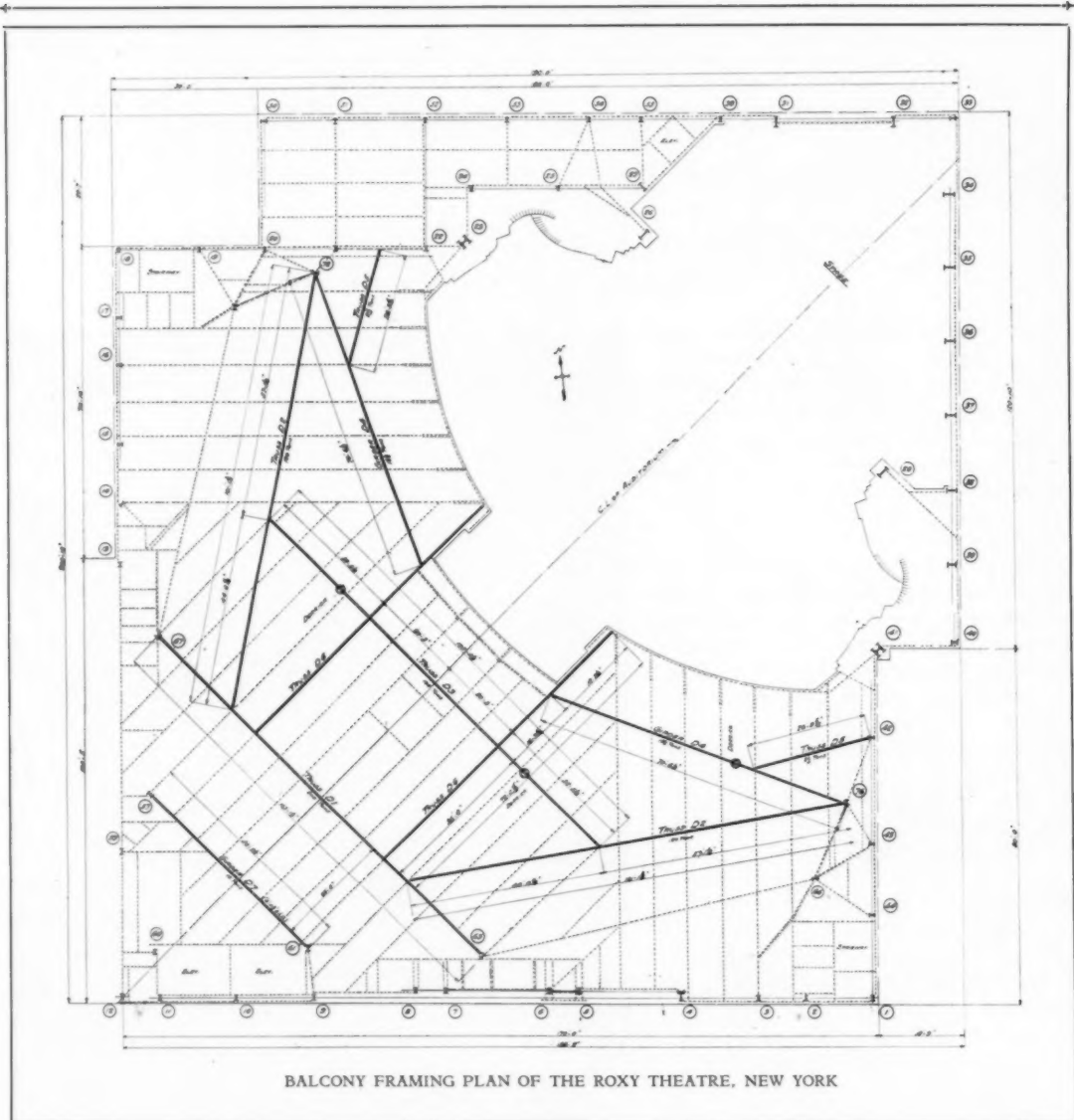
The shape of the auditorium has been changed to make possible the large areas needed in these balconies. In the motion picture theatre it is, of course, essential that all of the seats be within the limits of clear vision and this requirement influences the plan and dimensions. One of the essential requirements in the design of this theatre was the fact that there were to be no columns within the seating area of the theatre that would obstruct the view.



THE LARGE GUSSET PLATE IN TRUSS D1 THAT CONNECTS ITS UPPER AND LOWER PORTIONS

In the Roxy Theatre, the proscenium is placed in one corner of an approximately square auditorium. This arrangement permits of an unusually long range of balcony seats. The entire balcony, tunnel floor and mezzanine floor are supported on four columns which are concealed in the enclosing walls. An interesting feature of the design is the fact that both the tunnel floor and mezzanine floor are hung from the balcony framing by means of six steel hangers.

The two columns which support the rear of the balcony are 103'0" apart. The two columns which support the front of the balcony are about 169'0"



BALCONY FRAMING PLAN OF THE ROXY THEATRE, NEW YORK

apart and the line connecting them is the chord of an arc of about 190'0" which is the length of the longest row of balcony seats.

The floor system of the balcony is supported on ten principal members, made up of trusses and girders. Truss D1 and trusses D2 are the principal elements of the system and with girders D4, they are directly column supported, in whole or in part. The remaining seven members of the system are practically supported by the three members mentioned.

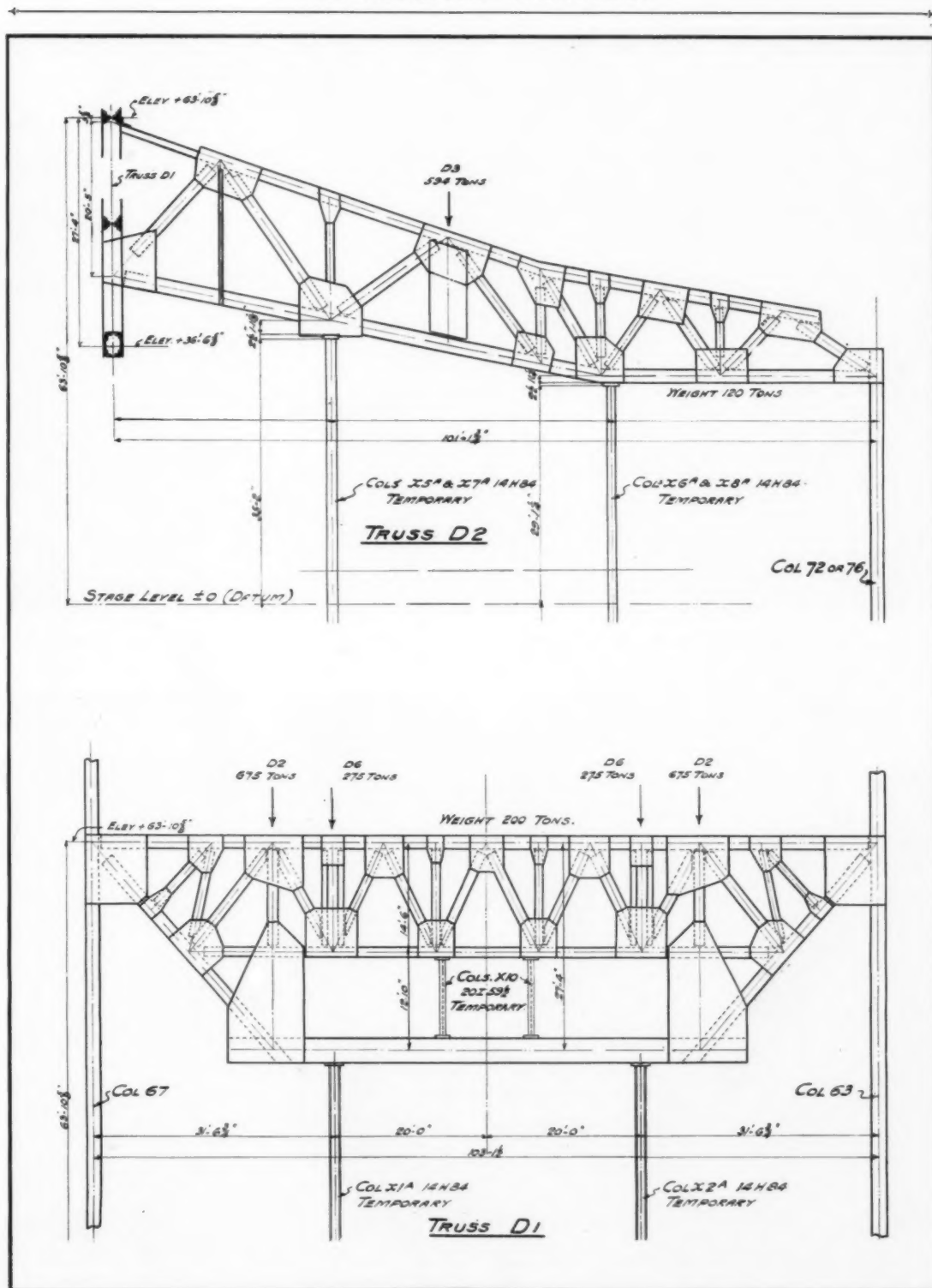
Truss D1 may be called the principal member of the supporting balcony system. It is 103'0" long between centers of the supporting columns 63 and 67. Its height is about 30'0" and it weighs 200 tons, being the largest truss that has ever been installed in a structure of this kind.

Truss D1 is an unusual truss and presented some

difficult problems. The truss extends through two stories. A passageway 47'0" long and 10'0" high had to be maintained through the lower half of the truss at the tunnel floor level. Because of this passageway the web members of the truss could not be continued to the bottom chord. This necessitated inserting a middle chord.

In an ordinary truss of symmetrical loadings the stresses would have been easily determined, but due to the fact that in a structure of this kind the truss had to be designed for unsymmetrical live loads, many unusual problems in design were confronted.

The detailing and preparation of the shop drawings presented an equally complicated problem. The main gusset plates are 12'0" x 18'0" in size. Over five thousand field rivets had to be driven in this truss alone.





THE BALCONY CANTILEVERED BEAMS PASS THROUGH THE WEB OF GIRDER D4. STEEL ROOF FRAMING IS SEEN IN COURSE OF ERECTION ABOVE THE BALCONY



GENERAL VIEW OF BALCONY FRAMING. TRUSS D1 IN UPPER BACKGROUND, WITH TRUSS D3 BELOW AND IN FRONT. CANTILEVER TRUSSES D5 PASS THROUGH TRUSS D3. TRUSS D2 AT RIGHT. GIRDER D4 IN PLACE AT LEFT

In erecting this truss, two temporary columns were set up on which the lower section of the truss was laid. On top of this lower chord two short temporary erection columns were set up on which, in turn, was laid the middle chord section of the truss. After being completely assembled, the entire load was taken by columns 63 and 67.

Trusses D2 are 100'0" long between centers of supports, consisting of truss D1 and columns 72 and 76. Truss D2 has an average height of about 15'0" and weighs 120 tons. This truss is irregular in shape in order to conform to the profile of the balcony section. About midway of its length is supported one end of truss D3. In the erection of these trusses, two temporary columns were used to support the lower chord until the truss was completely assembled.

Truss D3 is supported by trusses D2. It is about 105'0" long between centers of supports, about 16'0" high and weighs 106 tons. It is irregular in shape. In addition to supporting practically the entire load of trusses D6, it carries its portion of the floor system loads. The temporary erection columns were set up for each truss to support it until assembled and to take the load of the erection derricks, amounting to a maximum of 100 tons each. The position of these temporary columns was such that the loads from the derricks were transferred to them through the truss members without any special provision being made for them.

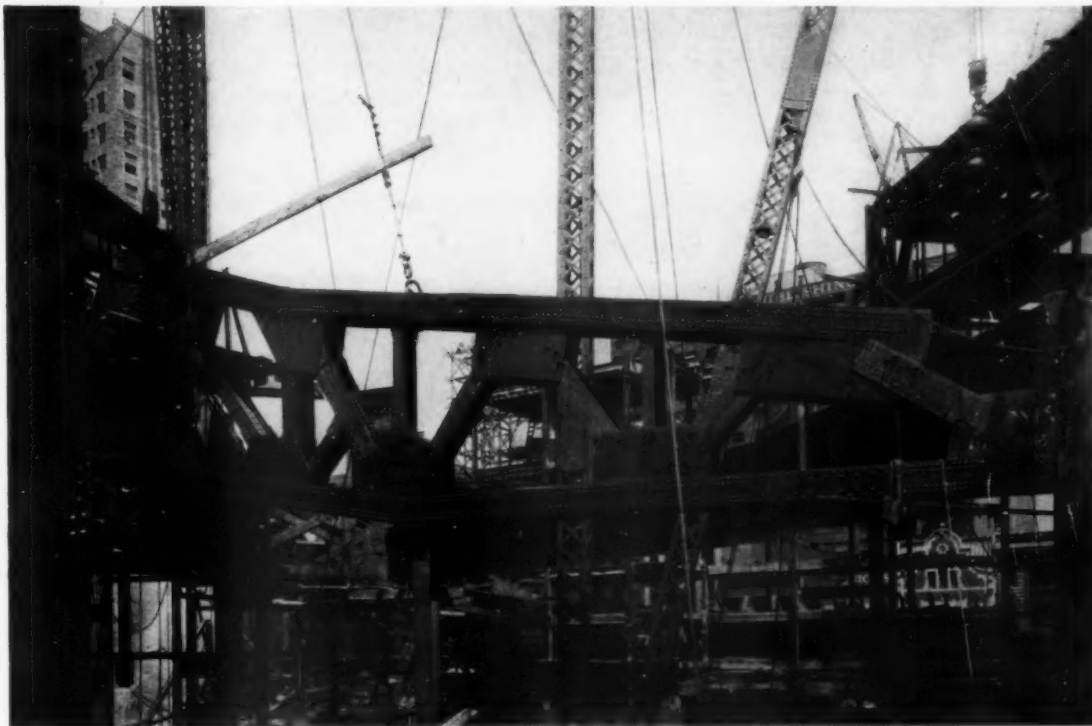
Girders D4 are supported by trusses D6 and columns 72 and 76. They are about 70'0" long between centers of supports, about 6'0" high and weigh 18½ tons each. These are plate girders. These girders are bent vertically with a difference of elevation of about 3'9". Girder D4-left had a temporary supporting column near its center, to take the load of a 100 ton erection derrick resting on its upper flange.

Trusses D6 are supported by trusses D1 and D3. Truss D6 is about 72'0" long and some 36'0" of its length is cantilevered from truss D3. The weight is 19½ tons. Midway in the cantilevered portion is imposed the load from girder D4. Truss D6 is a very interesting piece of construction. The difference in elevation of its two ends is about 38'0". It well illustrates the flexibility of steel construction and its ability to adjust itself to extraordinary requirements within restricted limits.

Trusses D5 are short utility members about 26'0" long and are supported by girders D4 and a member in the adjoining wall construction.

There are two main roof trusses which support seven intermediate roof trusses. One of these roof trusses is 156'9" long and weighs about 100 tons. These trusses had to be erected from derricks which were set on the balcony.

The Roxy Theatre was designed by Walter W. Ahlschlager, architect. The steel was designed and details were made under the direction of Otto F.



CLOSE-UP OF TRUSS D2. GIRDER D4 IS SEEN IMMEDIATELY BACK OF TRUSS D2

Sieder, chief engineer, Levering & Garrigues Company, who fabricated and erected the work.

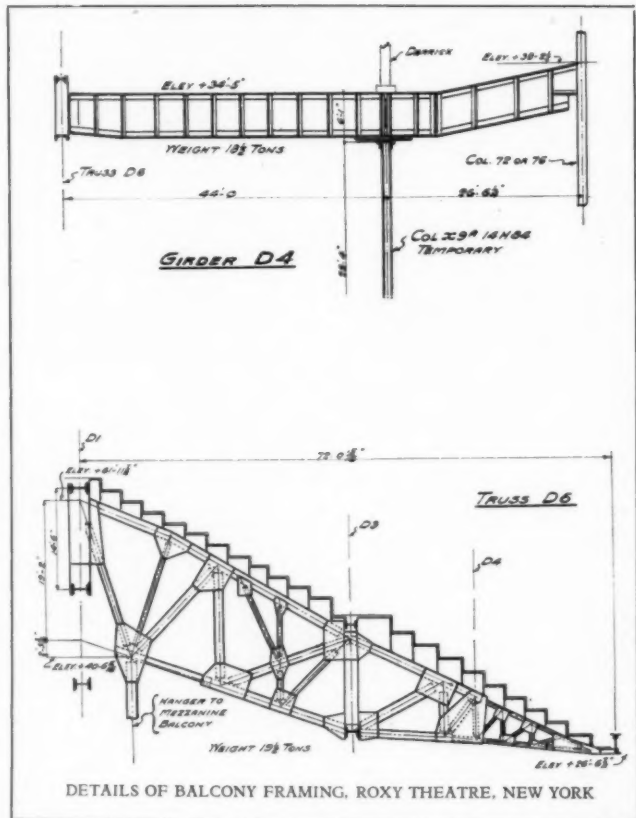
The element of time was one of the most important factors in the construction of the steelwork. The building had to be designed, shop drawings prepared, the steel fabricated and erected within a period of seven months.

Many revisions had to be made in the original design of the framing required to support the balcony and many difficult problems were encountered in both the design and erection. Despite these revisions and difficulties the erection of the steelwork was completed on time.

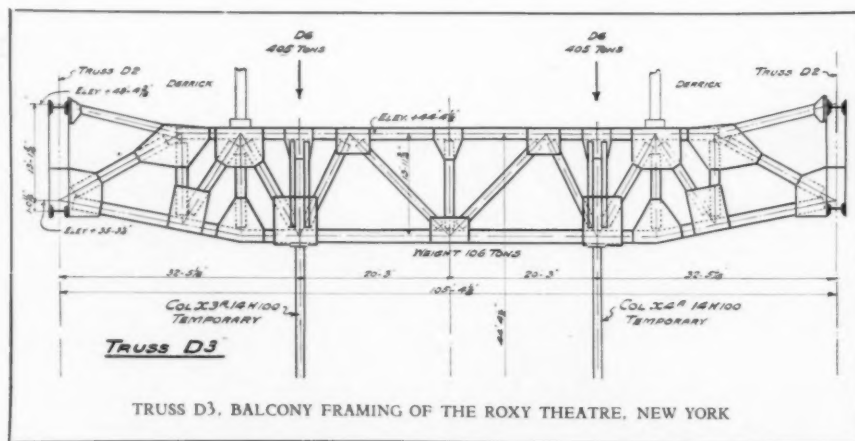
The framing of the Roxy Theatre balcony is an outstanding example of the progress that has been made in the development and use of steel and the resourcefulness of modern engineering practice in solving difficult problems.

Present generations can recall the older theatres where both the balcony and gallery were supported on a row of columns spaced from fourteen feet to twenty feet apart. These columns were ordinarily made of cast iron and supported wooden girders on which rested the cantilevered wood joists of the floor system. This system obstructed vision and resulted in a corresponding loss of seats. It is difficult to conceive of the building of a successful theatre of the type illustrated by the Roxy Theatre, limited by the structural design imposed some years

quirement of a spacious lobby to accommodate the overflow crowd awaiting admittance or those waiting for the "second performance." A second is the



DETAILS OF BALCONY FRAMING, ROXY THEATRE, NEW YORK



TRUSS D3, BALCONY FRAMING OF THE ROXY THEATRE, NEW YORK

ago. Theatre disasters have demonstrated the fire hazard involved in former types of construction, that modern practice has overcome.

Motion pictures have introduced at least two important factors in theatre design. One is the re-

careful study that must be given circulation in the auditorium to accommodate an almost constantly shifting audience. Obstructions must be reduced to a minimum, and aisles and passages must be sufficiently spacious to permit rapid progress and exit.

RIVETING vs. WELDING

THE following communication from A. F. Jensen, president of the Hanna Engineering Works, presents a matter of vital importance to the architectural and engineering profession in conjunction with the interest evidenced in recent developments of applying welding to the fabrication of structural steel for buildings. This letter is published to set forth to the profession another side of this important question.—The Editor.

30

Editor, THE AMERICAN ARCHITECT:

THE conservation of human life and limb is a solemn obligation not to be influenced by possible economies promised for any manufacturing process. Economy when proven can be made the decisive factor only if the assurance of safety by existing methods is equalled.

Claims of lower costs generally and superiority of product must be demonstrated by actual performance of plant and equipment wherein welding is used for joining plates, shapes, bars, etc., of the type constituting the nation's tonnage. The recent activities of so prominent a fabricator as the American Bridge Company should go a long way to make this possible insofar as structural fabrication is concerned, but cannot be construed as an acceptance by them of electric welding.

Machinery and methods used in riveting have practically eliminated the necessity for skilled workmen. Industry's greatest problem today is that of man-power and it is, therefore, but a logical development that those qualified by experience in the problems of the fabricating shop should consider the importance of the human element in welding as paramount. *What would be fatal in welding might still be safe when riveting.*

Engineers and fabricators know what a rivet will do and before accepting welding must know what a weld will do. Welding at present depends on the skill and conscientiousness of the individual welder. *Because of that human factor, no weld can be better than its welder. A welder may, under test, make a satisfactory weld, while in service he may be careless, with the result that welds are lacking in uniformity. "As this is a mental or psychological rather than a physical or mechanical problem its solution in a convincing way will be difficult."*

Undoubtedly a good weld can be made within limitations as a result of careful attention to a number of more or less intangible factors, some of which must be taken more or less for granted. *There is at present no competent accepted test available which will indicate with the same assurance which is possible in a riveted joint, whether a weld will be dependable in service.*

Data as to the results of the experiments con-

ducted by the Carnegie Institute of Technology is now available. The following, quoted from the August 5, 1926, issue of *Engineering News-Record*, is significant:

Incidentally, the riveted members included in the test program showed uniformly high strength and elastic properties, representing substantially full utilization of the material. This suggests that the efficiency margin, on which welding can work, is moderate. The new art must achieve almost perfection to gain an advantage.

So prominent an authority as J. H. Edwards, assistant chief engineer, American Bridge Company, had this to say before the annual meeting of the American Welding Society, April 21-23:

While statements made concerning the welding art have been probably true in part, observations about the related operations have shown much ignorance and have tended to discredit the whole. Statements to the effect that for welded joints all members of structure should be in compression, that welding increases the strength of the main material, and the odious comparisons of riveted and welded joints, are not taken seriously.

Fabricators from many years of experience have learned the virtues and weaknesses of rivets, and know how to use them so as to make economical and safe structures. What they are seeking concerning welding are the fundamental facts on which they may base their determinations of the strength. *When human life is in jeopardy, one must be cautious. He must know the foundation on which he builds and be reasonably sure of the results obtained.*

If the welding is done by machine, the mechanical control may possibly be made positive and uniform, but there exists in the minds of manufacturers much doubt about ability to obtain uniform results when the human element is such an important factor in fusion practice. The training and control of the individual welder, the one person on whom the integrity of the connection depends, is the element concerning which all doubt must be eliminated. *As this is mental or psychological rather than a physical or mechanical problem, its solution in a convincing way will be most difficult.*

Mr. Edwards in a discussion before the Structural Division of the American Society of Civil Engineers, July 14, 1926, is quoted as follows in the August 12, 1926, issue of *Engineering News-Record*:

Welding in the field, considering the demands as to time of completion to fit in with other trades, the training and experience of field erectors, and the cost, would lead to slower adaptation. Because of the liability of indifferent execution under unhandy conditions, as in the case of the hand method of driving rivets, field welding demands more cautious study.

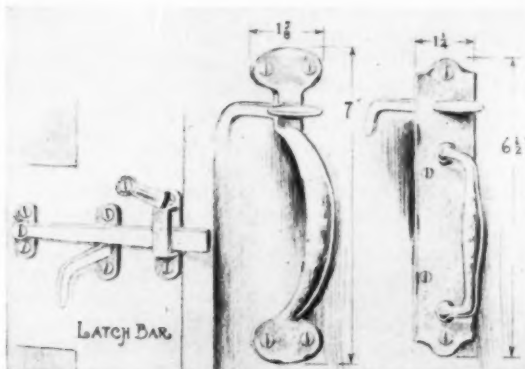
There is a field of usefulness for both welding and riveting. The dependability of riveting and its contribution to engineering progress are reflected in every direction. Riveting is fundamentally sound, has played a very important part in the development of our most important industries and will only be supplanted by methods more economical, less dependent on skilled labor and assuring equal safety.

(Signed) A. F. JENSEN,

President, Hanna Engineering Works.

EARLY ENGLISH AND COLONIAL HARDWARE

IT is of interest to note that large manufacturers of hardware have recognized and are meeting the demand for hardware in harmony with the architecture of modern residences, the design of which is based upon early English and Colonial precedent. Architects are often obliged to use hardware patterns other than those desired, owing to the difficulty or costliness of obtaining hand wrought hardware of good design, to suit these types of houses.



TYPICAL ILLUSTRATION FROM "EARLY ENGLISH AND COLONIAL HARDWARE"

P. & F. Corbin have recently issued an attractive catalog of hardware based upon authentic designs of the early English and Colonial periods as well as original adaptations of these periods. It is stated in the catalog that the metal used will not rust and that at the same time the tool marks, crudities, and color of the original hand forged prototypes have been retained. The catalog includes such items as door handles, knobs, escutcheons, key plates, thumb latches, locks, hinges, door knockers, bolts and shutter fittings. The various designs are shown by means of drawings with overall dimensions and in some cases with detailed dimensions. Architects will find this catalog and the type of hardware interesting, especially if they have occasion to design houses and other buildings in the spirit of the early English or Colonial periods.

HANDBOOK ON NEW JUNIOR BEAM

A BOOKLET on a new building construction product, the J & L Junior Beam, is issued by the Jones & Laughlin Steel Corporation to furnish architects and engineers with working tables and other data in the application of the new Junior Beam. The booklet, which is called Bulletin No. 2, contains fifty-six pages and is a complete handbook on the new structural product, which is a light weight rolled steel beam.

The booklet contains a letter from Professor Milo S. Ketchum of the University of Illinois, reporting the results of tests of the new beam made by him. Other features are a complete description with illustrations showing manner of support, use for floor beams, roof purlins and rafters, suggested specifications, tables of spacings and safe loads and fabrication details.

It is understood that the Jones & Laughlin engineers are studying the possible application of this new structural product to the "all-steel" house problem.

BUILT-UP ROOFING REFERENCE SERIES

A SERIES of five booklets on built-up roofing of unusual practical value is published by The Barrett Company. Volume I covers the subject of flat roof specifications. Steep roof specifications are given in Volume II. The roof flashing system is fully described with text, illustrations and specifications in Volume III. The most recent booklet is Volume IV on the Roof Drainage System. A fifth volume will deal with dampproofing and waterproofing.

Since these booklets are based upon the result of experience and practice in the field, they are most informative and of unusual value to practicing architects. As the title implies, they are reference books for filing. The presentation is commendable and the drawings are clear and appear to cover both usual and unusual conditions. The publication of producers' literature following the nature of the built-up reference series, forms a valuable addition to any architect's practical library. This standard should be encouraged.

NEW METHOD OF FINISHING SLATE

THE painting of slate surfaces is not a new development, for many years ago slate was not infrequently painted in flat colors or mottled to imitate marble and used for mantels and fireplace facings.

The Structural Slate Company, of Pen Argyl, Pa., has developed a finish, based upon modern finishing methods and materials, that can be applied to slate to obtain any desired color or color combinations. This finish has neither added to nor detracted from the physical characteristics which make slate especially useful. It does have the effect of making slate usable where possibly the natural color of the slate would be undesirable.

The colors, advantages and suggested uses of Struco slate, as the product has been called, are fully described in a booklet recently issued by The Structural Slate Company. The booklet is illustrated in color and contains twelve pages and is of a proper size for filing.



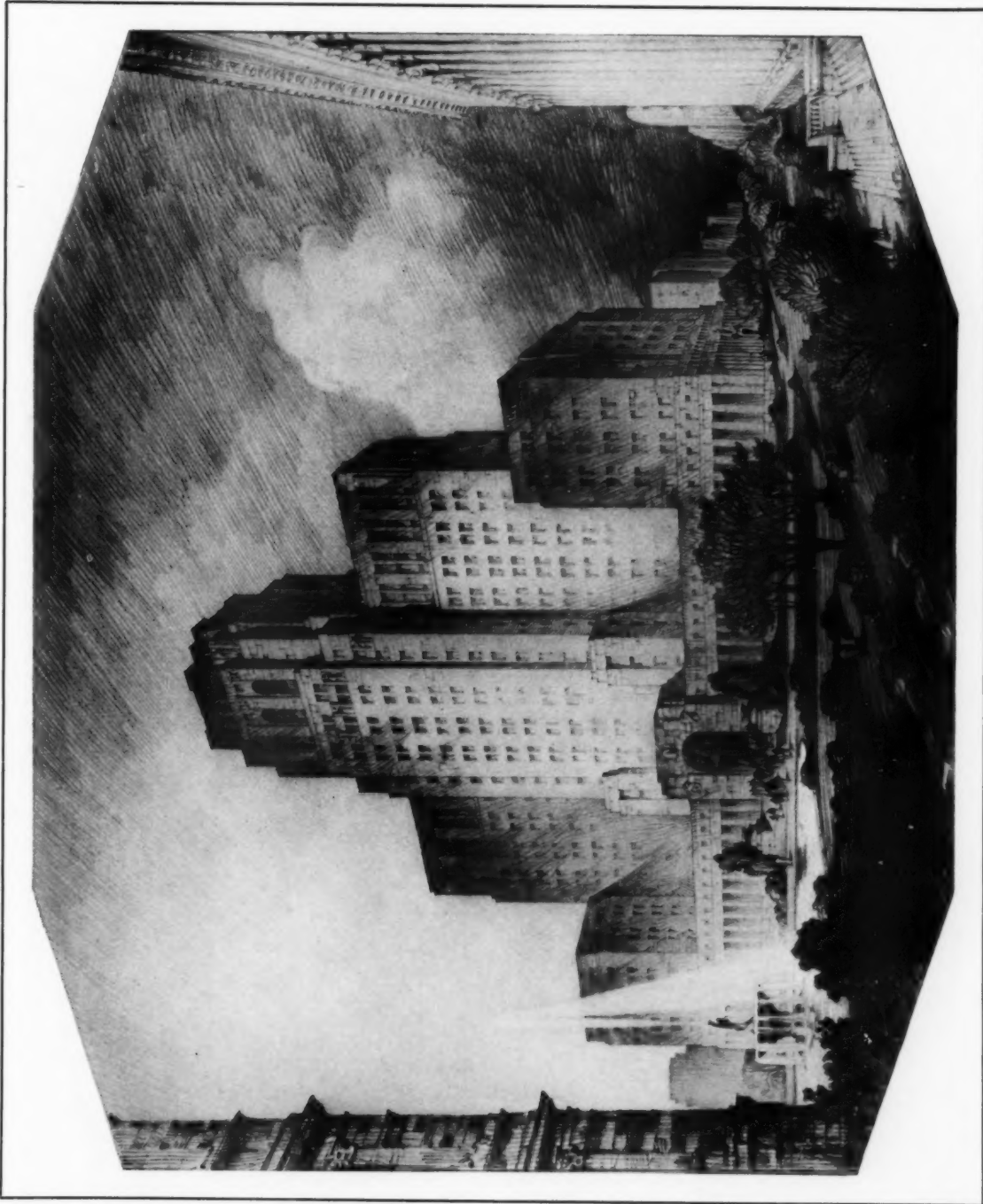
PANHELLENIC HOUSE, 49TH STREET AND FIRST AVENUE, NEW YORK
JOHN MEAD HOWELLS, ARCHITECT



PROPOSED BUILDING FOR GENERAL MOTORS COMPANY, NEW YORK

SHREVE & LAMB, ARCHITECTS

(From the original drawing by Chester B. Price)



PROPOSED NEW YORK STATE OFFICE BUILDING, ALBANY, N. Y.

SULLIVAN W. JONES, STATE ARCHITECT



PROPOSED CLUB HOUSE, NEW YORK ATHLETIC CLUB, NEW YORK
YORK & SAWYER, ARCHITECTS



A. D. 1697—BOSTON, MASS.



A. D. 1678—BOSTON, MASS.



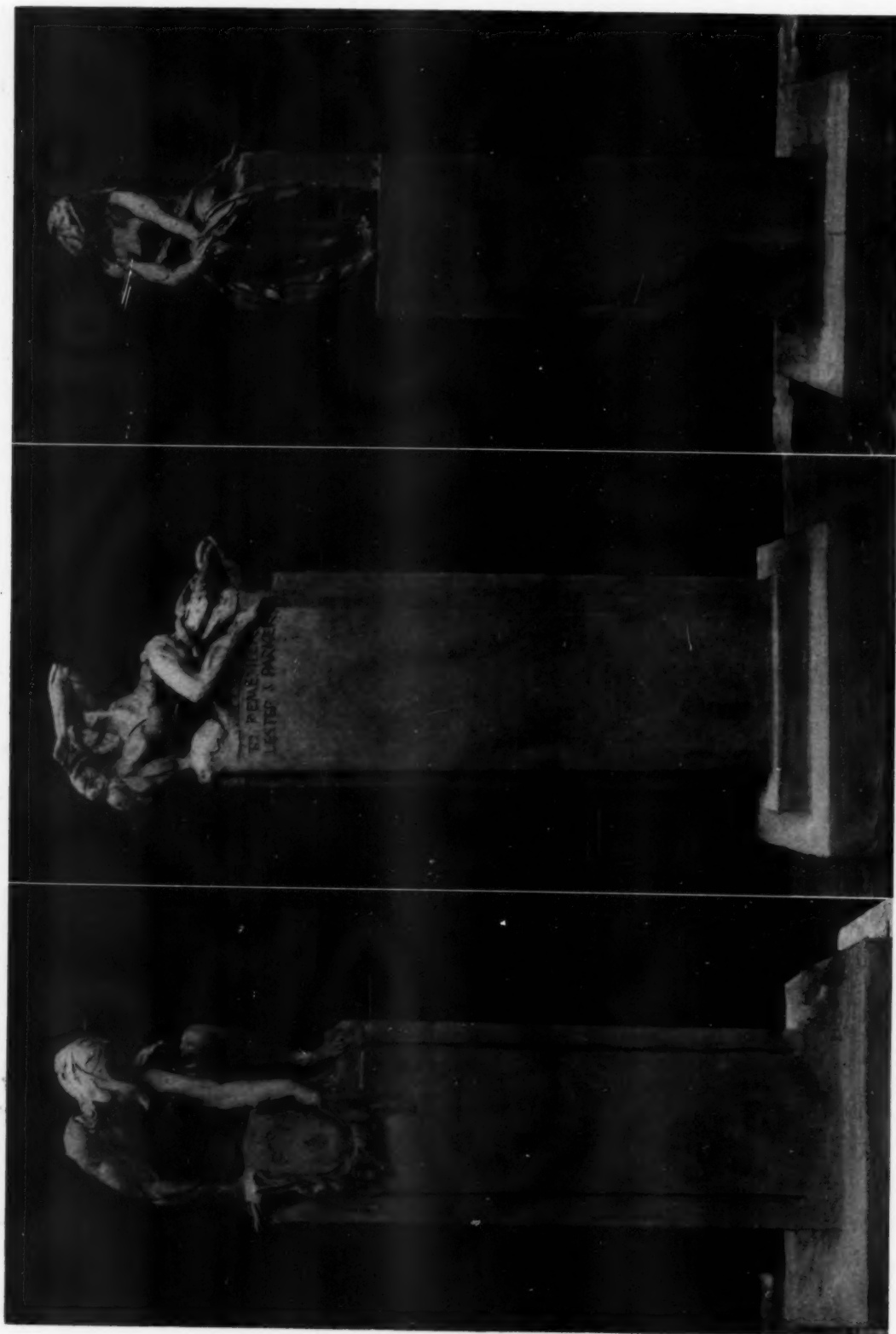
A. D. 1699—BOSTON, MASS.



A. D. 1690—BOSTON, MASS.

A SERIES OF OLD NEW ENGLAND TOMBSTONES

NOTE THE REPRESENTATION OF DEATH SNUFFING THE CANDLE IN UPPER RIGHT HAND CORNER. THE STONE SHOWN IN LOWER RIGHT HAND CORNER IS THAT OF MARY GOOSE, SAID TO BE THE ORIGINAL "MOTHER GOOSE"



MODELS OF SUGGESTIVE DESIGNS FOR TOMBSTONES, BY A. STIRLING CALDER, SCULPTOR

INTERIOR ARCHITECTURE

ANNUAL EXHIBITION OF THE ART-IN-TRADES CLUB

THE fifth annual exhibition of the Art-in-Trades Club of New York was held at the Waldorf-Astoria Hotel during the month of October. The exhibition consisted this year of twenty-three completely appointed interiors, including such decorations and furnishings as are generally employed in the embellishment of the modern home. These annual exhibitions of the club are designed to make public the great and important steps of advancement taken in the house furnishing arts, and the various exhibits are intended to show the principles of taste, of selection and of arrangement as they apply to the art of house decoration. While the general tendency of the interior decorator seems still to be toward the period room, the exhibition was enlivened by the presentation of new ideas in the field of decoration, among the most interesting of which was a modern

bedroom by Zimmermann Studios, Inc., and another room similarly entitled by W. & J. Sloane, both of New York. A twentieth century gallery, arranged under the direction of Wilson Hungate, was especially interesting as it so capably demonstrated the application of the principles of interior architectural design which THE AMERICAN ARCHITECT, through the articles of this department, is continually fostering. In the display of woodwork, furniture, lighting fixtures, textiles, stained glass, ornamental metalwork, etc., etc., art in the trades allied to interior decoration has reached a state of perfection which may or may not be due to the efforts that the club has furthered in this direction. The American craftsman is deserving of much of the applause that the fifth annual exhibition of the Art-in-Trades Club aroused.



TWENTIETH CENTURY GALLERY AT THE EXHIBITION OF THE ART-IN-TRADES CLUB.
FEATURING AMERICAN INDIAN MOTIVES
ARRANGED UNDER THE DIRECTION OF WILSON HUNGATE, DESIGNER



HISPANO-MORESQUE ROOM BY TIFFANY STUDIOS



INTERESTING IRONWORK BY OSCAR BACH



GREAT LIVING HALL ARRANGED UNDER DIRECTION OF PHILIP HISS, ARCHITECT



MODERN BEDROOM DESIGNED BY ZIMMERMANN STUDIOS, INC., FREE OF ANY PERIOD INFLUENCE



MODERN BEDROOM DESIGNED BY W. & J. SLOANE, SUGGESTIVE OF MODERN FRENCH IDEAS

FLOOR COVERING AS AN ELEMENT OF ARCHITECTURAL DESIGN

IN the form of an equation, the part that floor coverings play in a scheme of interior architecture would read like this:

A Rug : the Floor = a Wall Covering : the Wall

The floor, (which is outlined by the plan of the room),—the material of which it is constructed, and its ornamentation—is the determining factor in the size, shape and design of any carpets or rugs that may be applied to it. Ornamentation of the floor is embodied in the structure, sometimes in the form of a parquet floor, at others, a tile floor, or, again, a marble floor. For ornamentation in interior architectural design is actually the method of adding interest to the structure by means of embellishment or enrichment of the structural materials. Ornamentation of the floor should emphasize its shape, which is the plan of the room, and accentuate the purpose of the floor as the ground of the room. The decoration, on the other hand, lies in the application of floor coverings, as carpets and rugs. Decoration, like ornamentation, should serve to accentuate the purpose of the floor. The design of whatever ornamen-

tation or decoration is introduced in the structural floor or applied to it must take its place naturally beneath the feet. It is in the failure to either understand or appreciate the purpose of floor decoration that the design of modern floor coverings is so often unsuccessful.

The success that accompanies those floor coverings which affect tiles, marble, wood, etc., is due to the fact that the natural products from which such designs are adapted are logically associated with the floor and have since building first appeared in the world been considered as materials to walk upon. In a word, it might be described as the fitness of things, a principle on which successful architectural design is based.

To the average person, a design to embody architectural value must be drawn by T-square and triangle,—a geometric pattern, or, at least, a conventional one. This is a mistaken idea. It is true that architectural design is governed by certain principles in the application of which the mechanical is given first consideration. This is due to the close relation of structure to ornamentation. The introduction



AN EARLY AMERICAN DINING ROOM AT THE EXHIBITION OF THE ART-IN-TRADES CLUB
ARRANGED UNDER DIRECTION OF JOHN J. MORROW, DECORATOR
IN ITS RELATION TO THE FLOOR PLAN ON THE ONE HAND, AND TO THE PLACING OF THE FURNITURE ON THE OTHER.
THE RUG IN THIS ROOM KNOTS CLOSER THE ARCHITECTURAL AND DECORATIVE SCHEMES

of ornament, however, allows an opportunity for the freest kind of freehand design. The design, then, in which an underlying effect of structure is discernible, to which ornamentation has been applied in correct relation, may be said to be architectural in character. Such a design in a carpet or rug stays on the floor naturally and actually decorates the floor.

It is our opinion that vases of flowers and growing vines, drawn true to nature, do not belong in the design of a floor covering. They may take their places naturally on a wall, perhaps, for that is the way we see them in nature. What we see in a floor covering must be natural on the floor in order properly to serve its purpose. A heavy pile carpet of a plain color, especially in the neutral tints, is so generally specified because it is always in place on the floor. Its texture somewhat resembles the ground; it is thus naturally easy to walk on, and it never draws the eye out of its natural line of vision by any suggestion that there is something on the floor that does not belong there.

Now that the status of floor coverings in their relation to architectural design has been considered, let us study their bearing on furniture and other elements of the decorative scheme. The visual properties of carpets and rugs—textile products—have much more in common with certain elements of the

decorations, as fabrics for furniture coverings and draperies, for example, than with any structural materials that enter into the architectural design. Thus, the floor covering serves as a sort of intermediary between the architecture and the decorations. There is also a very definite relation between the rugs and the placing of the furniture. This is especially noticeable in a large room, as a hotel lobby, where the several groups of furniture which go to furnish the room are located on individual rugs.

But all these arguments only tend to prove that it is impossible to divorce decoration from architecture. One should follow another in natural sequence. The plan of the room, on which interior architectural design is based, and by which character and individuality are immediately given to the room, is also the basis of the scheme of decorations and furnishings. A rug is just as truly a component in the complete composition as is the mantel or the door surround. It serves to decorate the floor, thereby accentuating the importance of the floor without concealing its purpose. As such, its status is fully determined.

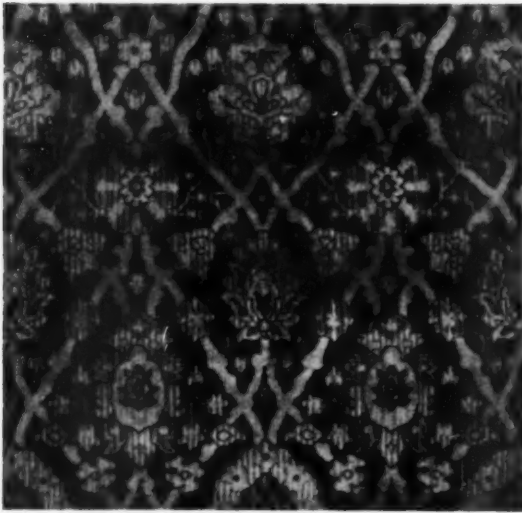
Acknowledgment is due to the following firms: Bigelow-Hartford Carpet Co.; Hardwick & Magee; Mohawk Carpet Mills, Inc.; Persian Rug Manufactory; Chas. W. Poulson & Sons Carpet Co.



DUE TO THE GENERAL ARRANGEMENT OF THE PATTERN IN THE FORM OF A PANEL, WITH CONVENTIONALIZED FORMS FOR ORNAMENTATION, THIS RUG HAS ARCHITECTURAL AS WELL AS DECORATIVE VALUE



WITH A GEOMETRIC PATTERN AS A GROUND, SIMULATING STRUCTURE, TO WHICH CONVENTIONALIZED ORNAMENT IS APPLIED, THIS CARPET IS LOGICALLY A FLOOR COVERING AND DECORATES THE FLOOR



THE UNDERLYING GEOMETRIC MOTIVE OF THIS DESIGN IS NOT MECHANICAL, WHILE THE CONVENTIONAL CHARACTER OF THE ORNAMENT IS WELL SUITED TO FLOOR DECORATION AND SEEMS TO BELONG ON THE FLOOR



DESIGN FOR A CARPET, REPRODUCED FROM A COLORED SKETCH, WHICH, WHEN LAID, TENDS TO ACCENTUATE THE PURPOSE OF THE FLOOR AS THE GROUND OF THE ROOM. THE ORNAMENT IS CONVENTIONALIZED



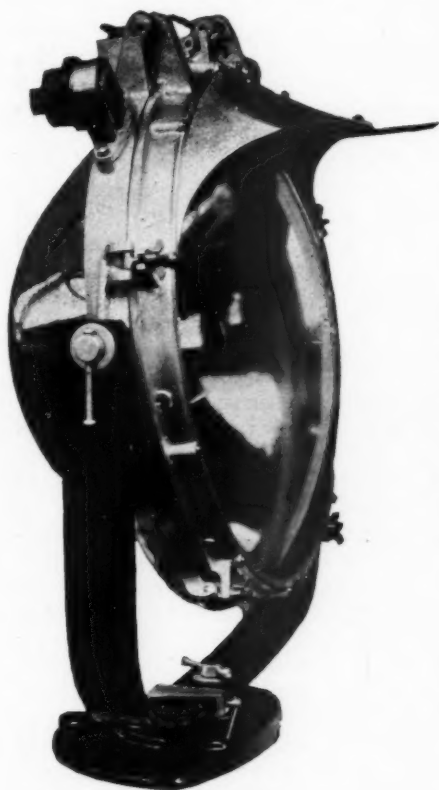
PALM ROOM OF THE ROOSEVELT HOTEL, NEW YORK CITY
GEO. B. POST & SONS, ARCHITECTS

THE FLOOR COVERING HAS UNUSUAL ARCHITECTURAL VALUE, FOR BY REASON OF ITS SHAPE AND DESIGN IT BEARS A DEFINITE RELATION TO THE ARCHITECTURE

New Methods in Floodlighting

Pyle-O-Lyte projectors have made possible an entirely new kind of general exterior illumination. With a correctly planned layout of projectors the most striking daylight effects of the design can be reproduced at night.

Light and shadow (and color) can be handled just as you wish, producing an evening display that is thoroughly in harmony with the character of the structure.



Type No. 2375 Pyle-O-Lyte, the new totally enclosed unit which is making remarkable records for economy, projection efficiency, and lamp life.

Pyle-O-Lyte projectors allow much greater freedom in the design of floodlighting than was possible with older types of units. Pyle-O-Lytes are permanent, absolutely weatherproof units, giving guaranteed performance when installed under the supervision of Pyle-National engineers.

High optical efficiency, combined with the Pyle-National light control lenses, gives accurate distribution with far fewer projectors. Permanent construction of Pyle-O-Lytes reduces maintenance and other operating expenses.

Send for the Pyle-O-Lyte bulletins. Pyle-National engineers are available for consultation on projector layout for any given conditions.

The Pyle-National Company

Floodlight Headquarters

GENERAL OFFICES AND WORKS:

1334-1358 North Kostner Avenue, Chicago, Ill., U. S. A.

BRANCH OFFICES:

3509 Grand Central Terminal, New York City

310 S. Michigan Avenue, Straus Bldg., Chicago

815 Boatmen's Bank Bldg., St. Louis, Missouri

311 Builders Exchange Bldg., St. Paul, Minnesota

CANADIAN AGENTS:

The Holden Company, Ltd.
Montreal, Winnipeg, Vancouver, Toronto

EXPORT DEPARTMENT:

International Railway Supply Company
30 Church Street, New York City

AA12-5 Gray

Specifications of most products advertised in THE AMERICAN ARCHITECT appear in the Specification Manual

THIRD SEMI-ANNUAL MEETING OF THE PRODUCERS' RESEARCH COUNCIL

THE Producers' Research Council affiliated with The American Institute of Architects, held its third semi-annual meeting at St. Louis, on November 4th, 5th and 6th. This was a successful meeting, as owing to the strong endorsement given to the work of the Council by the last convention of the Institute, the members were able to make this program very constructive. A number of prominent St. Louis architects addressed the meeting.

It is generally believed that much interest was created and good accomplished by the work done at the various sessions.

James P. Jamieson, President of the St. Louis Chapter, opened the meeting with an address of welcome.

N. Max Dunning, of Chicago, Chairman of the Structural Service Committee, A.I.A., gave an interesting talk, on the first afternoon, on the conditions which brought about the formation of the Council, as the result of lessons learned during the war, showing the necessity of co-operation in all branches of industry. It was out of that germ of thought that there was seen need of a point of contact, and thereby came the first affiliation between strictly professional and business bodies to make the Producers' Council. Mr. Dunning complimented the members of the Council on the work already accomplished, and stated that even now the importance of this movement was but partly realized. He brought out the question of manufacturers' specifications, which, he said, must be intelligently written, and cited the best methods to be used for the purposes intended. He mentioned a problem which should appeal to all classes of industry, and as a responsibility that cannot be dodged, the fact that the white collar class is being forced out of the newer class of multi-family dwellings by the skilled mechanics, whose income is far exceeding the clerical workers. He mentioned the increase in the cost of labor and material in the last ten years as compared to the total cost of buildings, and showed that there has been as a result a great increase in efficiency in building operations.

During the business session there was discussion upon the proposed advisability of dropping the word "Research" from the name of the Council, as being misleading. Action was taken on this point, subject to the approval of the Board of Directors of the Institute.

At the evening session, addresses were made by four St. Louis architects—E. J. Russell, on "Standardization of Specifications;" W. B. Ittner, expressing his ideas on how he would proceed if he were a manufacturer of building materials, so as to get the best point of contact with architects in the way

of following out their requirements; Louis LaBeaume spoke on "Architectural Expositions;" and Oscar Mullgardt, on "Services which could be rendered Architects by Manufacturers."

Mr. Russell mentioned the great improvement in conditions in the architect's office, due to standardization of materials, such as cement, tile, slate, and lumber, which conserve the architect's time in making selections. He mentioned the building industry as being the second largest industry in the country. He brought out the thought that individual manufacturers cannot do things by themselves, but that what neither they nor the architects alone can accomplish, can be done by co-operation of the two branches of the industry.

Mr. Ittner made a fervent plea for the revival of personal craftsmanship in this day of artificiality and standardized manufacture. He stated that we are losing the art of fine craftsmanship. He also said he regarded it very commendable that leaders in the manufacture of building materials should be willing to co-operate with the members of the Institute in their problems, and that while the Council was not great in numbers, it contained names of those of leaders in the building industry. He mentioned the education of the public in matters of art, which would require the producers to supply better and more beautiful things in the future. He felt that the latter should take the initiative on that point.

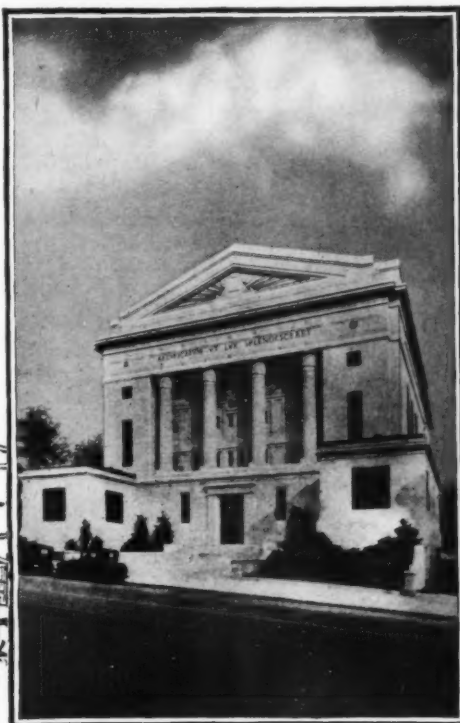
Mr. LaBeaume mentioned the value of architectural expositions to architects who could find time to attend. He commented on the great mass of wasteful advertising, and stated that a great deal of useless phraseology and immaterial matter is now being taken out of advertising, much to its benefit. He complimented the members of the Council on their efforts to improve this condition. He was of the opinion that informative literature is of the greatest aid to architects, especially in the smaller towns, where manufacturers' representatives are not always available.

Mr. Dunning expressed the opinion that the Council movement fostered by the Institute would prove to be the greatest thing done in this generation to improve relations between the architects and producers and provide a working basis of co-operation.

Mr. Mullgardt brought out the problem of the architect whose practice is expanding and changing from small work to larger work and the problems which he must encounter, and on which it is difficult for him to get proper information. He felt that this was a real opportunity for the manufacturers to do something in the way of conserving the architect's time in getting such authoritative information, also in dealing with the salesmen.

*In precision machinery,
Ball Bearings prevent
the wear that would
destroy accuracy*

In fine, split-hair work, the thickness of an oil film—squeezed out when a load is applied—would ruin the accuracy of the work. The "point contact" of ball bearings gives absolute accuracy under all loads and prevents the wear that would destroy this accuracy.



*Masonic Temple
Springfield, Mass.*

*McClintock & Craig
Architects
Springfield, Mass.*

Stanley Ball Bearing Butts were used in this building.



The preventive for sagging doors... Ball Bearing Butts

ADJUSTMENTS, repairs and replacements due to wear of butts add greatly to the cost of maintenance. Ball bearing butts practically eliminate this wear.

By eliminating such expense, ball bearing butts pay for themselves—absolutely. Consequently, ball bearing butts are an investment—not an added expense.

Stanley engineers have originated most butt and hinge improvements since 1852, including cold rolled steel, the non-detachable (non-

losable) washer, non-rising and self-lubricating pin, improved finish, and the use of ball bearings.

This wide experience enables us to make a product of uniformly high quality that sets the standard in butt manufacture. The Stanley trade-mark is on every butt.

The Architects Manual of Stanley Hardware contains information which will aid you in selecting and specifying the correct hardware. We will gladly send you a copy. A description of the Stanley line of Butts and Hinges can be found in Sweet's Catalogue, pages 1500 to 1503, and 1556 to 1568.

THE STANLEY WORKS, NEW BRITAIN, CONN.
New York Chicago San Francisco Los Angeles Seattle



STANLEY BALL BEARING BUTTS



Specifications of most products advertised in THE AMERICAN ARCHITECT appear in the Specification Manual

LeRoy E. Kern, Technical Secretary of the Scientific Research Department of the Institute, gave a very interesting illustration of applying efficiency to the design of a small house, resulting in a saving in cost, but absolutely destroying the beauty of the structure.

Various members of the Council talked on interesting subjects, which opened a general discussion. Scott Button spoke relative to architectural specifications from the standpoint of the manufacturer, and one particular point he covered was the specifying by architects of unnecessary and unimportant matters in connection with large units of apparatus, which took up a great deal of space in the specifications, and which should be left to the manufacturer of the entire unit, who must guarantee his product.

Mr. Lane addressed the meeting on the subject of architectural expositions from the side of the exhibitor, bringing out the difficulty in getting architects to attend. Mr. Adam and Mr. Coulton discussed the efforts made on the part of manufacturers toward meeting the wishes of the architect in material and design, and in matters of information.

Mr. Perry brought out the improvement in advertising matter, due to the efforts of the Council, and Mr. Byington opened up the interesting subject of conserving the time of the architect in calls of manufacturers' salesmen.

Edwin W. Ely, of the Department of Commerce, Washington, presented an interesting lecture, with lantern slides, on the subject of "Simplified Practice and Its Place in the Industrial Movement."

DESIGNING FOR CO-OPERATION WITH THE CRAFTSMAN

A DELEGATE to the recent convention of the National Association of Ornamental and Bronze Manufacturers stated that he hoped the day would soon arrive when architects would insist that their detail drawings be strictly adhered to and carried to an exact conclusion. It is doubtful if there are many architects familiar enough with ornamental iron and bronze work to enable them successfully to visualize on the drawing board the final results, or if they would be willing to deprive themselves of the opportunity to make corrections and alterations to better the completed production while the work is in process of execution. Better, perhaps, that the manufacturer insist that the preliminary scale drawings submitted by the architect for estimating purposes be more specific as to details, for it is here where the trouble generally starts. And this applies with equal truth wherever form indicated by architects' drawings is to be executed by the craftsman. Frequently the estimating drawings are so indefinite that the contractor must pad his estimate in order to cover certain details which he thinks may be introduced into the full size working drawings. It is hardly fair for a contractor or manufacturer to submit a price for making one thing and then expect him to do something radically different, requiring much more time and material, for the same price. And yet that is what architects frequently demand. In the first place, the architectural designer does not realize, perhaps, how a very slight variation in design may materially affect the cost of production. It is not unusual, when dealing with manufacturers whose ability as craftsmen is not to be denied, for architects to allow, or even to ask the contractor, to submit his own sketch for that part of the work on which he

is invited to estimate. This also makes it possible for the estimate to be based on a more accurate approximation of the cost of production, and, moreover, the architect knows just exactly what he is going to get for the money expended. He can rightfully insist that the work be carried to the minutest detail indicated by the sketch, but, at the same time, he cannot demand that the manufacturer do more than that which the sketch calls for. This is probably the best solution of the problem. It interferes not at all with the architectural development of the complete design, as the architect's scale drawings will show roughly the type of ornamentation; its size can be accurately determined and the character of the design will be governed by other details of the architecture. Further than that, it develops a finer craftsmanship. The manufacturer gets the job who not only can do a certain piece of work for a certain amount of money, perhaps less than any other manufacturer, but who shows by his ability as a designer in making suggestions that he will give the correct character to the work that has been entrusted to him.

1925 BUILDING LABOR HIGHEST, MATERIAL LOWEST RATIO RECORDED

IN 1925 the cost of building material was relatively lower and labor costs relatively higher than in any other year recorded, according to a building construction study recently conducted by the Department of Labor. The survey is based on permit figures of 130 cities relating to new construction of all kinds, residential and non-residential.

According to the survey, in 1914 material represented 44.1 per cent of the cost of building and labor 55.9 per cent. In 1916 the cost of material went up to 49.7 per cent and labor dropped to

Now ... Good Acoustics in every building

Architects report uniformly good results with Acousti-Celotex. Six unique advantages of this material

ACOUSTI-CELOTEX perfects hearing conditions and makes speech and music clear in all parts of any room.

It is also being widely used to reduce noise and promote efficiency in schools, offices and factories.

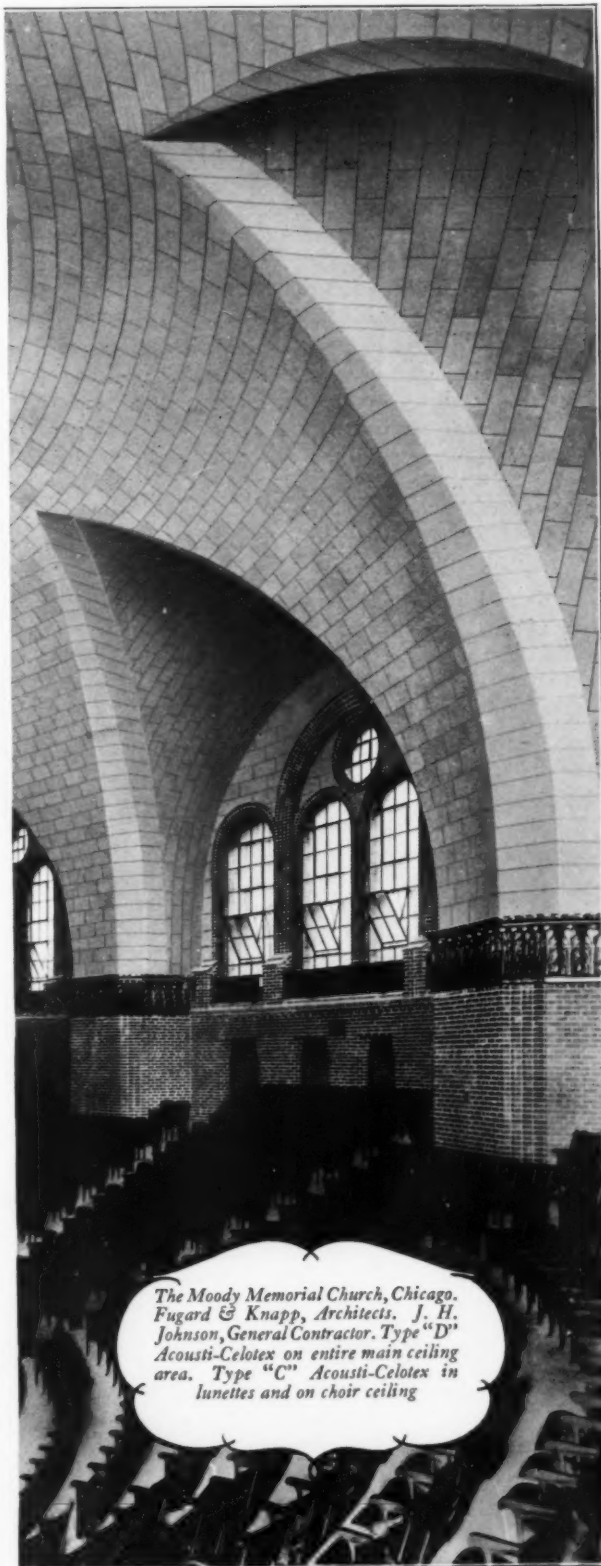
Acousti Celotex is a highly sound-absorbing acoustical board. It comes in tiles 6" x 12", 12" x 12", and 12" x 24", and in various thicknesses to suit conditions. It has a sound-absorbing co-efficient up to 70%. It offers the following unique advantages over any other acoustical material on the market.

- (1) *Acousti-Celotex is permanent. The rigid wall and ceiling tiles become a part of the building itself.*
- (2) *It is applied to all kinds of walls and ceilings, new or old, without eccentric or special preparation.*
- (3) *It has the lowest maintenance cost, requiring only a stiff broom or brush for thorough cleaning.*
- (4) *Acousti-Celotex has an attractive, soft-textured finish.*
- (5) *It can be decorated in full color without materially reducing its unusual sound-absorbing qualities.*
- (6) *No membrane or other covering is required.*

Our Acoustical Engineers will supply an authoritative analysis and specification for any building, at no obligation to you.

We have also prepared a new book, illustrated in full color, showing interesting installations and giving some idea of the beautiful decorative effects obtainable with Acousti-Celotex. May we send you a copy?

THE CELOTEX COMPANY, Chicago, Ill.
Mills: New Orleans, La.
Branch Sales Offices in many principal cities
(See telephone books for addresses)



The Moody Memorial Church, Chicago. Fugard & Knapp, Architects. J. H. Johnson, General Contractor. Type "D" Acousti-Celotex on entire main ceiling area. Type "C" Acousti-Celotex in lunettes and on choir ceiling

ACOUSTI-CELOTEX

Specifications of most products advertised in THE AMERICAN ARCHITECT appear in the Specification Manual

50.3 per cent. In 1919 material cost was 54.8 and labor 45.2 per cent. Two years later the figures were transposed, material cost being given as 41.9 per cent and labor 58.1 per cent.

In 1924 material cost was 40.5 per cent and labor 59.5 per cent. Last year the material cost is given as 39.8 per cent and labor cost 60.2 per cent.

Based on 100 in 1914, the cost of constructing a typical building in 1925 was 212 and the amount of building done 224.

At the end of 1924 the building shortage that accumulated during the World War and immediately thereafter had been more than made up. Last year there was a surplus of building over normal needs of the year. In fact, the country as a whole, as indicated by the 130 cities, at the end of 1925 was 11.2 per cent over-built as compared with 1914.

PENNSYLVANIA STATE BOARD OF EXAMINERS

THE Pennsylvania State Board of Examiners of Architects at its annual meeting in Harrisburg, elected Clarence Wilson Brazer, architect, of Chester, Pa., and New York, President of the Board, and Miller I. Kast, of Harrisburg, as Secretary. Both Mr. Brazer and Mr. Kast were among the five original appointees of Governor Wm. C. Sproul seven years ago and were re-appointed by Governor Gifford Pinchot. The retiring president, Edward Stotz, architect, of Pittsburgh, was also one of the original members of the Board.

The applicants who successfully passed this quarterly examination and are therefore entitled to practice as registered architects in Pennsylvania are: Albert Fisher Dagit, of Philadelphia; Jesse E. Martsof, of New Brighton, Pa.; Comly Edwin Maule, now of Columbus, Ohio; J. Mills Platt, of Rochester, N. Y.; Alexander William Percival, of Pittsburgh; Alfred Fellheimer and Steward Wagner, of New York City; Carl Cornwell Tallman, of Auburn, N. Y.; Joseph Daniels Leland, of Boston, and George Leslie Rapp, of Chicago.

The next semi-annual technical examinations will be held in Philadelphia, Harrisburg and Pittsburgh on December 28, 29, 30 and 31.

BUILDING MATERIAL FROM BELGIUM

A REPORT of the Department of Overseas Trade on "The Economic Situation in Belgium," prepared by J. Picton Bagge, the British Commercial Secretary at Brussels, gives some interesting figures regarding Belgian exports of building material to this country, writes *The Architect and Building News*, London. The figures relate to 1924, in which year the total production of Belgian cement was estimated at two million tons, of

which 946,147 tons were exported, Great Britain coming fourth on the list of customers with 86,692 tons. Of bricks, 806,737 tons were exported, Great Britain taking 188,797 tons and Holland 539,805 tons. Tiles exported amounted to 38,957 tons, of which Great Britain took 22,494 tons and Holland the remainder. Belgium about balanced her imports and exports of fire clay in this year, but it is curious to note that while we sent her 5,102 tons, we took 2,221 tons back. Other Belgian exports to this country included building and road stone; 2,919 tons of marble, and 161,404 tons of building sand. There seems no justification for some of these imports, with the possible exception of marble. The ramifications of trade are many and various, but why Great Britain should be taking nearly two-thirds of Belgium's export of tiles and great quantities of her building sand wants a lot of explanation.

THE JAMES HARRISON STEEDMAN MEMORIAL FELLOWSHIP IN ARCHITECTURE Second Competition, 1927

THE Governing Committee of the James Harrison Steedman Memorial Fellowship in Architecture announces the second competition for a Fellowship of the value of Fifteen Hundred Dollars, the holder of which is to pursue the study of architecture in foreign countries, as determined by the Committee and under the guidance and control of the School of Architecture of Washington University, St. Louis, Mo.

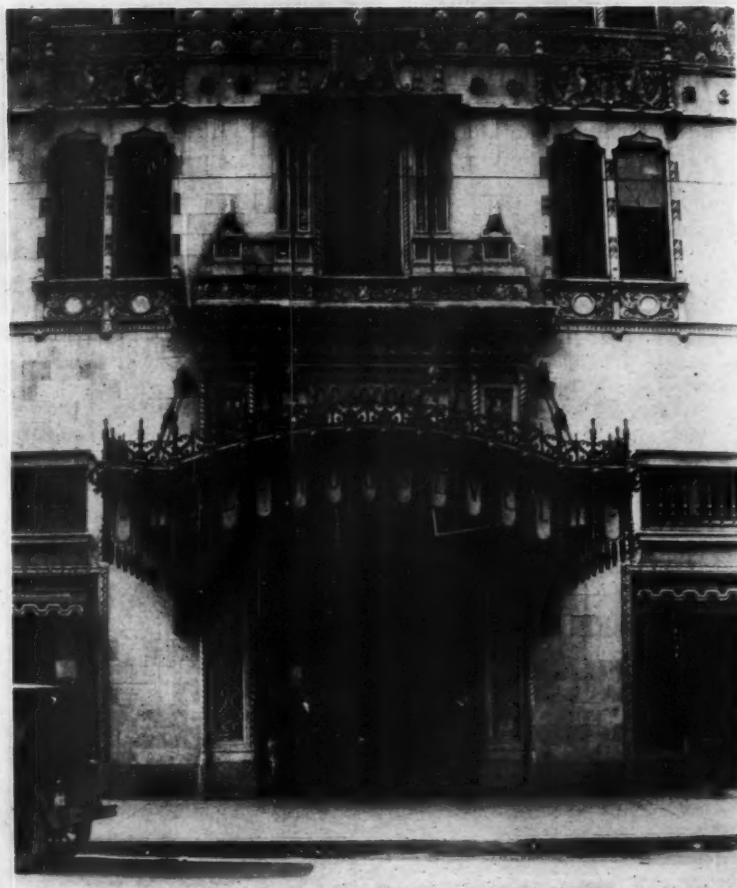
This Fellowship is open on equal terms to all graduates in architecture of recognized architectural schools of the United States.

Such candidates, who shall be American citizens of good moral character, shall have had at least one year of practical work in the office of an architect practicing in St. Louis, Mo., and shall be between twenty-one and thirty-one years of age at the time of appointment to this Fellowship.

Application blanks for registration can be obtained at any time upon written request addressed to the head of the School of Architecture of Washington University, St. Louis, Mo., to whom all candidates are required to forward their application blanks, properly filled out, not later than January 14, 1927.

Candidates who are holders of a degree not conferred by Washington University are required to submit with their application a transcript of the record of their scholastic work.

Candidates must be sponsored by the architect in whose office they are taking, or have completed, the year of practical work required for eligibility to this Fellowship. Each application must also be endorsed by at least two other members of The American Institute of Architects.



Entrance, The Roosevelt Hotel, New Orleans, La., Favrot & Livaudais, Architects. Lower story ashlar and ornamental enrichment in unglazed buff-grey Terra Cotta.

The Decorative Value of
TERRA COTTA

For lower story finish and effective enrichment of entrance features Terra Cotta offers you unsurpassed possibilities.

Messrs. Favrot & Livaudais demonstrate in this building the success attending a well chosen motif reflecting local atmosphere and beautifully detailed.

Note: Architects will also find many fine motifs in "Terra Cotta of the Italian Renaissance" published by this Society, \$3.00 per copy.

NATIONAL TERRA COTTA SOCIETY
19 WEST 44th STREET
NEW YORK, N.Y.

Specifications of most products advertised in THE AMERICAN ARCHITECT appear in the Specification Manual

AN ATTEMPT TO VARY FENESTRATION

THERE is occasionally discernible an attempt to overcome the general monotonous method of fenestration of the facade of a large building, commonly referred to as "waffle" fenestration. This is sometimes accomplished by band courses, by variation in the design of lintels or by the intro-



APARTMENT HOUSE AT 61 WEST NINTH STREET,
NEW YORK

SUGARMAN & BERGER, ARCHITECTS

duction of architectural motives to accentuate the dominant vertical movement. In the design of the apartment house illustrated herewith, center lines have been purposely avoided in the placing of windows and doors, symmetry is an almost unknown quantity in the entire design, while balance is perfectly retained throughout. The variation in the design, which includes the size and shape of windows, their grouping and the character of their surrounds, is even carried into the design of the building proper, as seen in the line of the roof. Fenestration is one of the most perplexing problems which architects have had to face in the design of large buildings, and to date their manner of solving the problem has not been all that might be desired. The efforts which the architects of this apartment house have put forth are a step in the right direction and it is to be hoped that greater consideration will be given this vital question in the future.

FARM POPULATION OF NEW YORK STATE DECLINED 10,000 IN 1925

FARM population in New York, including entire families, declined from 733,000 to 723,000 during 1925, according to figures recently made public by G. F. Warren of the New York State College of Agriculture. Mr. Warren drew his statistics from a survey of 4,384 farms.

During the year ending February 1, 1926, about 30,000 men and boys left farming to take up other work and about 12,500 left other occupations to go to farming.

"At the present time," the report says, "there are only about 25,800 hired men on farms compared with 26,700 a year ago and with 77,000 in 1916. Farmers are more and more getting their work done by the use of mechanical power such as tractors, trucks, etc., and by exchanging work with their neighbors."

PRELIMINARY NOTICE, LE BRUN TRAVELLING SCHOLARSHIP COMPETITION, YEAR 1927

THE Executive Committee of the New York Chapter of The American Institute of Architects, as Trustees of the Travelling Scholarship, founded by Pierre L. Le Brun, announces a competition for the selection of a beneficiary. The program will be issued about December 31st, 1926, calling for drawings to be delivered about March 1st, 1927.

All those wishing to enter the competition should arrange at once for nomination by a member of The American Institute of Architects. Nomination blanks can be had of the Secretary of any Chapter, A. I. A., or of the Le Brun Scholarship Committee. Nominations should be sent, so as to be received before January 1st, 1927, to Le Brun Scholarship Committee, Room 1618, 19 West 44th Street, New York, N. Y., Otto R. Eggers, Chairman.

CONVENTION OF THE AMERICAN GAS ASSOCIATION

THE convention of the American Gas Association, held at Atlantic City, N. J., October 11-15, is stated to have been the largest and most interesting meeting that has been held by the gas industry. More than four thousand men attended. It is of interest to note from the records of the convention that future plans include a policy of co-operation with architects, especially through the stimulation of the sale of gas-burning appliances approved by The American Gas Association Testing Laboratory. A. E. Hansen, architectural engineer, of New York City, addressed the convention on the importance of the Association's maintaining an Architects' Service Bureau not as a sales organization but as a service to the architectural profession.

THE PUBLISHERS' PAGE

IN the Engineering Department of this journal will be presented during 1927 several articles of practical value on the subject of supervision of construction. It is proposed to cover concisely the most important types of modern systems. This will be approached from the point of view of what to look for on the job.

Future plans also contemplate the presentation with appropriate comment, of the specifications being developed by the Standards Committee of the New York Building Congress. One of the most valuable specification services that can be rendered is to provide specifications suitable for practical application. The specifications developed by the New York Building Congress are prepared by representatives of all branches of the building industry. These include specification writers, contractors, estimators, and material and equipment producers. The final product is developed under discussion by all interested parties before it is finally issued as a complete document. These specifications should be found of unusual value to every architect's office.

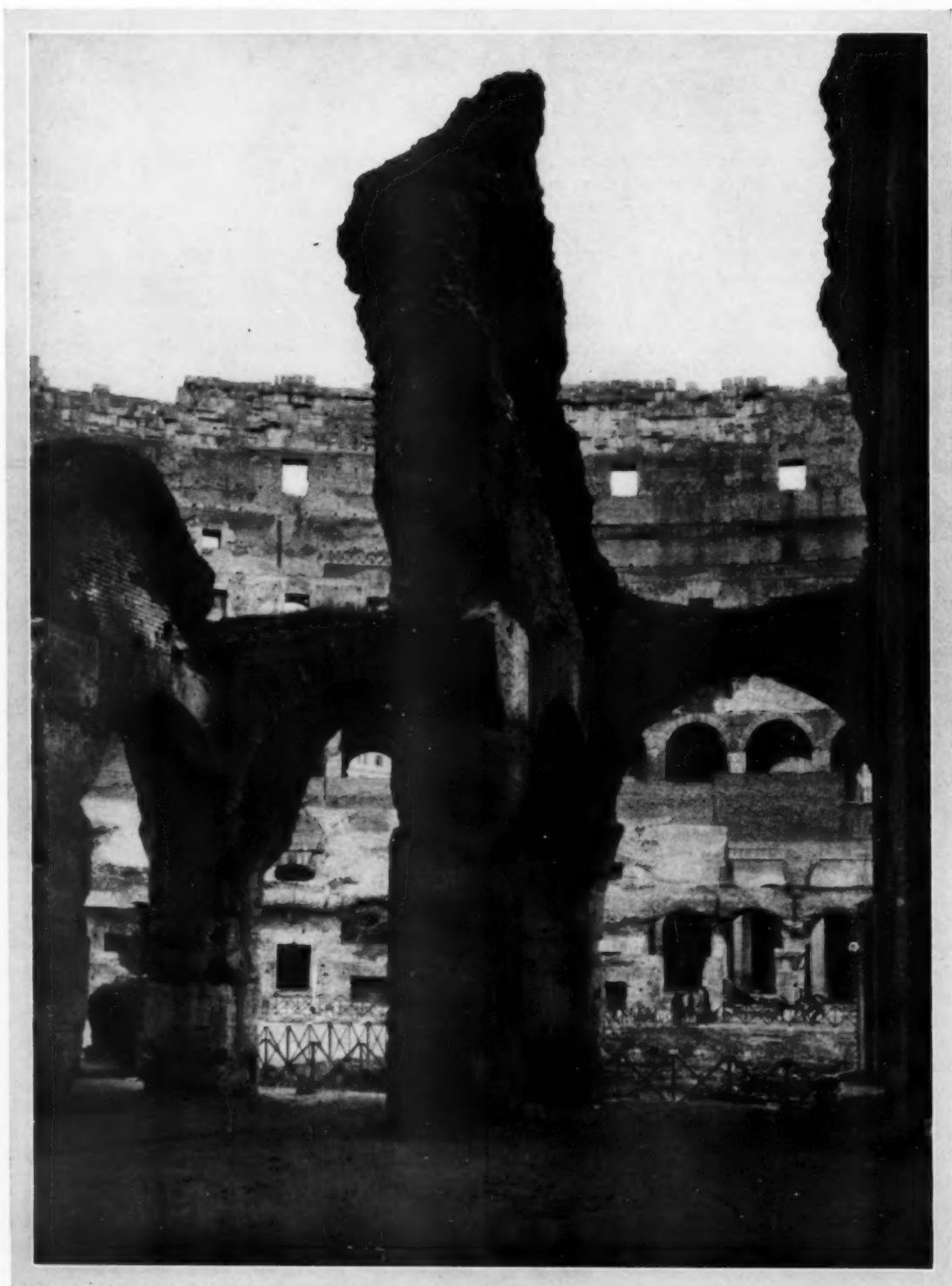
New equipment for buildings is constantly being developed and the Engineering Department will continue to present the important phases of various types of equipment as it affects the practice of architecture.

The pressing need for buildings to supply the building shortage that followed the war has practically past. During this period rapidity of construction was a large and important factor. It led to a very large amount of inferior construction. Now that the pressure of meeting an urgent deficiency has passed, there is evidenced a tendency to return to sound construction methods. This reaction is bringing with it new developments and new uses of materials and in a measure producing a new era in the construction industry. We shall endeavor to keep the architectural profession advised of these developments as they reach stages sufficiently definite to assume an important aspect.

Measured drawings and details are of practical use in every drafting room. Modern details, with photographs of the details as executed, selected from the work of representative architects throughout the United States will be presented during the coming year following the practice begun by this journal some years ago. These drawings, made to scale and dimensioned, form compact reference documents that have been found exceedingly helpful to many in the profession of architecture. The variety of subjects to be covered should make these drawings a series of unusual value.

During the last three years, or since the inaugura-

tion of the Department of Interior Architecture as a regular feature of this magazine, *THE AMERICAN ARCHITECT* has allotted considerable space in each issue to interiors of various types of buildings. It has taken the stand that the design of the interior, based on the same fundamental principles which govern the design of the exterior, presents a problem in architecture. It is difficult to attempt any explanation why the design of the interior should ever be neglected by the architect, but it is a fact, nevertheless, that until recently the finish of the interior was confined to wood trim, plaster walls and ceiling and a wood floor. Actually, the interior offers greater opportunities for individual expression than does the exterior. Once inside a building, one is not confronted by various foreign surroundings by which his attention is distracted, as in the case of the exterior. The purpose of the building, as expressed by the interior design, is the keynote by which individuality is attained. It has been the purpose of the Department of Interior Architecture to present interiors which have been developed on architectural lines and which emphasize in their design an individuality of purpose. The past year has seen marked increase in interest on the part of architects in the design of the interior. It is hoped that this greater regard for interior design, coupled with the unusual opportunities which the design of the interior presents to architects, will be even more generally established. During the forthcoming year it is intended to devote those pages allotted to interior architecture to the best examples of the design of the interior of all types of buildings available. There will also be presented in the text, as well as in the illustrations, suggestions and ideas which it is hoped will be of value to designers of interiors in attaining originality, while keeping within the limits of sound architectural design. Structure is the basis of the design of the interior as it is of the exterior. Consequently, new methods of construction and the development of new structural materials are often of benefit to the interior architect. As they unfold themselves and receive professional approval, they, too, will be presented and illustrated in the pages devoted to interior architecture. In keeping with the policy of *THE AMERICAN ARCHITECT*, the presentation will be largely pictorial. The text will be limited to what is not readily apparent from the illustrations. It is in the text, in fact, that it will be necessary to present most of the novel ideas, for, when the idea is ready for photographing, it is no longer new. The Department of Interior Architecture has set a high mark for itself for 1927, and all its efforts will be devoted to gain that goal.



THE COLOSEUM, ROME

FROM THE ORIGINAL PHOTOGRAPH BY WALTER F. BOGNER, 40TH HOLDER, ROTCH TRAVELING SCHOLARSHIP

THE AMERICAN ARCHITECT