Wednesday, May 13, 1925 Vol. LXI. No. 1584.

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."

FROM AN ARCHITECT'S NOTEBOOK.

"In all men's modes and habilitory endeavours an architectural idea will be found lurking—his body and the cloth are the site and materials whereon and whereby his beautiful edifice of a person is to be built."
SARTOR RESARTUS.

"He that hath not mastered the human figure and in especial its anatomy may never comprehend architecture."
MICHAEL ANGELO.

9 Queen Anne's Gate, Westminster.

Strasbourg

(From a water-colour by Keith Murray.)

THE

ARCHITECTS' JOURNAL

9 Queen Anne's Gate, Westminster.

Wednesday, May 13, 1925. Volume LXI. No. 1584.

Teachers and Architectural Education

PROPAGANDA, we constantly hear, is the need of the moment. Without it we shall continue to have an uninterested, uninstructed public which, if it does not actively prefer indifferent work, is unconcerned about good work. We shall continue to find other artists and craftsmen either afraid of architecture or, through ignorance, unable to co-operate with it. The coming of a general impulse and co-operation would be of greater moment to our architectural prosperity than the multiplication of good architects unable to practise their art. All this appears obvious, but despite the efforts of a few energetic individuals, the mission to the Gentiles has not generally caught on, and it must of necessity be a slow process extending over many years.

Individual enthusiasm is invaluable, but the time is surely ready for a definite step on the part of architects as a body, and the most obvious of these steps is the establishment of architecture as a subject in general education. Since the war our architectural schools have not only been developed, but have been welded into the practising profession; they present a nucleus for the discussion of training on more than technical lines, and through their staffs these should also form a point of contact with other bodies of teachers. The masters at architectural schools are rightly known first as architects and then as teachers, but in stressing this let us not become too shy of the professorial side, which consists in the presentation of architecture; this, fitly applied, cannot be restricted to the school course alone, but is closely related to and dependent upon the cultural world outside, since it is from the outside world that we get our students.

The architectural schools exist to train architects, and the staffs' business is limited to that alone, since the education of laymen, however desirable in itself, cannot, and should not, devolve upon them. But if we carry this assumption to extremes we may well find that we are transforming a difference of degree into one of kind, and in so doing that we are specializing not only the teacher, but the subject, leaving it unrepresented as a medium for common and general instruction. The hard-and-fast distinction between practice and appreciation is not followed in the other arts; a teacher of musical, dramatic, or pictorial art does not only teach those who intend to work professionally, and among those teachers and subjects represented at the recent conference of educational associations were found many of the most technical exponents of their particular subjects, even of such subjects as medicine. One might safely predict that until our architectural staffs are encouraged to rank themselves with other teachers, either affiliated as members of their organization or, if this is not feasible, as representing an architectural body, the other teachers will not recognize architecture as a possible vehicle for general education and culture. Educational progress is carried on and stimulated by those individuals responsible for it, and outside stimulation has only a poor response within. The value of a relative syllabus in which the different subjects interact is being recognized more and more, but such intentions are helped less by the multiplication of textbooks than by the personal contact of those responsible for teaching.

In a previous article the opportunity presented—and missed—by the architectural profession at the annual conferences of educational associations has been mentioned. It may be that architecture, for some unknown reason, must continue to be the only unrepresented art, but at least one would like to know what the difficulties are and why they cannot be surmounted.

The hitch probably arises because the matter is at present no one's particular business, and if this is so, there should be little difficulty in proving that it certainly contains a direct interest for the architectural schools. It is hardly an exaggeration to say that the valuable time of the staffs at these schools is largely frittered away during the first year in patching up the education of boys who arrive totally unprepared not only from the higher forms at schools, but even from the universities. The uneducable will be always with us, but the public school and university standard should contain some foundation of knowledge about the elements and influences on which architecture depends; that it does not is largely because architecture has been segregated as a technical subject to an extent unheard of in any other art.

The teaching profession generally should be made to realize the wide cultural possibilities of architecture; possibilities which no other individual subject can surpass, and that few can rival. But without the personal persuasion and contact of those practising and teaching it these possibilities cannot be brought home. It would obviously be impossible to suggest off-hand the machinery for such a departure, even if it were accepted as desirable, but it is of an importance that demands both consideration and action on the part of somebody, and who can that somebody be but the Institute, as represented by the Board of Architectural Education, and by the schools and their staffs?

This is not to suggest that the members of the staffs should go forth and themselves instruct in schools or colleges, but rather that they, as individuals, should represent the teaching of architecture among the teachers of other arts and subjects, and so bring about a general recognition of their art. Where architectural schools are already attached to a university such personal contact no doubt exists, but even there it is at present only local; what is needed is a more general representation of the teaching staffs or of the various architectural bodies. Not only could the members discuss their difficulties personally,

and help and encourage those architects capable of framing and giving the necessary instruction, but other teachers could also learn how best to make co-operation effective. The school staffs are not only acquainted with past and leaving students, but are in close touch with men in practice who would be prepared to help the movement. No other section of the profession could be so well equipped for this mission of propaganda, since if they made it acceptable outside they could also make sure that it was effective from within. MANNING ROBERTSON.

Lord Leverhulme

The death of Viscount Leverhulme, at the age of seventy-four, has removed one of the very few great commercial figures among whose interests architecture took a prominent place. With Lord Leverhulme it amounted almost to an obsession, and on the many occasions when he addressed architectural audiences he was wont to describe himself as deeply mortified at not belonging to a profession for which he had so early shown an unusual aptitude. He liked, with an eye to his industrial works set up in the four corners of the world, to think of himself as a builder of towns, and this he undoubtedly was, becoming in consequence one of the greatest private patrons architecture has ever had. He himself was as discerning and as generous as his undertakings were gigantic; at Port Sunlight, for example, a group of cottages was entrusted, and entrusted successfully, to an architect not more than eighteen years old. He will always be remembered for the fascinating community which bears the name of his chief product, and next to that, we suppose, for his gift of Stafford House to the nation, and the founding of the first chair of Civic Design in the kingdom. At the school to which this chair is attached, as at one or two others, he founded architectural scholarships which, we believe, were not endowed, the amounts being paid out by the donor as required. We hope their continuance will not be affected by this circumstance, which exhibits a characteristic trait of Lord Leverhulme's. Once a thing had captivated his mind he was loth to sever any of the bonds that connected him with it. In this, as in everything else, he was more of an idealist than the author of "Hard Times" would have thought credible.

Keats's House

The first thing Sir Arthur Quiller-Couch did at the opening of Keats's house at Hampstead as a museum, was to congratulate the Borough on having chosen this method of perpetuating the poet's name rather than erect an obelisk or a statue. Though we, for our part, can see no great harm in a Keats statue, the house, which was once called Wentworth Place, and is now (or was, until last Saturday) Lawn Bank, is as charming outwardly as it is, in Sir Arthur's term, inwardly "haunted." It is well worth preserving; we could wish, indeed, that some of our contemporary poets dwelt within walls that our grandchildren might gaze upon with as much pleasure. Keats moved thither at the end of 1818 or the beginning of 1819, until, a couple of years later, his failing health drove him into an exile from which he did not return. Hampstead had, of course, already known him a year previously, but his later and finer work was done at Lawn Bank. It was there, too, that he met Fanny Brawne.

More Taxicabs?

It is understood that the London police authorities are considering a proposal to license a new type of two-seater taxicab. There are two aspects to this proposal, and we would like to urge that neither of these be lost sight of. If the present taxicabs were gradually to be replaced by a similar number of two-seaters, the traffic problem would be lightened rather than increased, for the dimensions of the vehicles must of necessity have some bearing upon it. On the other hand, it is to be presumed that the smaller cab will be more economical than that now in use, and if this difference in cost may, as is by no means unlikely, increase the number now plying the streets, the introduction of the new cabs will have very regrettable consequences indeed. Should there be the smallest chance of their becoming to the present taxicab what the motorcycle is to the private car, we hope the proposal will be severely discountenanced from the beginning.

The Bank

Just about a century after the completion of its remodelling by Soane, the Bank of England is to undergo another yet more extensive remodelling, amounting virtually to entire reconstruction. The illustrated description of the proposed new scheme which we were able to publish exclusively last week showed clearly how an extremely difficult problem has been handled. Everyone will regret the passing of so much of the old work, but credit must be given to the architects for the ingenious manner in which a number of Soane's fine halls and other interiors have been incorporated in the new scheme. The remodelling is certainly a drastic one, but seemingly inevitable. That amazing congeries of halls, courts, wells, and passages that made up the ground plan of the Bank is to be entirely superseded. In its place we have a formal plan expression entirely consistent with the shape of the site—a filling-in of those remarkable screen walls such as Soane himself might have adopted had he been able to tackle the job as a whole at one time, and not in fragmentary sections over a period of forty-five years. At the present time, when voices are raised in protest against the obliteration of so much of the old work, it is not without interest to recall that Soane himself was severely criticized in his own day for demolishing the work of his predecessors, George Sampson and Sir Robert Taylor.

Soane the Modernist

Mr. Arthur T. Bolton, Curator of the Soane Museum, in his extremely interesting monograph on Soane, maintains that the Bank, though not truly Greek, was a real pioneer of the Greek Revival, which was not to become completely effective until the great war of 1793–1815 was over. Yet though (perhaps because) deriving from the Greek, the Bank is amazingly modern in spirit. In the work of Soane, especially at the Bank, we find the germ of a new movement in architecture. Soane is really the first of the English modernists. He was always experimenting with pure form. He had little sympathy with those transcripts from the Classic that seemed to satisfy the architectural ambitions of some of his contemporaries and most of his immediate successors. Soane, as Mr. Bolton pithily and wittily summarizes it, gave us "flutes without fillets, flat antæ in place of decent pilasters, together with indescribable incised lines and surfaces, the whole crowned by acroters unknown to Palladian tradition." And what wonderfully fine effects he got with these elements. What a masterpiece of surface expression is the loggia in the governor's court of the old Bank, for example. There is nothing finer in the whole field of modern architecture. Yet Soane had hardly any influence on the development of English architectural style. His work stands out in vivid relief against a background of conventional expression. It is isolated and complete, beginning and ending in itself. Yet, more than any other architect of modern times, Soane pointed out the way of progress. We cannot but feel that architecture took the wrong turning when, after Soane, it followed the path that led to pure Classicism. What might not English architecture be to-day if it had taken the path of progress?

An Announcement

The proprietors of THE ARCHITECTS' JOURNAL beg to announce that from the first of June next the editorial conduct of their paper will be in the hands of Mr. Christian Barman, whose record as a writer on architectural subjects is such that he will need no introduction to our readers.

The Presentation of the American Gold Medal to Sir Edwin L. Lutyens, R.A.

MANY hundreds of distinguished Americans gathered together on April 24 to do honour to Sir Edwin Lutyens, R.A., on the occasion of the presentation to him of the American Institute's gold medal for 1924. The event took place in the Grand Architectural Hall of the Metropolitan Museum of New York. No finer place could have been chosen for the purpose, the hall being, apart from its great size and fine Roman character, a centre of much public importance, and so arranged on this occasion as to be particularly impressive. The gallery was occupied by a large orchestra, which rendered works from the leading composers, and the hall was decorated with the bright banners of the fifty-four chapters of the American Institute of Architects. The fine series of galleries which contain the national collection of ancient and modern sculptures and the Greek, Roman, and Egyptian antiques, adjoining this large hall, were all thrown open for the occasion, lending a strong and dignified atmosphere of ancient culture.

SIR EDWIN LANDSEER LUTYENS, R.A.

Ladies and gentlemen; young and old; architects, artists, and craftsmen, representative of the best artistic energy all over the world, streamed into the museum to take part in the ceremony. Space became filled, until the hall and the balconies were completely occupied by a vivacious and brightly coloured throng. The reception by the directors of the Institute then followed, while the hall resounded with the music of Wagner, Bach, and Beethoven.

The scene made one realize the vitality of the architectural profession in this country; how much it enters into the daily life of the people; how close is its grip with the keenest interests of development and progress. Here, among the company, were men fully alive to the minutest change in all departments of vital national activity; men who were always ready, not only to rise at once to the most immediate demand, but also to lead the way to further progress. Here were men who represented the very fibre of American activity; men with strong personalities and virile imagination; men building skyscrapers, men whose capacity and grasp of affairs were recognized and respected by commercial, legal, banking, political, and other leading interests.

This ceremony was the grand climax of the week of the Convention, which had been a great success. Delegates from all over the U.S.A., and a number from foreign countries, had been present, and the public had poured in to view the exhibition of architecture and allied arts at the Grand Central Palace.

Now came the procession of all the functionaries, dressed in their official robes. At the culmination of this procession the leading figures took up arranged positions on a daïs in the centre of the hall.

As a prelude to the presentation, a speech was made by the Hon. John W. Davis, LL.D. With measured phrase and cultured precision he described what had led to the decision to make the award of the gold medal to Sir Edwin Lutyens. He referred particularly to the Cenotaph, which appealed so much to Americans—the excellence of its inspiration, the sadness of its lines and proportions, which symbolized the effort and the sacrifice of a great nation. "God Save the King" was played as the medal was presented.

Sir Edwin, in his reply, seemed very conscious of the honour being conferred on him, and delivered his speech in a quiet and reserved voice.

Then followed the posthumous award of the gold medal for 1925 to Mrs. Bertram Goodhue. The Hon. John H. Finley, LL.D., in his prefatory speech, referred to Goodhue's fine and lovable character as a man, and to his great and successful efforts to revive the true spirit of mediæval Gothic architecture.

The ceremony closed with the American national anthem.

F. B.

The Hongkong and Shanghai Bank

PALMER and TURNER, Architects

THESE new banking premises have been erected at Shanghai for the Hongkong and Shanghai Banking Corporation. The architects were Messrs. Palmer and Turner, of Shanghai and Hongkong, and Mr. G. L. Wilson, a partner of the firm, was responsible for the design. The building has a frontage of approximately 300 ft. to the Bund and 200 ft. to Foochow Road, rising 100 ft. to the roof, and a further 80 ft. to the finial of the massive dome; the building forms a landmark to the ships sailing the Huang Pu.

In the middle of the Bund front is a six-columned colonnade, with a triple-arched main entrance beneath. The entrance is approached by a 62-ft. long flight of steps to the entrance, flanked by two bronze lions, cast from models prepared by Henry Poole, A.R.A. The carved head forming the keystone arch of the entrance represents Agriculture, and the heads over the two side arches are Industry and Shipping.

Bronze entrance gates lead to a spacious portico, the inner archways of which are filled with glazed bronzed screens, and beyond is the entrance hall. All the principal façades are of Hongkong granite.

The entrance hall is octagonal on plan, the motive combining the number eight which figures so largely in Chinese mythology with the idea (and practical utility) of the meeting and distributing place of commercial avocations. The octagon is 52 ft. across, and has a dome of novel section, supported on eight detached Sienna marble columns. The outer arcade of the octagon is of the same marble. The bases and capitals of the columns are of bronze. The dome ceiling of the entrance hall is of Venetian mosaic, and the outside covering of the roof dome 150 ft. above it is also mosaic, terminating in the golden mosaic of the finial. The eight principal panels represent the banking centres of the East and West: London, Paris, Calcutta, Bangkok, Hongkong, Shanghai, Tokyo, and New York. Between the panels are the characters of an inscription from the Chinese classics, with the English words above, circling the dome: "Within the Four Seas all Men are Brothers." Surrounding and above these panels are the signs of the Zodiac on a dark blue ground with wide gold borders. Within and above again are eight heraldic lions in gold, and geometric symbols in squares—the Swastika (good fortune), Solomon's Seal (wisdom), etc., and, finally, the circular topmost centre panel showing Ceres, the Goddess of Plenty or Abundance; Helios, the God of the Sun, and the Horses and Chariot with which he traverses the Heavens; Artemis, the twin sister of Helios, the Goddess of the Moon, on her forehead the crescent; one half of background, Day; the other, Night.

All the parts of the bank are easily accessible in spite of the diversity of the departments and the immense size of the building. Around the entrance hall are eight telephone booths. From the south-east archway of the octagon is reached the brokers' room. South of that is the manager's suite, consisting of manager's office, manager's private room, waiting-room, telegrams, books, and stenographers' room, with a private corridor giving access to each. The accountant's department is approached through the north-east archway of the octagon. The remaining five archways of the octagonal hall open upon the main banking hall. This hall occupies practically the whole length of the building, and has an area of 21,500 ft. The walls and columns are faced with soft-toned grey Italian marble. Throughout the length of the west wall is a seven-arched arcade of Sienna marble, corresponding with the octagonal arcade of the entrance hall. The counter—over 300 ft. in length—is faced with marble, and has bronze gates. Above the counter top is a bronze grille. A striking feature of the hall is the double staircase of white and Sienna marble at the south end. The marble entrance-way from Foochow Road gives access to the bank below this staircase. The whole composition here has a striking effect of rich decoration arising purely out of utilitarian construction. The staircase leads to the mezzanine floor, where are the stationery rooms, record rooms, manager's changing room, telephone exchange, tiffin room, service room, and the staff changing rooms, including five lavatories with shower baths.

With the sole exception of the work in the accountant's department, the marble of which came from Devonshire quarries, the whole of the marble used is Italian. Specially to be noticed in the columns are the four monoliths, two at each end of the banking hall. These were worked in Italy, and delivered to the bank without damage. Each column weighs about seven tons. The floor of the public space is of marble mosaic with marble slab borders.

The lighting of the banking hall is extraordinarily effectual and effective. During the day the effect is of unobstructed open-air daylight. The light is from the openings of the western arcade, the large bronze windows of the northern end, and especially the great semi-circular vault of the lantern light above. This lantern is 120 ft. long and 33 ft. span. The artificial lighting has been the subject of special consideration, and a novel method has been adopted. It has been arranged for small searchlights to be fixed in the central area of the building at a considerable height above the lantern vault, which shall flood the banking hall with artificial light and give the same effect as daylight.

The Chinese bank is a blaze of Chinese decoration. The building is of fireproof construction throughout. The upper four stories are designed as suites of offices, and there are two residential flats on the top floor, each with a colonnaded roof garden. The upper stories are served by four wide staircases and six electric lifts. Separate staircases are provided for coolies and for escape in case of fire.

The materials for the building have been obtained from all parts of the world, and the crafts and trades of all nations have been employed. The total weight of the building is about 50,000 tons. Of the principal constructional materials there are: 3,700 tons of structural steel; 1,350 tons of steel reinforcing bars for concrete; 4,000,000 bricks; 50,000 casks of cement; 83,771 cu. ft. of granite (6,481 tons).

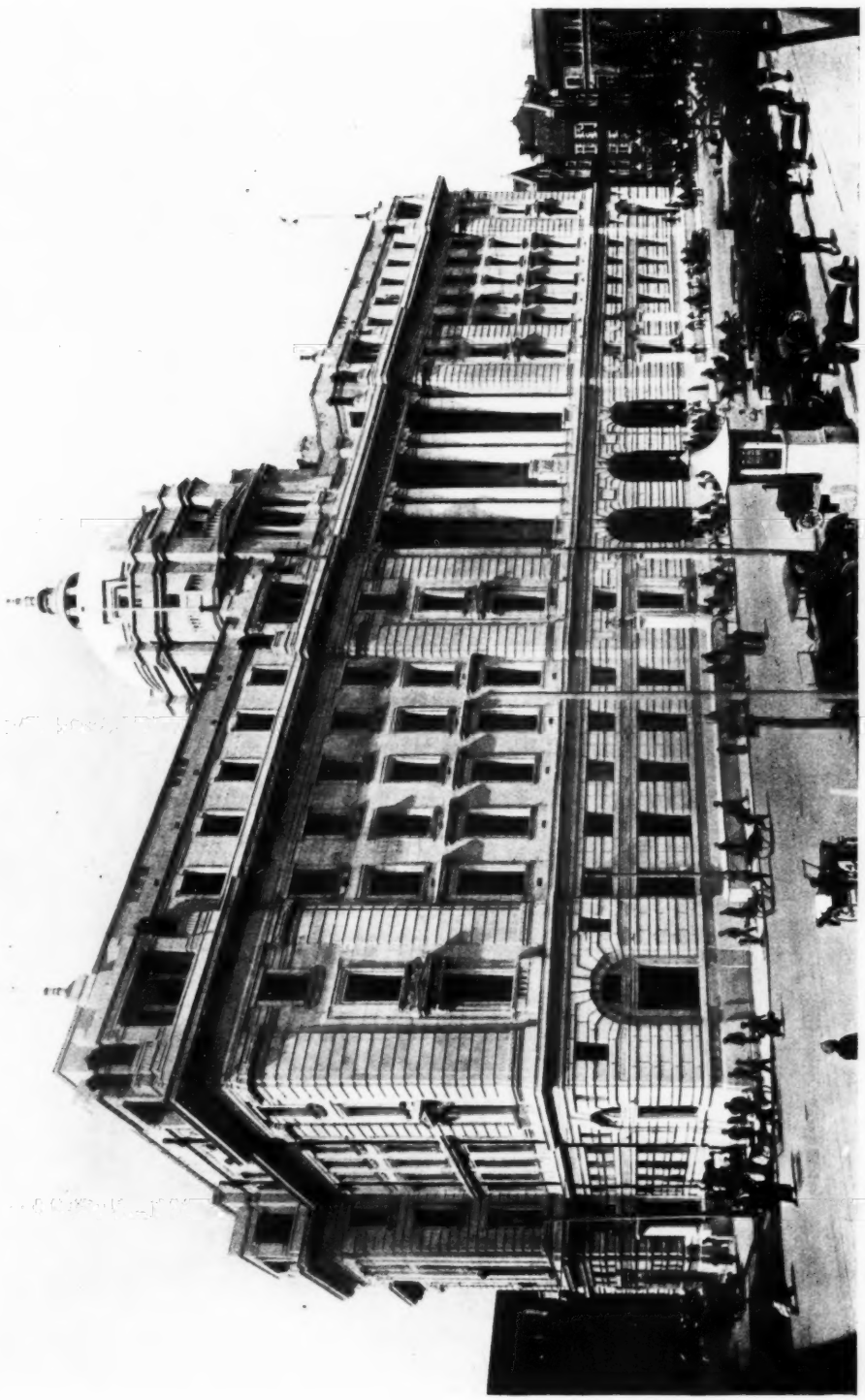
The general contractors were Messrs. Trollope and Colls (Far East), Ltd., of Shanghai, and the sub-contractors were as follows: Wheeler and Comyn Ching (Asia), Ltd., London (heating and ventilating); J. W. Singer and Sons, Ltd., London, and N. F. Ramsay (London), Ltd. (decorative metalwork); Henry Hope and Sons, Ltd., Smethwick, Birmingham (bronze and steel windows); H. T. Jenkins and Son, Ltd., Torquay (marblework); Van Kannel Revolving Door Co., Ltd., Watford, Herts (revolving doors); Chatwood Safe Co., Ltd., Bolton, Lancs. (strong-room doors); John Tann, Ltd., London (strong-room doors); Art Pavements and Decorations, Ltd., London (mosaic work—the ceiling and panels in the entrance hall are in gold and Venetian glass mosaic); British Luxfer Prism Syndicate, Ltd., London (lantern light); G. & A. Brown, Ltd., London, fibrous plasterwork; Dent & Hellyer, Ltd., London, sanitary fittings; Doulton & Co., Ltd., London, and Shanks & Co., Ltd., Glasgow (sanitary fittings).

The steelwork, the weight of which was approximately 3,325 tons, was fabricated by Messrs. Redpath, Brown & Co., Ltd., and despatched complete with all fittings ready for hoisting.

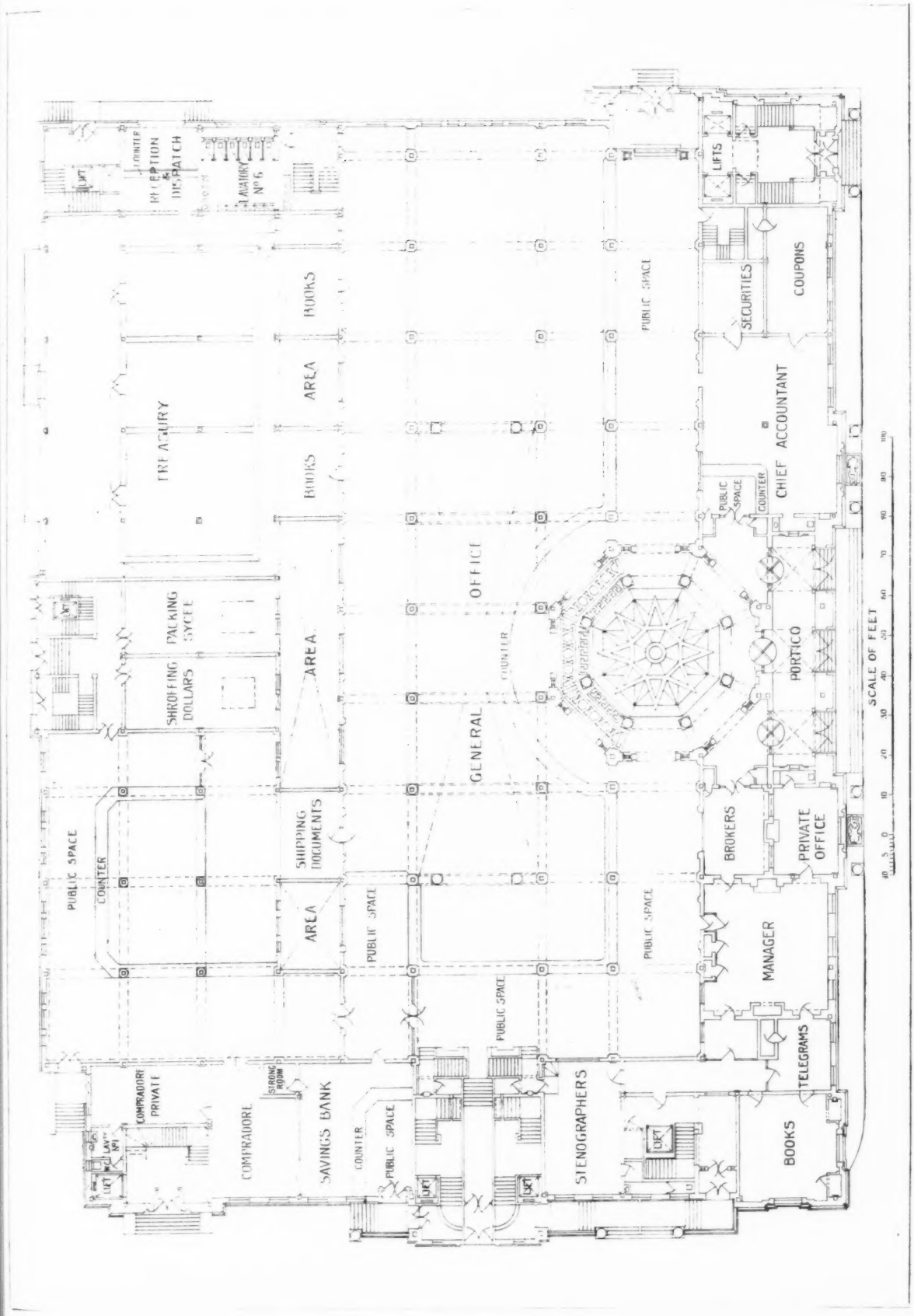
Messrs. Pilkington Bros., Ltd., of St. Helens, Lancs., were responsible for practically all the glazing. They supplied polished plate-glass, bevelled plate-glass, wired cast-glass, bent plate-glass, sheet-glass 26 oz. and 32 oz., white cathedral glass.

Current Architecture. 274.—The Hongkong and Shanghai Bank, Shanghai

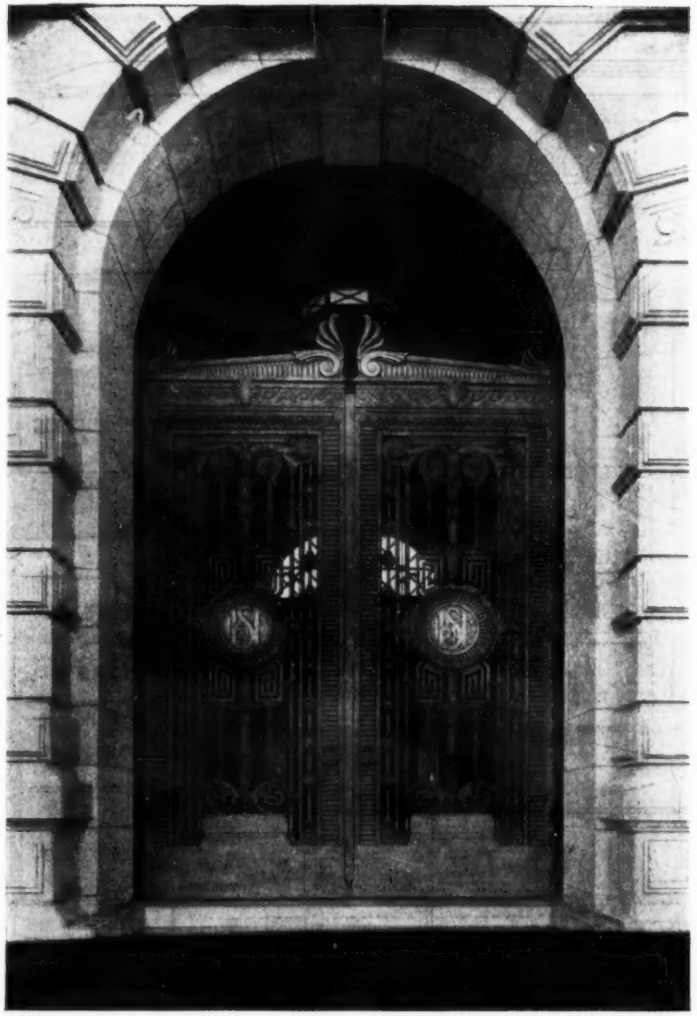
Palmer and Turner, Architects



The Hongkong and Shanghai Bank is one of the long line of big buildings on the Bund, overlooking the Huang Pu.



THE HONGKONG AND SHANGHAI BANK, SHANGHAI: GROUND PLAN. PALMER AND TURNER, ARCHITECTS.

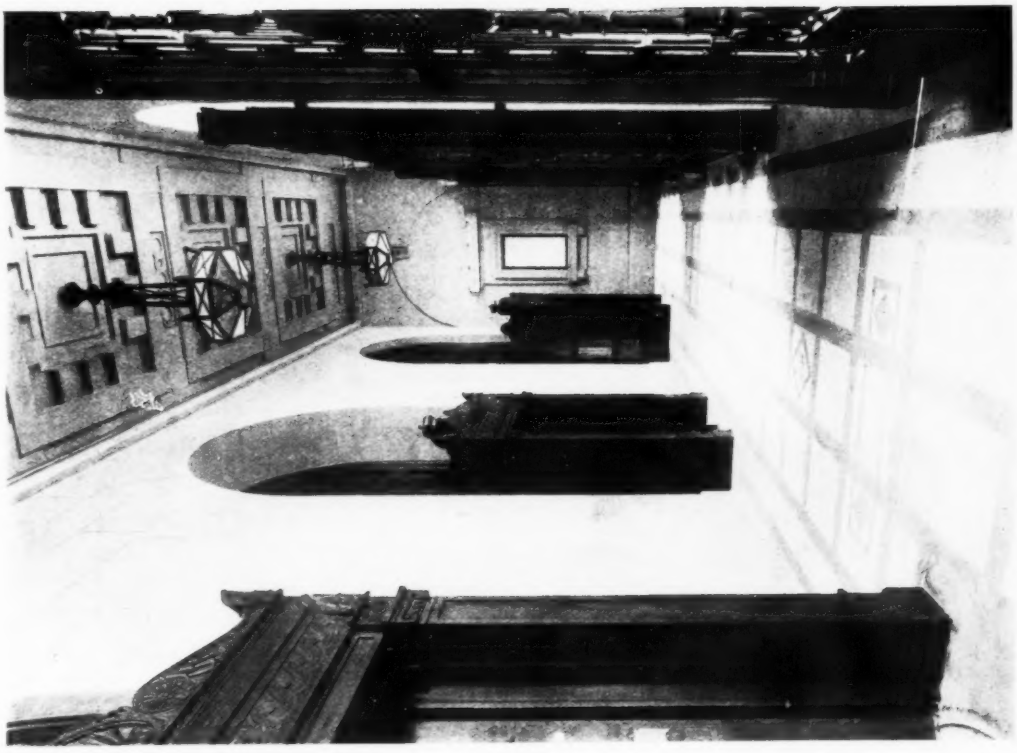


BRONZE ENTRANCE GATE, THE BUND.

BRONZE ENTRANCE DOOR, FOOCHOW ROAD.

THE [HONGKONG AND] SHANGHAI BANK, SHANGHAI PALMER AND TURNER, ARCHITECTS.

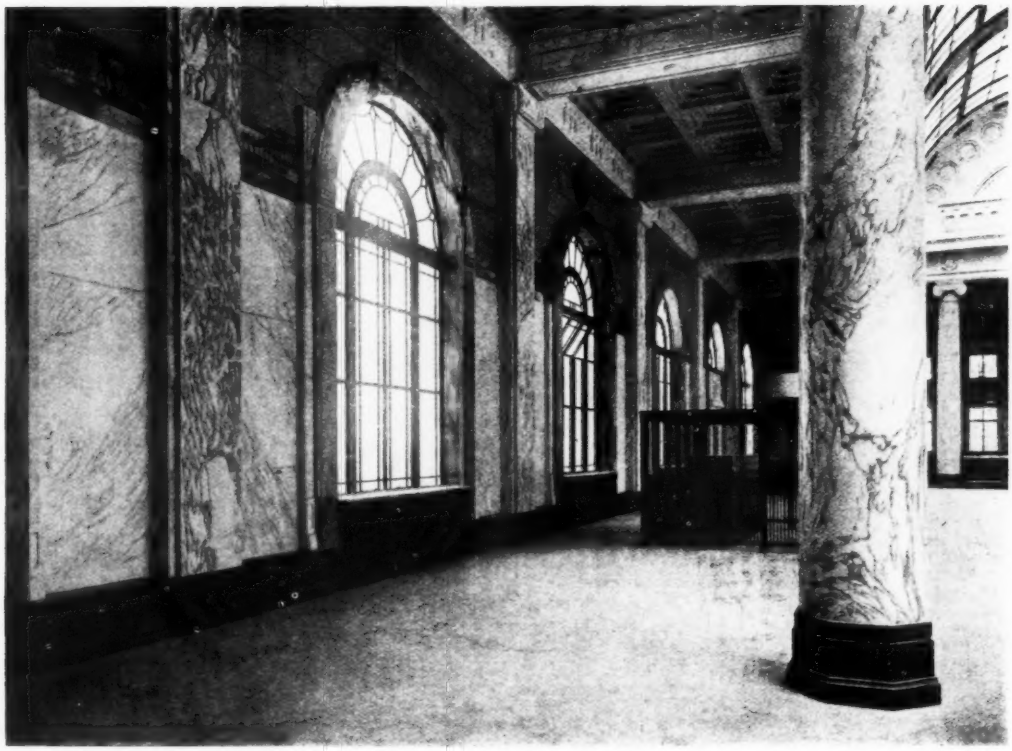
MAIN ENTRANCE HALL.



THE PORTICO.

THE HONGKONG AND SHANGHAI BANK, SHANGHAI. PALMER AND TURNER, ARCHITECTS.

THE BANKING HALL, LOOKING EAST.



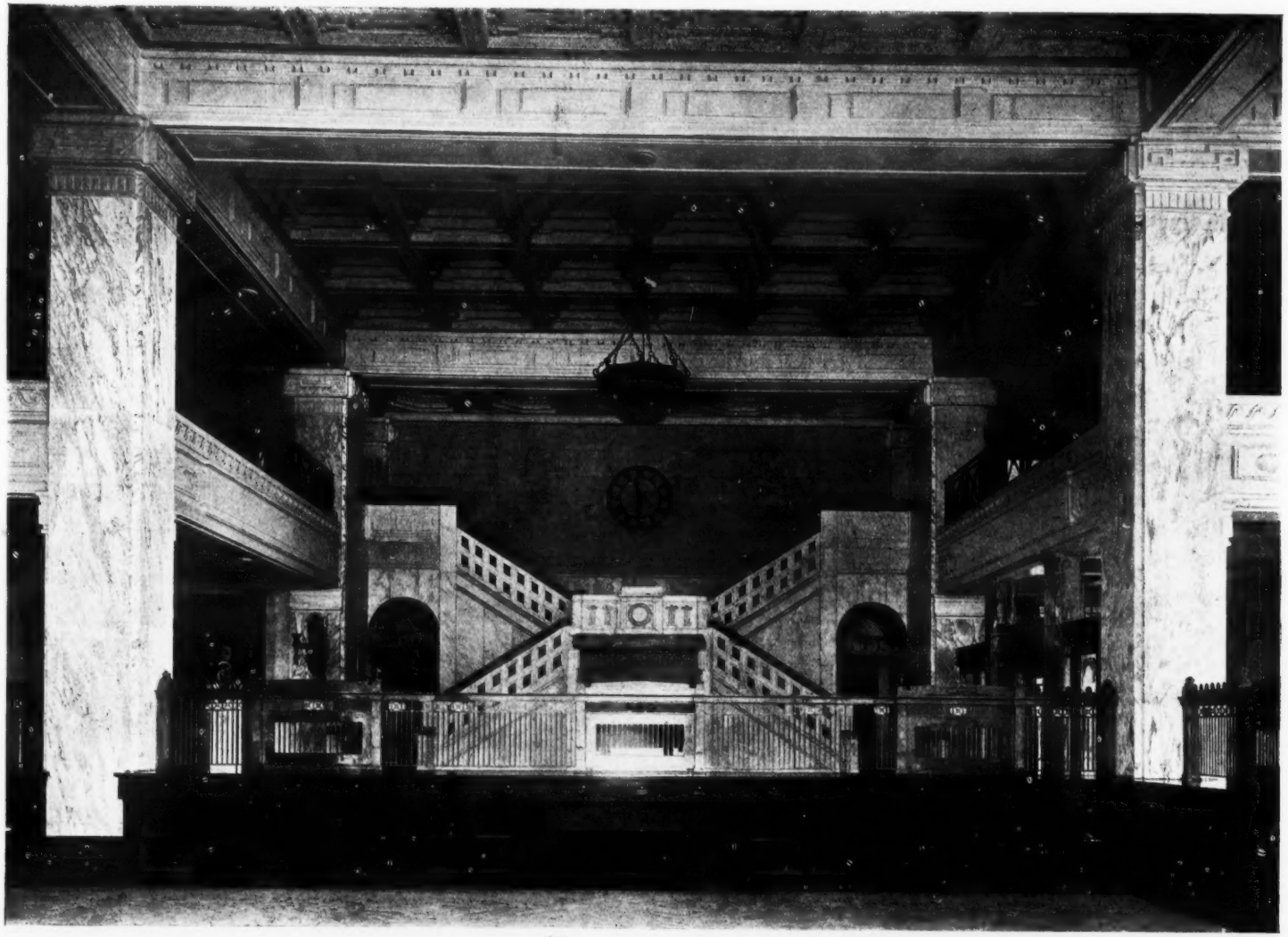
THE BANKING HALL, LOOKING NORTH-EAST.

THE HONGKONG AND SHANGHAI BANK, SHANGHAI.
PALMER AND TURNER ARCHITECTS.

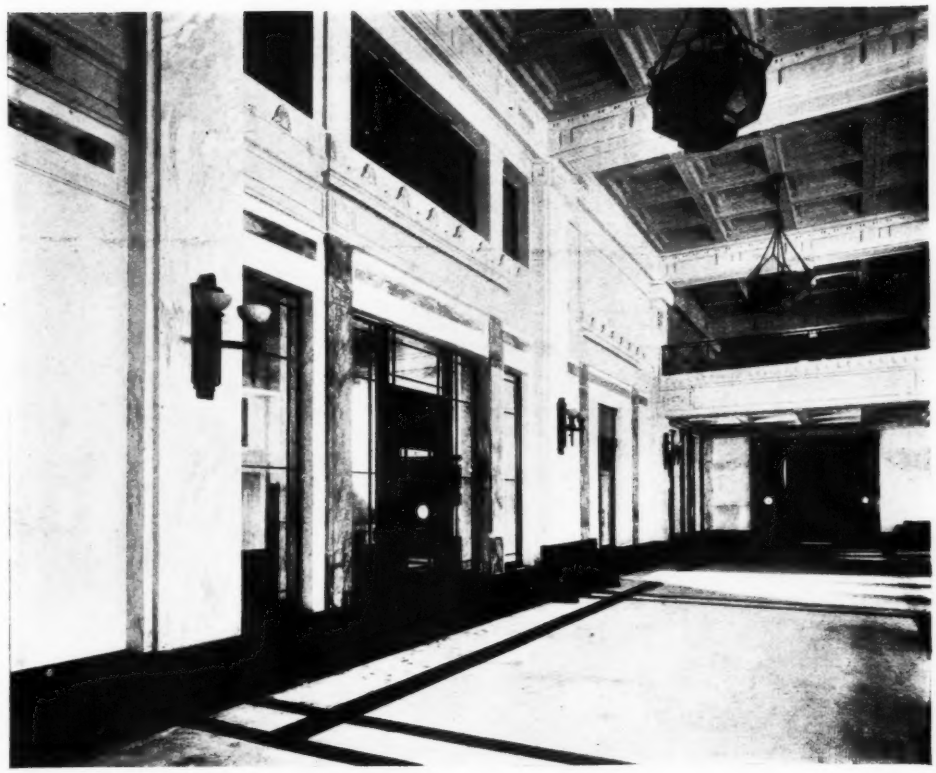
Current Architecture. 275.—The Hongkong and Shanghai Bank, Shanghai : The South

275.—The Hongkong and Shanghai Bank, Shanghai : The South End of the Banking Hall

Palmer and Turner, Architects



This view shows the marble staircase leading to the mezzanine floor.



PUBLIC SPACE, SOUTH-EAST CORNER.

THE MANAGER'S ROOM.

THE HONGKONG AND SHANGHAI BANK, SHANGHAI.
PALMER AND TURNER, ARCHITECTS.

THE CHINESE DEPARTMENT, SOUTH-EAST CORNER.

THE CHINESE DEPARTMENT: BANKING HALL.

THE HONGKONG AND SHANGHAI BANK, SHANGHAI.
PALMER AND TURNER, ARCHITECTS.

Two Current Exhibitions

AN exhibition of the work of the late Adrian Berrington, who died in 1921, has long been overdue, and the Architectural Association are to be congratulated on having brought together, obviously from a variety of quarters, an admirable collection. Berrington's etchings were, it appears, never published in his lifetime, only a few trial pulls being hitherto in existence. From each of the fifteen finished plates left by him a small limited edition has now been issued, and copies are to be obtained at the exhibition gallery in Bedford Square. By far the most important of the etchings is the large view of Waterloo Bridge, 5½ ft. long by 21 ins. deep, which is surely one of the largest designs ever done on copper in the whole history of etching. It is a fine panoramic composition, balanced with a meticulous symmetry that some might, perhaps, think slightly overdone; one end being punctuated by Cleopatra's Needle, and the other by the Shot Tower on the Surrey bank. The two forms are almost exactly similar in outline, and are equidistant from the dome of St. Paul's, which occupies the centre of the horizon. The bridge is subtly drawn, and is represented in its entire length, abutments and all, a task which appears to have been shirked by most artists who have made it their subject. I note with amazement that copies of this large and exquisitely finished etching are priced at only five guineas each. If I may venture on a prediction, I would suggest that before the exhibition is over they will be changing hands at a considerably higher figure.

The Buckingham Palace etching is another very beautiful rendering of an object familiar to Londoners, but here viewed from an angle which makes it appear peculiarly attractive. Among the other etchings half a dozen or so form a Scottish castle series, which no doubt originate from a tour undertaken by Berrington under an architectural scholarship. Some of the castles appear again among the water-colours. These, however, include what would seem to the ignorant observer to constitute the apogee of their author's career as a draughtsman. There are things here that betray quite another sort of technical mastery than may be found in the etchings. Berrington's brush acquired, towards the end of his life, a cleanness, a vivacity, and a power of coherent yet luminous design, that, perhaps, account for his increasing use of this implement. I do not know what are the dates of the water-colour drawing entitled "Carnival in a Wood," and lent by Mrs. Rachel Armand Taylor, or of that which is almost filled by the azure ripples of a broad expanse of bay, but in these two works may be observed how wide was Berrington's range of achievement. The dazzling brightness of the one scene, and the deep nocturnal gloom of the other, are conveyed with the same insight and dexterity.

Many of the visitors to the Winter Exhibition of Decorative Art held at the Royal Academy two years ago, came away with a sense of bewilderment, a feeling of incompleteness that was not diminished by the excellence of some of the works there shown. This feeling arose chiefly from the fact that decorative art is nothing without its *milieu*, and, with a very few exceptions, the Academy exhibits had no individual *milieu*. They were just pictures like any other pictures, though their handling betrayed a decorative rather than a descriptive intention. The same criticism will no doubt be levelled at the exhibition of mural paintings now being held at the Royal Institute of British Architects. The most interesting of the paintings shown, those hung in the smaller of the two galleries, were, as a matter of fact, mostly included in the Academy Winter Exhibition. Mr. George Clausen's cartoons for the frescoes, of which we illustrate a section, executed by him at High Royd, are no doubt the most striking among the designs exhibited. Moreover, they are fortunate in belonging to those whose architectural surroundings may be studied in an uncatalogued frame of photographs. Speaking of the catalogue,

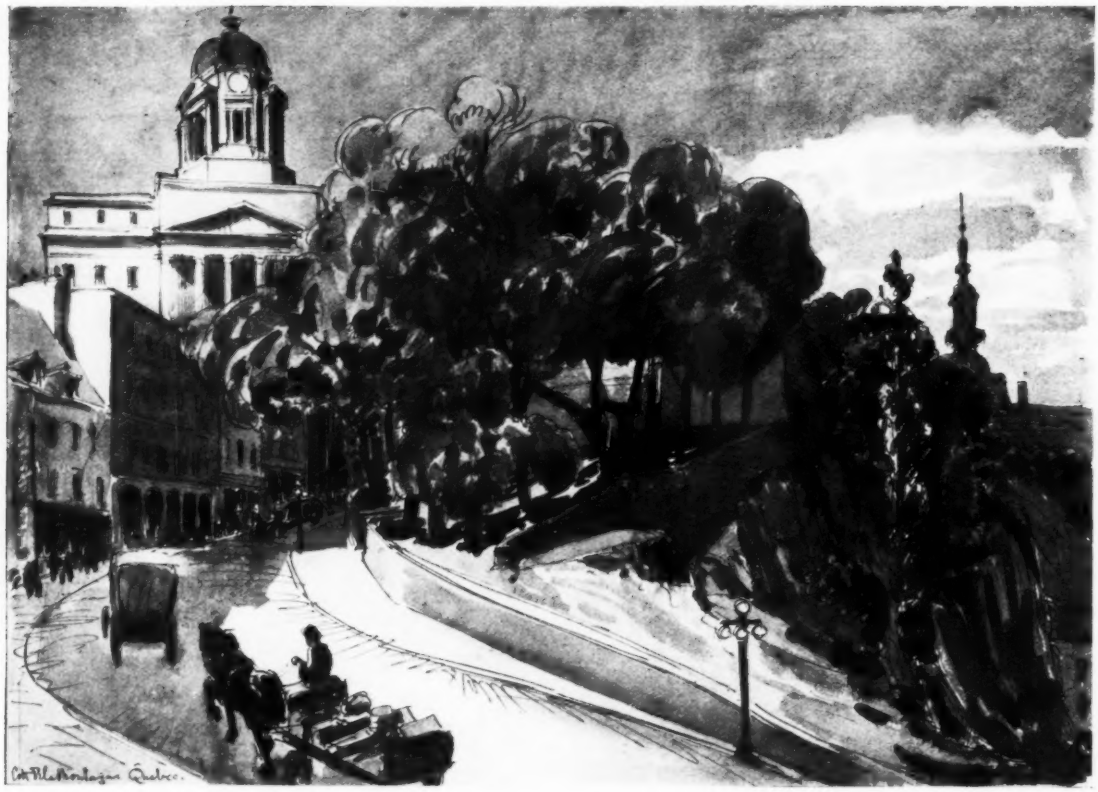
WATERLOO BRIDGE. FROM AN ETCHING BY THE LATE ADRIAN BERRINGTON IN THE A.A. EXHIBITION.

MORNING. BY GEORGE CLAUSEN, R.A.

(R.I.B.A. Exhibition of Mural Paintings.)

ENGLAND AND FRANCE. BY F. ERNEST JACKSON.

(R.I.B.A. Exhibition of Mural Paintings.)



CÔTE DE LA MONTAGNE, QUEBEC. BY THE LATE ADRIAN BERRINGTON, IN THE A.A. EXHIBITION.

the omission of this frame is an insignificant defect compared with the absence of any titles or other distinguishing legend whereby the origin and identity of the exhibits may be known. The names of the artists, which are given, are, however, the most important things about them, and the inclusion of such distinguished decorators as Miss Ethel Walker, Mrs. Sargant Florence, Mr. Clausen, Mr. Anning Bell, Mr. Cazley Robinson, Mr. F. C. Jackson, Mr. Maxwell Armfield, and Mr. John D. Batten made the show well worth seeing.

It is difficult to foresee the solution of the chief problem presented by exhibitions of this nature, but there can be no doubt that efforts will sooner or later be made to show examples of decorative art in a setting which suggests, however inadequately, the function which they were created to fulfil. It is probable that models will be utilized to a considerable extent. There is a model by Mr. Henry Holiday (the French word *maquette* misspelt is the only description of it in the catalogue) at the Royal Institute Galleries, and, quite irrespective of the artistic merits of the work, such a model is more instructive than ten full-size decorations by an Academician suspended *in vacuo*. An exhibition consisting entirely of ½-in. scale plaster models, coloured with care, would be of quite inestimable value, but the colouring should extend to the whole architectural scheme. To reproduce this whole scheme is beyond the power of any exhibition, but there is no doubt that something may be done to suggest it. N. N.

Chantrey Purchases

The Royal Academy have purchased under the terms of the Chantrey Bequest from their exhibition two small statuettes. One is a carving of a drake in Irish limestone by Mr. Richard Garbe, the other a highly wrought figure in ivory and marble, "Christ at the Whipping Post," by Mr. A. G. Walker, who was this year elected an Associate. The former was illustrated in our last issue.

The Hudson Memorial

The memorial to W. H. Hudson in Hyde Park is now entering its last stage. It was designed by Mr. Lionel Pearson, in the form of a bird sanctuary, with hedges, lawn, and a water-pond with a screen of Portland stone, with a large sculptured relief by Mr. Epstein as its centre. There is, it is said, nothing like it in English memorials.

Mr. Epstein, who has himself been carving the whole of the huge panel instead of following the almost general custom of designing in clay and handing the work over to carvers, then putting in some finishing work at the end, has done the carving in a large studio he had erected near Epping. The block has now been brought to Hyde Park, and the sculptor has begun his finishing work. The memorial is to be unveiled by the Premier on the morning of May 19.

Statuary for Bush House

On July 4 Lord Balfour will unveil a statuary group in the great arch over the portal of Bush House. The statuary, which symbolizes Anglo-American friendship, has been landed at the London docks.

When Bush House was erected Mr. Bush had carved on the lintel of the porch the words: "To the friendship of English-speaking peoples." Having provided the motto, he then sought to give it expression in the form of a symbolical group in stone. The idea evolved has been interpreted by Miss Malvina Hoffman, of New York. The two nations are typified by figures 12 ft. high. Each holds a torch, symbolizing civilization, over a Celtic altar. The carving was carried out in the United States by a native of Dumfriesshire.

It was originally intended that the group should be cut from Portland stone, the material used in building Bush House, but it was found impracticable to obtain blocks of the size needed by the dimensions of the statue. Indiana limestone has therefore been used.

The Royal Hospital School, Holbrook, Competition

The Winning Design

MESSRS. BUCKLAND AND HAYWOOD, FF.R.I.B.A., of Birmingham, architects, have won the competition for the design of the new Royal Hospital School to be erected at Holbrook, near Ipswich.

The present accommodation of the Royal Naval School is in Greenwich Hospital, in that portion of it that included the Queen's House, built by Inigo Jones, and certain other buildings which had been associated with it for the accommodation of the boys. The larger buildings on the other side of the road, built by Sir Christopher Wren, were used for the training of cadets. The first section, built by Inigo Jones, was for the training of non-commissioned officers, and it is that part which is now to be transferred to Holbrook, near Ipswich, overlooking the Stour estuary and looking right up to Harwich. The buildings are to be very extensive. They will include the school block with a lofty tower in the centre, the dining-hall, gymnasium, swimming baths, fourteen hostels each for eighty boys, a chapel, an infirmary, an isolation block, a parade ground, about a dozen houses for the principals, fifty-six houses for the artisan staff, and twenty-three houses for the teaching staff. There is a parade ground, with a saluting base, and the school buildings are grouped on the north side. The site is terraced, falling away gradually towards the sea.

Messrs. Buckland and Haywood were one of six firms selected from among many candidates to compete. To each of the six competitors the governing body, having satisfied themselves as to the standing of the competitors, allowed a sum of £500 for expenses.

In the winning design, which is illustrated on the following pages, the authors have endeavoured, both in lay-out and general conception, to fulfil the expressed desire of the promoters that the buildings should be made worthy of the great service with which they will be connected. At the same time they have also been governed by the primary requisites laid down in the conditions, viz., full provision for healthfulness, light, air, warmth, general convenience, and economy of arrangement.

The winners in their report state: The arrangement of the buildings on the site has been adapted to the existing contours in such a way that the levels of all balancing masses are maintained throughout, and a dominant horizontal character is established, which would bring the whole composition into scale with the landscape as seen from the estuary. Approach by road is also given appropriate emphasis by the focal treatment of roads at the main entrance, and by the coincidence of the main cross axis of the lay-out with the road on the west.

With the large number of boys to be dealt with, one of the chief problems in the lay-out has been the grouping of the hostels in such a manner that no boy will have to walk an unreasonable distance in getting from his hostel to the school or other occupation. The houses most remote from the school centre are from 300 to 350 yards away, and for purposes of comparison it may be mentioned that this is practically the same distance as at the Duke of York's Military School.

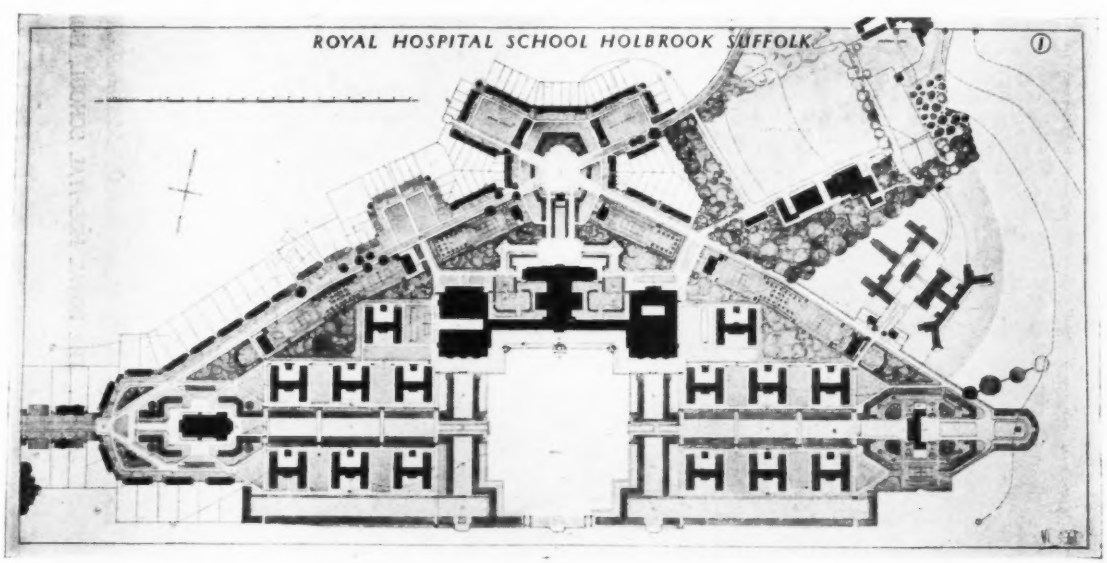
The whole of the main buildings comprising the administration block, school, trade shops, dining-hall, and kitchens, bath and gymnasium, are grouped together in one block, all with intercommunication under cover.

The school is planned in accordance with the now accepted practice of through ventilation by means of windows on both sides. In the class-rooms this is effected by means of open corridors.

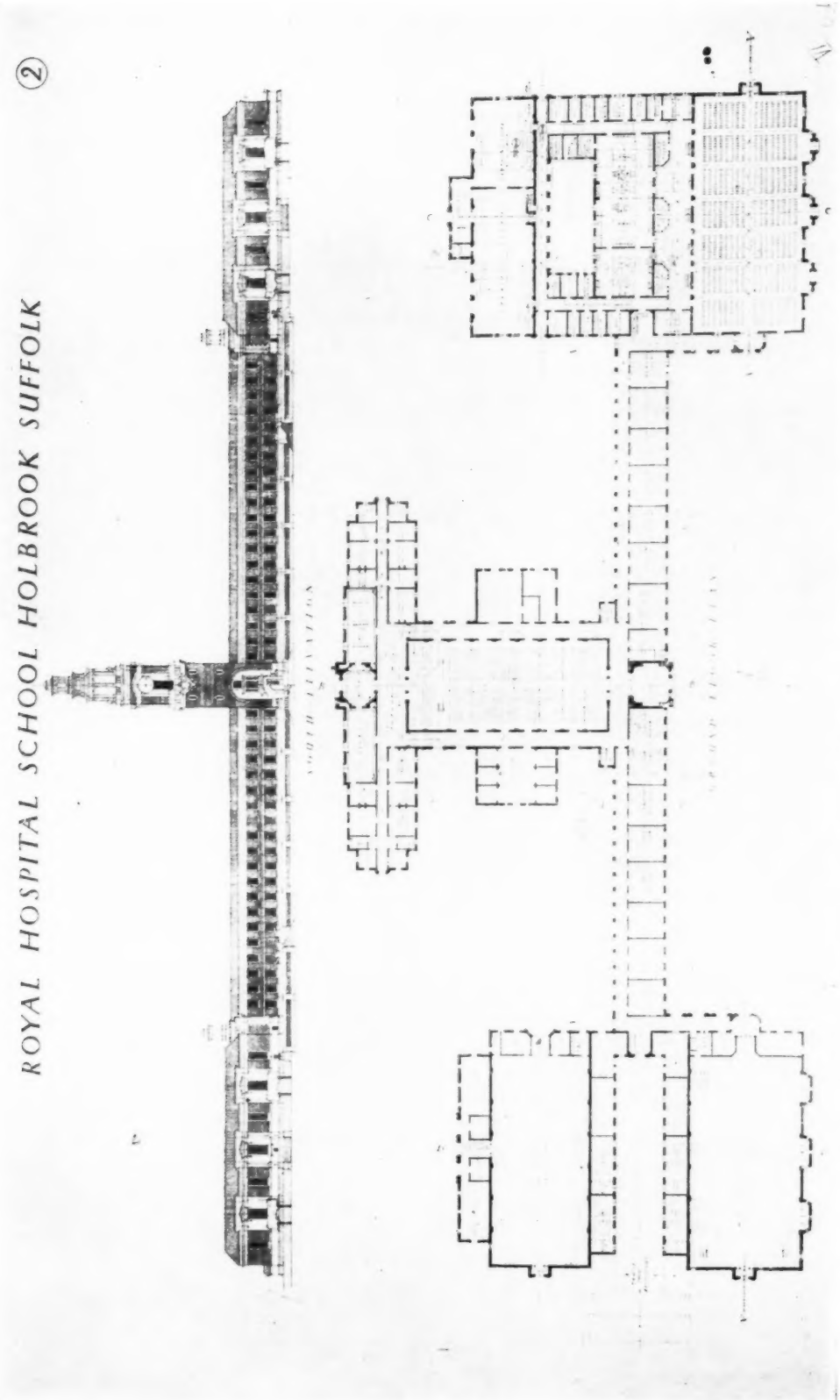
To emphasize the educational character of the work done in the trade shops they have been planned as part of the school building, and are approached from the main corridor of the school.

It has seemed to us appropriate to keep the chapel somewhat apart from the ordinary activities of the school; we have, therefore, not adopted the suggestion to group this building with others near the parade ground, and have placed it at the west end of the site, with an axial approach along the main avenue between the hostels.

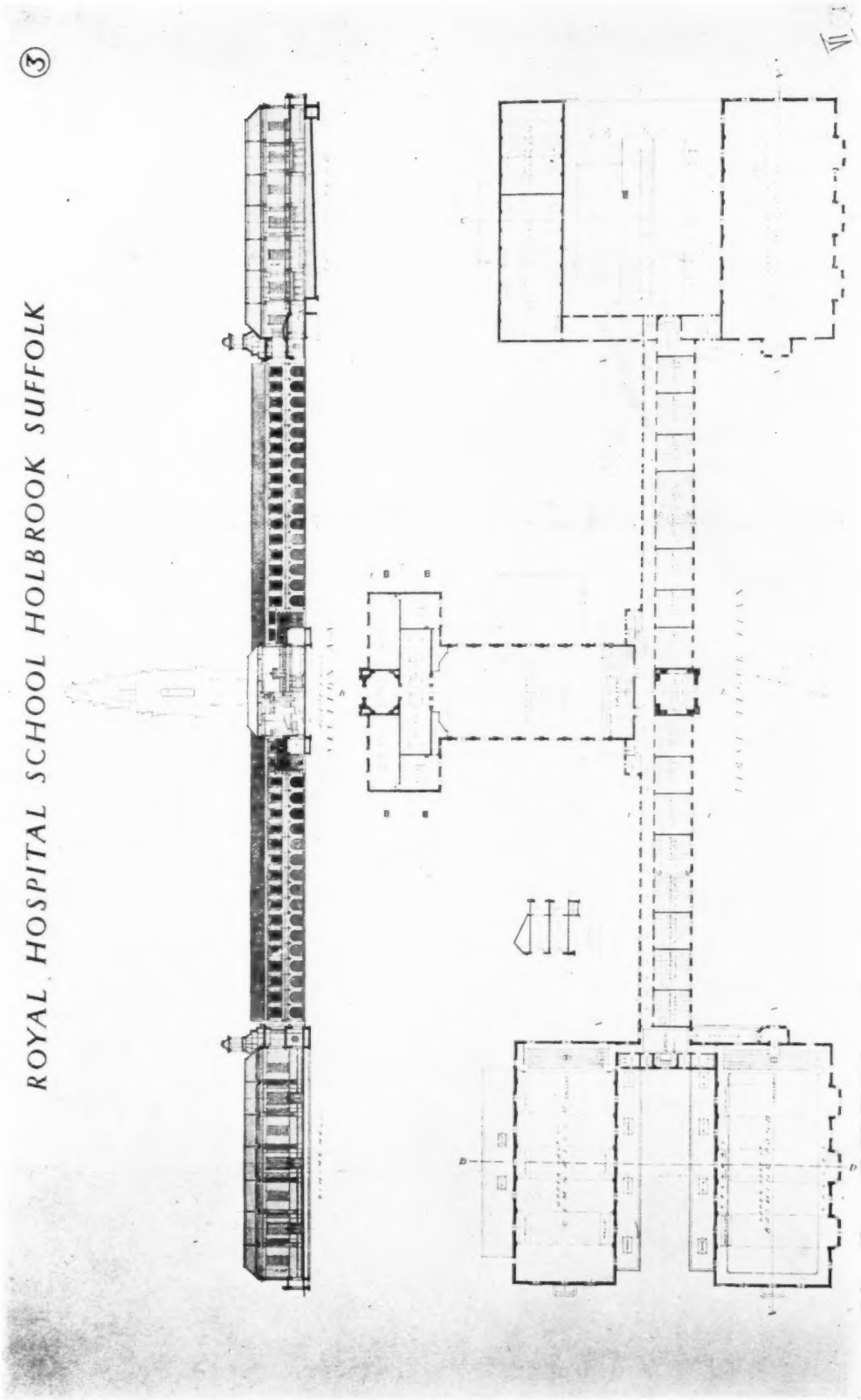
Most of the houses have been planned to face existing roads, so that the cost of road-making is reduced as far as possible.



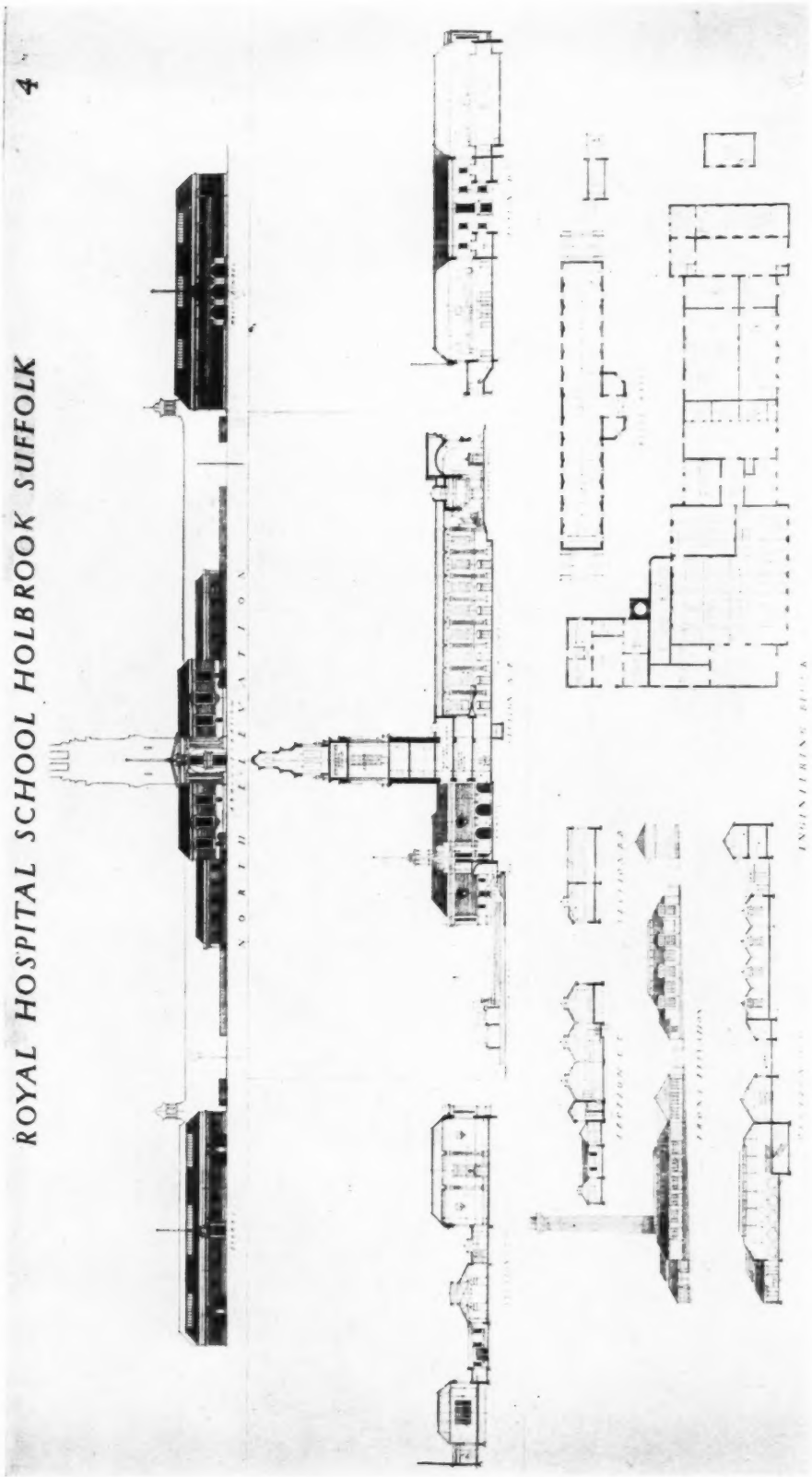
PLAN OF LAY OUT.



THE ROYAL HOSPITAL SCHOOL, HOLBROOK, COMPETITION: WINNING DESIGN. BUCKLAND AND HAYWOOD, FF.R.I.B.A., ARCHITECTS.



THE ROYAL HOSPITAL SCHOOL, HOLBROOK, COMPETITION: WINNING DESIGN. BUCKLAND AND HAYWOOD, FF.R.I.B.A., ARCHITECTS.



THE ROYAL HOSPITAL SCHOOL, HOLBROOK. COMPETITION: WINNING DESIGN BUCKLAND AND HAYWOOD, F.F.R.I.B.A., ARCHITECTS.

ROYAL HOSPITAL SCHOOL HOLBROOK SUFFOLK

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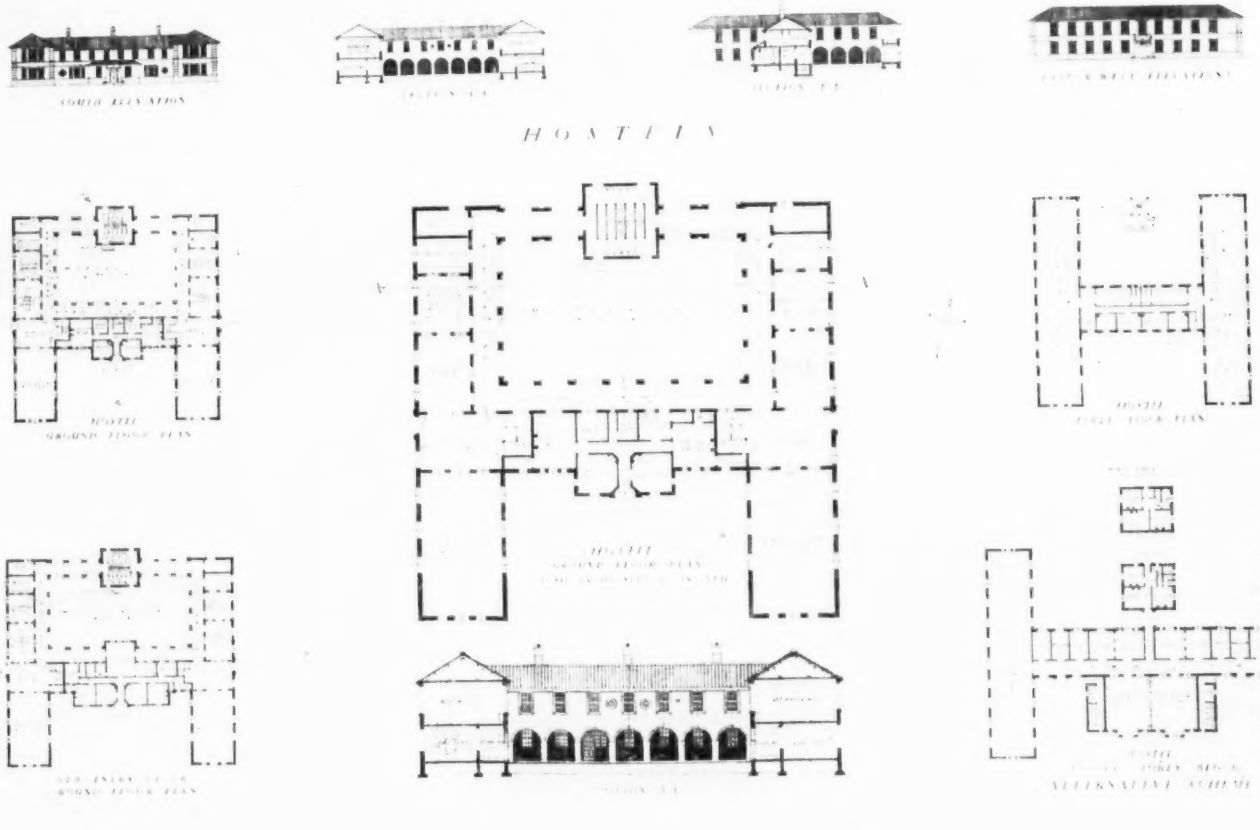

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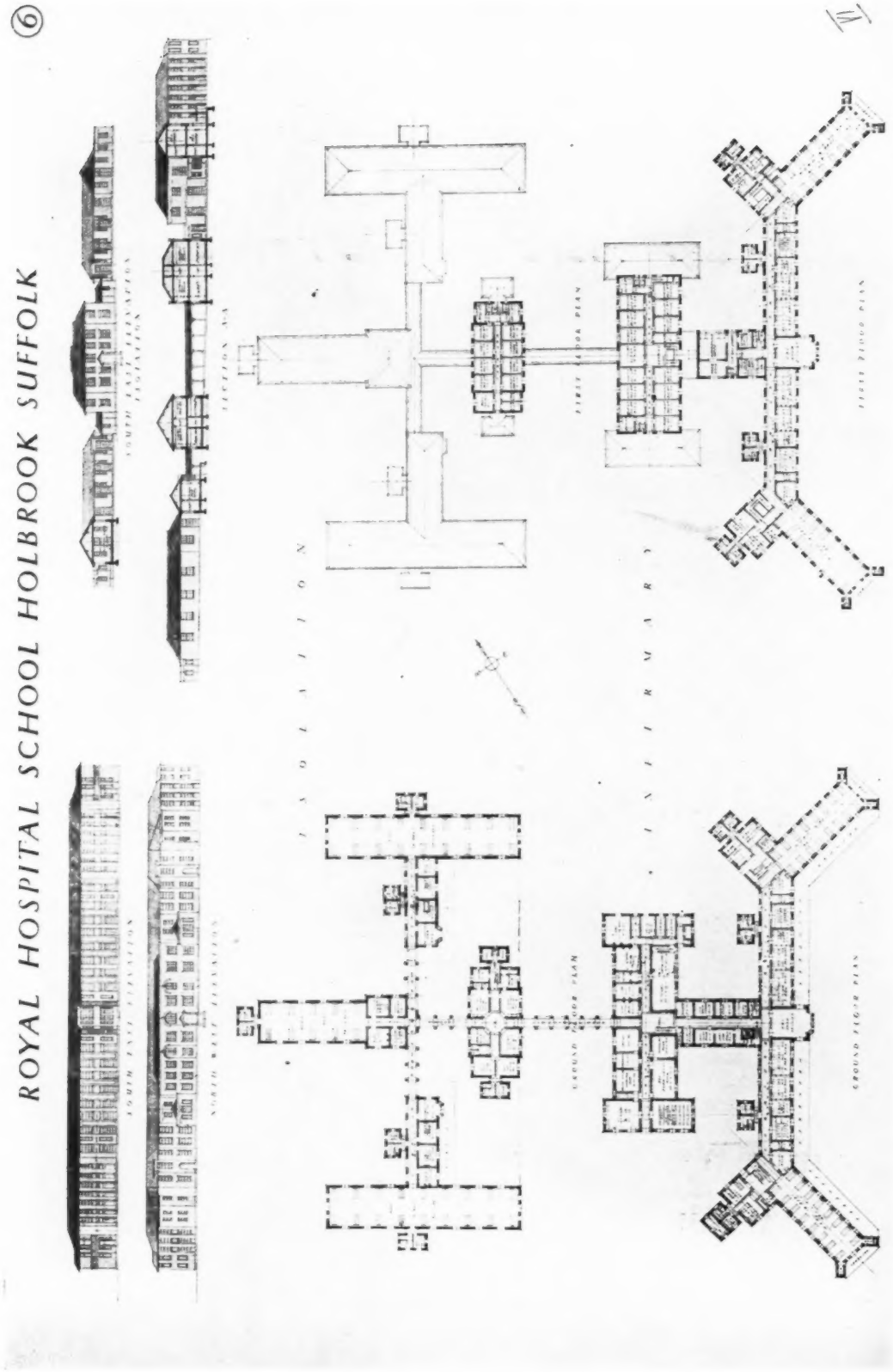

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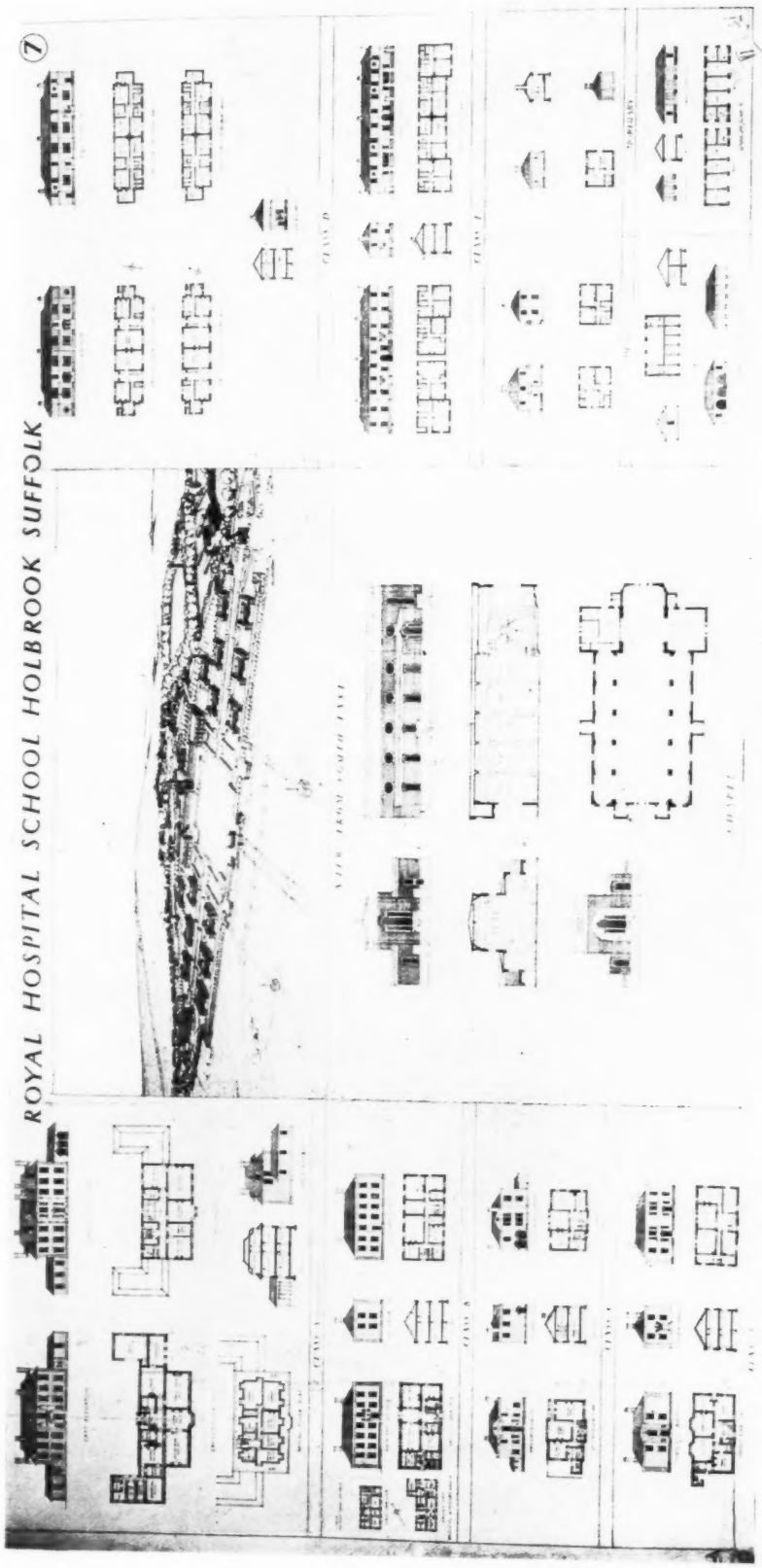


THE ROYAL HOSPITAL SCHOOL, HOLBROOK, COMPETITION: WINNING DESIGN. BUCKLAND AND HAYWOOD, FF.R.I.B.A., ARCHITECTS.

Magazines of the Month*

A Literary and Pictorial Digest

NEARLY twenty of the handsome pages of THE ARCHITECTURAL REVIEW'S May number are devoted to Sir Edwin Lutyens's block of office buildings in Finsbury Circus, London—Britannic House. Mr. W. G. Newton's impressions of the building are: "Britannic House is a palace upon a dainty cliff, and from its arched windows aloft you feel that the great lords of oil may step forth and throw from the balconies largess to the crowds below. . . . So far as it has gone it gives the impression, as has been said, of a palace built on a cliff, a very daintily and curiously disposed cliff, where the underlying pattern is archway planted by rectangle and square, and the rectangles are emphasized with channelled coursings and charming isolated orders, or subordinated in the general masonry mass, and the whole face amusingly spotted with carvings here and there of rare delicacy. . . . Certainly this curved front to Finsbury Circus, with its sweep of shallow steps, its piers and vases, its delicate strength below, and the dignity of its arched windows and unbroken roof above, is a stately housing of a great concern. Only the columns seem a little uncomfortable: they are hardly married, yet not quite divorced. And the Circus garden, with its shrubs and railings, should be a lawn of greensward where fountains play."

What is perhaps the most interesting house in North Devon is illustrated in this number. Bull Hill House, Pilton, would seem to have been part of the old Benedictine Priory there—quite possibly it was the residence of the prior. Some beautiful details are given of the old panelling, arched stone doorways, and picturesque roof timbers, most of which had been hidden from view. The series of articles on "Garden Design" deals in the tenth article with "garden ornaments," and lends itself to illustration by some delightful examples of figures, vases, and sundials. At Nether Swell, a pair of deer in bronze are shown under a tree. One wonders whether they are not too naturalistic: they might be apt, in time, to irritate rather than please.

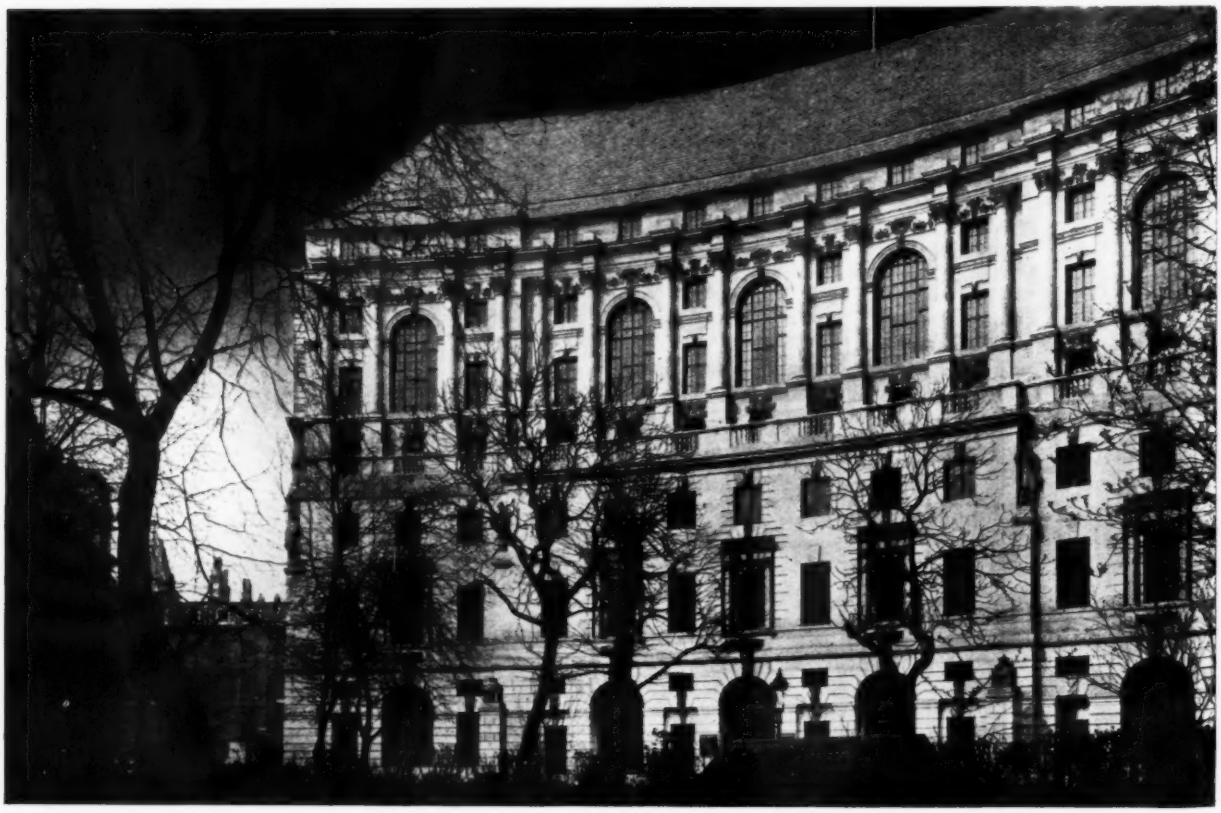
A writer in THE ARCHITECTURAL RECORD for April, introduces us to "one of the latest developments along architectural lines"—a "garden under lath," a new garden architectural form.

In many parts of California small "gardens under lath" have been known for several years. The need to supply shade for certain tender plants like begonias and ferns led to the erection of mere coverings of lath, for all the world like chicken coops. Gradually these lath structures became larger, growing conditions within them being so phenomenally satisfactory, and some covered as much ground as a greenhouse. Even so, they remained mere squares or oblongs, the product of amateurs or building contractors of the neighbourhood.

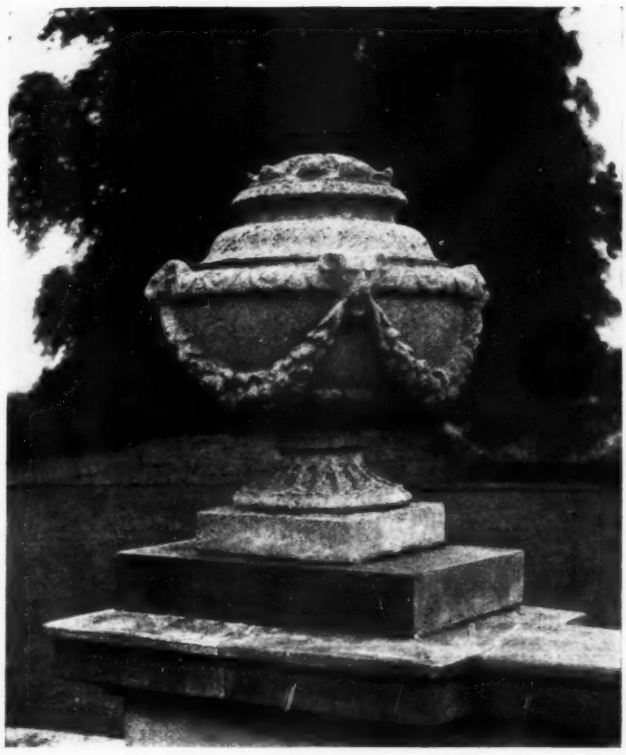
So, in the quite recent evolution of the so-called Lath House, it fell to the lot of a landscape architect to design and construct what, so far as is known, is the first really architectural Lath House.

In plan, there is a rotunda with one short wing, up-grade to the right, as you enter, and a very long wing, in several

*All the above magazines and many others may be seen in the Reading Room at 9 Queen Anne's Gate, Westminster.



BRITANNIC HOUSE, FINSBURY PAVEMENT, LONDON: A VIEW FROM FINSBURY CIRCUS.
SIR EDWIN L. LUTYENS, R.A., ARCHITECT
(*From "The Architectural Review."*)



A VASE IN A KENTISH GARDEN.
(*From "The Architectural Review."*)

levels, down-grade to the left, covering 6,000 or 7,000 sq. ft. The axis of the long wings is bent near its middle, to conform to the natural outside slope. The rotunda or main entrance is 40 ft. in diameter, sixteen-sided, the chords of the circle being of varying widths and 24 ft. in height, over all, 8 ft. for the dome proper and 16 ft. for the body of the rotunda. The shorter wing is four-sided, three sides being about 25 ft. long, and has a total height of about 12 ft. The longer wing is some 180 ft. long, 25 ft. wide, and 12 ft. to 15 ft. high on different levels. Flat roofs on both wings harmonize with the flat-roofed dome crowning the rotunda, the whole planned to fore-shorten pleasantly against the horizontal lines of the near-by residence and the general flat contours of the coast lines.

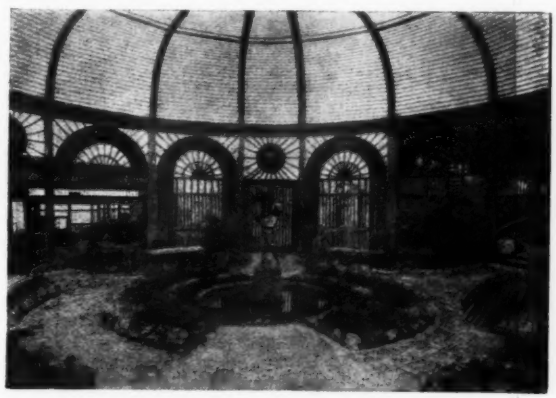
The chief structural innovation lies in the erection of the broad flat dome for the rotunda. Ordinarily risky, this type of dome was made possible by the use of iron beams which spring from above all the heavy vertical timbers of the rotunda and are caught in a "frog" at the centre. Light lath webbing in concentric circles composed the only overhead covering, and the iron beams were covered to the desired thickness with laminated strips of red-wood. Hence the effect of a great cobweb. The main lines were clean cut, everything carrying right through. The sixteen sides of the rotunda were filled in with a definite lath design, treated like panels. The wider ones reflected the semi-circular Mission Arch often used in the old Spanish-California architecture.

THE AMERICAN ARCHITECT for April 22 illustrates very fully the new Washington Cathedral. "That a new age of cathedral building is already at hand," says Mr. Philip Hubert Frohman, one of the architects, "would seem to be indicated by the fact that the three most notable cathedrals now under course of construction are the greatest and most monumental Gothic churches which have been built since the Middle Ages. The cathedrals referred to are those of Liverpool, St. John the Divine, New York, and Washington Cathedral. If the distinguishing characteristic of Liverpool Cathedral is originality, and of New York Cathedral, diversity, that of the original design for Washington Cathedral is conservatism. One of its marked differences from Liverpool and New York is due to the fact that it belongs to the typical mediæval type with a clerestory in choir, transepts, and nave. The internal order of Liverpool is striking and unusual, but we do not feel that its eternal effect with dark triforium in place of a clerestory and its principal source of light being from the windows of the barrel-vaulted aisle, so far below the main vault, is as beautiful and uplifting as a clerestoried interior. In the interior of New York Cathedral we approach more nearly to the ideal lighting of a mediæval cathedral, as the main aisles are as high as the nave, and have lofty clerestory windows which will admit a sufficient amount of light at the proper level. Even so, the effect of the clerestory light coming from outside of the main columns of the nave arcade does not seem to us to be quite as perfect as the scheme which was given the greatest favour by the mediæval builders of France and England. It reminds one more of great 'hall type' of church to be found in Germany."

Editorial comment is made upon the demolition of ancient buildings to make way for new ones. Anent the razing of the venerable Brevoort house on Lower Fifth Avenue, New York, protests have already been called forth from even the daily papers of New York. THE AMERICAN ARCHITECT says: "That a building so architecturally good, and one about which cluster so many of the fine traditions of this city should be compelled to step aside to provide a site for another of the too many apartment houses that are ruining that fine neighbourhood, has inspired a number of well-written editorials. None of them has expressed the sentiment of regret or spoken in words architects can better understand than the 'Herald Tribune.' The editorial concludes with this sentence: 'The wreckers who destroy the old Brevoort house will need be young and strong; he is a sound, tough old body even at ninety years, and will die with his bricks on.' 'Die with his bricks on'—a whole column of words could not more thoroughly express the true meaning of the passing of this fine old house.

"We have so few historic houses remaining that effort should be made to preserve them. And it will undoubtedly be an effort of considerable magnitude to impress on their owners the desirability of keeping such properties out of the hands of that speculative element that seems determined to get from every inch of property the highest rental income. . . . Something should be done to preserve these old houses, but it's doubtful if sufficient interest can be aroused with our political masters to accomplish anything worth while."

All this, we are glad to say, is quite at variance with the reported talk of Mr. Harvey Corbett in our recent American number. "We have very little feeling about tearing down old buildings. We have no sentimental ties



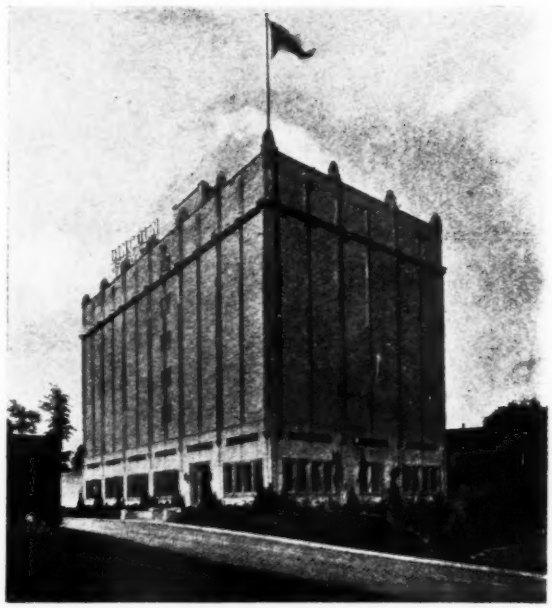
A "GARDEN UNDER LATH": A CIRCULAR POOL IN THE ROTUNDA.
NATHANIEL E. SLAYMAKER, ARCHITECT.
(*From "The Architectural Record."*)

and very few grandfathers. We don't value 'settling down,'" he is stated to have said.

The Lincoln Storage Company Warehouse, Cleveland, Ohio, also illustrated in this number, is an interesting example of the development of industrial and storage buildings. Perhaps the latter presents the more difficult problem to the architect owing to the preponderance of blank walls as compared with other kinds of structures. It is apparent that the old-time blank wall of uniform texture, reduced to an unbroken plane, was as impossible as a wall over-ornamented with details, useless orders, and cornices, and it has been one of the finest successes of architecture to produce a blank wall that completely satisfies by its harmonious colours, texture, and proportions.

All these requirements have been met in the Lincoln Storage Company Warehouse, Cleveland, Ohio. The completed half of the building is 123 ft. long and 64 ft. wide. On the north end is located the boiler-room equipped with oil-burning furnaces, and truck sheds which are 29 ft. in length. At this place is also located the exterior ten-ton capacity freight elevator which is ample for a loaded truck. There is no basement, and the elevation of the car floors on the railroad switch is the same as that of the second floor. The building is seven stories high; has a floor area of 57,469 sq. ft., and a contents of 625,540 cu. ft.

The balance of the first floor contains a spacious lobby which opens to the general office, the vault, the automatic elevator, the stairs, and the women's rest-room and toilet, and the corridor to the warehouse portion of the building. On this floor are also located the private office, the rug storage room, trunk room, and a large work, receiving, and packing room. Adjoining the men's locker room are the toilet and shower room. The piano storage room is on the second floor immediately above the office portion.



THE LINCOLN STORAGE COMPANY WAREHOUSE, CLEVELAND, OHIO. THE WATSON COMPANY, ARCHITECTS AND ENGINEERS.

(*From "The American Architect."*)

The typical floors contain a large number of storage rooms about 7 ft. by 13 ft. in size, and the balance of the rooms are 10 ft. by 10 ft. more or less.

ORANGE COUNTY FRUIT EXCHANGE, ORANGE, CALIFORNIA: A DETAIL OF THE ENTRANCE. MARSTON, VAN PELT, AND MAYBURY, ARCHITECTS.

(*From "The American Architect."*)

Reinforced Concrete Retaining Walls—I

By PROFESSOR HENRY ADAMS, M.Inst.C.E., F.R.I.B.A.

REINFORCED concrete has many advantages and some disadvantages. Among the latter the chief is that the calculations are rather complicated for anyone who is not accustomed to such work. There is no real difficulty, as no high mathematics are concerned, and although some of the formulæ have an ugly look, a little patience will make them quite clear. There are certain rules and approximate formulæ that will enable a general idea to be obtained of the sizes of slabs, beams, and pillars to carry certain loads, but for the final design there is no other way than to go through the precise calculations that are given in textbooks and county council regulations.

Some of these general rules will be considered before going on with the special subject of these articles. The concrete is not to be relied upon for any tensile strength whatever, but may be compressed up to the limit of 600 lb. per sq. in. The steel reinforcement takes all the tension up to the limit of 16,000 lb. per sq. in. The effective depth of a beam is from the upper surface of the concrete to the centre of the reinforcement. The most economical percentage of reinforcement is 0·675, that is, the sectional area of the steel will be 0·675 per cent. of the sectional area of the effective depth of the beam. For instance, a beam 12 in. wide, with an effective depth of 22 in., would require $\frac{12 \times 22 \times 0{\cdot}675}{100}$ =1·782 sq. in. of steel, say, three $\frac{7}{8}$ in. rods, which would give 1·8 sq. in. When the reinforcement has this value the neutral axis of the beam will be at 0·36 of the effective depth from the upper surface, and the stress in each material will be in the proper proportion. The bending moment is the active effect of the loading, irrespective of the value of the beam, and must be found by the ordinary rules according to the method of loading and supporting; the resistance moment is the resistance the beam is capable of setting up according to its size, material, and construction. A moment is always a force or load multiplied by a leverage. The lever arm of the resistance moment is measured from a point one-third of the distance from the surface to the neutral axis down to the centre of the reinforcement. In proper designing the two moments should be equal; if the bending moment is in excess the beam will not be strong enough, and the factor of safety will be low; if the resistance moment is in excess there will be unnecessary waste of material. There is a very simple and well-known formula for obtaining the size of a beam when the bending moment is known, viz., $B=95\,bd^2$, where B=bending moment in lb. inches, b=breadth in inches, d=effective depth in inches. The only difficulty in using this formula is that the weight of the beam must be taken into account in the bending moment; but the weight can only be guessed at beforehand, and it may take two or three trials before the size of the beam can be determined correctly. Reinforced concrete is assumed to weigh 144 lb. per cub. ft., that value making the calculation of weight very easy, viz., breadth in inches × total depth in inches × length in feet=weight in pounds. Thus a beam 12 in. by 24 in. by 20 ft. effective span will weigh 12×24×20=5,760 lb. Note that the effective span is from centre to centre of the bearing surfaces. As a rough approximation to include the weight of beam, take 60 for the constant instead of 95 given above. When the size of a reinforced concrete beam is given the safe distributed load superimposed will be approximately $W=\frac{0{\cdot}4\,bd^2}{L}$, where W=cwts. distributed and L= effective span in feet.

When one is constantly designing in reinforced concrete, charts or diagrams can be made from which dimensions may be read off by inspection, but unless these have been made personally for one's own use, they are at first quite as difficult to follow as any formula, and nothing is gained.

Chart A is a very simple one, and shows graphs from which the sizes of reinforced concrete pillars with the sectional area of the reinforcement to carry certain loads may be read off. For example, to carry a load of 200,000 lb. a pillar 19 in. by 19 in. may be used with four steel rods $1\frac{5}{16}$ in. diameter, containing a sectional area of $2\frac{3}{4}$ sq. in., or a pillar 18 in. by 18 in. with four steel rods $1\frac{5}{16}$ in. diameter, containing a sectional area of 5·4 sq. in. Also it will be seen that a pillar 12 in. by 12 in., with $1\frac{1}{2}$ per cent. reinforcement =2·16 sq. in. (say, four $\frac{7}{8}$ in. rods=2·4 sq. in.) may be used to carry a load of 87,000 lb. This chart is very easy to use, but unfortunately it only applies to pillars with a length not more than, say, 18 times the least diameter. Beyond this limit an awkward formula must be used to give the reduced load that it would be safe to put on a long column, so that little, if anything, would be gained over making the calculation by formula in the first instance. Other diagrams are usually more complicated, and must in all cases be very accurately drawn.

There is a great danger in trying to design reinforced concrete without a sufficient knowledge of the subject, and that is that vital slips may be made in the process, which may lead to an unforeseen failure, unless the designs are checked over by an expert. Generally an architect will find it to his advantage to collaborate with an engineer at an early stage of the design. There is no royal road to the subject, but in the succeeding chapters an endeavour has been made to work systematically and by gradual steps, so that any young architect should be able to follow the calculations and use them as a model for any similar design of larger or smaller dimensions that he may contemplate carrying out. The Institution of Structural Engineers publish a model specification for reinforced concrete, and also a little book of practical instructions to clerks of works, both of which will be found useful, and there are many contractors now with sufficient experience to carry out the work intelligently according to the designs.

(To be continued.)

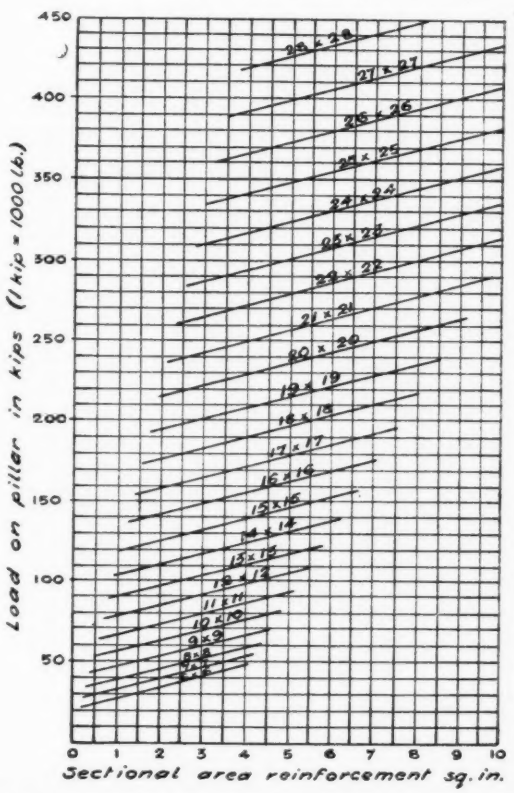


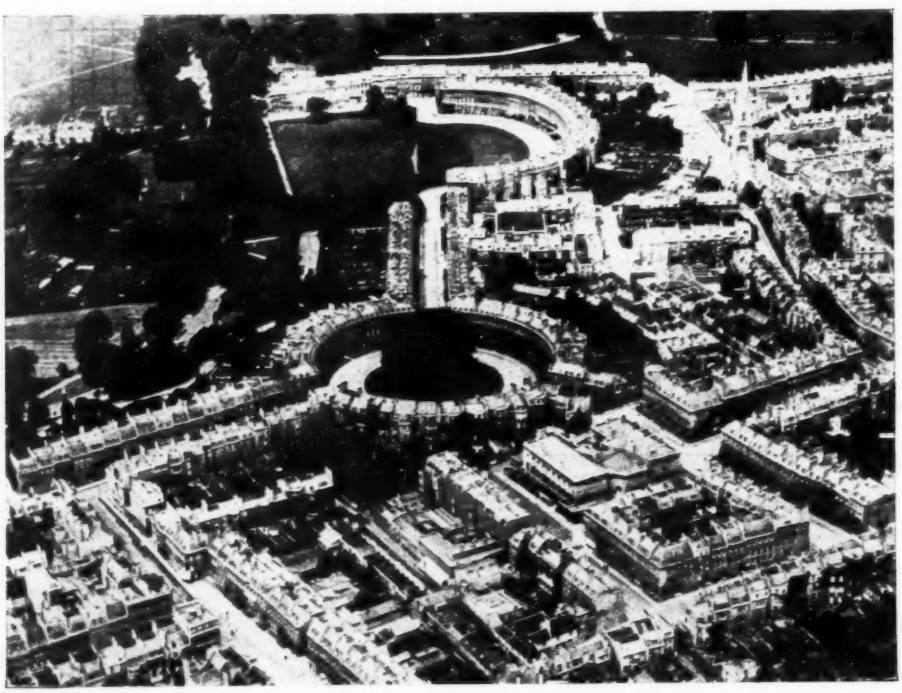
CHART A.—To find sectional area of steel reinforcement for given pillar loads.

Book Reviews

The Art of Town Planning.

Discussions as to the scope, the purpose, nay, as to the very meaning of the word "art," are, for the most part, futile. But from time to time the assertion is made that living itself is an art. Like many other vague generalizations, viewed from a certain limited aspect the remark contains some truth, for those making it do not mean to imply that breathing, eating, and sleeping are in themselves artistic expressions, but rather that modern life is so complex that certain aspects of it give scope for artistic expression, and that those who indulge in such expression live richer and fuller lives, both receiving and giving more than their fellows. Town planning is the objective arrangement of our lives in relation to each other. The greater the complication, the more necessity there is for orderliness and tidiness. This arrangement, too, allows scope for artistic expression. But it cannot in itself be called an art, far less a fine art. The defects of Mr. Lanchester's book seem for the most part to arise from his endeavour to be true to his title. Yet it is extremely doubtful if the layman, having read from cover to cover, will derive any coherent ideas about town planning. The fact is the book is too vague—so vague, indeed, that the reader is left with little to grasp, little to lay hold of. The most definite passage in the book consists of some extracts from notes on "Town Trees and their Characteristics." Here is something that can be grasped. But these extracts are too isolated. There should have been more about the value of trees, with examples of roads with trees, and of others which would be improved by their presence. Mention might be made of the tree-lined avenue approaches to Dorchester, almost unique in England, and so on. Again, in the chapter entitled "Communications," the reader would surely have been interested to have been given some details about the various present-day road authorities, their powers, their means of obtaining funds, and so on. The interest is stimulated by an admixture of the theoretical and the practical; of the general and the particular; and a growth of civic consciousness is the first essential to bring about town planning instead of town chaos.

Included among the many illustrations we should have liked to see a photograph of Ludgate Circus as it is to-day, or the junction of Oxford Street and Tottenham Court Road. No one surely could have seen without a feeling of utter shame the view which Mr. Hiorns threw on the screen at the R.I.B.A. recently as a contrast to the classical and mediæval cities. Some such shock may awaken the lay mind to the desolating horrors amongst which it dwells. Can the whole history of the world show worse ugliness? Greater squalor of poverty there may be elsewhere, but this foulness is the result of too much wealth rather than too little, and lies in the middle of a rich capital. Here, then, is something which public opinion could remedy at once did it care to do so. Many of the improvements which town planning sets out to achieve can only be brought about very slowly and at great cost. Here is an improvement that can be brought about almost at once. Mr. Lanchester says that the furniture of our streets becomes less of an essential. But is he right? We should have said that street furniture is rapidly increasing and becoming ever more essential. We do not have the parish pump, it is true, but we have the petrol pump. Let us walk about our towns, what do we find? Pillar boxes, telephone kiosks, cabmen's shelters, street lamps, telephone and telegraph wires, sand bins, tramway standards, shop fascias, signboards, street refuges, omnibus signs, public lavatories. Now, without making any architectural changes, without broadening any streets, let us walk through the town and remove every one of these objects, and any others that may not have been mentioned. Then let us clean the face of every building. Now let us re-design what was bad and replace only what is absolutely necessary for the life of the community. What a transformation we should have effected in the face of our town. No more hideous fascias with corrupt and distorted lettering; no more enamel advertisements; no more vulgar displays; no loose wires



AN AERIAL VIEW OF BATH.

(From "The Art of Town Planning.")

AN AERIAL VIEW OF CHELTENHAM.

(From "The Art of Town Planning.")

slung about the place; no more senseless twiddles in cast-iron. (Londoners have reason to be grateful to the L.G.O.C. for providing them with an example of tolerable street furniture. Their stopping-place indicators, with their simple lines and plain lettering, are at least inoffensive.) It is difficult to realize what an immense improvement would be effected in the appearance of our towns, could this tidying up be carried into effect.

The first part of Mr. Lanchester's book deals with the history of town planning. Part II is entitled "The Present Day." It is fairly obvious, however, that town planning activities of the past differ from those of the present so greatly as to be of kind rather than of degree. In the early days town planning was for the most part merely expedient arrangements for current needs; later there grew up the conscious geometric arrangement of streets to produce certain effects, and at various times there have been laws and regulations governing building activities. But in the past conditions have been comparatively static, so that there was not that necessity to plan for the future which is now so absolutely essential. It will be seen that the whole aspect of town planning is altered when it is known that the present needs will have changed before the buildings are outworn. The planner must always keep in mind the future; whereas in the past a road, a residential quarter, governmental offices, and the like, were arranged solely to meet palpable needs. When the Romans built their road they were not forced to consider the fact that in five years that road might become useless or, on the other hand, that its traffic might be quadrupled.

Mr. Lanchester is right when he says that a wider interest must be taken in municipal affairs by all citizens. Vested interests have too long kept matters to their liking, and threats at beneficial interference may break down the present attitude of aloofness in civic matters. The best towns have always been the outcome of civic pride, when citizens of all kinds, but particularly those in influential positions, have given freely in money, in labour, or in both, to their town. A book which helps to bring about this state of affairs is a valuable book.

"The Art of Town Planning." By H. V. Lanchester. London: Chapman and Hall. Price 21s. net.

Tables of Steel Compound Girders.

In the preface to this handy little book it is stated that some of its tables were prepared with the immediate object of facilitating the work of a large staff engaged in designing and detailing structural steelwork. Such collections of tables are more necessary to the designer than the multiplication tables which he had to learn by heart holus-bolus at school, or than the books of logarithms which he has far less need to consult. Mr. Mason's book should save much time and labour, whether to large staffs or small, since its tables include data for all the British Standard beams, and these data, the preface informs us, have been doubly checked for accuracy. Moreover, the common liability to printers' errors, or to misreading the small and not always very legible typographical figures in books printed in the ordinary way, has been eliminated by the photographic reproduction of the author's very legible manuscript figures and lettering.

"Tables of Steel Compound Girders." Compiled by F. B. Mason, M.Inst.Struct.E. London: Chapman and Hall, Ltd. 126 pages. Price 10s. 6d. net.

Laxton's and Lockwood's Builders' Price Book.

Messrs. Kelly's Directories, Ltd., recently acquired the copyright of Lockwood's Builders' Price Book, and they have united its best features with those of Laxton's. The combination volume includes those which have won for Laxton's Builders' Price Book the distinction of being quoted in disputed cases in the Law Courts. The book gives the price of materials, fittings and labour, and includes special chapters on all subjects on which information is required by those interested in the building and allied trades. Two important additions have been made in this edition—a chapter on "Housing—Some Alternative Methods of Construction," and "Legal Notes and Memoranda on the Employers' Liability and Workmen's Compensation." The book also contains on page 280 lists of the advances in the prices of light castings issued by the National Light Castings Association. The cost of labour is based on London rates of pay, but the cost for any work in the provinces can be readily calculated by means of the table showing the rates of wages throughout the country. A valuable feature is the "blue section," which includes the

names and addresses of over 5,000 manufacturers of specialities or branded articles (just 10,000 in all), classified under the names of their products.

The London Buildings Acts and By-laws of the London County Council, as they only apply to London, are issued as a supplement. It contains The London Building Acts (1894-1905) and other Acts relating thereto, with Standing Orders, By-Laws and Regulations now in force. A table of cases is given, with references to the various Acts. The whole book is very completely indexed, and comprehensive notes have been inserted. Lists are also given of Metropolitan district surveyors (with the boundaries of their districts) and of Metropolitan borough surveyors. Regulations of the Tribunal of Appeal are given, and the diagrams illustrating requirements relating to light, ventilation, and the thickness of walls at various heights should be found very helpful. This supplement forms a most useful companion volume to the Builders' Price Book.

"Laxton's and Lockwood's Builders' Price Book," 1925. Price 7s. 6d. net (postage 0d. extra). "The London Building Acts and By-laws of the London County Council." Price 1s. 6d. net (postage 3d.). Kelly's Directories, Ltd., 186 Strand, London, W.C.2.

Correspondence

Qualified Architects

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—The letter of Mr. Overy in your issue of April 29 is of great interest, as he states the views of a large number of men. He objects to architectural work being done by engineers; but have not many engineers in the past proved to have been great architects? The question is much more complicated than appears at first sight; Mr. Overy states with regard to housing, "A great deal of this work was done by architects, but now, alas! the surveyor is getting a stranglehold"; but the surveyor may be, and often is, an Associate of the R.I.B.A. Again, Mr. Overy asks that "qualified" architects should be employed. What is a "qualified" architect?

"STUDENT."

Building Expenditure in U.S.A.

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—With reference to your special issue on Modern American Architecture, I enclose a very interesting forecast (printed below) of building expenditure in the United States for 1925, which has been taken from "The Architectural Forum." The totals have been changed from dollars into pounds on the basis of 4s. 6d. to the dollar.

The public demand for apartments, hotels, office buildings, and schools, appears to be very strong, and the expenditure altogether colossal. Have you any means of forecasting expenditure on this side?

D. A. BEVERIDGE.

DETAILED FORECAST OF BUILDING EXPENDITURE FOR 1925 IN U.S.A.
(Last year's prediction was correct to within 3 per cent.)

Types of Building.	Cost.	Percentage of Public Demand.
1. Automotive	£ 32,053,050	2·9
2. Banks	38,277,225	3·3
3. Apartments	130,355,325	10·2
4. Apartment Hotels	45,754,875	4·0
5. Clubs, Fraternal, etc.	72,403,200	6·0
6. Community and Memorial	13,732,200	1·2
7. Churches	84,032,100	8·0
8. Dwellings under £4,500	53,037,450	4·5
9. Dwellings £4,500 to £11,250	22,936,500	2·2
10. Dwellings over £11,250	12,494,250	1·1
11. Hotels	88,580,925	9·2
12. Hospitals	51,533,550	4·5
13. Industrial	88,282,575	6·9
14. Office Buildings	109,939,275	9·6
15. Public Buildings	42,097,725	4·0
16. Schools	163,543,050	15·1
17. Stores	30,878,550	2·9
18. Theatres	30,595,725	3·2
19. Welfare, Y.M.C.A.'s, etc.	12,744,000	1·2
Total Value of New Buildings	£1,123,271,550	100·0

Societies and Institutions

R.I.B.A. Lecture, May 18.

Mrs. Arthur Strong, assistant-director of the British School at Rome, is unavoidably prevented from delivering her lecture on May 18. Mr. G. Topham Forrest, F.R.I.B.A., the architect to the London County Council, has kindly consented to deliver a lecture on "The Architectural Development of American Cities" on the vacant date.

R.I.B.A. Council Meeting.

Following are notes from the Minutes of the last meeting of the Council of the R.I.B.A.:

The Institution of Municipal and County Engineers.—In response to an invitation from the Institution of Municipal and County Engineers the following gentlemen were appointed to represent the R.I.B.A. at a round-table conference on town planning: Professor Patrick Abercrombie, Major Harry Barnes, Messrs. L. H. Bucknell, F. M. Elgood, Percival M. Fraser, Herbert Shepherd, and W. Harding Thompson.

The General Council for the National Registration of Plumbers.—Mr. Arthur J. Hope, President, Manchester Society of Architects, was appointed to represent the R.I.B.A. at a meeting of the General Council for the National Registration of Plumbers in Manchester on June 18.

The R.I.B.A. and the Society of Architects.—The secretary reported that the numbers of members of the Society of Architects who had transferred to the R.I.B.A. to date, under the amalgamation agreement were as follows: Fellows, 205; Members, 822; Licentiates, 238; Students, 84; Hon. Members, 5; Retired Members, 35.

The Registration Bill.—The Registration Committee, having reported that the preparation of the Draft Registration Bill was nearing completion, were empowered to consult Counsel on the matter.

Reinstatement.—Mr. W. Leonard Dowton was reinstated as a Licentiate.

Resignations.—The following resignations were accepted with regret: Messrs. William Davidson and W. W. Longbottom, Licentiates.

The Berks, Bucks, and Oxon Architectural Association.

The annual general meeting of the Berks, Bucks, and Oxon Architectural Association was held at Oxford in the hall of Oriel College, with the president, Mr. E. P. Warren, F.S.A., F.R.I.B.A., in the chair.

The annual report, which was adopted, among other business records an exhibition of prize drawings, the result of two competitions for students, and the third annual banquet of the Association. It refers feelingly to the death of Mr. Paul Waterhouse, past president of the R.I.B.A., and a vice-president of the Association, and expresses gratitude to Mr. Edward Warren, the retiring president, for his valuable and energetic guidance of the Association from its inception in 1921. The membership of the Association is reported as 145.

The retiring president in his address mentioned the Conference of British Architects at Oxford, when the local Association was privileged to act as hosts, and briefly reviewed the four years of the Association's existence and work. He referred to architectural education and the opportunity for Oxford University to take its part in this important field. After paying a high tribute to the work and enthusiasm of Mr. Harry Hutt, F.R.I.B.A., the secretary from 1921, who was about to resign that office, he thanked the members for their friendly support accorded during four years, and extended a welcome to his successor.

The following officers were then elected:—

President.
H. S. Rogers, M.A., F.S.A., F.R.I.B.A.

Vice-Presidents.
E. J. Dixon, A.R.I.B.A., Bucks.
Harry Hutt, F.R.I.B.A., Berks.
G. T. Gardner, Lic. R.I.B.A., Oxon.

Hon. Vice-President.
E. P. Warren, F.S.A., F.R.I.B.A.

Hon. Treasurer.
T. T. Cumming, F.R.I.B.A.

Hon. Secretary.
R. F. Dodd, A.R.I.B.A.

Hon. Auditor.
R. A. Rix, A.R.I.B.A.

The following elected by the branch societies complete the Council:—

Berks.
E. P. Warren, F. G. Sainsbury, H. W. Rising, W. R. Howell, F. H. Floyd, G. T. Saunders, and G. B. Willcocks.

Oxon.
T. Rayson and N. W. Harrison.

Bucks.
A. Cooper and G. H. Williams.

The president handed the prizes for a design of a market hall in a small town to Mr. G. Batten and Mr. J. C. H. Bawcutt.

Lord Montagu of Beaulieu on Road Problems

Lord Montagu of Beaulieu, speaking at the annual meeting of the Roads Improvement Association, said while he hoped that the London Traffic Committee would help to relieve the great congestion in London, he had always had grave doubts whether any regulations would achieve a permanent solution. What was chiefly wanted was more street space, and as it was extremely expensive to acquire frontages along most important thoroughfares for street widenings, it was clear that we should have to go either above or under the ground to relieve street traffic. In New York they were proposing to use overhead and underground ways for street traffic, and already in London a proposal had been made to burrow under Piccadilly Circus and make a new road between Berkeley Square and some point south of Piccadilly. These were steps in the right direction, because London traffic would increase as years passed, and, if the number of vehicles bore anything like the relation to the population which it did in the United States, within the next five years London would be twice as congested as it was to-day.

In the matter of road improvements and the excellence of our main roads this country was easily the first in the world. Nobody could complain much now of the state of our 24,000 miles of first-class roads. A serious problem was arising in relation to the unclassified roads. It was impossible for the poorer district councils to spend more money out of the rates on fitting those roads for the use of heavy motor traffic. If, as was foreshadowed, an increase of axle weights was allowed, the difficulties of those councils would be intensified. There were very few of the unclassified roads that were not deteriorating, and unless larger grants could be given for the improvement or maintenance of their present state they must deteriorate still further, and we should have the curious anomaly of the first and second class roads being superior to those of any other part of the world and the unclassified roads possibly being worse. There was no differentiation of the weights allowed to use the best and the unclassified roads, and he did not see that this was possible. At present heavy trailers carrying weights far in excess of the legal maximum used these side-roads, which were going to pieces.

As to the width of arterial roads, they must think entirely in terms of traffic width and must allow as a minimum 10 ft. per line of traffic. If a road could not be made 30 ft. wide he would just as soon it were only 20 ft. By all means let them take the land for extension, but he was against wasting money on widenings which did not conform to the 10 ft. vehicle width. The so-called improvement of roads by the addition of a couple of feet on either side was waste of money, and it would be better for a county council to widen ten miles of road by 10 ft. than to add a few feet throughout its length. Commercial traffic would go on to the roads more, and the omnibus services might be expected to extend far into the country. Therefore, the width of main roads must be on a generous scale. Also it was no good to build arterial roads like the Great West Road, ending at Chiswick.

The Fothergill Prize

Under the Fothergill Trust the Council of the Royal Society of Arts offer a prize of £100 for an essay on Fire Waste (Loss of Property by Fire) and its Effects on the Economics of National Life in Great Britain. Intending competitors must send in their essays not later than July 31, to the Secretary, Royal Society of Arts, John Street, Adelphi, London, W.C.2. The essays must be typed or clearly written. They may be sent in under the author's name, or under a motto, accompanied by a sealed envelope enclosing the name, as preferred. The judges will be appointed by the Council. The Council reserve the right of withholding the prize or of awarding a smaller prize or prizes, if in the opinion of the judges no suitable essay is submitted. The Council also reserve an option on the copyright of the successful essay.

List of Competitions Open

Date of Delivery.	COMPETITION.
*May 15	Technical College for the Middlesbrough Education Committee. Assessor, Mr. Percy Thomas, F.R.I.B.A. Premiums £200, £100, and £50.
May 15	Conversion of Ashford Assembly Rooms. Premium £50. Apply Clerk to the Ashford Urban District Council.
May 30	New Secondary School in Perth Road, Dundee. For the Education Authority. The Competition is limited to architects in practice in Scotland and carrying on business on their own account. Application for the conditions of the competition and instructions had to be made to Mr. John E. Williams, Executive Officer, Education Offices, Dundee, not later than February 18. Mr. J. A. Carfrae, Licentiate R.I.B.A., is the Assessor.
May 31	The best and most economical system of shuttering or equivalent suitable for use in connection with poured or *in situ* cottages. First prize £250; £250 may be awarded in additional prizes. Methods which are already in use or for which patent rights had been applied for before January 1 will not be considered. Apply Mr. H. H. George, Ministry of Health, Whitehall, S.W.1, not later than May 24.
June 4	Branch Library to be erected for the Belfast Corporation. The Competition is limited to architects in practice in Northern Ireland or their assistants. Assessor, Mr. James Cumming Wynnes, M.B.E., F.R.I.B.A. Apply, with deposit of £1 1s., to the Secretary.
June 11	National Commemorative War Monument, to cost one hundred thousand dollars, for the Government of Canada. Apply Office of the Secretary, Department of Public Works, Hunter Buildings, Ottawa. A few copies of the conditions, together with declaration forms, can be obtained from the R.I.B.A.
*June 30	Lay-out of open spaces and fortifications between Valletta and Floriana and those encircling Floriana. Premiums £1,000 and £500. An indemnity of £100 will be awarded to three other designs showing conspicuous merit. Assessors, Mr. E. P. Warren, F.S.A., and Professor Patrick Abercrombie, A.R.I.B.A.
July 1	An extension building adjacent to the Shirehouse, Norwich, for the Norfolk County Council. Premiums £150, £100, and £50. Assessor, Mr. Godfrey Pinkerton, F.R.I.B.A., on the whole of the designs submitted, and to make the award. Apply Mr. H. C. Davies, Clerk of the Council, The Shirehouse, Norwich.
Sept. 1	High bridge over Copenhagen Harbour. Three prizes to the value of Kroner 35,000. Apply City Engineer's Office, Town Hall, Copenhagen. Deposit of Kroner 100 (returnable).
Dec. 31	The Argentine Government offer prizes of 10,000, 5,000, 4,000, 3,000, and 2,000 Argentine gold pesos for the best architectural designs for a National Institute for the Blind. Apply Enquiry Room, Department of Overseas Trade, 35 Old Queen Street, Westminster, S.W.1.
No date	Rebuilding of Bethel Baptist Church, Pontlottyn. Premium £5. Apply Mr. J. R. Mathias, Rose Villa, Pontlottyn.

* Date of application passed.

Competition News

Manchester Art Gallery Competition.

The results of the Manchester Art Gallery Competition will be announced in our issue for June 17th.

Cheam Presbyterian Church Competition.

The following notice has been issued by the R.I.B.A.: "Members of the R.I.B.A. must not take part in the above competition because the conditions are not in accordance with the published regulations of the Royal Institute for architectural competitions."

Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

Mr. N. Chamberlain, the Minister of Health, informed Mr. Smithers that he did not propose to introduce legislation to make it compulsory on persons desirous of erecting a building other than a dwelling-house to apply to the Ministry of Health for a permit to build. The National House Building Committee had advised against any restriction of private and commercial building.

Replying to Mr. T. Thomson, Mr. N. Chamberlain said that up to April 1, 70,421 houses had been completed under the Act of 1923, and 2,486 under the Act of 1924.

Mr. N. Chamberlain informed Mr. Groves that the increase in the market price of all materials required for the construction of a workman's cottage since March, 1914, was about 85 per cent.

Sir W. Joynson-Hicks, the Home Secretary, informed Commander Bellairs that the total amounts advanced by building societies on mortage security in 1913, 1922, and 1923 were £9,131,017, £22,707,799, and £32,015,720 respectively. Practically the whole amount was advanced towards house-buying.

Sir K. Wood informed Mr. Wallhead that there had been no appreciable change in the cost of building materials since November last. Timber, as used for cottage purposes, had slightly decreased in price since November, 1924, by less than 1 per cent. Light castings had increased in price by various percentages representing a total increase of approximately 24s. per non-parlour house.

The Week's News

More Houses for Fulham.

The London County Council propose to purchase a housing site in Fulham at a cost of £20,000.

Southport Housing Scheme.

The Southport Town-planning Committee have adopted a proposal to erect fifty houses in the Marshside district.

Harrow Church Extension Scheme.

St. John's Church, Harrow, is to be extended at a cost of £5,000.

A New Mill for Oldham.

A new cotton-spinning mill is to be built in the Oldham area at a cost of about £250,000.

Housing at Rotherham.

The Rotherham Corporation are considering a proposal to erect 500 houses.

New Grand-Stand for Notts County Football Club.

The Notts County Football Club are to erect a new grand-stand. Mr. W. H. Higginbottom is the architect.

An Essex Road-Widening Scheme.

A sum of £10,000 is to be spent on widening Beehive Lane, Great Baddow (Essex).

Durham Castle in Danger.

The condition of Durham Castle is causing anxiety. Strengthening work will cost at least £30,000.

More Houses for Bexhill.

Fifty houses are to be built by the Bexhill Urban District Council.

One Hundred Houses for Aldershot.

The Aldershot Urban District Council are to build 100 houses by direct labour.

Houses at Lancaster.

A scheme for the erection of fifty-seven houses is being considered by the Lancaster Town Council.

Fifty Houses for Nuneaton.

A lay-out plan has been approved by the Nuneaton Corporation for the erection of fifty houses on the Tomkinson road site.

Loughborough Housing.

The Loughborough Corporation have received the sanction of the Ministry of Health to the borrowing of £18,453 to defray the cost of the erection of forty-two houses.

Wearmouth Bridge Approved.

The Ministry of Transport have approved the plans submitted by the Sunderland Corporation for a new Wearmouth Bridge, 80 ft. wide.

The Rebuilding of Middlesex Hospital.

The Governors have decided to rebuild the Middlesex Hospital, by degrees, on the present site at an estimated cost of £500,000.

Five Hundred Houses for Rotherham.

The Rotherham Corporation are applying to the Ministry of Health for sanction to a loan of £254,000 for the erection of 500 additional houses.

Stretford Housing.

The Stretford Urban District Council propose to erect 370 more houses, of which 190 will be on the King's Road extension, and the other 180 in Derbyshire Lane, West.

The Wren Society.

Mr. H. Duncan Hendry, A.R.I.B.A., the hon. secretary of the Wren Society, has moved to 53 Doughty Street, W.C.1, and all communications should be sent to this address. Telephone : Museum 7308.

The late Sir Isidore Spielmann.

We regret to record the death of Sir Isidore Spielmann, C.M.G., F.S.A., at the age of seventy-one. He was Director for Art, Exhibitions Branch, Department of Overseas Trade, and for fifteen years was joint hon. secretary of the National Art Collections Fund.

Housing at Manchester.

The Manchester Housing Department have been asked to provide 100 houses for the police force, preferably on the north of Manchester.

Changes of Address.

Messrs. Hendry and Schooling, architects, have moved their offices to 53 Doughty Street, W.C.1. Telephone : Museum 7308.

Messrs. Norris and Shattock, Licentiate and A.R.I.B.A., of 51 High Street, Guildford, and 16 Church Street, Godalming, have recently opened an office at 26 Buckingham Gate, London. Telephone No. : Victoria 2181.

Animals' War Memorial.

The Society for the Prevention of Cruelty to Animals have submitted to the local authority the design and plans of the proposed war memorial to animals to be erected at Hyde Park Corner. A feature of the memorial will be a wounded horse and dog in bronze on a granite base, with a drinking fountain at each end.

Kingston Builders and Bills of Quantities.

The Kingston and District Master Builders' Association has informed the Surbiton Urban District Council that members of the association will not tender for works costing over £1,000 unless bills of quantities are prepared. A list of builders and contractors has been compiled, and, in addition to advertising, the Council will communicate with them when any works are proposed.

The Kingston to Hampton Court Towpath.

A conference of local authorities convened by the Middlesex County Council was held at the Middlesex Guildhall to consider the condition of the three miles of towing path between Kingston Bridge and Hampton Court, and to arrange for its reconstruction. To reconstruct it would involve an outlay of about £21,000. The conference was of opinion that steps should be taken at once to reconstruct the walk, and to this end, substantial assistance was promised by the Crown, the Middlesex County Council, and the Thames Conservancy. The delegates of the local authorities also agreed to recommend their respective councils to assist in the work.

Harrogate Housing Schemes.

Three housing schemes are being adopted by the Harrogate Corporation to supplement the number of workmen's dwellings already provided. One of these is to purchase upwards of 24,000 square yards of land on the Bilton Grange estate. A second is to take over the scheme projected by the Public Utility Society in connection with the Congregational Church and acquire about two and a half acres of land at the junction of Crab Lane and Bilton Lane. A third scheme is contained in a letter from the Ministry of Health, agreeing to the appropriation of over twenty-six acres of land, forming part of the Ripon Road Farm, which is Corporation property, for housing purposes.

Waterloo Bridge.

Speaking at the last meeting of the London County Council, Captain Swinton said the special committee on Thames Bridges did not discuss the question of an undertaking that the existing Waterloo Bridge would not be touched at present. It was not a fact that with the expert engineering advice at the disposal of the Council and solely from the engineering point of view, the remaining double span required to complete the temporary Waterloo Bridge could have been constructed without touching upon and mutilating the structure itself. As the remaining double span of the temporary bridge was to be erected on the Waterloo Bridge roadway the engineers did not apprehend any risks of undue stress or injury to the bridge. The weight of masonry removed or to be removed approximated closely to the weight that would be imposed on the old bridge by the construction of the long span of the temporary bridge. In making the preparations for the launching of the girders and the large span for the temporary bridge it had been necessary to remove the columns on two piers and a portion of the existing bridge parapet. The stones removed had been numbered so as to ensure that in the event of the bridge being preserved ultimately in its present form such of them as were in good condition could be replaced in their original positions. Captain Swinton added that road traffic would be stopped on the bridge for about two months. It was hoped and believed that the bridge would remain open for pedestrians.

Building Plans Approved

Returns have been received by the Ministry of Labour from 129 local authorities in Great Britain giving the estimated cost of buildings for which plans were passed during the first quarter of 1925. According to "The Ministry of Labour Gazette," the summarized figures for the quarter and those as to plans passed by the same local authorities during the corresponding quarter of 1924 were as follows :

District and Aggregate Population (at Census of 1921) of Towns from which returns have been received.	Estimated Cost of Buildings for which plans were approved in the 129 towns from which returns have been received.					
	Dwelling Houses.	Factories and Workshops.	Shops, Offices, Warehouses, and other Business Premises.	Churches, Schools, and Public Buildings.	Other Buildings, and Additions and Alterations.	TOTAL.
(a) FIRST QUARTER OF 1925.						
ENGLAND AND WALES—	£	£	£	£	£	£
Northern Counties (874,000)	375,500	26,000	26,000	16,000	121,600	565,100
Yorkshire (2,334,000)	1,147,400	83,200	177,800	102,900	281,000	1,792,300
Lancashire and Cheshire (2,677,000)	1,178,900	140,700	308,500	279,400	242,000	2,149,500
North and West-Midland Counties (1,991,000)	1,000,400	800,800	116,400	108,900	328,000	2,363,500
South-Midland and Eastern Counties (550,000)	604,700	36,200	131,200	33,600	55,000	860,700
Outer London (1,799,000)	2,654,500	163,900	143,100	61,600	228,500	3,251,600
South-Eastern Counties (898,000)	787,100	10,400	96,100	51,400	188,200	1,133,200
South-Western Counties (433,000)	204,000	8,400	7,700	1,300	46,300	267,700
Wales and Monmouthshire (532,000)	336,500	3,800	25,600	19,000	42,700	427,600
SCOTLAND (2,019,000)	587,800	149,300	39,500	95,900	235,800	1,108,800
Total (14,107,000)	8,885,800	1,423,200	1,071,900	770,000	1,769,100	13,920,000
(b) FIRST QUARTER OF 1924.						
ENGLAND AND WALES—	£	£	£	£	£	£
Northern Counties (874,000)	396,800	16,300	37,100	13,400	88,300	551,900
Yorkshire (2,334,000)	1,274,200	104,000	200,800	44,300	308,300	1,931,600
Lancashire and Cheshire (2,677,000)	1,376,800	113,300	464,800	608,500	223,400	2,786,800
North and West-Midland Counties (1,991,000)	834,500	58,500	54,500	103,200	291,200	1,341,900
South-Midland and Eastern Counties (550,000)	723,800	6,300	62,500	16,000	127,000	935,600
Outer London (1,799,000)	1,837,100	58,800	128,000	81,500	195,300	2,300,700
South-Eastern Counties (898,000)	841,400	22,600	157,900	6,000	167,300	1,195,200
South-Western Counties (433,000)	426,900	5,100	7,600	4,000	61,400	505,000
Wales and Monmouthshire (532,000)	318,300	61,000	35,300	39,500	36,100	490,200
SCOTLAND (2,019,000)	773,400	165,600	76,200	82,700	267,100	1,365,000
Total (14,107,000)	8,803,200	611,500	1,224,700	999,100	1,765,400	13,403,900

Coming Events

Wednesday, May 13.

Architects' Benevolent Society.—Annual General Meeting to be held in the Rooms of the R.I.B.A., 9 Conduit Street, W.1. 5 p.m.

Friday, May 15.

Architecture Club.—8th dinner, Cecil Hotel. 7.15 p.m.
Architectural Association.—Week-end visit to Liverpool.

Monday, May 18.

R.I.B.A., 9 Conduit Street.—General Meeting.

Trade and Craft

The Courtrai-Du Nord Tile Co., Ltd.

In the advertisement on page xxi of our last issue, a misspelling unfortunately occurred in the name of the Courtrai-Du Nord Tile Co., Ltd. The correct title of the firm is as above, and the error lay in omitting the "i" in the name Courtrai.

Some Reinforced-Concrete Structures.

A brochure has been issued by Messrs. Melville Dundas and Whitson to illustrate and describe some of the many reinforced-concrete structures for which the firm have been responsible. In presenting this partial record of their work the firm emphasize the fact that practically all the contracts illustrated were either repeat orders, or the first work of a series of contracts carried out for the same people. It is noteworthy that a large proportion of the work shown was given to the firm without competition, or at prices which were not the lowest. The subjects illustrated range from simple concrete flooring contracts right through engineering structures of varied character. Among the buildings shown in which the firm executed work are the Municipal Buildings Extension, Glasgow (Watson, Salmond and Gray, FF.R.I.B.A., architects); general offices for Messrs. Alexander Stephen and Sons, Ltd., Shipbuilders, Glasgow (Frank G. Orr, architect); the Victory Bath presented to the Royal Burgh of Renfrew by Sir Frederick Labnitz, K.B.E. (T. Graham Abercrombie and J. Steel Maitland, F.R.I.B.A., architects); the Anchor Line Buildings, Glasgow (James Miller, A.R.S.A., F.R.I.B.A., architect); and the Port Dundas Bonded Stores—Distillers Co., Ltd. (Frank Burnet and Boston, architects). In a factory at Wolverhampton the value of the work executed by the firm was approximately £500,000, and in another factory at Flint the value was approximately £300,000. The brochure is artistically produced, and the buildings shown are of high architectural standard. Copies of the brochure can be obtained from the firm at 224 Vincent Street, Glasgow.

Mr. Charles E. Douglas, M.I.Mech.E., A.M.I.PeT.T., of 10 Gray's Inn Square, London, W.C.1, the London representative of the firm, is a nephew of the late Campbell Douglas, F.R.I.B.A., who was Vice-President of the R.I.B.A. from 1891 to 1895, and a Member of Council for a number of years. Mr. Campbell Douglas became a Fellow in 1879, and died in 1910. His firm was responsible for the big Glasgow Exhibition of 1887, and he himself was the designer of the St. Andrew's Hall, Glasgow, as well as other important schemes.

The All-Electric Home.

At the General Electric Company's premises in Kingsway there is now on view a bungalow which has been specially erected and fitted to show the immense possibilities of electricity in the home. There are four principal rooms, with hall, bathroom and scullery, all beautifully furnished and decorated, and showing how modern electrical equipment can harmonize with any style of furnishing. In this house lighting, cooking, heating and "general service," are all-electric.

Lighting plays an all important part in the "Magnet Home." Various systems of lighting are installed to show how different

THE MAGNET ELECTRIC HOME: THE DRAWING ROOM.

requirements may be met. One special effect is that of artificial sunlight and moonlight—a recent innovation of the G.E.C. The drawing-room can be flooded with artificial sunlight at will, with a very realistic effect, while the garden scene outside the dining-room can have the rays either of sunlight or moonlight upon it. These effects, which are produced by Osram lamps scientifically arranged, could be appropriately adopted to large staircases in private houses, hotels, restaurants, public buildings, etc., and to rooms with limited outlooks.

Heating is provided in the "Magnet Home" by electrically heated screens, fires, mats, and the like. Electric power is used in the kitchen in cookers, boiling rings, grills, and all controls are easily accessible and simple in adjustment.

It is impossible to describe in detail every appliance which has a place in the home, but some ingenious novelties demand special mention. The requirements of the smoker are provided for by a small electric pipe lighter, which needs but the touch of a switch to make it glow immediately; a delightful effect is obtained in the drawing-room by the use of the "Perfuma" smoke absorber, which, whilst being decorative from a lighting point of view, absorbs all tobacco smoke and emits a pleasing aroma.

Conveniently placed beside the shaving mirror in the bedroom is a wall-plug to which a small electric shaving water-pot may be connected. This appliance boils up enough water for shaving purposes in a minute or two, and ensures really hot water whenever it is needed. Numerous "outlets" are provided over the house, so that any type of appliance may be conveniently connected up.

New Inventions

Latest Patent Applications.

9489.—Allison, R. M.—Construction of buildings. April 9.
9400.—Backlund, E. V.—Wall building unit for wooden houses. April 8.
9191.—Bourchier, E. H.—Slab sheeting for roofs and walls. April 7.
9306.—Brownlow, R. S.—Apparatus for spreading plaster, etc., on walls, etc. April 8.
9562.—Johnson, C., Slade, W.—Slab building. April 9.
9145.—McGinness, M.—Building construction. April 6.
10065.—Bevis, W. F. F.—Device for construction of concrete walls, etc. April 17.
9782.—Brownlow, R. S.—Apparatus for spreading plaster, etc., on ceilings, etc. April 15.
9877.—Button, H.—Concrete, etc., building constructions. April 16.
9798.—Erdmann, K.—Building elements. April 15.
9960.—Horton, A. S.—Building construction. April 16.
10028.—Miller, T.—Shuttering for concrete, etc. April 17.
9611.—Milligan, R.—Concrete shuttering, etc. April 14.
10124.—Nudd, A. J.—Shuttering for concrete building construction. April 18.

Specifications Published.

231231.—Smallwood, A.—Structural metal work.
231376.—Holmes, A. E.—Concrete wall shuttering.
231644.—Cudmore, A. E.—Apparatus for casting concrete walls and the like.
231653.—Walker, F. T.—Waterproof composition suitable for use in building and for other purposes.
231702.—Deutsche Patent-Ankerschienen Ges., Halfen, J., and Kramer, J.—Channel-shaped anchor-rails for ferro-concrete beams and girders.

Abstracts Published.

229368.—Savory, E. W., Park Row Studios, Bristol.—Slab buildings.
229890.—Bron, A., 134 Weespersijde, Amsterdam.—Slabs for walls, floors, roofs, etc.

The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C.2, from whom readers of the JOURNAL may obtain all information free on matters relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and abstract only, and forward on post free for the price of 1/6 each.