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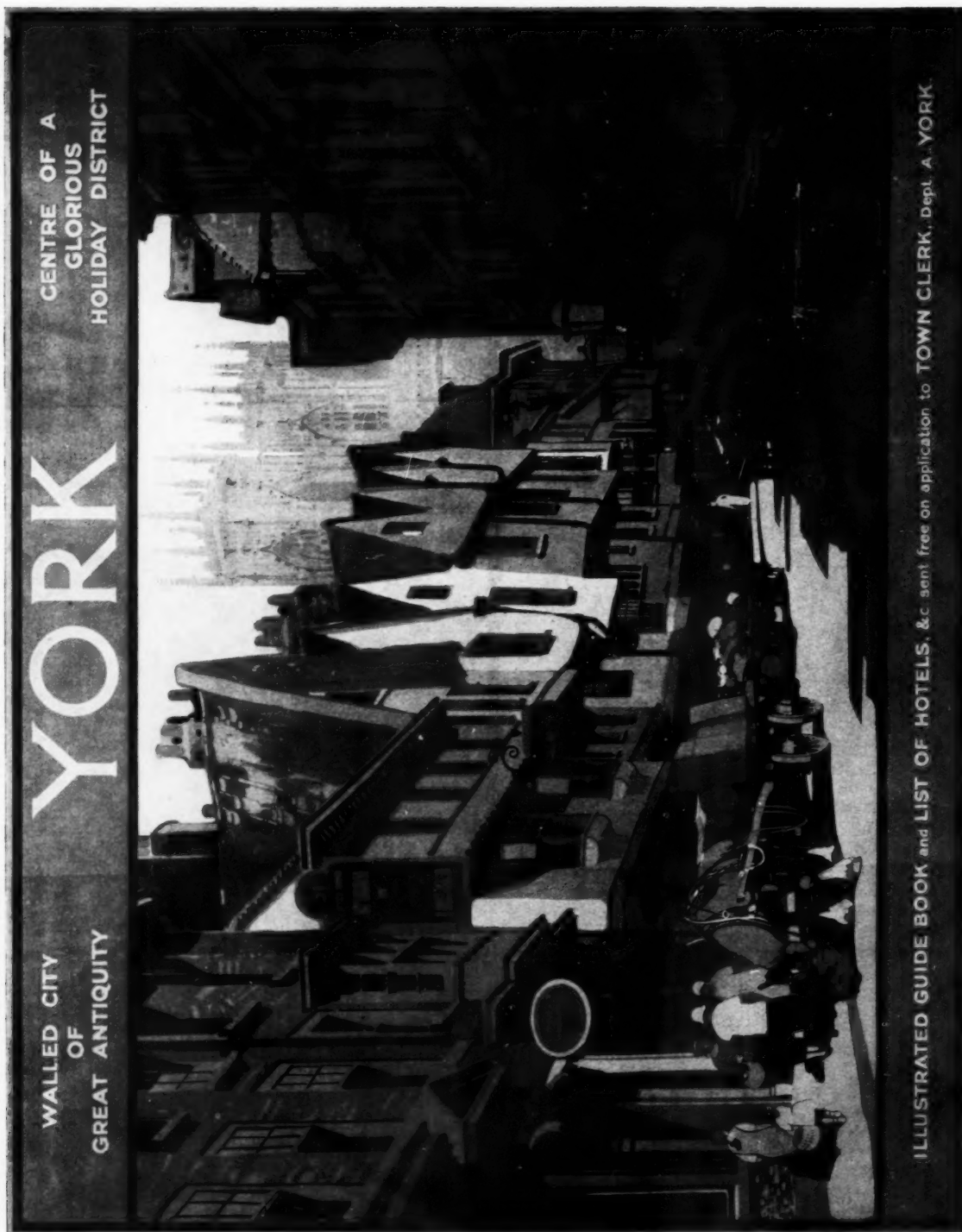
FROM AN ARCHITECT'S NOTEBOOK.
OF BUILDING.

*Houses are built to Live in, and not to Looke on :
Therefore let Use bee preferred before Uniformitie :
Except where both may be had. Leave the Goodly
Fabrickes of Houses, for Beautie only, to the
Enchanted Pallaces of the Poets : Who build them
with small Cost.*

FRANCIS BACON.

27-29 Tothill Street, Westminster S.W.1.

Drawings of Architecture. 4.—York
From the Poster by Fred Taylor



The railway companies have of late turned their formerly dull and depressing stations into veritable art galleries. The above poster, by Mr. Fred Taylor, is one issued by the London and North Eastern Company.

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ARCHITECTS' JOURNAL

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Waterloo Bridge

IT is difficult to believe that the days of Waterloo Bridge—as we know it—are numbered. With its great granite arches set solidly on powerful piers, it seemed to be built for eternity. Amid a changing world, it was apparently one of the few things immutable; the very embodiment of the everlasting. Yet a strong exterior covers an inherent weakness that threatens to bring the bridge to ruin. The wooden piles upon which the piers are built, exhausted with their hundred odd years of resistance to an enormous superincumbent weight, are at last giving way. The fourth pier from the Surrey side has subsided more than the others, and here the deck of the bridge forms a valley down which heavy vehicles dip and rise much in the manner of the switchback railway. When we drew attention to the condition of the bridge some five or six months ago, there was a tendency in certain quarters to regard our warning lightly. Some critics went so far as to characterize it as an "alarmist rumour." It is small consolation to find our worst apprehensions so quickly realized.

"The noblest bridge in the world," Canova called it—"worth coming from Rome to see." "A colossal monument worthy of Sesostris and the Cæsars," said Dupin, the famous French engineer. Even Ruskin could scarce forbear to pay tribute to the great curve across the Embankment—"as vast as the Rialto at Venice, and scarcely less seemly in proportions." To think that all this embodied strength, greatness, and nobility must soon come to an end is a desperate thought that seems to have no relation to reality.

Exactly what will be done is not at the moment certain, though the stated intention of the L.C.C. is to rebuild the bridge and at the same time to widen it by some thirty feet. The addition would be made on the west side, and Rennie's elevations would be preserved. Architects would rather that the bridge were rebuilt exactly to Rennie's design, for it is impossible to alter the proportions of something perfect without spoiling its unity of effect. If, however, widening is imperative from the point of view of traffic requirements, it must be submitted to with as good a grace as may be. That it is possible to widen an old bridge without destroying its character is, in any case, shown by the bridge across the Thames at Kingston, which was doubled in width some few years ago. The underside of the arches shows a rather objectionable contrast between the old and the new, but the architectural character of the bridge is at least preserved. If the widening of Waterloo Bridge were done no more offensively than this there would be little cause for complaint; but the question that remains to be answered is: Will Waterloo Bridge be rebuilt to Rennie's design?

We hear ominous rumours that the Port of London Authority is pressing for an entirely new three-arch bridge—a bridge that shall offer less obstruction to traffic and tide than does this granite bridge of Rennie's with its nine arches. Let London at once declare that it will tolerate no

such proposal. To widen Rennie's bridge is bad enough; to sweep it away would be an act of unmitigated vandalism. Waterloo Bridge is a national monument; it is part of the country's material history. London without Waterloo Bridge is no more conceivable than London without St. Paul's, the Abbey, the Tower, or the city churches. If the bridge is to go, then let these others go also, for they are not more essentially of that London which calls up spirits and casts a spell.

But we cannot believe that Londoners will be so pusillanimous as to leave the fate of their finest bridge to the devices of uncontrolled officialdom. Let the forces of righteousness assemble and present to those who threaten the bridge with extinction the united front of a Greek phalanx. The Commission of Fine Arts, the Royal Academy, the R.I.B.A., the London Society, the Society for the Protection of Ancient Buildings, the Society of Antiquaries, and any others that care to join in—let them all get together and say in one united and unanimous voice that Waterloo Bridge, widened or not widened, must be preserved.

The argument that a wider fairway and fewer piers are essential in the interests of river traffic will not hold water. The few tugs and barges that occasionally pass along Father Thames have no difficulty in negotiating the arches of Waterloo Bridge; and it is surely rather late in the day to discover that the piers are an obstruction to the tide. If they are an obstruction now they were an obstruction a hundred years ago, and Rennie and the river authorities of the day did not know what they were about. Such arguments are entirely unconvincing; they simply reveal the wish that is father to the thought.

The sudden giving-way of Waterloo Bridge does not come as a surprise to those who have given any study to the problem of London's cross-river communications. For years past it has been obvious to all who cared to see, that Waterloo Bridge was carrying loads heavily in excess of what it should be called upon to bear. The light, slow-moving vehicles—phaetons, cabriolets, and coaches—of Rennie's day gave no clue to the heavy conveyances that, in greatly increased numbers, would hurl themselves across the bridge a century later. Nemesis has waited long, but her appearance was inevitable. To-day we are faced with the contingency that central London may soon be served by only two bridges, a mile and a quarter apart, one of these already being none too strong for its job. The prospect is so disconcerting that we do not care to dwell upon it.

It must be said, however, that if only officialdom had listened years ago to the advocates of the Charing Cross Bridge scheme, affairs would not be in such parlous plight to-day. Even now there is time to make some sort of reparation. If it is impossible at the moment to carry out the Charing Cross project, there is no valid objection to Mr. Lanchester's scheme for an entirely new bridge giving on to the eastern arm of Aldwych on the north, and coming out by the Old

Vic on the south side of the river. Such a bridge would form a much-needed alternative to Waterloo and would relieve the pressure upon Blackfriars and Westminster Bridges.

While on the subject of Charing Cross Bridge, we would join issue with Sir Herbert Walker who, at a recent meeting of the Southern Railway Company, declared that the existing Charing Cross terminus was indispensable to the Southern system because it set down their passengers on the north side of the river. This is manifestly unsound reasoning. The reason that Charing Cross station appears to be indispensable at the moment is because the South Eastern section of the Southern Railway is a very out-of-date line. If it were electrified, it would be possible to tunnel underneath the Thames and to connect up with the existing underground lines; thus the South Eastern management could still deposit their passengers on the northern side of the river. By giving them the opportunity of proceeding direct to any other part of London, the company would confer an even greater benefit upon the travelling public than goes with the retention of the existing terminus.

All these questions, though separate problems in themselves, are linked up with the fate of Waterloo Bridge. Prompt action is imperative if absolute chaos is to be avoided. New bridges are urgently wanted, and the place for them is between Blackfriars and Westminster. The St. Paul's Bridge project surely cannot live in face of the urgent need for bridges elsewhere. Why is it that the obvious and most reasonable remedies for public ills—including those of traffic communications—are never applied until every unlikely alternative has first been attempted? One might as well interrogate the Sphinx.

Rennie's Bridges

John Rennie has been unlucky with his London bridges. London Bridge itself is no longer as he designed it, for in 1902 its footways were widened from 9 ft. to 15 ft. each, the extra width being carried by large corbels of granite. The work was done with much ingenuity and skill under the direction of Mr. Andrew Murray, the City Surveyor of the time, but no one could truthfully say that the appearance of the bridge has been improved. Rennie's Southwark Bridge is, of course, gone entirely. It was a remarkably fine structure, consisting of three cast-iron arches, constructed with voussoirs in the manner of masonry. But it was too narrow, and its approaches too steep; and a few years ago it gave place to the present bridge, designed by the late Sir Ernest George. Waterloo Bridge, by general consent Rennie's masterpiece, is actually an adaptation of his earlier design for the bridge across the Tweed at Kelso. This is a case of the copy transcending the original. Rennie lived from about 1793 up to his death in 1821 at No. 18 Stamford Street. Until recently the house was marked by an L.C.C. tablet. A few weeks ago it was demolished to make way for a big new factory building.

The National Gallery Centenary

The National Gallery, whose centenary is now being celebrated, was not begun until eight years after the inauguration of the Collection, and it was not completed until 1838. As architecture, it does less than justice to the powers of its designer, William Wilkins, R.A., whose ability is much better seen in the University College building in Gower Street. In justice to Wilkins, however, it has to be remembered that he was rather hampered by the conditions laid down. One essential requirement was that he should work into his composition the columns from Carlton House, and another laid him under the obligation of including in the design a dome, cupolas, and porticoes. The result is that the building has a very restless skyline, which is not improved by the modern skylights that rise above the parapet level. The best one can say for it is that it might have been a good deal worse. The Gallery

originally housed the Royal Academy as well as the National Collection, but, space being found inadequate, the R.A., in 1869, transferred to Burlington House. The National Gallery has been added to considerably since Wilkins designed it. In 1876 E. M. Barry added a new wing and the central octagon, and further additions have since been made by the Office of Works. The National Portrait Gallery, which adjoins, was added in 1895, from the designs of Ewan Christian.

The Building, the Press, and the Architect

Now and again it really does seem that the daily Press is aware of the existence of architects. For a time their names are scrupulously mentioned, and then—presto!—they are again forgotten. Some of the great dailies are exemplary in giving the names of architects in connection with buildings—"The Times," for example—but some of their contemporaries, alas! are by no means impeccable. There is our old friend "The Daily Telegraph," who last week devoted three complete pages to an illustrated description of the new building for Peter Robinson's. The work was carefully described, and due credit given to the contractors and sub-contractors. But we searched in vain for the names of the architects. "Hamlet" without the prince is a not inapt analogy.

The Revised Competition Regulations

The revised regulations for architectural competitions, which we published in our last issue, seem to have been drawn up with a good deal of care, and with special regard for the psychological element in relation to intending promoters of competitions. Many architects, especially the younger school, would have liked to see the principle of the jury system embodied as an essential feature of these conditions. We cannot but feel, however, that the Competitions Committee is wise in leaving the basis of assessment optional. The single assessor system may have serious disadvantages, but public bodies have not yet been educated up to the jury system. They are sufficiently reluctant to pay for the services of one assessor. What would be said to the suggestion—nay, the command—that they should pay for the services of three? Mr. Herbert Welch put the case very aptly when he said that promoters had to be encouraged to do anything at all, and that upon the least provocation they would throw up the whole thing and give the job to the borough surveyor. "Half a loaf, etc."

Steeple and Porticoes

St. George's, Hanover Square, whose bi-centenary has just been celebrated, is one of the fifty churches voted by Parliament "to give this part of the town the air of the capital of a Christian country"—to quote the satirical Pennant. John James, its architect (who also designed St. Luke's, Old Street), was a pupil of Gibbs, whose influence is much apparent in these churches. James was one of the first to introduce the fashion of placing the tower, cupola, or steeple on the roof-line of a church without providing any apparent base for it to rest on. Leigh Hunt criticized the practice in "The Town," observing "... steeples, however noble, and porticoes however Greek, can never coalesce. The finest steeple with a portico to it is but an excrescence, a horn growing out of the church's neck." Leigh Hunt would probably have agreed with the critics who object to classical steeples because they express the vertical through the horizontal. It is a doubtful objection. The succeeding and diminishing stages of a classical steeple—especially if they be designed as Wren designed St. Bride's, Fleet Street, or St. Mary-le-Bow, or as Gibbs designed St. Mary-le-Strand or St. Martin-in-the-Fields—can become a thing of perfect beauty—a beauty not surpassed even by the spires of the finest Gothic cathedrals. The tower and cupola of St. George's, Hanover Square, though in the Gibbs manner, lacks the distinction, the grace and proportion of Gibbs's work. The pupil was never really the equal of the master.

Waterloo Bridge

Some Notes on John Rennie's Masterpiece

IT is some months since the writer of the editorial notes in this JOURNAL drew attention to the alarming condition of Waterloo Bridge. Official assurance was, as is usual in these cases, readily given that there was no truth in the assertion, and stated that the writer had been misled by a slight unevenness in the roadway over the bridge.

Nevertheless, at a meeting held in January the London County Council instructed the Improvements Committee "to report on the congested state of the traffic over the bridge, and the possibility of relieving this congestion by widening the structure."

Since then a series of reluctant admissions have been extorted from the Council, which have indicated beyond question that the writer of the note was perfectly justified in his statement.

One of the piers on the Lambeth side of the central arch has settled so considerably that the road has dropped into the disconcerting decline of a veritable switchback; the parapet has fractured, and it is not unlikely that if the heavy traffic that now goes over the bridge (which is much more than the bridge was originally designed to bear) is not diverted, total collapse may take place within a comparatively short time.

The matter is under consideration by the Improvements Committee of the London County Council, who may be expected to report to the Council on it in about two or three weeks' time. No definite opinion has so far been formed by the committee, but it is understood that the report of the Council's chief engineer on the results of the inspection, and certain experimental operations for strengthening the foundations of the bridge, is of a serious nature. It is feared that there can be no satisfactory remedy for the state of the existing bridge.

According to the London correspondent of "The Manchester Guardian" (whose accuracy in all announcements of architectural interest is well known), a temporary bridge will be made, and work will begin on it very soon. It is expected to take eighteen months to build the temporary bridge. The work on Waterloo Bridge is expected to take about five years. The extra width of the new bridge is not yet settled, but 30 ft. is talked of. The addition will be on the west side, and it is intended not to alter the two façades of Rennie's bridge.

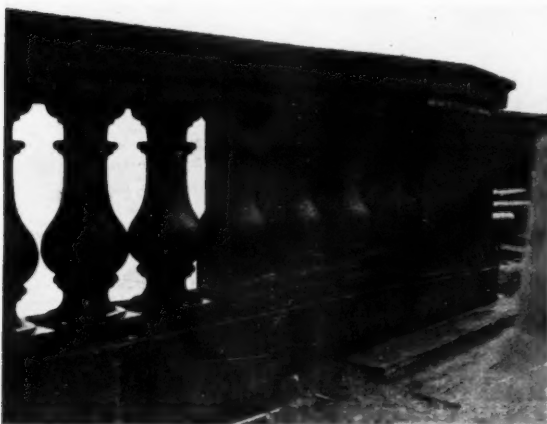
There is, however, this question to be settled. It is stated that the Port of London Authority are pressing for

a three-arch bridge offering less obstruction to traffic and to the tide. Their status in the matter is not quite clear. The Council believe that no Act of Parliament is necessary for the rebuilding, but the Port Authority thinks differently.

Perhaps it will be of interest to give the account of the construction which appears in Britton and Pugin's "Edifices of London":—

The foundations were laid in coffer dams, formed by three concentric rows of piles, at the distance of about 3 ft. 6 in. apart. The ground was found to be mostly a stratum of gravel over another of clay, and into this were driven beech and elm piles, 12 in. in diameter by about 20 ft. in length. Between the foundation was rammed in, to the depth of about 18 in., Kentish rag stone, laid in liquid mortar. Timber sills, or bearing piles, transversely and longitudinally, were fastened to the heads of the piles. Over the whole was a flooring of 6 in. beech plank, secured to the sills by long spikes, and made perfectly level, to receive the first course of masonry. The whole surface of the piers and abutments, as well as the arches, consists of large blocks of Cornish granite, bonding inwards from 3 ft. to 5 ft. The hearting, or filling in, consists of blocks of Craigleith or Derbyshire stone, of corresponding magnitude, every course of which was grouted with liquid mortar. In constructing the arches, the beds or joints were worked with the greatest care, and, to give additional security, four chain bars of iron were worked transversely into each arch. The spandrels between the arches, in the transverse direction, were filled with six division walls, each three bricks thick, and carried up to the level of the extrados of the arches. The whole space was covered with stone corbels, to receive and support the roadways. The spaces between were left hollow to diminish the weight on the haunches of the arches, and through these hollow spaces the drainage of the bridge is conducted by means of cast-iron pipes.

The arches of the bridge are of a semi-elliptical figure, and are all equal, being 120 ft. in span, with a rise of 35 ft.; leaving 30 ft. clear height above the surface of water of spring tides, and forming altogether a clear waterway of 1,080 ft. The abutments are 40 ft. thick at their bases, and lessen gradually to 30 ft. at the springing of the arches. They are each 140 ft. long, including the stairs. The piers are 30 ft. wide at their bases, diminishing to 20 ft. at the springing of the arches. Their extreme lengths are 87 ft.; the points, or salient angles, towards the stream having

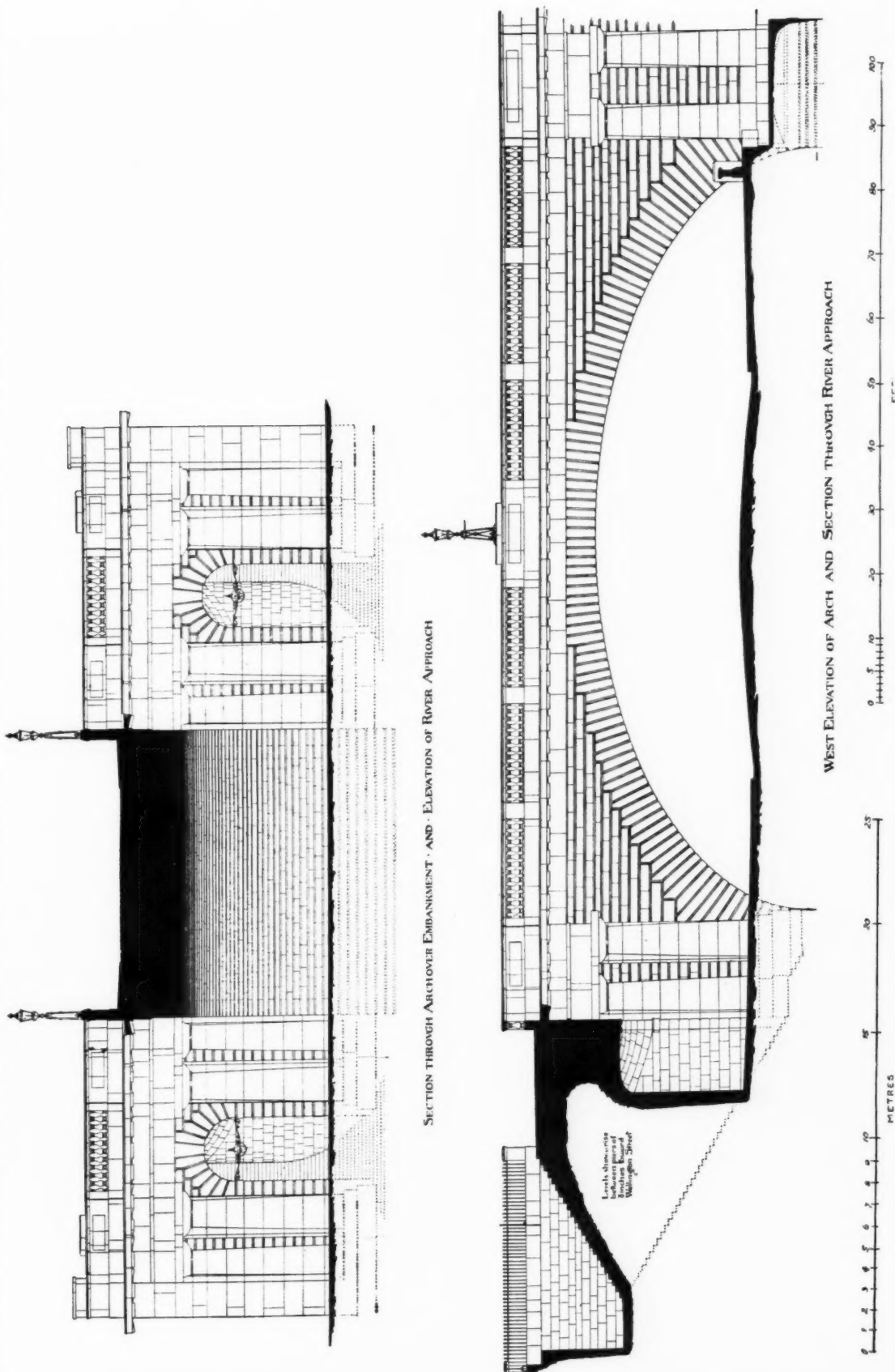


THE PARAPET, SHOWING FRACTURES AND SUBSIDENCE.

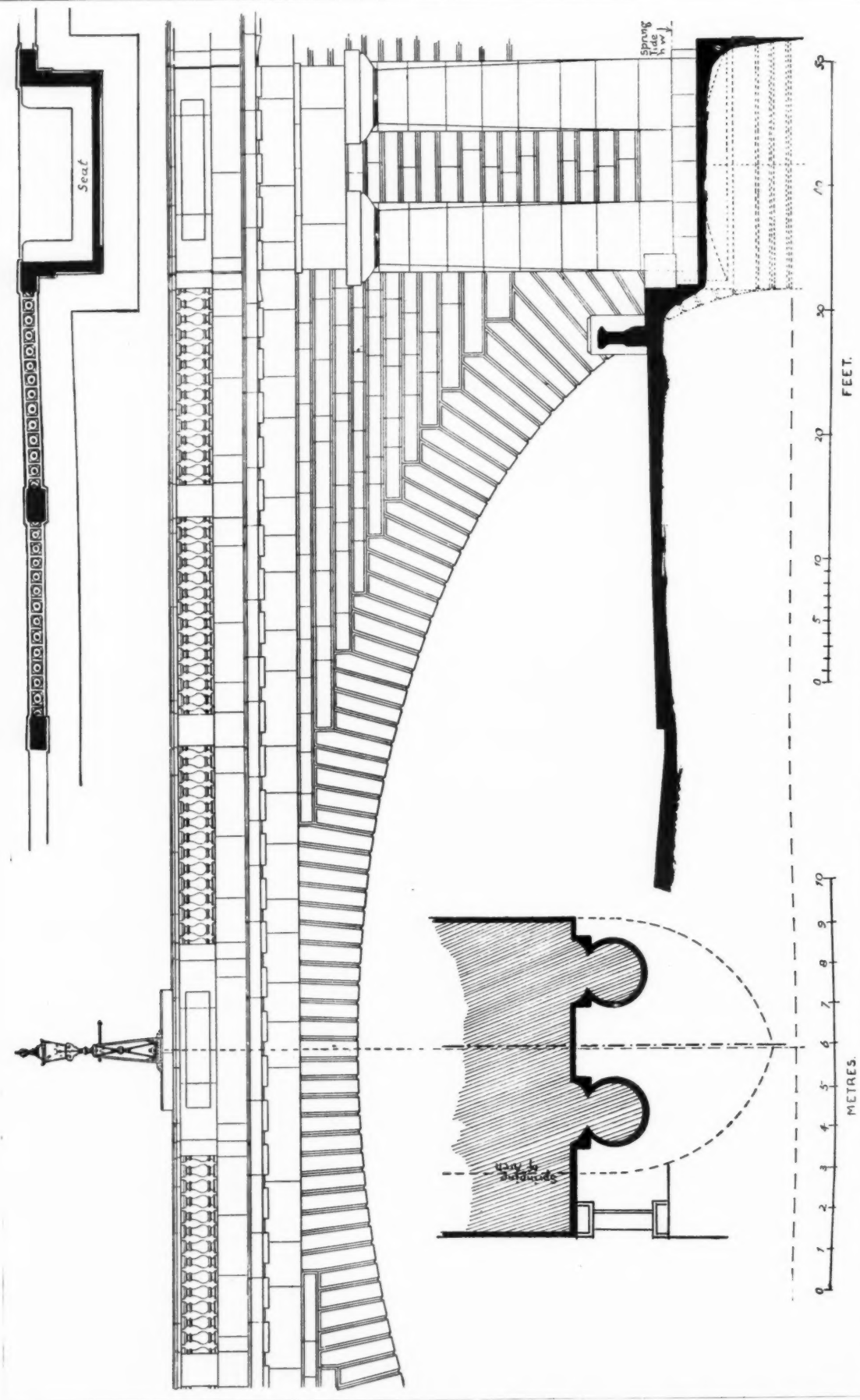
Photos: "Daily Mail."



A DETAIL AND A GENERAL VIEW OF WATERLOO BRIDGE.



WATERLOO BRIDGE: THE ARCH OVER THE EMBANKMENT AND THE STEPS TO WELLINGTON STREET.



WATERLOO BRIDGE: A DETAIL OF THE ARCH OVER THE EMBANKMENT.



JOHN RENNIE.

the form of the Gothic arch. Above they are terminated by two three-quarter columns of the Grecian-Doric order, supporting an entablature, which forms a square balcony or recess. The sides of the bridge are defended by an open balustrade, with a frieze and cornice. The carriage road is 28 ft. wide, with a footpath of 7 ft. on each side.

The roads or approaches to either end of this bridge are 70 ft. in width, except at the entrance into the Strand. They are carried over a series of semicircular arches, each 16 ft. in span. The approach on the Surrey side of the river is formed by thirty-nine of these arches, besides an elliptical arch, of 26 ft. span, over the Narrow-wall Road, and a small embankment about 165 yd. long.

The whole length of the brick arches in the Surrey approach is	766 feet.
The whole length of those in the Strand approach	310 "
Total length of the bridge from the ends of the abutments	1,380 "
	2,456 "

In building the arches, the stones were rammed together with very considerable force, so that, upon the removal of the centres, none of the arches sunk more than an inch and a half. In short, concludes Britton, the accuracy of the whole execution seems to have vied with the beauty of the design, and with the skill of the arrangement, to render the Bridge of Waterloo a monument, of which the metropolis of the British Empire will have abundant reason to be proud for a long series of successive stages.

But "Men's Workes have an age like themselves; and though they out-live their Authors, yet have they a stint and period to their duration," wrote Sir Thomas Browne, and it would seem that the days of "the noblest bridge in the world" are done.

If we lived in another age we might dare to hope that Rennie's beautiful bridge would be strengthened and used for only the lighter traffic, and a new bridge built across the river at Charing Cross.

H. J.

John Rennie was born at Phantassie, East Lothian, on June 7, 1761. The son of a farmer, Rennie started life as a

millwright, and later studied at Edinburgh University. In 1784 he was employed by James Watt, and in 1791, at the age of thirty, he commenced practice on his own account in London as an engineer.

Although Rennie acquired fame in many branches of engineering, it is by an architectural structure, Waterloo Bridge, that he is chiefly known. Canova described it as the "noblest bridge in the world." Opened by Prince Regent (George IV) in 1817, it was originally called Strand Bridge, but the name was changed after the Battle of Waterloo.

Rennie's skill as a bridge builder was not, however, confined to Waterloo Bridge. Many other fine examples were completed from his designs, some of them, especially those at Leeds, Boston (Lincs), Musselburgh, New Galloway, Newton Stuart, and Kelso being especially notable. He was also responsible for the first Southwark Bridge, and designed the existing London Bridge, which, however, was carried out by his son.

Besides planning the breakwater at Plymouth, admitted to be one of the most remarkable engineering feats in the world, Rennie carried out great improvements to the harbours at Plymouth, Chatham, Sheerness, and Portsmouth, assisted in the design of the Bell Rock lighthouse, and designed the London Docks, and others at Dublin, Hull, Blackwall, Greenock, Liverpool, and Leith.

Rennie died at his house in Stamford Street on October 4, 1821, and was buried in St. Paul's Cathedral, by the side of Sir Christopher Wren. He had two sons. George, the elder, was at one time superintendent of the machinery at the Mint. On the death of his father, George entered into partnership with his brother John, who was knighted in 1831, on the completion of London Bridge.

Mr. Alwyn R. Dent, who recalls the opening ceremonial in the "Journal" of the Society of Architects, points out



THE HOUSE IN STAMFORD STREET IN WHICH RENNIE DIED.
(Recently demolished.)

that in Waterloo Bridge London possesses an essay in monumental design which can easily hold its own amongst the bridges of the world, great in its simplicity and strength, and appropriately so, for in its lines are expressed unconsciously the stern resolve and determination which one hundred years ago overthrew the world ambition of Napoleon; it was in reality, though not intentionally, England's great war memorial.

"When," he adds, "we look upon the firm yet subtle outline of the Sicilian Doric columns and the strength and apparent lightness of the airy sweep of the arches, one must acknowledge that not inappropriately did the designer clothe the bridge with the archaic Greek spirit, for in its almost perfect union of beauty and utility and economy of design it reflects those characteristics which we have learnt to be the most significant in our inheritance of Hellenic tradition."

The Society for the Protection of Ancient Buildings are naturally moved by the proposal, and are watching keenly every development. It may be expected that the R.I.B.A., with others, will also keep a watchful eye upon any undertaking likely to destroy the unity of such a composition. "To widen Waterloo Bridge," Mr. Powys, the secretary of the S.P.A.B., stated in an interview, "would materially reduce the value of Rennie's design. Waterloo is certainly the finest bridge over the Thames. A very great part of its beauty, as one sees it from above, or from below, or from the Embankment, is due to its comparatively narrow width. It is obvious, therefore, why the design would be spoilt by widening: the arches, which are now rather narrow, would become tunnels, and to anyone looking underneath the bridge diagonally from the Embankment the view of the river would be reduced by about one-half."

Some Minor Aspects of Town Planning

V—Open Spaces and Densities

By H. J. BIRNSTINGL, A.R.I.B.A.

(Concluded)

PERHAPS there are few matters that afford greater perplexity in the early stages of preparing a town-planning scheme than the allotment of open spaces.

The problem is bound up intimately with that of densities, concerning which no absolute standards for general application can be laid down. The chief difficulties are to determine, for purposes of assessment, what is to constitute a unit area, and what is to constitute net and what gross area. When these points are decided and the amount of open space calculated, the question as to their nature arises, for it is obvious that open spaces vary in their purpose, and, therefore, in the benefit that they bestow upon the community. Thus the broad grass verges adjoining a ring boulevard, although an open space, will not compensate for the absence of children's playgrounds. Neither can a city square offer the same facilities as allotments, or formal pleasure gardens as a football ground, or a private sports ground as a public park. The matter must, therefore, be considered from this twofold aspect of area and purpose.

Mr. G. L. Pepler, in his interesting paper on "Open Spaces" in a recent issue of the "Town Planning Review," shows that suggested areas of parkland vary from 115 to 250 persons per acre of park, and that actual open spaces, selected from a few typical English towns, vary from 180 persons per acre of open public space within the town at Cambridge to 600 at Shrewsbury. But even these figures, considered independently, afford but little guide unless accompanied by a map showing the nature and distribution of the open public spaces. For example, a large park situated on the boundary of a manufacturing town might bring the number of persons per acre of open space to a reasonable figure. On the other hand, such a park would be of little use to children living in the opposite quarter of the town. For this reason Professor Abercrombie (*vide* Mr. Pepler's paper) maintains that children's playgrounds, which should be at the rate of 50 sq. ft. per child, should not be situated more than half a mile apart.

One of the most interesting recent contributions to the subject of densities and open spaces is made in "Dublin of the Future."* The city is divided into two areas, in the inner one of which alone full town conditions prevail. This inner area is known as the intra-urban, and the outer one as the extra-urban. From these areas all purely non-residential land is subtracted. These lands include water areas, railways, manufacturing tracts, and private institutions,

leaving a normal residential area, which is made up of house-plots, roads, public buildings, ordinary commercial premises (as opposed to manufacturing tracts), and open spaces. This constitutes the gross urban acre for which a density of seventy-five persons per intra-urban and sixty per extra-urban acre is suggested.

The open spaces are scheduled into the following sections: small playgrounds, neighbourhood parks, town gardens or city squares, local parks, great town parks, parkways, road and river, park highways, and Nature preserves; to these might be added allotments. The small playgrounds are intended for small children, and they should be so disposed as to be not more than half a mile apart. Often they will be arranged in connection with the other open spaces, or in connection with school playgrounds. In most cities derelict sites exist which could be converted at little expense. These spaces will be required only in those districts where there is the kind of population that is likely to make use of them.

The Neighbourhood Parks constitute a particularly interesting suggestion. The intention is that they shall form highly concentrated recreation grounds giving facilities for persons of both sexes and of various ages, but particularly for such of the adult population as are past the years of the more vigorous pursuits of football and the like. These parks contain a bowling green, lawn-tennis courts, croquet lawn, open-air gymnasium, etc. The intention is that they shall be run as municipal clubs, for the use of which a small subscription shall be charged. The precise accommodation and the facilities which each can offer will depend upon local conditions as to available area, the nature of the surrounding population, and the other facilities in the neighbourhood. Town gardens and city squares might in most towns be grouped with Local Parks. These, for the most part, do not offer any specialized facilities, but they afford pleasant spots in the town area for walking and resting. In the lay-out of these gardens the average town leaves room for much improvement. Aimlessly tortuous paths, gloomy shrubberies, and ugly cast-iron railings should give place to a more formal setting. More attention should be given to bright flowers, and the introduction of small groups of statuary. The larger of these grounds should contain a well-verandahed and open-air restaurant. There is every need for the health of the nation that encouragement be given to indoor workers to spend their leisure in the open air. Advantage should be taken, too, of any natural contours of the ground for the formation of an open-air theatre, and many of these gardens or parks

* Reviewed in our issue for April 4, 1923.

should have a bandstand for regular musical performances. There is a prevailing idea that brightly-laid-out gardens, music, and the like are the prerogative of watering-places and holiday resorts. Every effort should be made to eradicate this impression. Such facilities for enjoyment and well-spent leisure are all the more necessary amidst the pressure of mundane affairs. A decorative asset that is almost entirely ignored in the laying-out of our gardens is that of water. The value of a fountain or running water in a decorative garden scheme cannot be over-estimated. It soothes the eye and the ear, and through them the harassed mind. Yet a fountain, even in a country having so high a rainfall as our own, in a public garden is extremely rare. Fountains, jets, artificial streams, lily ponds, duck ponds, ponds for the sailing of model boats, and even bathing pools should figure frequently in the lay-out of our open spaces; the latter, however, belong to the large parks rather than the small decorative gardens of this category.

Next on the schedule which we are following are the Great Town Parks. These offer facilities of every kind, but although various portions may be devoted to particular purposes the chief advantage of the large park is the opportunity that it presents for a big unbroken area of grass land. Here again water, in the shape of a boating lake, is an immense asset. But on no account should a large park be divided up into a series of specialized sections. If the area is sufficient to accommodate unobtrusively a few of these it may do so, but there should always remain broad tracts of unfenced grass and parkland, intersected by foot-paths and broad tree-lined avenues laid out, not at random, but with forethought, due regard being paid to contours, natural features, and relation to the surrounding town.

Although in the Dublin report, the schedule of which we have been following, a distinction is made between parkways and park highways, it is one that will not often prevail, and the kind of open space that we have now to consider is that which borders on wide traffic routes, either land or water. In the case of roads these will be wide, tree-planted avenues having ample grass margins and even possibly flower borders. The circumferential or ring roads will offer facilities for this treatment, otherwise there will be but little occasion in the town itself, although a main avenue leading into the town or leading from the railway terminus to the civic centre, if thus treated, gives a fine generous impression on entering. These thoroughfares will probably be served by tram and omnibus routes, and should be well provided with seats. Indeed, a plea might be made for better seating accommodation in all open spaces. There should be seats at reasonable intervals, and particularly at bus and tram stopping-places, in all tree-lined streets of sufficient width to accommodate them, and in all the town squares and gardens. It is said that to provide seats encourages untidiness, but the purpose of these open spaces is to serve the public, particularly those who have no private grounds in which to rest themselves, and not to gratify a desire for neatness on the part of the city councillors. Untidiness is certainly a curse in all our large towns, but its case cannot be effected by coercion, but by education and by awakening a civic pride. If the fullest use is to be made of public open spaces by those who have most need of them it is essential that there be an ample provision of seats. The river parkways will occur in those towns fortunate enough in possessing the facilities, and will consist in a strip of public ground adjacent to the river or canal bank.

Natural reserves will include any large tracts situated on the town's purlieu, which it is thought desirable, either on account of natural beauty, historic interest, or as a protection from urban encroachment from without or growth from within, to preserve inviolate. Such reserves will sometimes be the result of a private gift to the town. Finally, there are allotments. The desirability of these has already been dealt with in an earlier article. With regard to the area and number, the authors of "Dublin of the Future" suggest one acre in ten in housing areas, this figure being computed as follows: Sixteen houses to the

acre, of which half will have gardens of sufficient size to render allotments unnecessary, and of the remainder one in five should have an allotment of one-sixteenth acre. This estimate, however, is extremely low if compared with those mentioned by Mr. Pepler as satisfying the demands of the population.

The open spaces as we have now considered them may be grouped roughly into two main sections, the specialized and the general. The former include the small playgrounds, the neighbourhood parks, the allotments, and some of the town gardens and city squares, viz., those which are entirely devoted to ornamental purposes, and the latter include the remaining town gardens and city squares, the great town parks, the park highways, and the Nature reserves. The preparation of the city plan must provide a more or less even distribution of these spaces according to their purposes.

We have already shown that a great divergency of opinion exists as to the number of persons whom an acre of public open space should serve. Let us assume this figure to be 200, which is between the extremes that we mentioned. We have so far assumed that the small playgrounds should be at the rate of 50 sq. ft. per child. As about a quarter the population is under fourteen years of age, out of the 200 persons 50 will require about .05 of an acre. Next we have the neighbourhood parks. The authors of "Dublin of the Future" show a park of $4\frac{1}{2}$ acres, which they estimate will "provide amusement for 400 active regular participants." In addition to this number it would attract and benefit many others, say, 600 in all. Of the remaining 150 persons over fourteen years of age of the original 200 it may be assumed that about one in three would desire the facilities of these parks, and they would then require an area of about .35 of an acre. Next we have the allotments. These have already been computed at one acre in ten; we shall therefore have 0.1 of an acre for allotments. Finally, there are the ornamental gardens, for these we must take a purely arbitrary figure, let us say .05 of an acre, which is the same as that of small playgrounds. For the specialized open spaces we therefore have taken the following areas: Small playgrounds .05; neighbourhood parks .35; allotments .1; and ornamental gardens .05; total .55, leaving .45 acres for the general purposes.

There are, of course, other ways of calculating the various open spaces, but on the whole it will probably be found most satisfactory to do so as a proportion of the population rather than as a proportion of the area. For the spaces must be distributed according to the nature and density of the population, and not according to the area. It will, therefore, be best at the outset to divide the town into zones or unit areas, and distribute the open spaces accordingly. In actual practice the town-planner is not, for the most part, dealing with a virgin area, but with an over-populated city, a chaotic growth that has arisen without forethought or order. In selecting and converting sites for open spaces he is generally obliged to depart from the ideal to compromise, for financial and other local considerations cannot be ignored. However, the fault in most towns is not that the actual percentage of area devoted to open spaces is insufficient, but that its distribution is faulty. In planning for the future growth of the city it is possible by the definite retention of certain areas for specific open spaces to avoid this in the future. Finally, it must be remembered that the open spaces are for the use and benefit of the people, not for the æsthetic delectation of the few, and that the only way to insure their proper maintenance is by the co-operation of the users. This will be brought about, not by restrictive and irksome local orders, over-fencing, and prohibitions, but by developing an appreciation for beauty, a love of orderliness, both for its own sake and out of neighbourly consideration. This development will take place as it becomes generally realized that the civic authorities have the welfare of the town and its humblest citizens at heart, that what they do is for the enjoyment of all and not for the benefit of a privileged few.

The Savoy Cinema, Hull

BLACKMORE and SYKES, Architects

THE Savoy Cinema has been erected under the promotion of Messrs. The Savoy (Hull) Ltd.

The site is a rectangular one, with frontages to Morrill Street and Holderness Road. The whole area is occupied by the theatre and its subordinate rooms. In addition to the cinema the scheme embodies two shops and a billiard hall with twelve tables.

The building is designed in the Neo-Grec style, and the elevations have been executed in narrow sand-faced bricks, white pointed, and with stone dressings.

The entrance opens into a foyer, 30×30 ft., architecturally treated in fibrous plaster and with polished oak block flooring. From the foyer are the two entrances to the auditorium, and the two staircases leading to the crush hall for the balcony.

Ladies' and gentlemen's lavatories are located on respective sides of the foyer, access to which is gained by well-concealed entrances.

The operators' box, re-winding room, and attendants' room are situated between the foyer and the auditorium. The generator room is below the operators' box. The auditorium is 80 ft. in width, and the projection is 75 ft. to the screen. The ground floor provides accommodation for 950, with exceptionally large gangways. There are five exit doors on the ground floor.

A special feature has been made of the orchestra platform.

The screen is a "Surbrite," 21 ft. 9 in. × 18 ft., and is covered by electrically-operated curtains with special lighting effects.

A spacious organ chamber has been provided at each side of the proscenium, and the three-manual organ which has been installed is operated from a detached console in the centre of the orchestra.

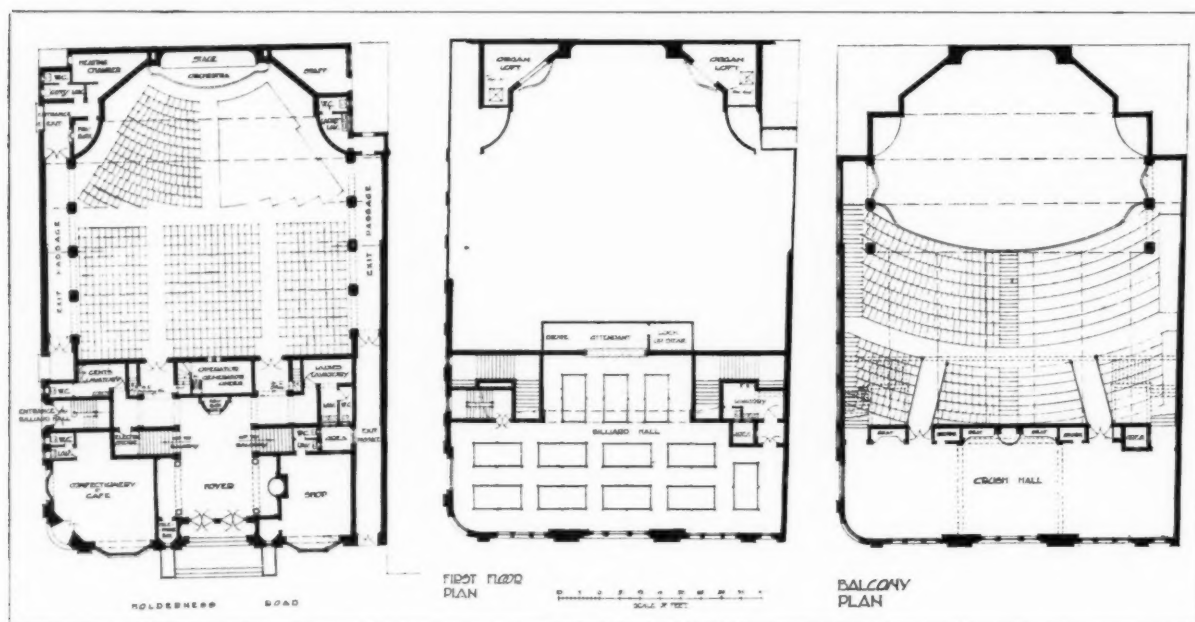
The balcony of the hall provides accommodation for 650 in comfort. It is entered from a crush hall 80×26 ft., with a large and central fireplace recess and an impressive curved ceiling. The floor is laid with polished oak block flooring.

The ventilation of the building is carried out by electric extract fans, conveying the air through trunks arranged in the roof space, from the ceiling grids, and the system is such as to give a complete change of air in the hall six times per hour.

The heating is on the low-pressure hot-water system and an electric motor and pump is provided to give rapid acceleration of the circulation.

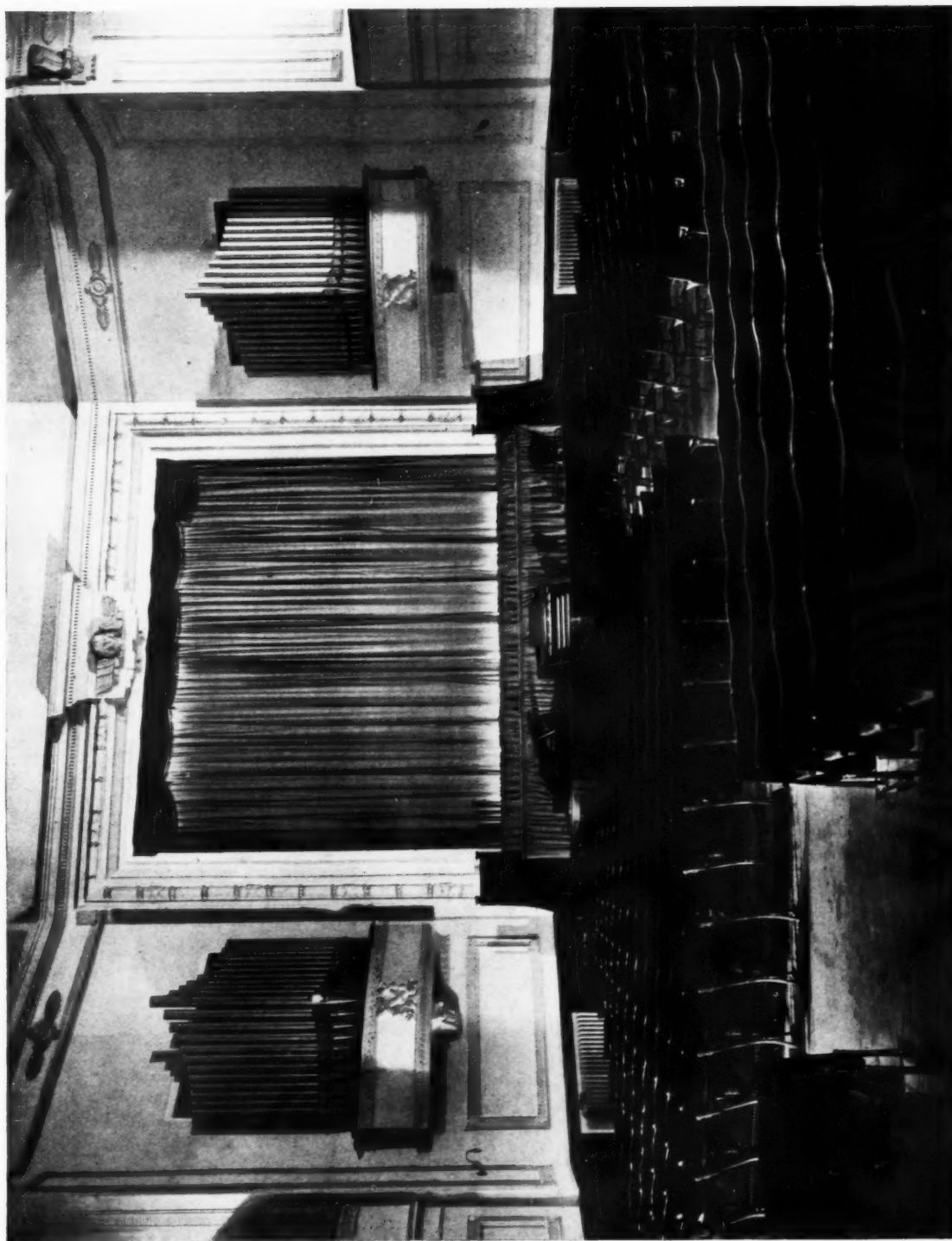
The electric lighting of the theatre has many special points, such as subdued reflected light, coloured tone effects, and "dimmer" operation. The lighting throughout has specially designed silk-covered fittings in blue and gold. The main ceiling fittings are in the form of lighted Grecian urns, suspended from the ceiling with silken cords attached to the gold-coloured handles of the urns, the effect obtained being quite unique. The lighting during the pictures is so arranged that the gangways and the access to all seats can be distinctly seen, and the necessity for the attendants to carry hand-torches is obviated.

The general contractors were Messrs. Con. Greenwood and Sons, Ltd., of Hull, and the specialist works were executed by the following firms:—Arch. D. Dawney and Sons, Ltd., Battersea (balcony and roof steelwork); D. T. Brown, Son & Co., Liverpool (general steelwork); W. J. Wilson and Son, Mansfield (fibrous plasterwork); R. Finch & Co., Hull (joinery); C. F. Procter, Hull (plumbing and glazing); The Hull Concrete Stone Co., Ltd., Hull (stonework); The City Electrical Co., Ltd., Hull (electrical installation); Holmes and Moore, Ltd., Hull (seating); Wm. Harland & Co., Ltd., Hull (general furnishing); H. S. Vincent & Co., Sunderland (organ builders); Hollis Bros., & Co., Ltd., Hull (oak block flooring); O. Tofolo & Co., Hull (terrazzo and composition flooring); Rosser and Russell, Ltd., Leeds (heating); Chas. Raine and Sons, Ltd., Hull (ventilation system); W. Garbutt & Co., Hull (internal decorating); Dawber, Townesley & Co., Ltd., Hull (slating works).



GROUND, FIRST FLOOR, AND BALCONY PLANS.

Current Architecture. 226.—The Savoy Cinema, Hull: The Auditorium, Looking towards the Screen
Blackmore and Sykes, Architects



The exterior of this Cinema is designed in the Neo-Grec style, and the treatment of the interior is upon the same lines. A special feature has been made of the orchestra platform, and organ chambers have been provided at each side of the proscenium.

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The Heswall Golf Club House Competition

The Winning Design

AS announced in our last issue, the design of Mr. Herbert J. Rowse, A.R.I.B.A., has been placed first in the competition for the new club house at Heswall, Cheshire. In his report the winner states that his design has been primarily influenced by the following considerations:—

(1) It has been sought so to design the building that the greater part of the accommodation suggested in general terms in the conditions of competition shall be included in the main building. With this object in view it has been found to be necessary to dispose of the women's club room on the ground floor, thus placing it in an adjacent position to the locker room and lavatory, and reasonably accessible for such intermittent service as may be required.

(2) That accommodation asked for, but not included in the main building, shall be provided in wings to be erected later, but which will ultimately take their place as complementary parts of the final structure. It has been considered advisable to place these wings and the kitchen yard at right angles to the cross axis and parallel to the roadway, thus causing the building to encroach as little as possible upon the links.

(3) In order that it shall not be necessary to cart filling

to the site for the purpose of the ground work, and the formation of the terrace as designed, the space which it is proposed to use for the parking of cars shall be excavated to the level of the roadway, and it is calculated that sufficient filling (together with that from the foundations and basement) will be obtained for the purpose.

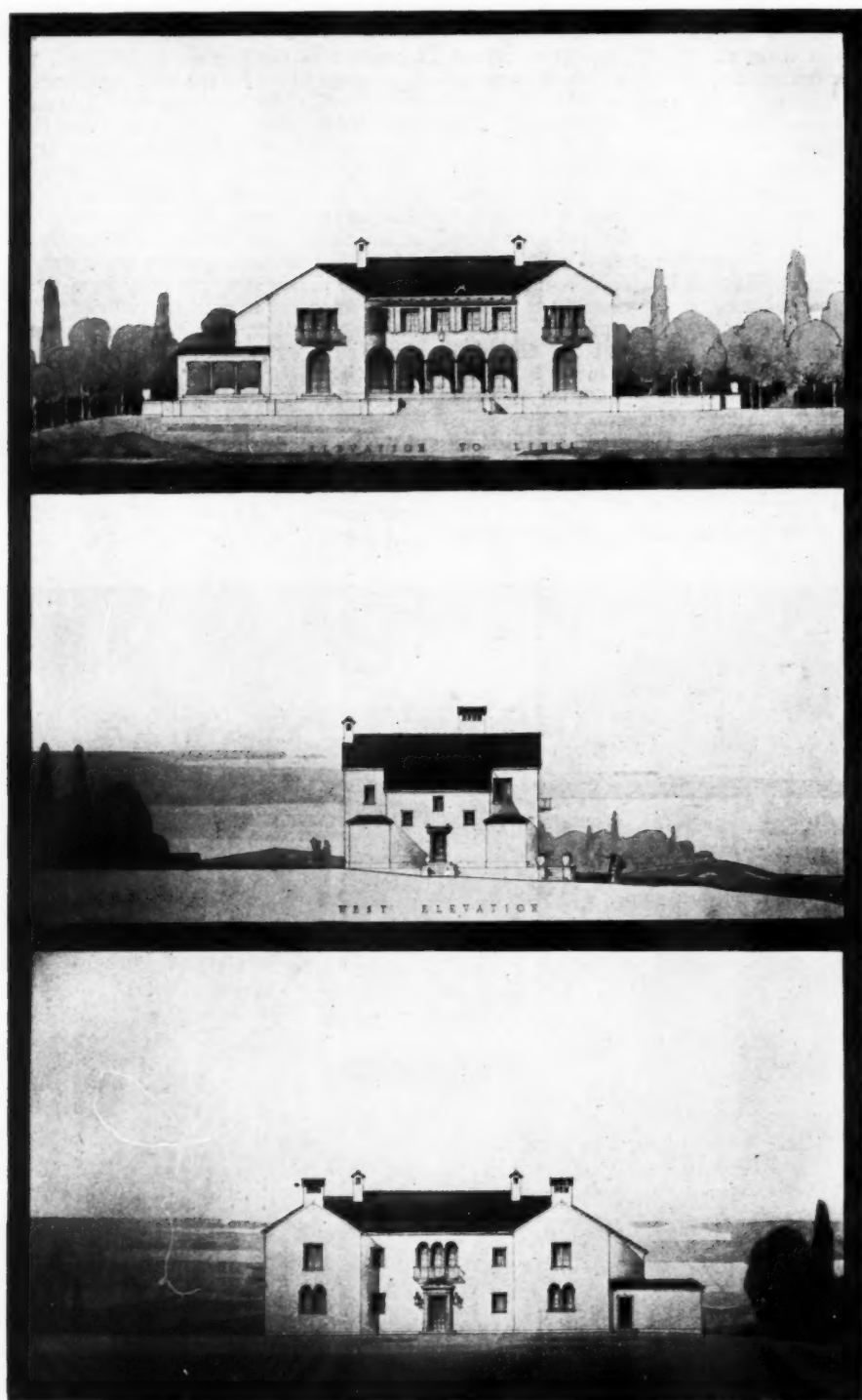
(4) As the strong prevailing winds are from the north-west, it has seemed important that the veranda should be afforded some screen, and it has consequently been recessed behind the projecting wings of the main building.

(5) After careful inspection of the site, it has been decided to widen the existing roadway from the point of entrance to the forecourt to a width sufficient to allow two cars to pass one another, the forecourt and parking space providing sufficient room for turning. An "In" and "Out" way is indicated to the parking space, so that the traffic is to some extent controlled. A proper setting to the building would be obtained by the planting of trees to the north of the entrance drive and around the parking space.

The planning of the building has had three objects in view. It has aimed at obtaining a convenient and economic arrangement of the accommodation; at securing interiors that would be pleasant in effect; and at providing features

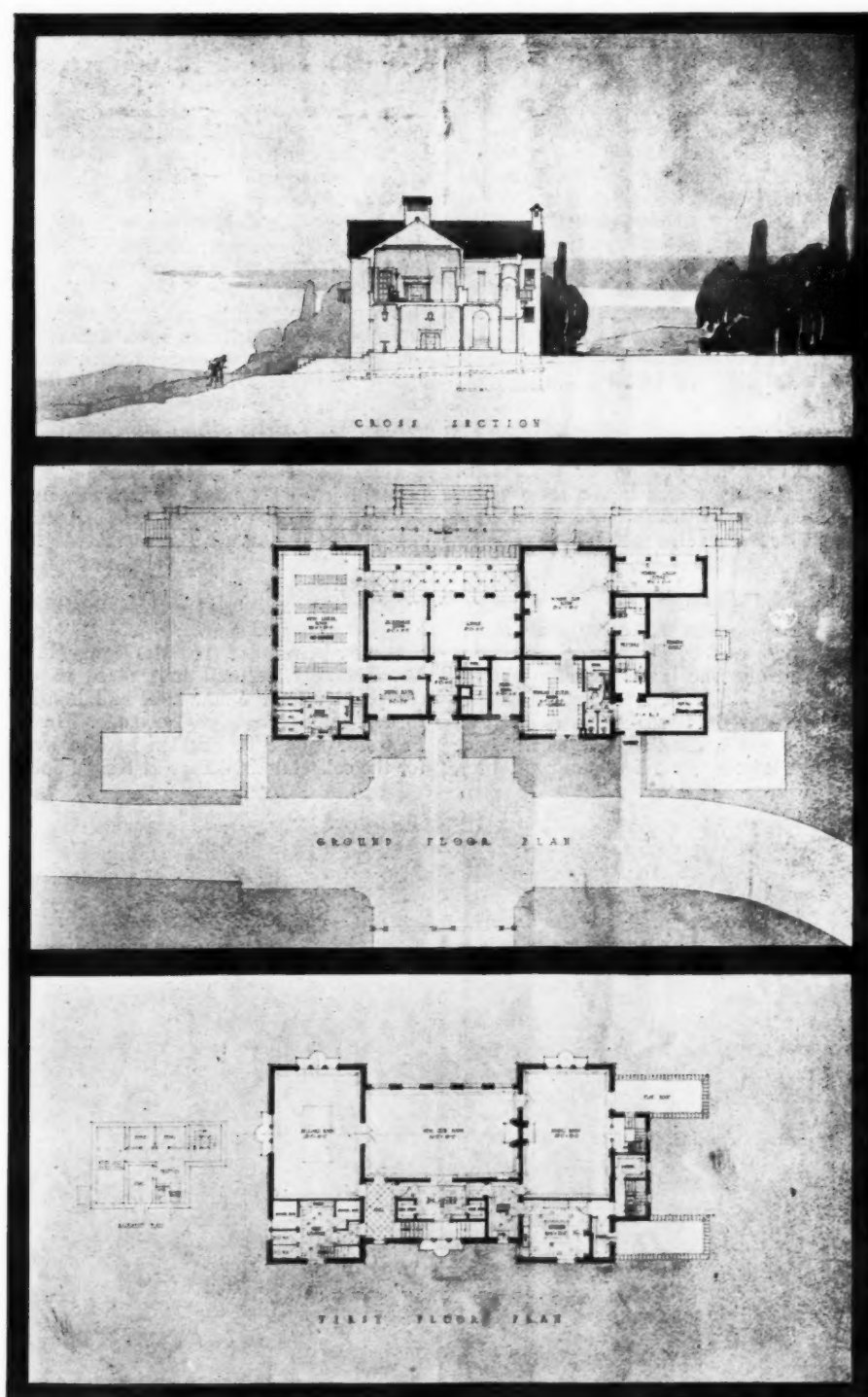


THE GENERAL LAY-OUT.



HESWALL GOLF CLUB HOUSE COMPETITION: THE WINNING DESIGN.

HERBERT J. ROWSE, A.R.I.B.A., ARCHITECT.



HESWALL GOLF CLUB HOUSE COMPETITION: THE WINNING DESIGN.

HERBERT J. ROWSE, A.R.I.B.A., ARCHITECT.

for external effect which are not fortuitous, but are the logical outcome of the interior elements.

Although the building is of a simple character a brief analysis of the plans may be useful.

Ground Floor.

Men's Accommodation.—From the entrance hall access is gained to the locker rooms, lavatory, lounge (and through it the secretary's room), and to the staircase which leads to the club room and billiard room on the first floor. Owing to the close planning necessary to keep the cube as low as possible the entrance hall has been reduced to sizes which are considered adequate but minimum. To obtain the largest possible room for lockers within the rectangular shape of the plans, the lavatory accommodation has been placed partly on the ground floor and partly on the first floor, with the resultant advantages that baths can be taken in greater comfort on the first floor, and that the upper lavatories are accessible to the club rooms. A small minor staircase connects the first floor lavatories with the locker rooms so that the whole of the accommodation is available for the use of persons entering the building through the locker room.

Women's Accommodation.—The entrance is planned on the westerly side off a small court, and the club room is entered through the staircase hall and not on the axis of the entrance, thus screening the rooms from strong winds. The locker room is entered from the club room and from it the drying-room and lavatories, under which a basement for heating and wine and spirit store is placed.

First Floor.

The men's club room is placed in the centre, and from it is entered the dining-room and billiard room, the latter having also an entrance from the hall. Equally efficient service is provided from the bar to all three rooms. Women have access to the dining-room by the small staircase adjacent to their club room and entrance. The service accommodation includes kitchen, service pantry, larder,

and store, with access stair from trades' entrance and yard. The principal qualities which have been aimed at in the design of the façades are those that have also been sought in the plans—simplicity and directness—and no attempt has been made to invest the building with any character but that proper to itself.

The following materials and finish are suggested:—

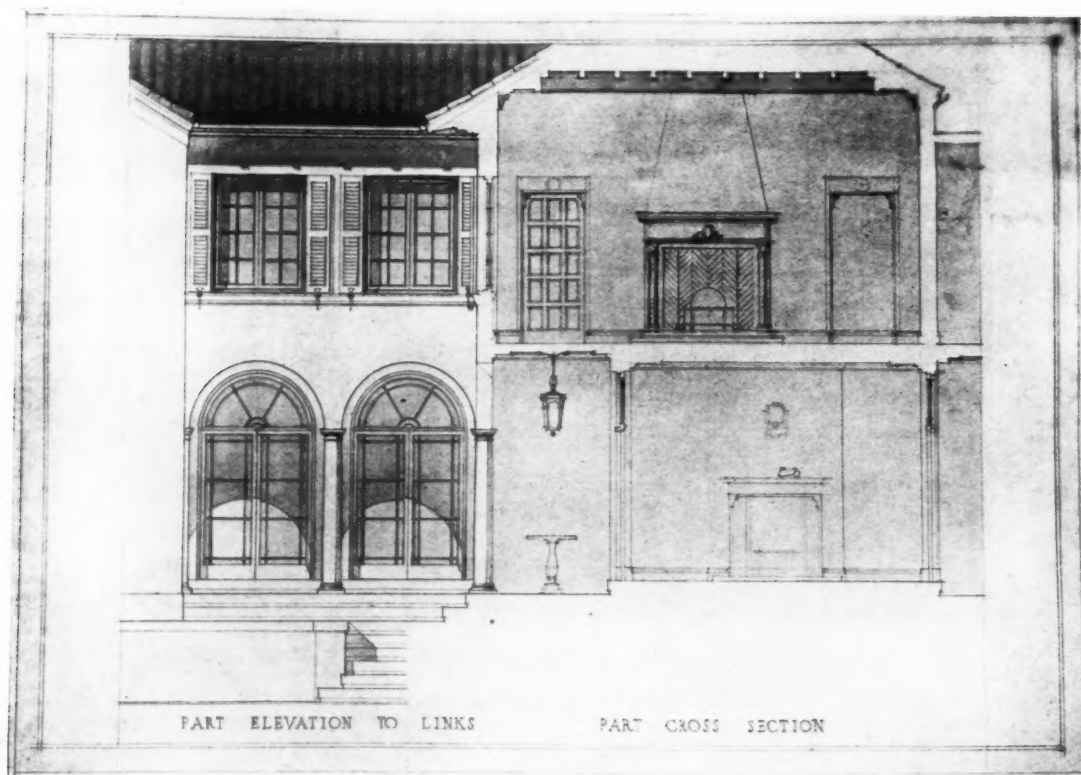
Exterior.—The walls will be of 11 in. cavity above floors, with 14 in. work in foundations, and the external finish of stucco—brush stippled. The roof will be of small "Lombardic" tiles; the chimney stacks of brick, stucco finished; the veranda of rough squared stone paving; and a portion of the terrace will be brick paved. The forecourt drive will be of Jersey gravel.

Interior.—The locker-room walls will have a brick finish, and the club room and hall walls will be of two-coat plaster, sand finish. All window and door linings and architraves are eliminated, and hard plaster arrises are suggested, thereby saving considerably in cost, and obtaining an interior effect which has been definitely aimed at. For the doors soft wood, stained dark walnut, is suggested, and a wood-beamed ceiling, stained dark walnut, for the club room. The dining-room and billiard-room ceilings will be plastered with shallow wood beams, stained dark walnut.

The cubic contents of the building taken from 5 ft. 6 in. below finished floor line, to half way up the roofs and to the top of the flat roof, and the basement from 8 ft. 6 in. below floor line, is 86,190 cub. ft., at 1s. 3d. per cub. ft., £5,386; terrace and filling and widening drive, say, £300; total, £5,686.

NOTE.—Stewards' and professionals' quarters and women's loggia are not included.

It may be recalled that Mr. Rowse, in collaboration with Mr. Thornely, secured first place in the recent limited competition for the new Holt building, Liverpool, which is to cost approximately £1,000,000. In collaboration with Professor Lionel B. Budden he also won the competition for the collegiate buildings at King's College, Cambridge.



HESWALL GOLF CLUB HOUSE COMPETITION: A DETAIL OF THE WINNING DESIGN.

Economic Effects of Housing Subsidy and Rent Acts

Mr. Calvert Spensley on Future Policy

AT the last meeting of the Surveyors' Institution—the president (Mr. J. Inglis Davidson) in the chair—Mr. J. Calvert Spensley, O.B.E., chief assistant valuer to the London County Council, read a paper entitled, "Economic Effects of the Housing Subsidy and the Rent Restrictions Acts."

After dealing in his paper with the house shortage, Mr. Calvert Spensley referred to the cost of building, and said that the highest cost incurred by the London County Council in building cottages related to the Roehampton estate in April, 1920, namely, three rooms £1,297, four rooms £1,531, and five rooms £1,702. The cost of building was estimated at the time to be about three and a half times the pre-war cost, but the high cost was also due to the improved type of cottage, which was responsible for an increase of from one-third to one-half in the cost of the best pre-war type cottages. The 1922-23 contract prices were estimated to be approximately 80 per cent. above pre-war prices.

A comparison of the increase in the cost of houses, with the corresponding increase in wages and price of building materials, could not be made with exactness, but, so far as a comparison was possible, there did not appear to be any clear indication that there had been any large extent of "going slow" at the present time as compared with pre-war.

The author then referred to the bearing of house shortage and building costs on rents, housing subsidies, and the general effect of rent restrictions. He said: What would have happened if there had been no rent restriction legislation is a matter of mere speculation; politically something had to be done, but no one now quite approves either of the method that was adopted or of the subsequent course of events. At the same time it is not likely that any measure of agreement would have been secured for any other given plan. The hard-and-fast restrictions undoubtedly produced hardships on individuals. Whether a system of rent courts to deal with cases of hardship or unconscionable increases of rent would have produced more satisfactory results is a matter that may still have to be considered if subsidies fail to secure an adequate supply of houses.

The practical question has entered a new phase with the resumption of private enterprise activity and the possibility of dilution of the building trade. If the result is a rapid increase in the pace of house building, especially if this is accompanied by a decline in the cost per house, it ought to retard the extreme increase in the potential rent standard; that is to say, it may by recognized economic means produce the end which the system of rent restrictions was intended to serve, and at the same time avoid the anomalies which statutory interference with freedom of contract almost inevitably involves. Whether it can possibly produce the result in time to avoid the extension of statutory rent restrictions after 1925 is another question.

Already the check on building (whether caused by high cost of materials or by shortage of skilled labour) has had a very serious effect on the rent-paying community.

If in spite of subsidies it is not possible to produce houses sufficient in number to show a margin of supply over demand by June, 1925, what will happen? The answer which the economist would give would probably be that, judging from the known factors, there would be an immediate increase of rents, since the Legislature virtually allows an open market in house rents, the only limitation being the county court judge's view of what is "harsh," "oppressive," or "causing exceptional hardship." The answer which the politician would give is probably influenced by the fact that the great

bulk of the electors are protected rent-paying tenants and their wives, and that no party could face an electorate from whom protection was withdrawn before a margin of housing accommodation had been secured.

While, therefore, it is no doubt true that anything that interferes with the free play of economic forces is to be deprecated unless the safety or general advantage of the community at large should demand it, there would seem to be a social and certainly a political necessity for a continuance of rent restriction in some form until the housing shortage is remedied. Conversely it may be said that unless the shortage is well on the way to being made good within a very limited time, there will inevitably be a demand for an extension of rent restriction on lines which may have far-reaching political results.

The conclusion must be that we are too close to the practical working of housing subsidies and rent restrictions to judge of their economic results, and that the subject is not so much a part of economics as of politics, and that, for the time being, economic forces are subordinated to political and sociological forces.

Major Harry Barnes, F.R.I.B.A., proposing a vote of thanks to Mr. Spensley, said he was always taught to believe in an open market, and that any restriction of the operations of supply and demand was in the long run bound to be fatal. He was not surprised at the strong volume of opinion which came from house owners who felt themselves deprived of opportunities which had been granted to others of securing what the natural operation of the market had brought. But looking a little closer into the question one could see that there were real reasons why rent restriction should not only have been imposed, but should be continued. The production of houses was not a thing which could be increased with anything like the rapidity—even apart from exceptional circumstances—with which other commodities could be increased. When dealing with houses the position did not so rapidly adjust itself to market conditions. But apart from that, there was the fact that the indispensable condition of anything like an augmented supply of houses was absent. We had not got in this country anything like the labour that was required to meet the housing demand. In the past, so far as he could see, out of every ten men engaged in the building industry, not more than one was engaged in building houses, working-class houses—at the very outside not more than one in eight. The other seven men, if they took eight as the number, were engaged on maintenance, repairs, and general buildings. We were told that those eight men had dwindled to something like four—put it at five—and at a time when we got that depletion we got a double demand. The result of that could only be an enormous inflation of costs, and, therefore, it seemed to him in the existing circumstances, until we could get the supply of labour back to the normal, the only result of leaving houses to a free market would be a tremendous increase in the rents of those who could pay increased rents. He did not believe there was the least prospect in any period which any of them there would live to see of what had been called by Mr. Spensley a gap or a chasm being closed so far as a very large section of the population of this country was concerned. Therefore, as regarded the housing shortage, not as affecting those people who could afford to pay for houses, but those people who wanted or needed houses whether they could afford to pay for them or not, then he saw no prospect of the shortage being met to-day without a considerable subvention from State funds.

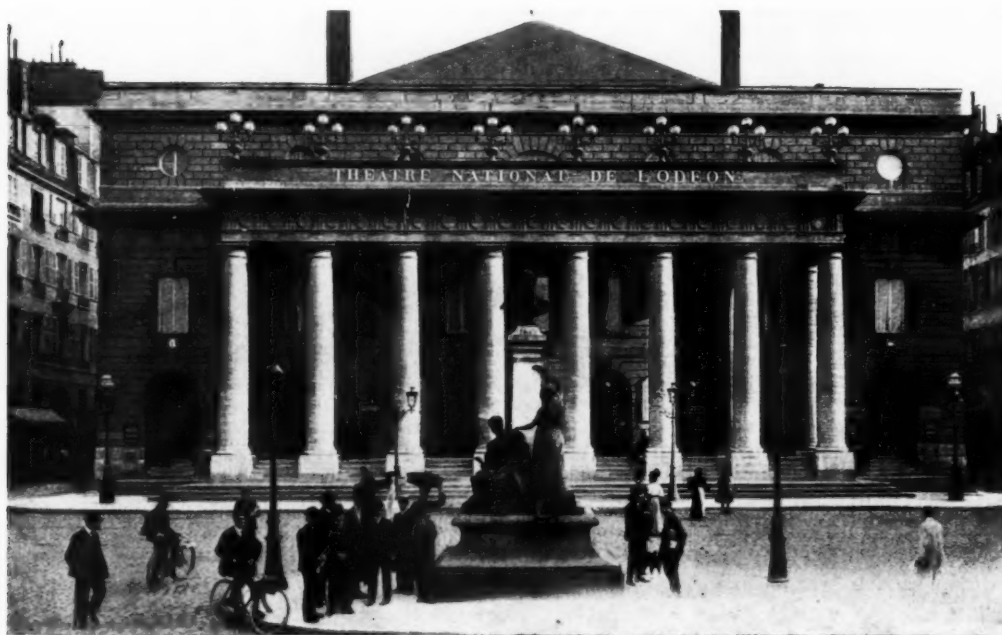
Sir Theodore Chambers, in seconding, said that Major Barnes and himself spent a considerable number of weeks on the Rent Restriction Act Committee, and he thought they felt at that time that we were up against a problem which was almost insoluble. He thought it was due to the non-solubility of the problem that people fought shy of discussing it. But when we recognized it was not only our problem in this country, but the problem of every country in the world, he thought they would come to the conclusion that they, as presumably knowing something of the economics of the subject, could not spend too much time in threshing it out, even if they did it over and over again. The feeling he had had during the past four years had been that there were two entirely different housing problems—the problem of the weekly wage earner, and the problem of the salaried man and the people with a certain amount of saved capital on the interest of which they partly lived. As regarded the problem of the weekly wage earner, he had come to the same conclusion as Major Barnes, that it was impossible to expect in any time that we saw in front of us that the capitalist would again build houses for that class to let them. He thought that the house owner, the owner of numbers of working-class houses, had been put to so much difficulty by unnecessary legislation, he had been so abused as an intolerable person, the other directions in which his capital could be put out to far greater advantage were so numerous, that he could not conceive that private enterprise in the sense of building working-class houses to let to the working-class people would ever come again in our lifetime. At the present time it was perfectly true that the gap—the ability to pay of the wage earner in this country, and the economic or remunerative rent of the house which society now demanded he should live in—was too great to be bridged. Whether society was right in having raised the standard so high was another question, but, undoubtedly everyone desired that the whole of the people in this country should be housed in houses on which a reasonable

return could be paid out of the weekly wage of the wage earner. As regarded the problem of the salaried man and people with saved capital, he thought it was most unhappy that the views of the Rent Restriction Act Committee were not accepted, and the Act lifted off the houses that were brought in in 1920.

Mr. T. P. Bennett, F.R.I.B.A., remarked that as an architect he was particularly interested in the question of building costs, and his students at the building department of the Northern Polytechnic had carried out a considerable amount of investigation into those costs. Mr. Spensley, in his paper, put the cost of the 1922 house on the Roehampton estate as £362, which was considerably less than double the 1914 cost on the Old Oak estate. The writer of the paper mentioned that those prices were not exactly comparable, but the whole of his (Mr. Bennett's) investigations went on to prove that it was still impossible, even at the end of 1923, to erect any kind of building at approximately less than twice the pre-war cost. So if a house cost £220 in 1914 it would be bound to cost £440 in 1922. Mr. Spensley went on to say that from one third to one-half of the increased cost was due to increased amenities and increased accommodation. If that be so, he failed to see how they could build them for £362. He also saw that Mr. Spensley said there were no indications that workmen at the present time were going slow as compared with pre-war. He was sorry to say that his investigations did not support that view, and he could not find any builders who would support that view. He still could not erect buildings at very much less, if anything, than twice pre-war value, and he had put the loss due to output at 15 per cent. at least. He had quoted that figure on several occasions, and each time had been told that the loss in output was nearer 20 per cent.

Mr. Spensley, in reply, referred to Mr. Bennett's criticism, and as regarded building operatives going slow, said he could not find any statistical evidence of it, and he thought it only just to say he had come to a negative conclusion.

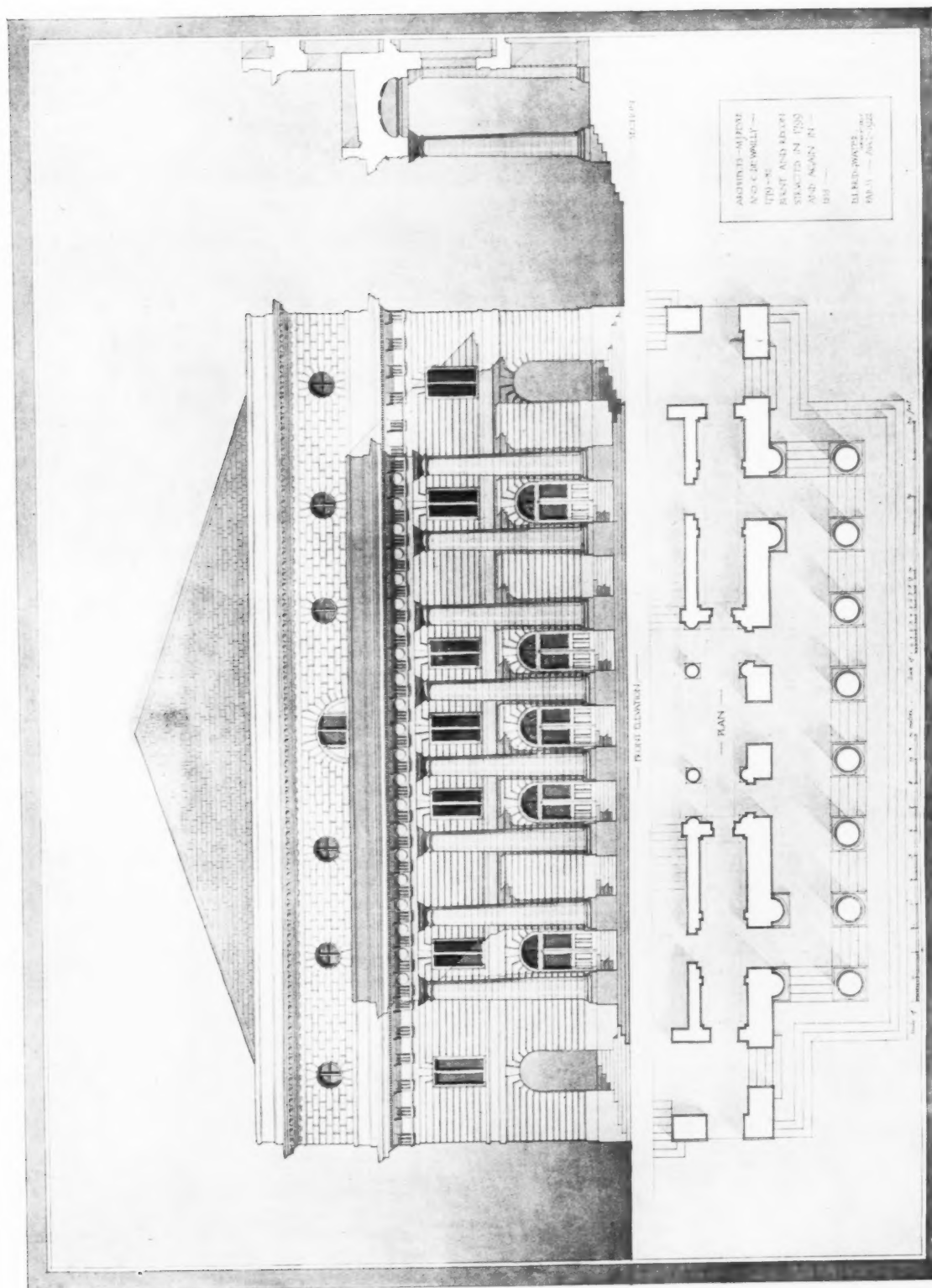
The Odéon Théâtre, Paris



Le Théâtre National de l'Odéon, Paris, situated in the centre of the Latin Quarter, presents an uncommon type of theatre façade. It was designed by M. J. Peyre and C. de Wailly in 1779-82, but was burnt badly and recon-

structed in 1799, and again in 1818. It is reminiscent in design of the theatre at Bordeaux, but in this case the order is not taken across the whole of the façade. A drawing by Mr. D. L. Bridgwater is reproduced on the facing page.

Measured Drawings. 46.—The Odéon Théâtre, Paris
Measured and Drawn by D. L. Bridgwater.



(See particulars on facing page.)

Book Reviews

Modern Craftsmanship.

This volume provides further evidence, for those still in doubt, of the variety and excellence of modern craftsmanship. The great middle class is at length shaking off its lethargy and beginning to take a serious interest in the house and its equipment, and since, to-day, it is from the middle class that patronage is to be sought, this awakening is the first preliminary. As yet the good work that is being done can scarce leaven the bad, and thus it is that we encounter so little of it in our daily lives. But there are many obstacles to be overcome. In addition to the indifference which has hitherto been ubiquitous, there is the love of the antique for its own sake, and a stupid sentimental regard for period furnishing—the most pernicious of all the influences that to-day militate against the support of spontaneous expression. Then there is the economic factor. Good original contemporary work is always priced exceedingly high, so that many that might otherwise buy it are almost compelled to try and *pick up* antiques or to buy frank imitations.

The contents of the "Studio Year-Book" are not limited to British enterprise, and there are many interesting examples of American and Continental work. From these there is one interesting conclusion to be drawn. Hitherto it has been—and with justification—usual to regard France as being in the forefront in matters of architectural decoration and equipment. It is quite clear, however, that she has lost all claim to any place of honour, while other nations have, one and all, recovered from that strange distemper, from which our insularity happily protected us, known as *nouveau art*. She still lies sprawling upon the sick-bed, with the result that the French work is immensely inferior to all other. To put it briefly, the French work is positively bad, most of the other is positively good.

The volume deals with architecture—the moderate-sized house only—decoration, furniture, fireplaces and stoves, metal work, ceramics, and textiles, and constitutes an extremely interesting and moderately-priced record of the work now being done in Europe and America.

"The Studio Year Book of Decorative Art." A review of the latest Developments in the Artistic Construction, Decoration, and Furnishing of the House. London: The Studio, Ltd. Price 7s. 6d. net.

"Houses for All."

This is the alluring title of a little booklet by Mr. E. D. Simon, at one time Lord Mayor of Birmingham, and well known as a valiant fighter in the anti-smoke campaign. Frankly, however, we think that the contents of the book belie its title. Mr. Simon maintains that but for the rates it would be possible to extract an economic rent for new houses; in other words, the removal of the rates would bridge the gulf between the tenant's capacity for payment and the economic rent. In an analysis of the rates he shows that these are levied to meet the expense of services to property, such as roads, scavenging, street lighting, etc., and services to persons, such as police, education, public health, etc., and that in Manchester, at any rate, the cost of the former is only 20 per cent. of the whole, and that house valuation is an unfair basis for assessing the latter. Why, the author argues, should a man be penalized when he moves his family from unhealthy to healthy conditions, by having to pay more for these very services, which, on account of the better conditions under which his family will now be living, he will probably use less?

Unfortunately the matter is by no means so simple as it may on the face of it appear to be. Under any form of taxation anomalies are bound to exist, and it is evident that if the money required for public services is not raised in one way it must be raised in another, and Mr. Simon suggests the rating of site values. This was fully considered by the Land Enquiry Committee of 1913, and, as was then pointed out, any change must be very gradual so that its effect on the housing question would not be immediate. Moreover, the rating of site values alone would not bring

in sufficient revenue, so that new sources would have to be found, and for these the author has no suggestions. Mention is made of increased "grants in aid," but the money for these must have previously been raised by taxation. The fact is that exemption from rating is a form of subsidy, and a very complicated form of subsidy.

It is, after all, a very natural inference that if a man is able to pay a higher rent he is able to pay a higher rate, just as, if he is able to buy more tea for his family or more tobacco for himself he is able, and does, pay more tea or more tobacco tax.

Mr. Simon realizes the first essential point, and that is, that those most in need of houses cannot pay for them without financial assistance. Now, however, this financial assistance is provided, whether by a remission of the rates, by an artificially low rent, by an artificially high wage, or by a lump subsidy, it will be found that it is ultimately paid by the community at large, in its capacity of ratepayer, consumer, direct or indirect taxpayer. If, therefore, it is the community who must help to pay for small houses, it is clearly the right and duty of the community to control the building of these houses. This is the fact which Mr. Simon is unwilling to face. The abhorrence which most people have to facing this fact is rendered all the more inexplicable, since no working-class houses built during the last century are equal, as a whole, from whatever aspect they may be examined, to those built since the war under immediate Government control.

The necessity for public education is unquestioned, but it is not suggested that public education should be run by private enterprise with State subsidies. Neither can public housing be run by private enterprise. But just as there is room for both public and private enterprise in education in their various spheres, so there will be room for both public and private enterprise in building; but just as the State educates those who cannot pay for education, it must house those who cannot afford to pay for houses. Until this fact is realized there will be no "houses for all."

H. J. B.

"Houses for All," by E. D. Simon. "The New Way" Series, No. 4. "The Daily News," Ltd., Bouverie Street, London, E.C. Price sixpence.

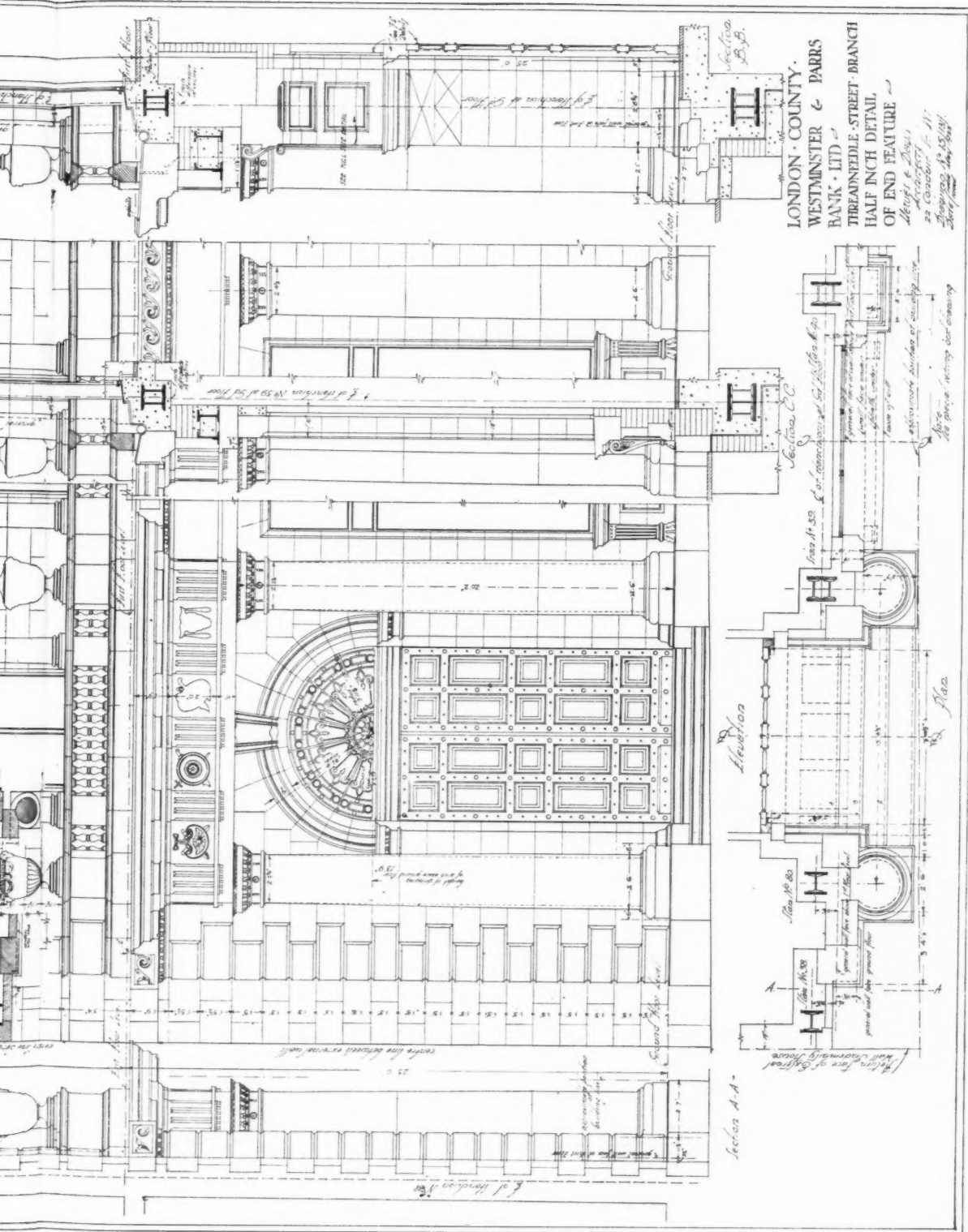
Popular Fallacies.

"What one does not know is exactly what one should want to know, and what one knows is what one has no use for." This rather depressing quotation from Goethe, which appears on the title-page of the third edition of "Popular Fallacies," might be added to by this quotation from ourselves: "What one does know usually turns out to be entirely wrong." The great virtue of a book like "Popular Fallacies" is that it is a splendid antidote to swelled head. The bluest-blooded descendant of the Conqueror would, we dare swear, be reduced to a becoming humility of mind after reading half-a-dozen pages of this book. One by one all our fond illusions are shattered, until we are quite ready to believe that black is white, round square, and earth flat. There are no entries in the index under architecture or building, but there are many of a technical nature that are likely to appeal to a special type of reader. The book is positively encyclopædic, and it will provide many hours of stimulating and entertaining reading.

It is now fourteen years since the second edition appeared, and while that edition dealt with 460 fallacies on 340 pages, the present edition deals with 1,350 fallacies (i.e., 890 additional ones) on 986 pages. This is therefore practically a new book, for not only has the old matter been completely revised, but fifty pages of it have been omitted, and 696 pages of entirely new matter have been written; thus about 250 per cent. of new matter has been added.

Mr. Ackermann deserves the utmost praise for his exhaustive, and, we imagine, exhausting, labours in getting this very remarkable work together.

"Popular Fallacies." Explained and Corrected. By A. S. E. Ackermann, B.Sc. Lond. The Old Westminster Press, Regency Street, S.W.1. Price 12s. 6d. net.



The above detail is of a bank building in the City now approaching completion. It is erected on the site of the early-nineteenth-century building once known as "Moxhay's Hall of Commerce."

Construction 30.—The Steel Framing of Bush House

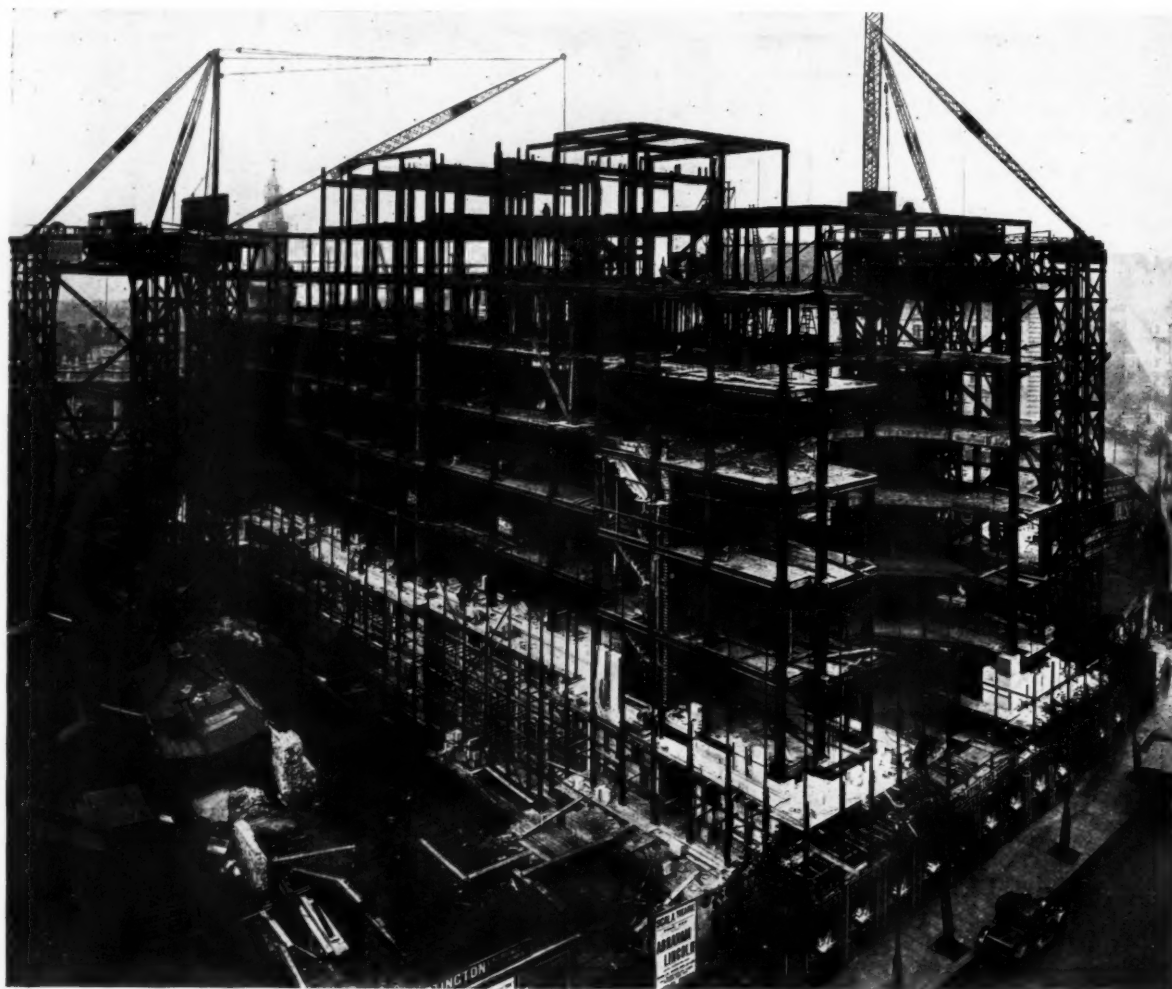
THE restraint and the impressive simplicity of Bush House, the clear cut, decisive but severe lines, and the bold, cool strength in its design are indicative of the power in its massive steel frame. Although the existing building is merely the central unit of a great triple group—the two flanks of which have yet to be added—Bush House, as it stands now, is one of the highest and most compact building units in London. Despite its originality in conception, its great height and mass, and the fact that the building on plan is not a parallelogram nor even co-axial with Kingsway, the planning by the architects, Messrs. Helmle and Corbett, A.I.A., is so efficient that the structural steel framing follows straightforward lines. The steelwork, therefore, did not involve any exceptional difficulties to suppliers and erectors with the experience and available resources of Messrs. Dorman, Long & Co., Ltd. The framework is, however, heavy, and in its design there is provision for carrying, ultimately, a tower of a calculated dead load of 2,000 tons. This tower is not being added meantime, which is to be regretted, as many consider it enhances an already outstanding design.

The building, at present, is 246 ft. long by 86 ft. wide, with a height from the basement to the roof of 146 ft. 8 in.,

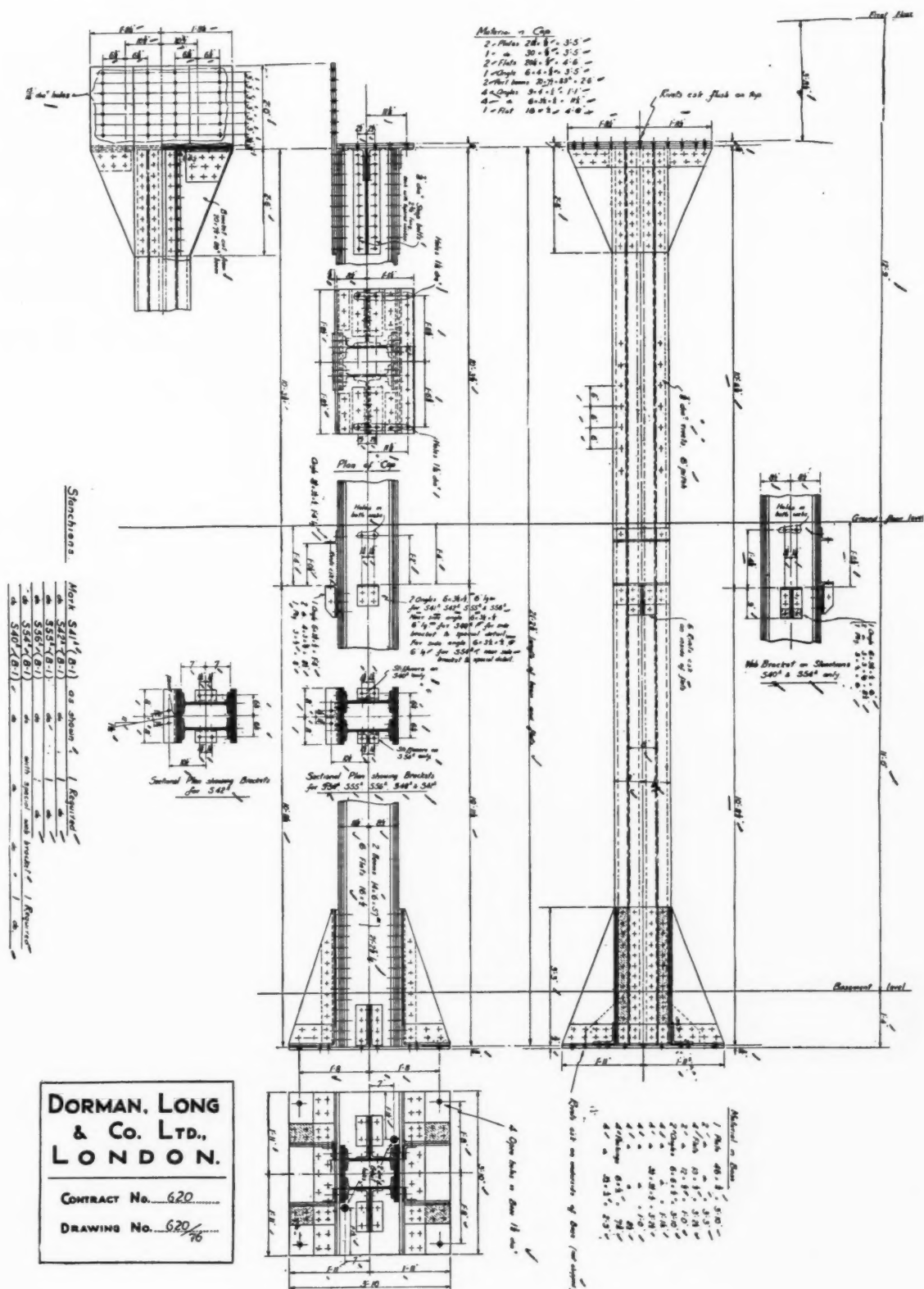
and the approximate total weight of steel in the framework is 2,320 tons. There are nearly four acres of floor area in the basement and ten floors. These floors have been designed for a load of 185 lb. per sq. ft.; except the ground floor, which is even stronger, being designed for a load of 200 lb. per square ft. inclusive. The flat roof also has been designed for an inclusive load of 140 lb. to the square foot.

The skilful detailing of so large a steel-framed unit naturally has some features of interest to constructional engineers. There are 76 main stanchions designed for loads of 300 to 350 tons each. These stanchions are of compound section built up of 12 in. by 6 in. B.S.B.'s, and plates 10 in. or 12 in. wide (for single joist stanchions) and 14 in. wide (for double joist stanchions). On the Strand front there are two main stanchions designed for a load of 500 tons each, built up of 18 in. by 7 in. B.S.B.'s, with plates 24 in. wide on the lower lengths and 18 in. wide on those above.

Between the basement and the first floor level at the Aldwych end is an auditorium measuring 75 ft. long by 67 ft. wide by 21 ft. high, with a gallery about 15 ft. wide round three sides. The stanchions carrying the floors above this auditorium exert heavy point loads on three pairs of twin plate girders erected at the first floor level, the load on each pair of girders being 680 tons. These girders are



BUSH HOUSE: THE ALDWYCH FRONT. A VIEW OF STEEL FRAMING NEARING COMPLETION.



BUSH HOUSE: DETAIL OF STANCHIONS EXERTING POINT LOADS, EACH OF 340 TONS, ON TWIN GIRDERS.

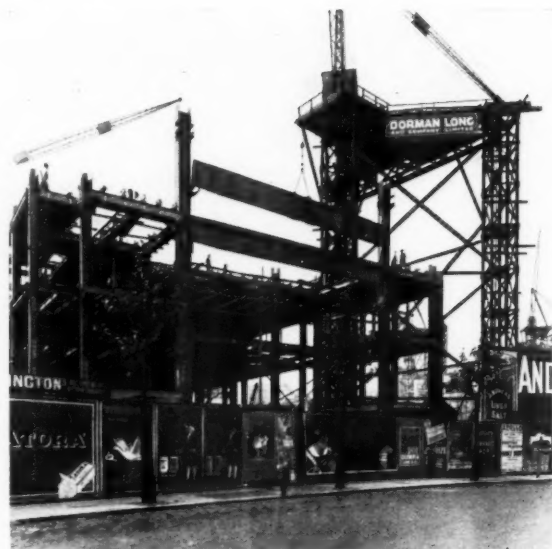
43 in. by 20½ in., and each 41 ft. 5 in. long. A detail of the connections between these stanchions and girders is shown on the two accompanying drawings.

The steel framing for the loggia at the Strand entrance is rectangular on plan, and the third floor extends over it. The heavy stone cornice and pediment are carried on the flange of two deep plate girders at the sixth floor level.

The loggia at the Aldwych front is an impressive feature and worthy, in its character and great dignity, of closing the vista down Kingsway. It is semi-circular on plan and the steelwork conforms approximately to its curves at each floor by means of a straight, diagonal bar. At the fifth floor, the semi-dome is carried by steelwork, the crown of which is immediately beneath the plate girder. This girder carries the heavy stone pediment, part of the floor above the semi-dome, and part also of the flat at the eighth floor level.

Stanchions constructed similarly to the two on the Strand front are erected in the centre of the building. They are designed for a load on each of 470 tons, which is what they will have to carry if and when the tower is added. All the stanchions have particularly wide spreading bases for the distribution of the heavy loads over a wide area of the reinforced concrete foundations. The area of the site was enclosed in massive retaining walls of reinforced concrete, the toe of which formed the foundations for the external stanchions of the steel structure.

The main beams in the floors are, generally, 20 in. by 7½ in. by 89 lb., from which run secondary beams of 12 in. by 6 in. by 44 lb., and, on these, concrete floors of the hollow tile type were cast *in situ*.

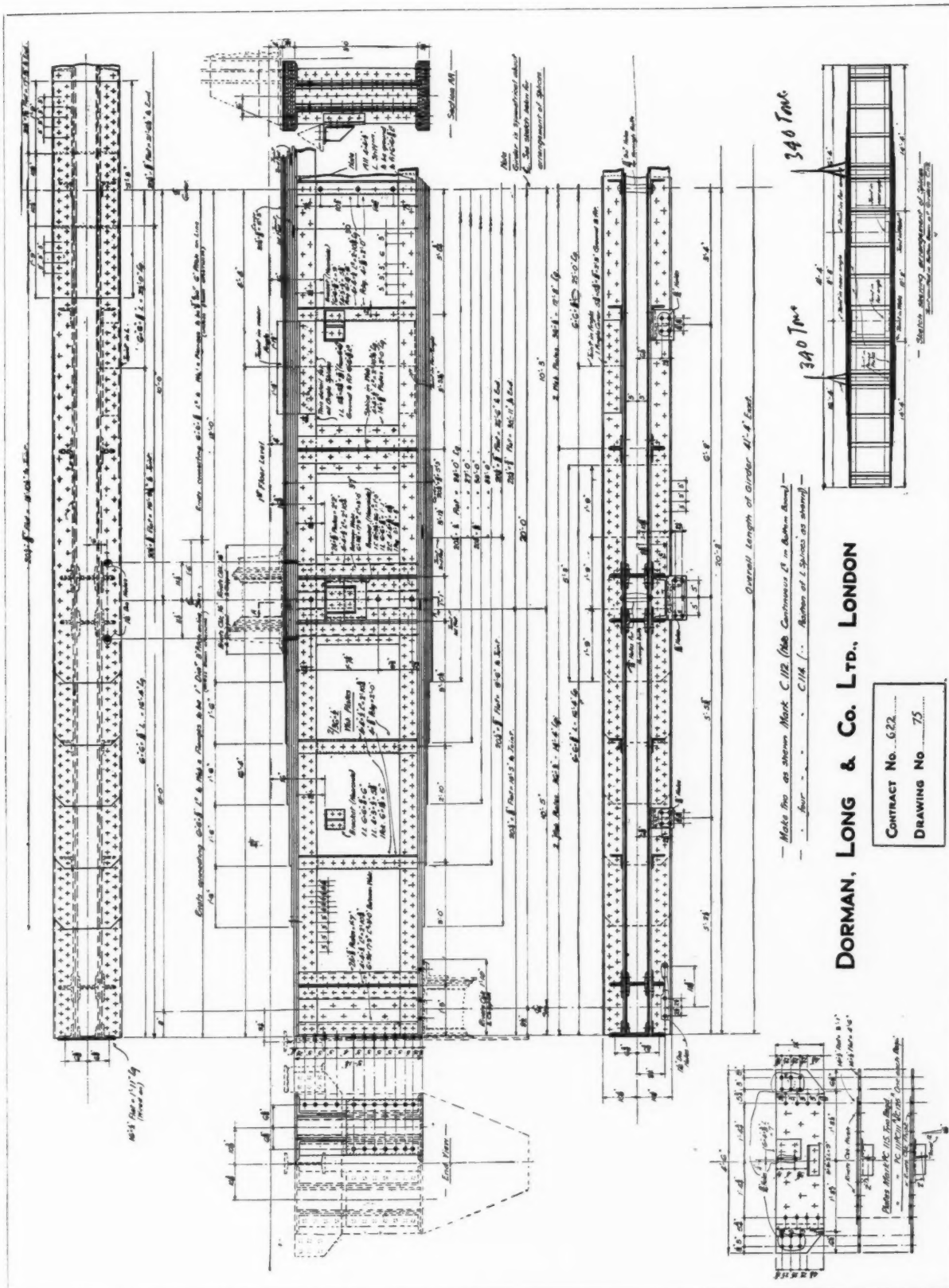


ERECTING THE GIRDERS OVER THE LOGGIA AT THE STRAND FRONT.

The steelwork is British manufacture throughout. The steel was rolled at Messrs. Dorman, Long & Co.'s mills at Middlesbrough, and the fabrication was done in its entirety at their London works at Nine Elms.



BUSH HOUSE: STEELWORK AT ONE OF THE FLOORS.



BUSH HOUSE: DETAIL OF TWIN GIRDERS CARRYING HEAVY POINT LOADS.

Correspondence

The correspondence of readers is welcomed. It is naturally preferred that a letter should bear the name of the writer, but the use of a pseudonym is permissible. The Editor does not necessarily associate himself with the views expressed by correspondents. Anonymous letters cannot be published.

John James and James Gibbs

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—You have often complained, with absolute justice, that the apathy of the public towards architecture and architects is reflected only too faithfully in the popular newspapers. Largely in consequence of your patient and persistent efforts to remove this cause of reproach, the lay papers have begun "to sit up and take notice." For example, I read in a widely-circulated London morning newspaper of March 24 this scarcely wide-awake statement: "St. George's Church, Hanover Square, the scene of many a fashionable wedding, was 200 years old yesterday. Built by John James, who also designed St. Martin-in-the-Fields, St. George's Church," etc. (more about the weddings). By James!

One ought to be grateful, I suppose, for any reference in a popular newspaper to the name of the mere architect of a church which is the scene of "many a fashionable wedding." I must confess, sir, that, much as I appreciate this condescension, I am rather scandalized to see the masterpiece of James Gibbs attributed to his pupil, for whom it should be sufficient fame to be associated with the church of "many a fashionable wedding." I realize, of course, that it is the "fashionable wedding," and the equally fashionable divorce, that is the kernel of the reference.

"CAP'N KETTLE."

A Palace for the Arts

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—With the demands of the Sculptors' Society that this generation shall build a palace for the Arts goes a much wider problem, which I have outlined before now in other periodicals. Such a palace should be worthy of our generation; it should be at once a temple to living culture; a market place for British arts, and at the same time an international centre for exhibitions, concerts, and the drama.

It goes hand in hand with the Charing Cross Bridge scheme, which embodies a plan for improving the Strand and for developing the south side of the river. Mr. Herbert's model of the proposed bridge and the improvements shows also the ideal site for a worthy place for the arts. This could be set up by all the artists in the British Isles, through their central confederation and numerous societies, subscribing one pound a year each. This would bring in an income of a million pounds a year, with which everything is possible. The scheme is practical and businesslike, and embodies studios, exhibition rooms, theatre, concert and conference halls, gardens, restaurants, and workshops. Once started it could certainly be made to pay, as has been proved in Hungary and America. The building is an absolute necessity in modern London, and it only needs the co-operation of all the art societies to become a *fait accompli*.

AMELIA DEFRIES.

A Bent Girder for a Staircase

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—I notice with interest in a recent issue an answer from Professor Henry Adams to an enquiry from "C. W. C." as to the correct method of calculating a cranked staircase stringer. The information given appears very interesting, but, I suggest, somewhat misleading to "C.W.C." Professor Adams does not point out that in order to make the proposed joint in the beam safe, it is absolutely necessary to apply a horizontal section of 1.85 tons at each end bearing. Consequently, if your enquirer proposes to follow

this construction and at the same time rest the ends of the beam on ordinary wall bearings, it will certainly not be satisfactory.

It would be interesting to know how the joint proposed will resist the bending moment which is given as 88.8 in. tons at that point. Apparently Professor Adams looks on this cranked beam in a similar manner to an arch, but does a beam become an arch directly it departs from a straight horizontal line?

I would suggest to "C. W. C." that a more usual method of calculation would be to treat the case exactly as a horizontal beam, and make the joint sufficiently strong to take up the bending moment at that point.

Flange and web covers would be necessary as though a joint were being made in a horizontal member. The tendency to straighten the cover plates and pull on the rivet heads would be negligible on such a small beam as the one in question. Incidentally, one might mention that a 7 in. by 4 in. joist would appear to be sufficient, a saving of weight on the beam of about one-third from the 6 in. by 5 in. joist recommended by Professor Adams.

S. G. NEWSTEAD.

SIR,—With regard to the letter of S. G. Newstead, I consider a vertically bent girder in the condition of an arch producing a thrust at the abutments as worked out in my previous reply. On this view, if the ends have only the usual bearing, there is little or nothing to take the thrust, and the tendency to spread makes the bending moment that was given. By so much as the bearing may resist thrust the bending moment would be reduced. It may be the more usual method to treat it as a horizontal beam of the same span, as I used to do at one time, but I do not now agree with that method. Taken that way a 7 in. by 4 in. by 16 lb. R.S.J. would be sufficient, but I would not care to trust to it. On further consideration I would suggest that the 6 in. by 5 in. by 25 lb. section advised by me should be cut and pieces welded in where cranked instead of a plain cut with joint plates in which some allowance was made for reduction of bending moment by friction on the bearings. A 7 in. by 4 in. by 16 lb. R.S.J., with joint plates, might possibly be safe, if the web plates and the flange plate on inside of curve were $\frac{1}{2}$ in. thick.

HENRY ADAMS.

Architecture on the Stage

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—Once or twice in your JOURNAL you have pressed for the employment of an architect to prepare scenario for the films—which, though in the modern film are usually very effective, are very often made up of irritating inaccuracies which would be avoided by anyone who knows his period. A wonderful preciseness is necessary if the film is to be unmarred as a work of art—and if, too, it is not to spread false ideas of the manners and customs and architecture of the age in which the story is laid.

Most of the large companies, of course, do employ artists to superintend these details, but I think such artists should bear the title "architect"—and be qualified as such. Moreover, their name should appear with that of the author's.

An instance occurs in Mr. Shaw's recently produced "Saint Joan." Mr. Charles Ricketts has designed the dressings and hangings, and delighted all with his Gothic architecture of the times. Mr. Ricketts is a stage "architect"—and should be so called. There would be mutual honour for both him and our profession.

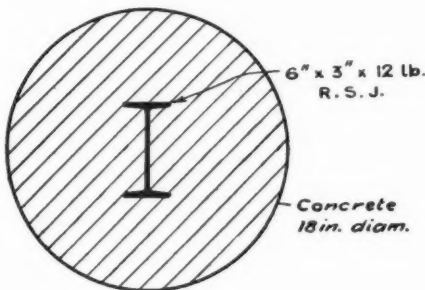
H. J.

Enquiries Answered

STRENGTH OF REINFORCED CONCRETE PILLAR.

"B" writes: "Could you give me a method of calculating the strength of columns consisting of a small rolled steel joist (usually of a very bad stanchion section) cased in concrete. This seems to be a very usual practice locally out here (Baghdad). An instance is a case I saw this week. A column fixed at bottom only, consists of a 6 in. by 3 in. 12 lb. per ft. rolled steel joist cased in concrete making a finished diameter of 18 in. The total length of the column is 26 ft., and the load carried (exclusive of the weight of column) is 10 tons. Could you tell me how the safe load on such a column may be obtained?"

—No information applicable to this case appears to be given in any text-book. The rolled joist being embedded at the neutral axis makes the reinforcement of the least possible efficiency (see illustration), but no doubt it has



some value, although it may be difficult to ascertain definitely. The composition of the concrete is an important element in the case, but not stated. A plain circular concrete pillar (not reinforced), 18 in. diameter and 26 ft. long, ends flat, with a safe compressive strength of 600 lb. sq. in. on a short specimen (1:2:4 concrete), would by the Rankine-Gordon formula carry safely a load of 2.4 tons, thus:—

W = safe total load in lb., f = safe stress lb. sq. in.

A = sectional area sq. in., a = fixing constant.

c = material constant, l = length in inches.

r = radius of gyration in inches.

$$W = \frac{fA}{1 + \frac{1}{ac} \left(\frac{l}{r} \right)^2} = \frac{600 \times 254.5}{1 + \frac{1}{2.5 \times 70} \left(\frac{26 \times 12}{4.5} \right)^2} = \frac{152700}{28.4}$$

= 5,377 lb. = 2.4 tons safe load. As to the constant c , although several authors give the constant for wrought-iron, mild steel, cast-iron, and fir, none gives it for stone or concrete, or show how what they do give is derived. Taking it as half the maximum working stress in tension, we cannot allow a value of more than 70 for 1:2:4 concrete, and this brings the result very low. By

another method $W = fA \left(\frac{24-r}{18} \right)$ where W = safe load per sq. in., f = safe stress per sq. in. on short specimen, A = sectional area in sq. in., r = ratio of height to least diameter,

$$\text{then } W = 600 \times 254.5 \left(\frac{24 - \frac{26}{18}}{18} \right) = 600 \times 254.5 \times .37 = 56,500 \text{ lb.} = 25.2 \text{ tons safe load.}$$

Adopting the method used for reinforced concrete pillars the working would be as follows, but the result must necessarily be too high as the reinforcement is so badly placed.

$$I = \frac{\pi d^4}{64} + 14A_s r^2 = \frac{\pi \times 18^4}{64} + 14 \times 3.53 \times 3^2 = 5150 + 446 = 5,596 \text{ in. units.}$$

$$A_s = \frac{\pi d^2}{4} + 14A_s = \frac{\pi \times 18^2}{4} + 14 \times 3.53 = 253 + 49.3 = 302.2 \text{ sq. in.}$$

$$\text{Then } k = \frac{5596}{302.2} = 18.5.$$

$$\therefore c_1 = \frac{500}{1 + \frac{500}{8000k^2}} = \frac{500}{1 + \frac{500}{8000 \times 18.5^2}} = \frac{500}{1 + \frac{26^2 \times 12^2}{8000 \times 18.5^2}} = \frac{500}{1.66} = 301 \text{ lb. per sq. in.}$$

$$\text{Safe total load} = \frac{301 \times 302.2}{2240} = 40.6 \text{ tons.}$$

$$\text{Vol. of column} = 26 \left(\frac{\pi \times 1.5^2}{4} - \frac{3.53}{144} \right) = 26(1.77 - .0245) = 26 \times 1.7455.$$

$$\text{Weight} = 26 \times 1.7455 \times 144 = 6,520 \text{ lb.}$$

$$\text{Weight of joist} = 12 \times 26 = 312 \text{ lb.}$$

$$\text{Total weight} = 6832 \text{ lb.} = 3 \text{ tons.}$$

$$\therefore \text{Safe external load} = 40.6 - 3 = 37.6 \text{ tons.}$$

Although these results are very contradictory it appears probable that the column is quite safe with a 10-ton load.

HENRY ADAMS.

RESTORING PERISHED TERRA-COTTA.

"B" writes: "Is there a satisfactory method for treating terra-cotta where the face has perished and broken away by the action of the atmosphere and weather. Is there any method of repairing it with coloured cement in the way perished stonework can be restored?"

—Firms specializing in stone restoration would no doubt give a price for resurfacing decayed facings, and such treatment would probably be successful in arresting further decay, but whether the appearance could be expected to be satisfactory would depend on the type of terra-cotta in question. Either red or yellow impervious material would be practically impossible to simulate in cement, but the varieties having more the appearance of stone could no doubt be repaired so as to be almost unnoticeable, or, of course, if the whole face required treatment and not patches only the change would not matter.

E.

TESTING BITUMINOUS DAMP COURSES.

"I. A. M." writes: "What tests should be applied in comparing samples of bituminous damp-proof courses, and what result in each test is it reasonable to demand of an efficient material?"

—Roll bitumen courses are presumably meant, and an office test rather than a laboratory one. I would test for (1) softening point, and choose that which stood the highest temperature without running; (2) resistance to pressure—rejecting any which exuded under pressure applied by an ordinary office press; (3) pliability—bending back and forth until cracking took place, and choosing the sample which stood this test best in conjunction with the two preceding ones. Probably all samples would be found resistant to absorption tests, so that these are unnecessary. If a laboratory test is desired it would probably cost more than using a less chancy material.

E.

THE LINING OF WALLS AND CEILINGS.

A correspondent writes: "In your issue for February 20, page 358, you published an enquiry from 'F. G.' who wishes to obtain 'a good fibre or plaster board for lining walls or ceilings on which permanent decoration of wall-paper (without strips to cover joints) could be put immediately, and which would not work out any dearer than plastering.' Might I suggest 'Sheet Roc,' also as a material likely to satisfy his requirements. It is supplied by Messrs. J. and W. Stewart, of 13 Berkeley Street, London."

Law Reports

Fence Dispute—Thirty Years' Repairs

McAndrew v. The Corporation of Dartmouth.

March 16. King's Bench Division. Before Justices Horridge and Sankey.

In this case the defendant Corporation appealed from a judgment of the county court judge of the Totnes and Paignton County Court in favour of the plaintiff. The matter arose out of a trespass, and in the court below the plaintiff was given £20 odd damages.

The facts were that plaintiff had a garden adjoining the Warfleet Road, Dartmouth, and the garden was separated from that highway by a wall, on which plaintiff erected a fence. The Corporation took the view that the fence was an obstruction, and contended that plaintiff had no right to use the wall in that way. They accordingly caused the fence to be pulled down, and plaintiff brought his action. The county court judge found that plaintiff was the owner of the wall.

The appeal was dismissed with costs, Mr. Justice Sankey stating that witnesses for the Corporation had admitted that the Corporation had never done any repairs to the wall, while there was other evidence to show that for thirty years the repairs had been executed by Mr. McAndrew and his predecessors in title. There was ample evidence to justify the judge's conclusion of fact on the ground of the acts of ownership.

An Architect Sues for Fees

Bromhead v. Kirbymoorside Rural District Council.

March 15-18. King's Bench Division. Before Mr. Justice Rowlatt.

This was an action by Mr. Frank Harold Bromhead, architect and surveyor, of Hallcroft Road, East Retford, against the Kirbymoorside Rural District Council, claiming £927 alleged to be due from defendants to plaintiff for professional services rendered to the defendants in connection with an abandoned State-aided housing scheme.

Mr. Van den Berg said plaintiff was a very competent architect who had been consulted by various local councils in connection with proposed housing schemes. He said defendants employed him to draw up plans and prepare specifications, between July, 1919, and February, 1922, but the scheme was abandoned after it had been approved by the Ministry of Health.

The defendants passed a resolution offering the plaintiff £750 in full settlement of his claim, and as the price of peace plaintiff agreed to accept that sum. But the offer was made subject to the approval of the Ministry, who declined to finance the Council to that extent, so the offer went off, and plaintiff claimed the full sum. Defendants appeared to contend that all the work had to be done for nothing or else that the plaintiff ought to accept such a sum as the Ministry, in their discretion, might think proper having regard to the existing financial circumstances. Further, it was said that the law implied that when there was an abandonment there had been some sort of frustration which prevented plaintiff maintaining the action. Alternatively, defendants tendered £336 as sufficient to satisfy plaintiff's claim.

His lordship, in giving judgment, said the appointment was subject to an agreement in writing, but no such agreement was ever made. In the meantime the plaintiff went on with the work. The scheme, however, fell through, and the plaintiff claimed fees. The defendants were willing to pay £336, and brought that sum into court, and further, they said they were not liable because their contract was not under seal. But the defendants were a rural council and, therefore, they were not limited by the section which had reference to urban councils. They were not protected against a claim for *quantum meruit* for work done which they had actually enjoyed the benefit of, and whether plaintiff could recover on that basis was the question in this action. The point had been raised that the *quantum meruit* had not been sufficiently pleaded, but his lordship

did not share this view. It was sufficiently pleaded. The real point on the contract set up by the defendants was that there was no contract at all. The agreement in writing was never entered into, but work was done pending the contract. It was done at once and at the request of the defendants, and it was done by a professional man whose time was his livelihood. He could not work for nothing. Plaintiff was employed, the defendants said, on the basis of "houses erected" for the defendants. That was in the defendants' resolution, but it was never communicated to the plaintiff. In the events that had happened there was nothing which said that the plaintiff should do eighteen months' work for nothing. He was not bound by that resolution at all. Then the defendants said that the whole thing was contingent on the scheme going through. In his lordship's opinion the plaintiff must be regarded as a stranger to all this. The broad justice of the case was that the plaintiff must be paid for the work he had done. The question of amount was a troublesome matter. Housing was a national matter in 1918 when the scheme was started, and everyone was anxious that work should be proceeded with. Under all the circumstances he awarded the plaintiff £675. Judgment for that amount with costs. The £336 paid into court to be paid out to the plaintiff.

Quiet Enjoyment—Alleged Interference

Cork v. Williams.

March 16. King's Bench Division. Before Mr. Justice Shearman.

This was an action by the tenant of a shop, with rooms over it, situate at White Lane, Norton Folgate, London, against his landlord, for damages for alleged breach of a covenant for quiet enjoyment. The defendant set up a counterclaim for rent and mesne profits.

The facts were as follow: The tenancy agreement was determinable in December, 1922. The premises were condemned by the L.C.C. as dangerous for habitation prior to that date, and the landlord demanded a right to enter and do the necessary repairs. But as that would mean his vacating the place, the plaintiff refused, with the result that the L.C.C. did the work of partial demolition, protecting as much as possible the tenant's goods with tarpaulins. The tenant, having claimed the protection of the Rent Acts, occupied the premises for some time afterwards, and he set up that his quiet enjoyment of the premises had been spoilt by the action of the defendant, and the demolition of part of the premises had resulted in a loss to him of half the profits of his business in his shop.

His lordship gave judgment for plaintiff for £25, without costs, and dismissed the counterclaim. Proceeding, his lordship said the Rent Acts legislation had a great deal to do with this case, and it favoured a certain class of tenant who became litigious when he received advice. It seemed obvious that the premises in question in this case could have been pulled down if vacated, and the site could have accommodated buildings that would have given homes to a number of people. In fact, legislation destroyed free dealings amongst people who were landlord and tenant. There was no doubt that the premises were dangerous, because the County Council served a notice upon the landlord to pull them down or repair. But the tenant, upon whom his lordship thought the landlord served a legal notice to quit on Christmas Day, 1922, continued to stay there, with the result that the landlord could not obey the Council's order; so the Council came in and did the demolition themselves, leaving the tenant sticking on in a sort of doll's house, with half the walls gone. The unfortunate landlord was between two fires: the tenant who would not go out and who was claiming damages, and the County Council who wanted the repairs done. The plaintiff claimed damages for breach of contract for quiet enjoyment, forgetting that the landlord had a right to enter the place to repair it. Had the landlord repaired the premises after demolishing them in part, the plaintiff would have had no claim, but he did not do the repairs, and in consequence the plaintiff had sustained damages as from October to December, 1922, to the extent of £25.



STAIRCASE AT THE LYONS' CORNER HOUSE, COVENTRY STREET, LONDON.

FREDERICK J. WILLS, ARCHITECT

(See note on following page.)

The Relation of Architecture to other Arts

Professor Lionel B. Budden, M.A., A.R.I.B.A., in reading a paper before the Liverpool Architectural Society, observed that architecture was receiving more general attention to-day than it had done for a century. This he attributed to three causes: first, the fact that architectural education was at last being established on a professional basis, and so commanded public respect; secondly, that the work of many practising architects in England had, during the last decade or so, shown increasing power and distinction, the improvement being largely due to American influences; thirdly, that the publicity now given to architecture by means of exhibitions and critical articles in the Press had brought it into line with painting, music, and the drama, as a subject that should engage the interest of all educated people.

A Divorced Art.

Architecture, however, though it was regaining its position as one of the fine arts, had been so long excluded from the rest of the company that it was no longer expected to have much to do with them. Not only the public accepted this point of view, but the majority of architects, painters, and sculptors did so themselves. It so happened that the most recent developments in painting and sculpture were the outcome of more or less parallel and complementary movements; but architecture had travelled in a different direction and at a different pace; and the problem of adjusting its demands to those of painting and sculpture had become both difficult and acute. Another problem that had also its own difficulties was the reconciliation of the tendencies in modern furniture design and applied craftsmanship with the claims of contemporary architecture.

The Causes of Divorce.

After discussing the relationship that had existed in the past between architecture on the one hand, and on the other, the arts of painting and sculpture and the crafts, Professor Budden proceeded to outline the causes of their present divorce, and to consider the consequences. In architecture these had led to architects relying for their efforts on purely architectural elements of design, whilst in painting and sculpture the independent work conceived without regard to any special setting had become predominant. The advantages and disadvantages of this state of affairs were illustrated in various ways. So specialized had the arts become that even the best painters and sculptors were usually quite ignorant of the technique of architectural composition. Without at all understanding its recourses and aims, they were ever ready to explain what was wrong with modern architecture, and would patronizingly suggest remedies for its salvation. Architects themselves were commonly in no better plight. Only too frequently even those who were highly trained and possessed a cultivated and fastidious judgment in their own art were complacently insensible to valuable aspects of modern painting and sculpture. Sometimes they exhibited frankly bad taste and took a philistine pleasure in doing so; and in any case they were almost invariably antipathetic to the work of the younger generation of other artists.

Its Reconciliation.

The loss to architecture was deplorable. By being limited simply to its own resources it was denied a whole range of effects which it could only achieve by the aid of painting and sculpture conceived in sympathy with it. At present these two latter arts, in their most vital modern forms, paid no attention to architecture at all, and were more often than not antagonistic to it.

How to bridge the gulf that divided architecture from the arts and crafts which once owed allegiance to it was the final question. Professor Budden elaborated a number of constructive proposals and indicated tendencies which seemed already to be working to that end.

Trees and Shrubs for Highways and Public Spaces

At a joint meeting of the Metropolitan Branch of the Architects' and Surveyors' Assistants' Professional Union and the Associates' Section of the Institution of Municipal County Engineers, Miss M. Agar, landscape gardener to the Metropolitan Public Gardens' Association, gave a lecture on "Trees and Shrubs suitable for Highways and Public Spaces." Miss Agar pointed out how great was the æsthetic need for foliage in our cities, and how obvious it was that the ideal streets should be wide enough and suitable for the planting of trees. As far as atmosphere went, there was no part of London in which vegetation would not thrive, and as for suitability of soil, it was quite easy for us to do all that was necessary.

In the planting of forest trees, each of which required about 60 ft., much might be done in taking advantage of the way blocks of houses were planned, such as planting a tree between semi-detached houses. A tree in a highway should be considered common property, and its life should not be at the mercy of the person who happened to take the house near by. If one took a house with a tree in the pathway, one ought not to demand the mutilation of the tree, but realize that the tree was part of the road and common property.

Of the forest trees, Miss Agar said that the slow growth was no argument against planting a row of a certain kind, as one could have a different kind of tree of quicker growth for intermediates, to be discarded later when the others had reached maturity.

The lecturer then discussed the advantages and disadvantages of each type of tree. Among the trees mentioned as suitable for London were the plane, sweet chestnut, birch, and the lilac.

In the discussion which followed, Mr. Basil Holmes said that arterial roads gave a great opportunity for the planting of trees, and he described such a scheme which had already been begun.

Mr. Wheble suggested that one row of trees could often be planted in the middle of a highway where a row on each side would be objectionable, and Miss Agar agreed to this.

The chairman, Mr. E. J. Elford, M.Inst.C.E., pointed out that in London and our large manufacturing towns the chief difficulty was the smoke nuisance.

A Restaurant Staircase

Time was when London's restaurants and tea shops were dingy, uninviting places, mostly hidden away down side streets. Often they were ordinary shops converted to a purpose to which they were entirely unsuited. The public endured these depressing places because there was nowhere better to go. The mid-Victorian would be astonished at the restaurants and teashops of to-day, for they are veritable palaces—well planned and attractively designed and decorated, and occupying prominent positions on the main thoroughfares. They are places of light and gaiety, where, for a moderate sum, you may not only feed well but be entertained with some of the best classical and modern orchestral and vocal music.

The Lyons' Corner House in Coventry Street is a notable example of the modern popular restaurant. It was illustrated in these pages when it was first opened about a year ago. Since then it has been completed by the opening up of two new floors and the introduction of a new main staircase, of which latter a view from the ground floor level is illustrated on the preceding page. This staircase is one of the most attractive features in the whole building. It has a gracefully-designed metal balustrade, and is carried out in "Biancola," made with "Atlas White" Portland cement. The treads have a special inlay of marble cubes alternating with other cubes, which not only add a decorative feature to the treads, but afford a good non-slip foothold. The landings are laid to match the staircase. The whole thing is of a most attractive character; it positively invites the diner to ascend to the upper floors. Messrs. Art Pavements and Decorations Co., Ltd., were the contractors.

Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

Mr. Greenwood, the Parliamentary Secretary to the Ministry of Health, informed Mr. E. Brown that the average cost (exclusive of the cost of land and development expenses) of 2,662 houses erected by direct labour was £861, and of 47,356 houses erected under lump sum contracts was £915.

The remunerative rents (excluding rates) for A and B type houses erected at the average cost of the month of January, stated Mr. Greenwood, allowing for the cost of land, roads, sewers, and management expenses, would be 12s. and 13s. 6d. a week.

Mr. Wheatley informed Sir N. G. Doyle that 168,966 houses had been erected under the provisions of the Housing, Town Planning, etc., Act, 1919. The average all-in cost was estimated at £1,040 per house, and the average rent, excluding rates, for all types for England and Wales was 9s. 8d. per week, or, if the metropolitan area were included, 8s. 8d. per week. In addition, 39,184 houses were erected with the aid of the subsidy to private builders under the Housing (Additional Powers) Act, 1919; 6,148 houses had been erected under the Housing, etc., Act, 1923. He could not say how many houses had been erected for £500 each. The average price for houses included in contracts let by local authorities under the provisions of the Housing, etc., Act, 1923, to the end of January, excluding cost of land development, etc., was £363 for non-parlour type, and £418 for parlour type. It was estimated that the loss in respect of 100,000 houses costing £500 each and let at 9s. per week, including rates, might be approximately £1,500,000 per annum for sixty years, which would not necessarily all be borne by the State.

Mr. Wheatley informed Sir J. Nall that during the month of January authority was given by the Ministry of Health to housing purposes under the 1923 Act covering 2,560 houses to be built by local authorities and 8,119 by private enterprise, a total of 10,679. For the month of February the corresponding figures were: local authorities' houses, 3,429; private enterprise, 9,376; total, 12,805.

Mr. Adamson, the Secretary for Scotland, in answer to Sir W. Sutherland, said that the total number of new houses erected in Scotland under the post-war Housing Acts was 24,021.

Mr. Wheatley informed Lady Astor that the following statement showed the position of housing schemes under the 1923 Act:—

I.—Houses authorized by the Minister of Health up to March 12, 1924:—

To be erected by local authorities	39,381
To be erected by private enterprise	75,682
Total	115,063

II.—Houses included in definite arrangements on or before March 1, 1924:—

Schemes of local authorities—	
Number of houses included in contracts or in approved direct labour schemes	22,037
Private enterprise—	
Number of houses included in undertakings given by the local authority under Section 2 (3)	41,060
Number of houses approved by the Minister under Section 3 and included in contracts ..	3,601
Total (included in Table I)	66,698

III.—Building Progress at March 1, 1924.

	Foundations Completed.	Roofed in.	Total under Construction.	Completed.
Schemes of local authorities ..	4,995	3,737	8,732	3,067
Private enterprise	9,398	5,368	14,766	3,081
Total houses (included in Table II)	14,393	9,105	23,498	6,148

Mr. Wheatley informed Mr. Hobhouse that the numbers of houses included in schemes authorized to date to be built in the county of Somerset under the Housing, etc., Act, 1923, were 367 by local authorities and 445 by private enterprise.

State-aided Houses.

Answering Mr. D. Millar, Mr. Wheatley said that up to December 31, 1923, local authorities had issued certificates authorizing the erection of 25,188 houses by private enterprise under the Act of 1923. 1,110 houses had been completed, and a further 6,657 were under construction. At the same date, 31,434 houses had been authorized in schemes to be carried out by local authorities under the Act, 1,998 had been completed, and a further 6,606 were under construction. These figures did not include houses erected to replace dwellings included in slum clearances. Tenders for the erection of 1,108 houses or tenements had been approved since the beginning of 1923 in connection with slum clearance schemes.

Mr. Wheatley's Confidence.

Mr. Wheatley announced that he hoped to submit during the next week or two a scheme which would solve the housing problem within a comparatively short time.

Contemporary Art

The Grosvenor Galleries.

The choice spirit of the collection of thirty-five pictures at Colnaghi's, 144 Bond Street, is almost a reconciliation to the loss of the larger galleries on the other side of the street. D. Y. Cameron in his most flamboyant mood, Lavery in his best modern form, Orpen with his portrait of Mrs. Carstairs, and McEvoy with the Hon. Mrs. Akers-Douglas, make a brave show, while the younger figure painters are represented by Gerald Brockhurst's individuality as displayed in "Matitchka" and "The Black Silk Dress," beautiful examples of this accomplished artist's imagination and technique. The figure pictures are not quite equalled by those which have for their major interest the presentation of buildings, but in Charles Cundall's "Eze," and in the well-grouped "Morning, La Turbie," this artist is seen at his best. "The Millstream, Brough," by C. J. Holmes, is not quite convincing although it is very pleasantly designed. Wilson Steer's "Dover Harbour" has beautiful grey colour and a surround of romance which only he can give to such a scene, in which realism would appear to be the requirement—there is none of it here. In W. W. Russell's "Passing Shower" there is realism, or rather truth informed by poetry, a quality often found in his work.

The Redfern Gallery.

Here are displayed some fifty water-colour drawings by an adherent to Russell's methods, James Wilkie. The influence is obvious, the source of inspiration is the same from which Russell derives some of his most charming studies—the very picturesque seaside town of Shoreham. Wilkie's work has not been shown before in bulk, and this, his first collected exhibition, makes a most favourable impression. He has much skill, much respect for tradition, a clean brush, a dainty perception, and his drawings indicate a peaceful personality. Not all of them are done at Shoreham, for there are several subjects in Sussex and some in Kent and Cornwall, all charming.

Of the Old School.

The exhibition of Joseph Farquharson's pictures and sketches at the Fine Art Society is not nearly so chilly as might have been expected. Indeed, the best works there are the four warm Egyptian ones: "Boulak," "The Market at Cairo," "On the Banks of the Nile," and "Egyptian Market," in which the crowds are admirably rendered, the buildings well placed, and there is a real feeling of right atmosphere.

At the Beaux Arts Gallery, R. W. Allan proves himself a faithful student of Nature. Truth rather than a striving for pretty effects is obviously his aim, and the truth is pleasantly if not ostentatiously or flashily set forth. Allan is content to work in the way of the earlier generation, and very worthily upholds the serious tradition of the Victorian landscapists without ever being dull. He has the grip of Nature in certain moods which render transcripts in paint convincing.

In the same gallery some student drawings of Augustus John offer a subject of interesting study. The recent second thirty-guinea-a-picture experiment at this gallery was as successful as the first. It has succeeded in distributing a number of pictures that otherwise might not have been sold for some time longer, and of making the artists who put high prices on their works because they sell so few, furiously to think.

KINOTON PARKES.

Societies and Institutions

R.I.B.A. Intermediate Examination.

The intermediate examination of the R.I.B.A. will be held on May 23, 26, 27 and 29. The closing date for receiving forms of application and testimonies of study is April 25.

"The Best Street Frontage."

The jury, under the chairmanship of the Earl of Crawford and Balcarres, which is to award the medal to be given by the R.I.B.A. for the best street frontage completed during the year ending December 31, 1923, is now engaged in considering the merits of the buildings which have been recommended for the award. It is expected that the jury's decision will be announced at an early date.

R.I.B.A. Diploma in Town Planning.

The examination for the R.I.B.A. diploma in town planning will be held for the first time on October 15, 16, and 17, and on October 20. Candidates applying for admission must be with Fellows, Associates, or Licentiates of the R.I.B.A., and applications must be made before May 31. Forms of application for admission, containing the regulations and syllabus, may be obtained at the R.I.B.A.

R.I.B.A. New Members.

At a recent general meeting of the R.I.B.A. the following members were elected:—

As Fellows (7).

Butler, A. S. G.
Chaikin, Captain B.
Cowper, J. B. F.

Edwards, S. J., M.A.
(Cantab.), P.A.S.I.
Jones, N.

Paterson, H. L.
Sadler, W. T.

As Associates (26).

Bath, H. R. H.
Bech, G. A.
Brooke, D., B.Arch.,
(Liverpool).
Button, E. H.
Chambers, Isabel M.
Chitale, L. M.
Coia, J. A.
Crickmay, G. H.
Curwen, J. S., O.B.E.
Ferguson, J. D.

Fillmore, C. E. M.
Fry, E. M., B.Arch.,
(Liverpool).
Grant, J. D.
Greenfield, T.
Harrison, Edith G. (Mrs.).
Higham, E. H. H., B.Arch.,
(Liverpool).
Hirst, H.
Hutton, C. H., B.Arch.,
(Liverpool).

Hyslop, C. G. C.
Knewstubb, F. W.
Knight, C. R., B.Arch.,
(Liverpool).
Lawrie, A. F.
Parkes, S. T.
Powell, A. H.
Sutherland, T. S.
Vallis, R. W. H., B.Arch.,
(Liverpool).

R.I.B.A. Council Meeting.

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

R.I.B.A. Essay Prize.—The annual value of this prize was increased from 25 guineas to £50.

The Royal Artillery War Memorial.—It was decided to approach the Fine Arts Commission with regard to the site of the memorial.

Professional Conduct.—Three members having infringed the rule of professional conduct which protects a member from attempts to supplant him in his employment, one of them was censured and suspended for twelve months, one was censured and suspended for six months, and the resignation of the third was accepted.

Newbury Building By-laws.—It was decided to communicate with the Ministry of Health in support of the Berks, Bucks, and Oxon Architectural Association's appeal against an oppressive by-law.

The Manchester Society of Architects.—The admission of the Burnley District Society of Architects as a branch of the Manchester Society was approved.

Reinstatement.—Mr. J. S. Heath, F.R.I.B.A., and Mr. J. F. Schofield, A.R.I.B.A., were reinstated.

The National Association of Master Heating and Domestic Engineers.

The National Association of Master Heating and Domestic Engineers commemorated its coming of age by a dinner at the Hotel Victoria, London, under the chairmanship of the president, Mr. Ernest S. Beal, M.I.Mech.E., C.C. The Lord Mayor, at the request of the chairman and on behalf of the Association, presented a silver salver, as a token of the esteem and appreciation of the members, to Mr. D. M. Nesbit, founder and first president of the Association and honorary treasurer. Mr. Ernest S. Beal, M.I.Mech.E., C.C., was re-elected president for the third year in succession.

Liverpool University Examination Results.

Following is the examination list for March of the Liverpool University:—

FACULTY OF ARTS.

CERTIFICATE IN CIVIC DESIGN.

Class I.

Beckett, J. L.
Jensen, A. G.

Holt, T.
Vallis, R. W. H.

Hough, H. T.

Class II.

Forshaw, J. H.

Holt, J.

Knight, E. R.

The Reading Society of Architects.

At the fourth annual meeting of the Reading Society of Architects, the following members were elected to form the Executive Committee for 1924:—

Chairman:—H. Whiteman Rising, F.R.I.B.A.
Vice-Chairman:—W. Galt Millar, F.S.I.
Hon. Treasurer:—W. R. Morris, Licentiate R.I.B.A.
Hon. Librarian:—H. Whiteman Rising, F.R.I.B.A.
Hon. Secretaries:—C. B. Willcocks, F.R.I.B.A., and W. J. Freeman, A.R.I.B.A.
Hon. Auditors:—A. S. Cox, M.S.A., and E. P. Morgan, Licentiate R.I.B.A.
Members:—W. R. Howell, F.R.I.B.A.; J. T. Saunders, F.R.I.B.A.; H. Nutt, F.R.I.B.A.; and F. G. Sainsbury, M.S.A.

The following were elected to serve as representatives of the Society on the Council of the Berks., Bucks., and Oxon. Architectural Association:—

W. R. Howell, F.R.I.B.A. F. H. Floyd, F.R.I.B.A. J. G. T. West, M.S.A.
C. B. Willcocks, F.R.I.B.A. F. A. Woods, A.R.I.B.A. J. R. Greenaway, F.S.I.
E. P. Morgan, Licentiate R.I.B.A.

Mr. H. Whiteman Rising was nominated for election as Vice-President of the Berks., Bucks., and Oxon Architectural Association.

During the meeting a lecture on "Some English and Continental Memorial Brasses" was given by Mr. H. T. Morley, F.S.P. (Associated Craftsman).

The Registration of Electrical Contractors.

The dominant objects of the newly formed National Register of Electrical Installation Contractors (Incorporated), as expressed in the Memorandum of Association, are: (a) To afford to the public the means of distinguishing electrical installation contractors who shall have given evidence of their competency and undertaken the responsibility required by the conditions of registration under the powers contained therein; (b) To raise the efficiency and status of electrical installation contractors as a body in a manner consistent with the importance of their occupation, and in connection with the application and use of electricity for any purpose; (c) For the foregoing purposes to set up, issue, and maintain a register for Great Britain the Irish Free State, and Northern Ireland of electrical installation contractors qualified for registration under the rules and regulations for the time being of the Association, and to issue certificates of registration thereunder.

The first council is composed of representatives of the Institution of Electrical Engineers, the Incorporated Municipal Electrical Association, the Electrical Contractors' Association, the Electrical Contractors' Association of Scotland, the British Electrical and Allied Manufacturers' Association, the Association of Consulting Engineers, the Electrical Wholesalers' Federation, the R.I.B.A., and the Irish Centre of Institution of Electrical Engineers. The offices of the Register are at 1 Lincoln's Inn Fields, W.C.2.

Northern Architectural Association.

An interesting lecture was given before the Northern Architectural Association by Mr. Arthur Stratton, F.S.A., F.R.I.B.A., reader in architecture at the University of London. The lecturer, who has spent much time in Holland and the Netherlands, took for his subject "Dutch Architecture and its Influence on English Architecture in the Seventeenth and Eighteenth Centuries." He showed the gradual development and charm of the native work in spite of the difficulties of cramped sites and the flat, uninteresting nature of the landscape, and demonstrated how cleverly the Dutch architects had turned their greatest difficulty, viz., water, into a valuable and picturesque asset, and how, by their clever and varied treatment of gables, they had successfully overcome the difficulty of their narrow frontages. He followed up by showing how the Dutch

domestic style of the eighteenth century strongly influenced English architecture of the "so-called" Georgian period, commenting on the fact that though the Dutch and the English were continually at war, practically during the whole period trade between the two nations must have been great and almost continuous.

The South Wales Institute of Architects.

At the thirty-fourth annual general meeting of the South Wales Institute of Architects held at Cardiff, Mr. Percy Thomas, O.B.E., F.R.I.B.A., was unanimously re-elected as President for a third term of office.

The following officers were also elected:—

Vice-Presidents:—C. F. Ward, F.R.I.B.A.; H. C. Portsmouth, F.S.Arc.
Hon. Treasurer:—H. Teather, F.R.I.B.A.
Hon. Auditor:—C. S. Thomas, F.S.Arc.
Hon. Librarian:—C. H. Kempthorne, Licentiate R.I.B.A.
Hon. Secretary:—Ivor P. Jones, A.R.I.B.A.

Members of Council.

Central Branch:—A. G. Edwards, M.S.A.; J. P. D. Grant, A.R.I.B.A.; W. S. Purchon, M.A., A.R.I.B.A.; R. H. Winder, M.A., A.R.I.B.A.; F. H. Heaven, A.R.I.B.A.; T. Alwyn Lloyd, F.R.I.B.A.; J. B. Wride; C. F. Jones, A.R.I.B.A.; J. Williamson, A.R.I.B.A.
Western Branch:—J. Herbert Jones, F.S.Arch.; G. R. H. Rogers; E. E. Morgan, A.R.I.B.A.; O. S. Portsmouth, A.R.I.B.A.; Glendinning Moxham, F.R.I.B.A.
Eastern Branch:—Horace Jones; F. Swash, F.R.I.B.A.
Northern Branch:—G. Vincent Evans, Licentiate R.I.B.A.; J. Llewellyn Smith, Licentiate R.I.B.A.; Jacob Rees, M.S.A.

Associates' Representatives.

Central Branch, L. S. Hatchard; Western Branch, G. L. Crocker; Eastern Branch, J. E. Lenton; Northern Branch, B. T. Jones.

Cardiff Public Hall Scheme.

The question of a public hall for Cardiff is one of genuine public interest. Probably the citizens are more interested in it than their representatives realize. Anyhow, it was a happy thought to set as part of the work of the School of Architecture at the Cardiff Technical College, the preparing of plans for a public hall. Mr. W. S. Purchon, M.A., A.R.I.B.A., set this task for his fourth year full-time day students. The task was set simply as an exercise, but it was felt that here was practical practice, that here was a definite linking up of the studies of these young men with the civic or communal life of the city. Five designs have been prepared. They are the work of Brian Thomas, Leonard Monroe, William Oakley, D. J. Williams, and V. S. Williams.

Mr. Brian Thomas, whose scheme is the most ambitious, has used a circular plan with some considerable ingenuity. His design is, perhaps, the one most in harmony with that of the adjoining City-hall by Lanchester and Rickards. Mr. Brian Thomas's design is wholly in keeping with the Cathays Park amenities. It provides for a cantilever balcony, with a corridor running right round the hall, and there are also cloak-rooms, retiring rooms, etc. Its exterior architectural style is Baroque.

All the other designs are exteriorly much more severe. Mr. Monroe's will probably impress most. Here, again, is a cantilever balcony, with side corridors. Mr. Oakley's design is excellent, too. All round the work is of a high standard.

Obituary

The late Mr. H. J. C. Cordeaux, F.R.I.B.A.

We regret to record the death, at the age of fifty-seven, of Mr. H. J. C. Cordeaux, F.R.I.B.A., of the firm of Cordeaux and Farrow, East London, Cape Colony. He went to East London in 1898, and till the day of his death took an active interest in the welfare of the town. Some years ago he entered into partnership with Mr. W. Farrow, and as Cordeaux and Farrow this firm of architects has been well known throughout South Africa.

The late Mr. A. C. Morris Edwards.

We regret to record the death of Mr. A. C. Morris Edwards. He was articled to Mr. Arnold Mitchell, and afterwards was assistant to Mr. W. D. Caroe. He practised successively at Beckenham and London, and took part in the development of the Cooden Beach Estate, near Bexhill. His work was chiefly domestic.

The late Mr. A. E. Murray.

We regret to record the death of Mr. Albert Edward Murray, the Irish architect, at the age of seventy-four. He was known particularly as a designer of hospitals and infirmaries. Having been articled to his father, William George Murray, R.H.A., he won medals and prizes at Dublin and South Kensington, and

began to practise in Dublin in 1871. Among his works in Dublin are the Royal City of Dublin Rotunda, Adelaide and Coombe Hospitals, the Royal Bank of Ireland, Harding Technical School, Old Men's Asylum, and Working Boys' Home. He also designed infirmaries at Waterford, Londonderry, and Enniskillen, and a cottage hospital at Kilkenny, as well as maltings, shops, and private houses in various places. Murray's professional eminence was recognized by his appointment to be Professor of Architecture in the Royal Hibernian Academy. For over seventeen years he was hon. secretary and treasurer of the Royal Institute of the Architects of Ireland, and was president for three years and a member of the council for nearly thirty years. He was also on the Council of the R.I.B.A.

The late Dr. W. H. Maw.

We regret to record the death of Dr. William Henry Maw, who had been editor of "Engineering" since its foundation fifty-eight years ago. He was eighty-five years of age. The son of Mr. W. M. Maw, of Scarborough, Dr. Maw was president in 1901 of the Institution of Mechanical Engineers, of which for over thirty years he was a member of the council, and in 1922 he became president of the Institution of Civil Engineers. He was a Fellow of the Royal Geographical Society and of the Royal Microscopical Society, a member of the Board of Studies of the University of London, and a LL.D. of Glasgow University. He served continuously from 1902 on the committee of the National Physical Laboratory, and was one of the founders of the British Engineering Standards Association. During the war he served on many committees appointed by the Government, and particularly by the Ministry of Munitions. He was elected a member of the Royal Astronomical Society in 1888, and from 1905-7 he served as its president. He was one of the founders of the British Astronomical Association.

Publications Received

"Housing Problems in America: the Proceedings of the Ninth National Conference on Housing in Philadelphia on December 5, 6, and 7, 1923." Published by the National Housing Association, 105 East 22nd Street, New York City.

"The Art of Hesketh Hubbard." By Haldane MacFall. The Morland Press, Ltd., 190 Ebury Street, London.

"The Making of the National Gallery, 1824-1924." An historical sketch by Sir Charles Holmes and C. H. Collins Baker. Price 1s. 6d. net. The National Gallery, Trafalgar Square, London.

List of Competitions Open

Date of Delivery.	COMPETITION
April 3	A competition has been promoted by the Canadian Government for designs for a full-length statue of the late Sir Wilfrid Laurier to be erected in the grounds of the Parliament Buildings, Ottawa. The winner will be commissioned to carry out the work. Second premium, \$1,000. Apply the Secretary, Public Works Department, Room 784, Hunter Buildings, Ottawa.
April 26	At the instance of the British Drama League the proprietors of "Country Life" have promoted a competition for designs for a national theatre. The proprietors of that journal will bear the cost of building a complete large-scale model of the first prize design, to be shown at the British Empire Exhibition. Jury of Award: Mr. J. Alfred Gotch, President R.I.B.A.; Sir Edwin Lutyens, R.A., F.R.I.B.A.; Sir Lawrence Weaver, K.B.E., F.S.A.; Professor C. H. Reilly, F.R.I.B.A.; Professor Hubert Worthington, A.R.I.B.A.; Mr. Harley Granville-Barker; Mr. Albert Rutherford. Mr. Geoffrey Whitworth, Hon. Secretary. First prize, £250; second prize, £100; for the best model sent in with a design, £25; for the best perspective view of the interior of the larger auditorium, £25. Apply Editor, "Country Life," 20 Tavistock Street, Covent Garden, London, W.C.2
June 30	The Bradford Masonic Association invite designs and estimates for a masonic temple, to be erected at Bradford. Premiums £200, £150, £100. Apply The Bradford Masonic Association.
Sept. 30	Designs are invited for a statue in bronze and a pedestal (at a cost of about £5,000) in honour of the late Sir Ross Smith, K.B.E. Apply The Agent-General for South Australia, Australia House, London.

Competition News

Nurses' Home, etc., Competition, Kingston-on-Thames.

The President of the R.I.B.A. has nominated Mr. Alan E. Munby, F.R.I.B.A., as assessor in this competition.

The Week's News

Housing at Kingston.

Twenty houses, costing £12,598, are to be built by the Kingston Corporation.

Proposed New River Promenade for Liverpool.

A scheme is under consideration for making a promenade on the Liverpool side of the Mersey.

Harrogate Spa Rooms Improvements.

Plans have been prepared for alterations to the Royal Spa Rooms, Harrogate.

Building at Worthing.

Sixty-two plans, involving a constructional cost of over £36,000, were passed by the Worthing Corporation in February.

Workshop Housing Needs.

It is estimated that 300 houses are urgently needed in Workshop.

The Redecoration of Finsbury Town Hall.

The exterior of Finsbury Town Hall is to be redecorated at a cost of £600.

New Hospital for Malton.

Plans have been adopted for a new hospital at Malton, to be built on a site the gift of Earl Fitzwilliam.

£35,000 for Benfieldside Roads.

A scheme of road-making, involving about £35,000, has been approved by the Benfieldside Urban District Council.

More Houses for Mansfield.

The Mansfield Town Council propose to build seventy-two houses on the Bull Farm Housing Estate. These will be in addition to the sixty-two houses now in the course of erection.

Proposed New Boulevard for Edinburgh.

The City of Edinburgh are considering the formation of a terrace on the south side of Princes Street, between the West End and the Mound. The cost is put at about £50,000.

New Houses for South Shields.

The South Shields Rural District Council have received the sanction of the Ministry of Health to erect 175 additional houses.

Newington Institution Improvements.

The Minister of Health has sanctioned the expenditure of £38,773 by the Southwark Board of Guardians on improvements at their Newington Institution.

New Mental Hospital for Middlesex.

The Middlesex County Council have approved of the purchase of Porters Park estate, Shenley, for £80,000, as a site for a new mental hospital and a mental defectives' colony.

A New Bridge for Sunderland.

The Sunderland Rural District Council have decided to erect a high-level bridge over the Wear at the Hyltons. The cost is estimated at £50,000.

A Proposed Paddington Subway.

The Paddington Borough Council have under consideration a proposal to construct a subway under the Grand Junction Canal at a cost of nearly £100,000.

New Schools for Derbyshire.

New schools for Shuttlewood, Stonebroom, Dronfield, and Findern have been decided upon by the Derbyshire Education Committee.

A New Pavilion for Ryde.

The Ryde Town Council have decided to apply to the Ministry of Health for sanction to a loan of £3,000 for the erection of a pavilion on the Western Esplanade.

A New Convalescent Home for Skegness.

Plans have been prepared by Messrs. John Howitt and Son, architects, of a new convalescent home for women and children at Seathorne, Skegness.

The Wembley Town-Planning Conference.

A town-planning exhibition and conference, organized by the Town Planning Institute, is to be held in the Palace of Arts, Wembley. The exhibition will be held from April 23 until May 17, and the conference from May 5 until May 9.

Members of the Institute who propose to attend the conference should obtain their tickets from the secretary, Mr. Alfred R. Potter, 11 Arundel Street, Strand, W.C.2, as early as possible.

Proposed New Cinema for Thirsk.

Plans have been prepared for a new cinema theatre, proposed to be built at the junction of Castlegate and the Market Place, Thirsk.

More Houses for Bolton.

The Bolton Housing and Town Planning Committee have approved the general outlines of a scheme for the erection of a further 250 municipal houses.

100 Years of London Bridge.

On March 15 a hundred years ago, the first pile of London Bridge was driven. The first stone was laid on June 15, 1825, and the bridge was opened by King William IV on August 1, 1831. The bridge was designed by John Rennie the elder.

The Shortage of Skilled Building Labour.

The suggestions of the Committee of the National Housing and Town Planning Council for meeting the requirements of the building industry as regards skilled labour—a summary of which appeared in our issue for March 5—have been approved by the Council.

An Easter Tour to the Dordogne

An Easter tour has been arranged to the Dordogne by the Garden Cities and Town Planning Association. The party will leave London on April 16, and will return in the week-end April 26-28. Full details of the tour, itinerary, and cost, will be sent on application to the Secretary, Garden Cities and Town Planning Association, 3 Gray's Inn Place, London, W.C.1.

Professional Practice.

Mr. C. Gordon Huntley, A.M.I.E.E., M.I.H.V.E., who has relinquished his connection with the consulting engineering practice of Messrs. Huntley and Wood, has joined the technical staff at the London office of Messrs. Davidson & Co., Ltd., Central House, Kingsway, W.C.2.

Mr. David Millen, M.S.A., A.M.T.P.I., has resigned his membership in the firm of Ernest G. Allen and Partners. The business is being carried on as heretofore by the remaining partners under the style of Ernest G. Allen and Alfred R. Potter. The address of the firm is 11 Arundel Street, Strand, W.C.2.

The Walls and Gates of Peking.

Professor Osvald Siren, of Stockholm, with the permission of the Chinese Ministry of the Interior, has devoted several years to a faithful study of the walls and gates of Peking. He has now brought to England 110 photographs and 50 architectural drawings made by Chinese draughtsmen under his supervision. These drawings and photographs are now being exhibited in the galleries of the R.I.B.A. till April 5. The exhibition will be open (free) between the hours of 10 a.m. and 6 p.m. (Saturday 1 p.m.).

Exhibition of the Cairo Hospital Competition Drawings.

The drawings submitted by the following competitors in the Qasr-el-Aini Hospital, Cairo, Competition will be exhibited in the R.I.B.A. Gallery from April 7 to April 17: Messrs. H. Percy Adams and Charles Holden; Henry V. Ashley and F. Winton Newman; J. T. Cackett and R. Burns-Dick; E. Vincent Harris; H. V. Lanchester, T. Geoffrey Lucas, and T. A. Lodge; William and T. R. Milburn; Charles Nicholas and J. E. Dixon-Spain (photographs only); William A. Pite, Son, and Fairweather; and J. Reginald Truelove. The exhibition will be open daily between 10 a.m. and 6 p.m. (Saturday, April 12, and Thursday, April 17, 1 p.m.).

Sir Thomas Jackson, R.A.

At the annual meeting of the council of the Winchester Diocesan Fund a letter was received from Sir Thomas Jackson, R.A., placing in the hands of the Bishop his resignation of the post of diocesan architect. Ill-health and advancing age was given by Sir Thomas as the reason for this step. The meeting unanimously passed a resolution thanking Sir Thomas for his long and valued services to the diocese and expressing regret at his resignation. Dr. Furneaux, the former Dean of Winchester, said he was brought very closely into touch with Sir Thomas Jackson. His great work in the restoration of the cathedral was a standing proof of how much the diocese of Winchester owed to him.

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