## THE

# ARCHITECTS'



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#### CHRISTIAN BARMAN, Editor

The Editor will be glad to receive MS. articles, and also illustrations of current architecture in this country and abroad, with a view to publication. Though every care will be taken, the Editor cannot hold himself responsible for material sent him.

# WEDNESDAY, JUNE 22, 1927. NUMBER 1692: VOLUME 65

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# CHOOSE BY COMPARISON

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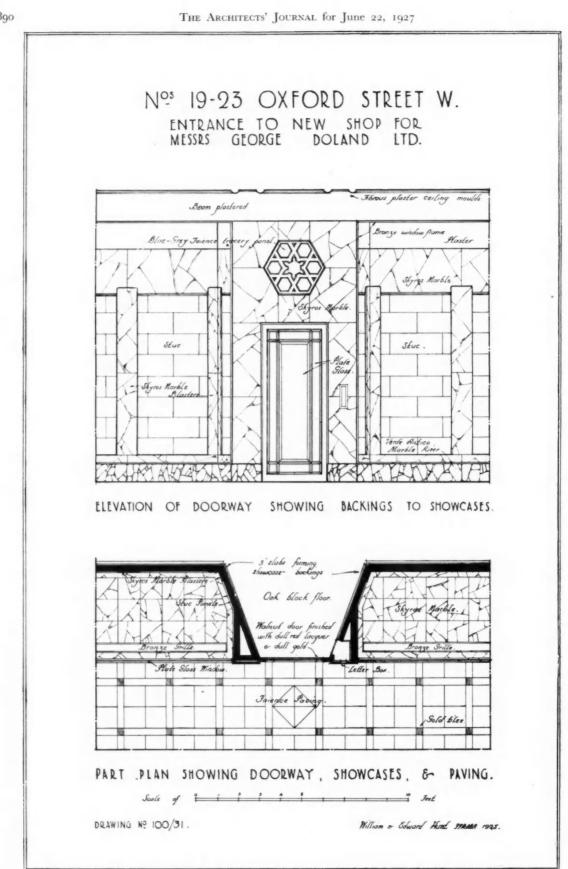
[A working detail of this entrance doorway and showcases appears on the following page]

ENTRANCE DOORWAY AND SHOWCASES AT NOS. 19-23 OXFORD STREET, W. BY WILLIAM & EDWARD HUNT

#### THE WEEK'S DETAIL

#### [ BY WILLIAM & EDWARD HUNT ]

The photograph shows the inner recessed showcases and entrance doorway to the shop of Messrs. Doland, Ltd. The showcases were designed to give a rich, but simple, background to the exhibits, which are themselves of an essentially plain character, and the bronze framing to the plate glass windows is made quite subsidiary. The predominant material is Skyros Alpha marble, which is used for the stallboard paving, and forms a simple pilaster treatment to the backings in conjunction with stue panels of a warm reddish tone. The doorway itself is surrounded by the same marble, finished at the bottom with a plinth of Verde Antico. The doorway itself is of walnut finished by the dry-tone process, and the door and glazing bars are lacquered dull red and picked out in dull gold. The paving round the showcases is carried out with light blue-grey and gold faience tiles. The floors of the showrooms are of oak blocks, and the ceilings are treated with reeded plaster panel moulds. Over the doorway is a hexagonal panel of faience tracery, of which a detail will be published next week.



A photograph of this detail is given on the preceding page.



Wednesday, June 22, 1927

# A TOWN-PLANNING SETBACK

The extreme intricacy of the relationship of local authorities to one another was clearly shown the other day when a Committee of the House of Commons decided that, as far as it relates to the inclusion within its boundaries of the parishes of Northenden, Baguley, and Northern Etchells, the Manchester Corporation Bill, 1927, has not been proved.

The matter arose, it will be remembered, in connection with the Wythenshawe estate, which the Manchester Corporation has acquired partly by purchase and partly by gift from Mr. E. D. Simon, himself an ex-Lord Mayor of the city. The object of the Corporation was to include this area within its boundaries and to develop it for housing its growing population. The grounds of the objections to the inclusion seem neither lucid nor reasonable, indeed their origin is probably psychological and arises from an injured pride and an acquisitiveness, and the authority from whose jurisdiction it is proposed to remove the land feel it a matter of duty and honour to resist such proposals, irrespective of their merits.

The situation at Manchester has resulted in a vicious circle which is not without its humorous side. At present the three parishes included in the estate are part of the Bucklow Rural District Council's area, and this body is responsible, therefore, for sewerage and sewage disposal works. But the rateable value of the parishes concerned makes it quite impossible for money to be borrowed to construct these works. As soon as the houses are built, however, the rateable value will increase the borrowing power. But this rateable value will not be created until the houses are built and occupied, and the houses cannot be occupied until they are connected to the sewers. A solution to this particular difficulty would seem to be for the Manchester Corporation to act after the manner of the private companies which have promoted Letchworth and Welwyn Garden Cities, and which possessed the ordinary power of ground landlords. Here the rural district councils were unable to provide for sewage disposal in advance of building, and so they were provided by the companies. If the Manchester Corporation were allowed to act in the same way, it could provide for its own estate only, which comprises only a part of the three parishes which it is desired to annex. If this were permissible Manchester would surely be the gainer and the parishes the losers, insomuch that they would not benefit as a whole from the sewage works, which would raise their rateable value, and Manchester would not be called upon to provide works for more than their own freehold property.

From the town-planner's point of view the development of Wythenshawe would have been a matter of interest, for it presented an opportunity which does not often occur —that of a first-rate municipality developing an estate for housing its population armed with the threefold power of ground landlord, local authority, and town-planning authority, to which must be added the statutory powers under the Housing Acts.

The situation which has occurred owing to the action of the Select Committee of the House of Commons is in the nature of a setback for town-planning, and is contrary to the hopes and efforts of today. These kinds of anomalies in high places are by no means rare. A Government legislates against "sweating," and it is later found that its own contracts are the result of sweated labour. A Government inveighs against the emission of black smoke, and it is found that its own boilers are amongst the worst offenders. A Government places on the statute book an Act to safeguard painters from lead poisoning, and claims exemption for itself. And so we are disappointed rather than surprised at this thwarting of Manchester in its attempt to provide for its urgent needs in a comprehensive manner. Big schemes today invariably demand that petty individual ambitions must be sunk, and that vested interests must be dealt with impartially, and important Corporations ought surely to be able to depend upon the backing of the House of Commons.

Perhaps the most astonishing thing in this particular case was the suggestion made by the opposers to the scheme, namely, that the population for whom accommodation was sought should be found within the existing city boundaries, and this in face of the evidence of the medical officer of health of the evil results of the present overcrowding.

A referendum on the question of the proposed annexation was taken among the inhabitants of the three parishes, and the verdict was against the proposal. We do not know how the case was presented. It would not be difficult to present it in a way that would assure a desired answer. And, after all, what does the result prove? The density of the three parishes is about one person per acre, and the occupation of the inhabitants is, for the most part, agricultural. It is not unnatural that they resent the everlasting urbanization of the countryside. We ourselves resent it. But for good or evil we are an industrial country with a large industrial population which is demanding better living conditions: a demand the justice of which is generally accepted, and if the future is to be free from the faults which we have inherited from the past, such matters must be dealt with in a big way. This, we think, Manchester was doing.

## NEWS AND TOPICS

THE SLADE CHAIR AT OXFORD—THE KEEPING OF THE ELGIN MARBLES—ROYALTY AND REGENT STREET—THE OUEEN'S HOUSE, GREENWICH, TO BE RESTORED.

MIGHT not the Slade Professorship at Oxford be made more fruitful? Mr. A. M. Hind, who is about to end six years' service in the Slade Chair at that university, in recording his experiences puts forward certain suggestions for vitalizing the Slade. His main proposal having that object is that the Slade Professor should no longer be non-resident, but should be accorded the status and emoluments of a resident professor, when he would have a better chance of becoming less negligible and more "a centre of inspiration." I quite see the force and beauty of this contention. Any professor of any university might be expected to work with greater vim and success if he could complacently regard himself-and, what is more, could be considered by others-as an integral part of the university, and not as a mere supernumerary for irresponsible youth to flout with impunity. I do not intend to discuss here the general functions that Mr. Hind suggests for the Oxford Slade Chair, but I confess to being rather fascinated by the proposal to include, as special subjects in the Final School of Modern History, the History of Architecture and Renaissance Art. Also I am somewhat enamoured of his proposal that the at present temporary series of lectures on architecture should be perpetuated by means of a permanent endowment, and should be given the title of the "Wren Lectureship on Architecture." My only misgivings about this scheme are lest the senate should kick at innovation, and lest haply the venerable name of Wren be provocative of weak jokes among the unregenerate, the feeblest jests being most potent for mischief. From recent newspaper correspondence I gather that London University, with its Bartlett School of Architecture, is disposed to develop its Slade Chair, and I cannot imagine that æsthetic Oxford will allow itself to be outclassed by commercial London. That is a reason why it should seriously consider the sage counsel in Mr. Hind's swan song. And the whole thing suggests to my mind the need for conference and closer communion between all the schools concerned in architectural education, with the R.I.B.A. at the head of affairs.

\* \*

Mr. E. Guy Dawber, having written to the Press a trenchant letter advocating the control of building designs, Mr. E. J. Elford, of the Institution of Municipal and County Engineers, made unseemly haste to accuse him of making " a statement likely to leave a false impression if not corrected." I at once quote this statement in which Mr. Dawber is said to have laid himself open to correction at the hands of a municipal and civil engineer, so prompt to contradict and correct. Mr. Dawber had asserted that "lay committees of local tradesmen, farmers, and others, pass, criticize, or condemn, plans or drawings laid before them, without the least technical knowledge of what the buildings may look like in execution, or only acting upon the advice of their surveyor." Well, but what is the matter with that statement? Let Mr. Elford open our eyes to its turpitude. "Now," quoth he, ponderously and turgidly, "Mr. Dawber should know that neither local committees nor their surveyor have the slightest power . . . to have any regard to what the building

will look like." For my part, I dare swear that Mr. Dawber really does know as much as that, yea, and much more also. Hence his indictment of the lay committees. And I venture to say that in his hurry to impeach him, Mr. Elford doth protest too much. Mr. Dawber's strictures simply deprecated the misjudgment of designs for elevations. Mr. Elford shows that often the designs for elevations are simply not considered at all. He rather leads us to suppose that lay committees do not care a straw what the building will look like, so long as the drains are all right. So that Mr. Elford's quite gratuitous attempt to demolish Mr. Dawber's case simply proves it up to the hilt. Mr. Elford concludes his absurd letter with this saw of might: " Even among architects there is not always agreement as to what constitutes beautiful design." Passing strange, but irre-fragably true. "Yes, by St. Anne, and ginger is hot in the mouth, too ! "

#### \*

The discussion which has been waxing hot in the Times and elsewhere of reasons for and against the restoring to the Erectheum the caryatid included with the Elgin marbles now in the British Museum does not raise what seems to me to be the best of all good arguments against such restoration, namely, the danger of its destruction by war or constitutional upheavals. The Parthenon, and its inimitable sculptures, the remnants of but a few of which still anywhere exist, would have survived their two thousand years and more in the dry, pure air of Athens. It was the destructiveness and indifference of man, not the stress of years and of the elements that reduced them to shattered ruins and allowed the sculptures to lie at the mercy of anyone till they were in part buried under accumulations of rubbish and forgotten. The Parthenon was bombarded by the Turks twice or more and suffered other violences; and the late war has shown the nature of Western races when they fight, and the unmanageable nature of the weapons of destruction they wield. Under peace conditions and unopposed, aeroplanes recently aimed 114 bombs at a battleship without securing one hit. Athens is more open to attack than is London, and as aeroplanes are at least as likely to hit the Erectheum when they do not aim at it as when they do, lovers of sculpture will feel the Elgin caryatid in safer keeping in England than in Greece.

\*

I confess to regret that their Majesties intend to signalize the near completion of the rebuilding of Regent Street by ceremonially driving through it. To my way of thinking, the Sovereign should be as far removed from being a commercial asset as he is from being a political. New Regent Street has arisen in no other motive than the aggrandisement of the salesman and the advertisement of shops. Nash's Regent Street, on the other hand, was laid out with the same purpose as more recently actuated the making of Shaftesbury Avenue: it was designed to cut through and ameliorate a poisonous and congested areaan earlier and more terrible Seven Dials known as St. James's Market-and the ungainly angle of Lower and Upper Regent Street with the Quadrant was fixed upon for the better achievement of this end. What the King and Queen will see is a stone architecture rendered in Portland replacing one expressed in stucco. I leave it to a more skilled pen to distinguish the occasion by capping the epigram which appeared in the Quarterly Review about the time the Quadrant was finished.

Well within the next lustrum (let us hope) the Queen's House at Greenwich may assume something like the outward appearance that Inigo Jones intended for it. True, the house is to be appropriated to a use he could not have foreseen; but, on the other hand, features he knew not, and probably would have abhorred, are to disappear. Stucco, with which his walls have been defaced, is to be removed, together with the asphalt covering of the area which served as a spacious drill-ground for successive generations of prospective seamen, a thousand youngsters exercising there to the accompaniment of rhythmic music and to the entertainment of fascinated nursemaids peering through the railings. For the Royal Hospital School is to be removed to Holbrook, in Suffolk, and the Queen's House is to be restored as nearly as possible to its pristine condition, as far as that is compatible with adaptation to the purposes of a National Naval Museum. Conversions of this kind are to me anathema; but while I must confess to a prejudice in favour of "purpose-made" buildings, I reluctantly assent that the Queen's House will be ennobled rather than degraded by the distinctly patriotic use to which it will be put. Moreover, I am confident that the Office of Works, which is to effect the inevitable alterations, will duly respect the work of Inigo Jones and of the other great architects who wrought there with him or after him. I cherish the hope that investigations, for which the overhauling process seems to afford an excellent opportunity, may reveal with more certitude what work is Jones's, what Webb's, what Wren's, thus peradventure reconciling the conflicting attributions that have been rife. Anyhow, the Queen's House is a brilliant gem in a noble setting, and I am happy in the belief that its fresh function of utility will insure it a renewed lease of life of indefinite duration.

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Clifton College seems resolute to enhance its reputation for keeping in the van of educational progress. Perhaps it is the vigour of youth that makes it one of the most enterprising of our public schools, as it is apparently the voungest of them, having been opened in 1862-which, comparatively speaking, is no older than the day before yesterday. In spite of a Gothicity that was tyrannically prescriptive, the Clifton College science building, which the Prince of Wales opened the other day, is a welcome portent of efficiency in modern education. For comparable reasons, the architect of the new building was no doubt chosen because of his established reputation in science and of his experience in the planning of scientific laboratories. Mr. Alan Edward Munby has specialized in that kind of planning until his skill in it verges on the wizardry of alchemy. Then, again, his standard book on The Chemistry and Physics of Building Materials, his sometime chairmanship of the R.I.B.A. Science Standing Committee, and his active membership of several other "derned learned scientific" bodies sufficiently explain why he, being an old boy of Repton, was chosen to design a science building for Clifton College. When, in due course, Clifton's sons become almost as famous in science as, passing in large numbers through Woolwich and Sandhurst, they have become in war (see Newbolt's poems passim), they will owe a tremendous stimulus to a scientific architect's judicious outlay of the £50,000 provided for their science building.

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The continuity of tradition in home-making in Palestine has been illustrated once more by the discovery of a house at Tel-el-Nisbeh which is supposed to date from the seventh century B.C. Like many modern houses of the inhabitants of the Judean plateau, this ancient Israelitish dwelling was provided with a private cistern and with a wine press and wine vat carved in the solid rock. The excavations have been conducted by Professor William Bade on behalf of the Pacific School of Religion, and have brought to light a city wall between 25 and 26 ft. wide, as well as domestic utensils of burnt clay and stone, with remains of food and the ashes of cooking fires. The utilization of the solid rock of the site in building the house is one of the peculiarities of architecture in the rocky districts of Palestine, where rainwater cisterns are almost invariably formed in the basement, and where it is by no means unusual for half a vaulted chamber to be carved in the rock and the other half to be executed in added masonry. In such cases the rock is often permitted to remain solid until the new material has been added, and it is only after it has served as scaffolding and perhaps as centering to the new vaulting that the hollow portions are scooped out.

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The astonishing action of the Vicar of Ickleton, Cambridgeshire, the Rev. P. H. Cooke, and his churchwardens in sending away six old bells to be recast has been very rightly condemned by a Consistory Court in Ely Cathedral. The vicar is to be reported to the Bishop, and the churchwardens have been suspended from office. Not the least part of the duty of the English Church is the care of a great number of valuable ancient monuments which have passed into its keeping from pre-Reformation times or have been contributed by pious folk. The tendency to take the duty of custodian in altogether too light-hearted a manner has been shown far too frequently in recent years. Public protests have been needed to persuade the Church to preserve Sir Christopher Wren's work in the City, and a great many more public protests are due on account of the new craze for introducing into village churches hideous flood-lighting arrangements that would disgrace a thirdrate cinema palace. It is a hopeful sign that the Consistory Court at Ely has made a move in the matter of the lost bells, though in this case it is but locking the stable door after the horse is stolen.

ASTRAGAL

#### ARRANGEMENTS

#### WEDNESDAY, JUNE 22

The Royal Institute of British Architecis. (At Hampton Court Palace.) 2.0 p.m. Garden Party. Reception of the guests by the President and Mrs. Guy Dawber.

#### THURSDAY, JUNE 23

At the Royal Institute of British Architects. 9.0 p.m. till 2.0 a.m. Dance. (Decorations by the Architectural Association.)

#### FRIDAY, JUNE 24

The Royal Institute of British Architects. (At the Hotel Cecil.) 7.0 p.m. The Conference Banquet. Presentation of the Royal Gold Medal for Architecture to Sir Herbert Baker, A.R.A., F.R.I.B.A.

#### THE ARCHITECTS' JOURNAL for June 22, 1927

# THE BRITISH ARCHITECTS' CONFERENCE

#### [ BY E. BERESFORD CHANCELLOR ]

DURING this week the British Architects' Conference, under the patronage of His Majesty the King, and the presidency of Mr. Guy Dawber, is being held in London, at the headquarters of the R.I.B.A. in Conduit Street, and among the schemes for the entertainment of the visitors from the provinces and elsewhere a series of visits has been arranged, not only to outstanding features in London, but to such notable places as Windsor, Knole, Hever, Penshurst, and Hatfield, as well as to such historic towns as Oxford, Cambridge, and Canterbury. The programme is so full and varied that one visualizes the visiting architects dreaming (if they have any time for sleep) such dreams as assailed the confused brain of Mr. Verdant Green after he had been taken round the Oxford Colleges on a notable occasion. The London programme alone is sufficient for what Ruskin would have termed a life's liberal education; and when one realizes that the peripatetic architects will be enabled to visit Trinity House, the Tower, the Port of London Buildings, the Mansion House, the Heralds' College, the British Museum, the Foundling Hospital, the Law Courts, the Temple, Lincoln's Inn and Gray's Inn, Kensington Palace, and no fewer than six of the City Companies' Halls (with a vision of tea at the Holborn Restaurant), one can imagine that they have been looking forward to this corvée with a certain amount of apprehension mixed with a not unnatural excitement. For, in truth, it is a gargantuan programme. It is easy enough to write down the names of these places, but think

what those names connote ! One imagines, of course, that the chief points of interest for the visitors will be the architectural features of the various buildings, but even then what a feast is here ! No wonder no other refreshment save tea is apparently thought necessary, or, indeed, possible, until exhausted nature finds relief in dinner intervals before the series of receptions are given.

It is needless to say that not all the places mentioned will be visited in one day, and choice may be made between alternative groups. One of these groups may be dismissed at once; it is that which comprises the British Museum and the Foundling Hospital, and I hardly know which is the more depressing. Besides, what are you going to concentrate on in the former? Its classic structure, the work of Sir Robert Smirke, or the acres of books; the Elgin Marbles or the Assyrian or Egyptian antiquities; pottery and glass or drawings and prints; coins or postage stamps? It would take days to see them all. And then the Foundling Hospital, which Theodore Jacobsen designed; it possesses a pathetic interest because it is moribund, but hardly an architectural attraction, although it is no doubt better than what might conceivably replace it if or when it is demolished. Much more productive should be the visit to the Inns of Court, for here you have collocations of buildings, altered as many of them have been by rebuilding and reconstruction, which somehow still retain an air of antiquity and mellowness, and a most delightful and surprising variety.



Fishmongers' Hall, London, E.C. The entrance hall as restored by H. S. Goodhart-Rendel.

By the way, it is to be hoped that Lincoln's Inn Fields has also been included, at least for a cursory examination of the exterior of some of its houses, for example, the two built by Inigo Jones, on the lines on which it was suggested to lay out the whole square; Newcastle House, designed by Captain Wynde; and the little stone-faced house next to it, the work of Soane, whose Museum close by would form an appropriate visiting place as well. Gray's Inn, with its warm red bricks and lovely garden (where Bacon used to walk), and Staple Inn, that quiet little backwater out of the turbulent stream of Holborn, hidden behind its Elizabethan houses, will hardly be overlooked, although the programme does not mention it, probably from fear of drawing attention to the great staring red Prudential offices, under whose weight lies old Furnival's Inn, where Pickwick Papers was written.

The wandering architects will only see the outward walls of the Bank, which Soane and Sampson, Taylor and Cockerell contrived, for it is but a heap of ruins now. However, Dance's Mansion House remains (by the way, the carving in the pedestal was executed by Sir Robert Taylor, before he gave up sculpture for architecture), although the so-called mare's nest, a sort of attic story, seen in old engravings, was mercifully taken down in 1842.

And here we are in the midst of those City Companies' Halls, some of which are to be examined. The Goldsmiths' Hall, designed by Philip Hardwick in 1835, on the site of one demolished six years earlier, with its portraits and its plate, among which is a cup said to have been used by Elizabeth at her coronation; the Mercers' Hall, rebuilt in 1672, some say by Wren, others think by Edward Jarman, with its modern front, in Cheapside, put up in 1879; the Stationers' Hall, erected in 1670, encased in 1800, and much altered and a new wing added eighty-eight years later, which stands on the site of old Abergavenny House; Brewers' Hall, which Pocock repaired in 1828, whose earlier structure, destroyed in the Great Fire-the fate of all these old halls-was rebuilt soon after, Wren no doubt having a hand in it; and Fishmongers' Hall, which Henry Roberts designed in 1831-33 on the site of Jarman's earlier red-brick, stone-faced structure, and which has in recent days been decorated so delightfully by Mr. H. S. Goodhart-Rendel, such an improvement on its old, dreary and depressing aspect. One imagines that the visitors will not be allowed to press on to the farther east without examining the Royal Exchange, designed by Sir William Tite, and opened by Queen Victoria in 1844, the third building on this site, with its series of frescoes in which the City's annals are portrayed. Trinity House, erected in 1793-5 from Samuel Wyatt's designs, and the Custom House, designed by David Laing (1814-17), which succeeded Ripley's, destroyed by fire in 1814, which had in its turn succeeded Wren's, also a victim to the flames in 1715, which again had arisen on the earlier one burnt down in the Great Fire; and Sir Edwin Cooper's Port of London Authority Buildings, one of the largest (which is saying much) and most important of our new structures, bring us to the Tower of London-and what can be said of the Tower in less than a volume? That amazing building has looked down on London's history for eight hundred and fifty long and pregnant years. What is curious is that even here, on this ancient time-worn structure, Wren, whose architectural presence still dominates London, has left his impress; and as we look at the stonefaced windows (in the Italian style) and the pepper-pot

turrets on the White Tower, it is of Wren (who contrived these additions, and, parenthetically, did so much other work here) that we think, almost to the exclusion of the original architect (was it Gundulph, Bishop of Rochester?) who raised this fabric as a palace for kings, a centre of government, and a significant sign of Norman dominance.

Adequately to examine such a mass of historic and architecturally interesting places as those I have mentioned, would obviously be the pleasant labour of weeks, and were it not that they have been made up into prize-packets (as one may flippantly term the alternative groups) it would be obviously impossible, even with the perambulating power of Asmodeus, to see them all. With so rich a feast spread out I confess, were I one of the visiting architects, I should have great difficulty in selecting which dish to partake of. If I selected the City Halls, I should all the time be envying those who were, at the same moment, examining the Tower, and vice versa; if I elected to feed on the beauties (and memories, so many are they and so pregnant) of the Inns of Court, I should have a feeling of envy for those who were being shown over some of our modern architectural wonders (whose memories will be in the future) which stand on spots which have had (as what spot in London has not?) some portion of an historic past. Devonshire House, not Hugh May's mansion, or the later one designed by Kent, but the present wondrous pile contrived by Messrs. Carrère and Hastings, in collaboration with Mr. C. H. Reilly; Bush House, where old Holywell Street and Wych Street used to remind one of the London Gay describes; and Adelaide House, which dominates London Bridge and has effaced St. Magnus. But it is not only the architectural wonders of the east that are this week being submitted to the expert criticism of the visitors. Today a drive has been arranged in motor charabancs which is enabling them to see Waterloo Bridge, now a centenarian on crutches, but with plenty of life in it yet, and Somerset House, perhaps the finest building existing in a city which is full of them. By the way, those who bemoan the loss of old landmarks might well recall this magnificent pile. For one cannot doubt that when the old palace was pulled down, and Chambers erected the existing stone-epic, there were those who regretted the loss of the Duke of Somerset's abode, and the abode, later, of so many of the Queens' Consorts, and saw in the new erection what many of the laudatores temporis acti see in the wonderful new structures with which London is now being covered.

Then the charabancs will proceed to Whitehall, past Barry's official buildings and Whitehall Gardens where Peel lived and died, and the Scotch Office where a royal duke once lived, by the statue of his nephew, that other royal duke who for long ruled over the War Office-but not the War Office that now stands where Carrington House (one of Chambers's creations) once stood. Whitehall is full of memories, for it once formed part and parcel of that great straggling palace from which one always visualizes the Merry Monarch passing, with his long strides, to feed his ducks in St. James's Park, or Mr. Secretary Pepys wandering in the "Matted Gallery," or the Privy Garden and seeing, not without satisfaction, Lady Castlemaine's smocks hanging out to dry ! But "the sights self" in Whitehall is that precious fragment of Inigo Jones's projected palace, a palace which would, had it materialized, have rivalled the Louvre and outshone the Escurial.

Pall Mall and its clubs, from the United Service to the R.A.C., will be passed, not, one hopes, without a flying glance of St. James's Square, which is so significant a spot, apart from many of its architectural features (the Adams and Brettingham are represented here) and its historic and social annals, because its creation by Lord St. Albans, in Charles II's day, inaugurated the West End, and first drew the great ones of the earth from the Strand and Soho. And so up St. James's Street with a glance at Henry VIII's palace gateway; St. James's Street, which has been entirely rebuilt (except for the shops of Messrs. Lock and Messrs. Berry, which linger amid so much change) since Fox and the Princewere tobe seen there, and Brunmell going into White's, or Sheridan staggering out of Brooks's; and Byron awaking there to fame.

I see that the drive which is to include all this, does much more, for it carries its burden (with memories by now that must make it dangerously overladen) into Piecadilly and Regent Street, with a glimpse of greenery in the Regent's Park, and back to Aldwych and Kingsway. Those on this drive will see some wonderful things; but I personally would prefer to be in the alternative one, which would take me to Kensington Palace, because the warm red-brick of that beautiful place would be rather a relief after the orgy of stone and reinforced concrete with which the new London is being made compact, and also because it always seems so interesting, apart from its traditions, as an example of a building in which one can see the distinctive touch of its original unknown architect, and that of Wren and Kent, who successively added to it, and created a palace out of the old Nottingham House, which the asthmatic William III purchased in order to be far from the damp and fogs that hung about Whitehall.

I wonder if it is within this mighty scheme of entertainment to assemble the visitors on the bridge in St. James's Park. One hopes so, for in all London there is surely no more beautiful spot, especially at this season of the year, nor a more significant one. For here you have on the one hand that mass of official buildings, the Foreign Office and the Horse Guards, with the pinnacles of the War Office and Whitehall Court rising beyond them, and glittering in the sunlight like some eastern fairy palace, a Kubla Khan's lordly pleasure house; and on the other, the royal palace, with the emblem of sovereignty floating in the summer air. No other city has anything to show comparable with these wonderful vistas, which link up the power and majesty of the country by something of that rustic charm which is its outstanding characteristic.

This brief summary of the delights that await the architects, who will no doubt all bring to their investigation special knowledge of their history and associations as well as their architectural features, will indicate the scope of the mental banquet prepared for them. Large and varied as it is, the critical will perhaps note certain lacunae. Personally, one is not so surprised at what is included in this itinerary as at what is omitted. The architects are to be shown the premises of Messrs. Selfridge, Liberty, and Peter Robinson; they are also to be introduced to the Albert Memorial, in which one can only hope they will find something to admire. But there is no indication that visits are to be paid to St. Bartholomew the Great, Smithfield (one of our greatest architectural treasures), or to St. Stephen's, Walbrook, which Canova said was worth coming from Italy alone to see; or St. Paul's or the Abbey. Nor does it appear that the Imperial Institute, that masterpiece of Colcutt's, is to be visited, nor Westminster Cathedral,

in which Bentley's genius expressed itself so wonderfully, and whose campanile rises even above the immense structures which are today being flung up towards the stars that blink wonderingly at a rapidly changing city.

#### THE ITINERARY

The full itinerary for the remaining part of the week is as follows:

#### WEDNESDAY, JUNE 22

10.30 a.m. to 1 p.m. Alternative visits: New London buildings. A charabanc drive with visits to Devonshire House, Bush House, and Adelaide House. New London stores. A charabanc drive with visits to Selfridge's, Liberty's, and Peter Robinson's. A drive round Central London. Motor charabanc drive to Waterloo Bridge, Somerset House, City Churches, Whitehall, Pall Mall, St. James's Street, Piccadilly, Regent Street, Regent's Park, Aldwych, and Kingsway. A visit to Kensington. Motor charabanc drive with visits to Kensington Palace, the museums, and Government buildings in South Kensington, the Albert Hall and Memorial. 1 p.m. to 2 p.m. Luncheon interval. 2 p.m. to 7 p.m. Garden party at Hampton Court. The party will travel to Hampton Court by motor charabanc from the West End via Richmond Park and Kingston to Hampton Court, and return via Ham Common. The Conference group photograph will be taken at 4 p.m. 7 p.m. to 8.30 p.m. Dinner interval. 8.30 p.m. to 8.30 p.m. Exhibition. There will be an exhibition in the main library and the galleries of the principal treasures of the R.I.B.A. library, including drawings, rare books, sketch books, etc., arranged by the Literature Standing Committee, who will provide stewards to give information informally about various sections of the exhibition.

#### THURSDAY, JUNE 23

to a.m. to 6 p.m. Alternative excursions: Knole Park, Penshurst, and Hever Castle. A charabanc drive to Wrotham, Ightham, Sevenoaks (lunch), Knole Park, Penshurst, Hever Castle, Edenbridge, Westerham (tea). Hatfield, Welwyn, and St. Albans. A charabanc drive to St. Albans Cathedral, St. Albans (lunch), Hatfield and Welwyn Garden City (tea). Greenwich and Blackheath, etc. A tour by steamer to Greenwich (lunch), visit to Greenwich Hospital and Observatory, motor charabanc drive to Blackheath, Morden College, Dulwich village (tea), and back by road. Windsor and Eton, etc. A tour by motor charabanc to Eton, Windsor (lunch), Windsor Castle, and return via Bedford Park. 9 p.m. to 2 a.m. Ball in the R.I.B.A. Galleries. A scheme of decoration will be arranged by the Architectural Association.

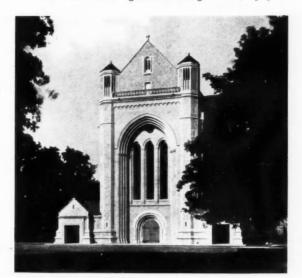
#### FRIDAY, JUNE 24

to a.m. to 6 p.m. Alternative excursions: A visit to Oxford. By train from Paddington to Oxford, drive round University and College buildings, lunch at the Mitre Hotel, and return by train. A tour of the North Downs. By train to Guildford, and drive by Farnham, Odiham, Hindhead (lunch), Haslemere, Chiddingfold, Leith Hill, Dorking (tea), Shalford, and back by train from Guildford. 7.30 p.m.—Conference banquet. The Conference banquet will take place in the Grand Hall, Hotel Cecil, Strand, W.C. The Royal Gold Medal for Architecture will be presented to Sir Herbert Baker, A.R.A.

#### SATURDAY, JUNE 25

10 a.m. to 7 p.m. Alternative excursions: A visit to Cambridge. By train from Liverpool Street, drive round University and College buildings, lunch and tea at the Bull Hotel, and return by train to Liverpool Street. A visit to Canterbury. By train from Charing Cross to Canterbury, visit to the cathedral, lunch and tea at the Falstaff Inn, and return by train to Charing Cross. 10 a.m. to 1 p.m. Alternative visits: The London Museum; the Tate Gallery.

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# OUR GREATEST MEMORIAL BUILDING

#### [BY OSBERT BURDETT]

T<sub>HE</sub> new Charterhouse Chapel, built from the design of Sir Giles Gilbert Scott, the architect of the new Liverpool Cathedral, is a beautiful and remarkable building, as all will agree who were present at its consecration on Saturday

last, June 18. The site, the design, the quarry in the grounds of the school. and the fact that the war memorial should be a chapel at all, deserve attention. When the school moved, in 1872, to its new buildings near Godalming, in Surrey, the fine plateau on which they stand was provided with a chapel at its end in the western modern Gothic style. These buildings, by the way, were also opened on June 18, fifty-five years ago, and it is interesting, therefore, that the war memorial building should be a new chapel rather than any other addition to the buildings on the site.

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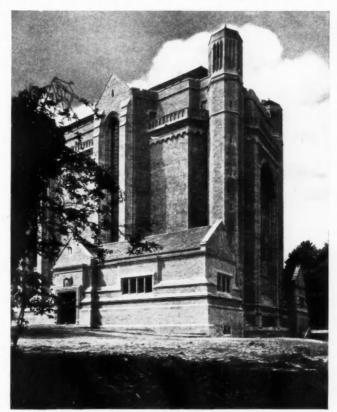
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The first effect on the spectator of the new chapel is to make him wish that Sir Giles could redesign the whole, for the inevitable comparison is all in favour of the new building. It occupies the eastern end of the plateau, and stands on the crest of a steep slope which falls sharply to the road beneath. From this it will be approached eventually by a flight of steps rising to the narrow eastern front.



The effect from below is, therefore, striking, for the steep crag is surmounted by a vertical mass of stone giving the appearance of a tall tower, height on height above one.

It is further to be noticed that the shape of the building is that of a chapel, not that of a church, and there can be no question that the sense of a particular corporate worship is more manifest by two lines of opposed stalls than when rows of boys face the east as if they were a miscellaneous congregation. But the oblong building that the chapel-shape necessitates presents an awkward

Charterhouse School War Memorial. By Sir Giles Gilbert Scott. Above, view of the west end across the cricket ground. Below, the east end looking from south-east.

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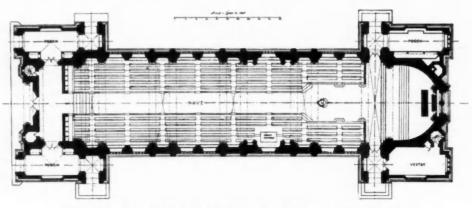
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problem to the architect, since a long, tall, narrow building is not in itself a beautiful form. The well-known criticism, that the outside of King's College Chapel at Cambridge resembles a billiard table with its legs in the air, is really as much a criticism of this shape as of the turrets and pinnacles that give a horrid point to the resemblance. As, moreover, the new Charterhouse Chapel stands alone and without immediate relation to the buildings near it, the sense of unity and repose that the architect has achieved is doubly effective. His building is self-sufficient and contained, though it has no help from its neighbours, such, for example, as its place in a quadrangle would give.

While the four porches at the corners of the building do, indeed, tie it gracefully to the ground and prevent it from appearing an upstart, it is also true, I think, that the spirit of the design is most compelling when the building is seen from the south or north side, with the great walls with their five double buttresses, which practically hide the five lancet windows, towering above one. Here, surely, is the clue to the sense of satisfaction given by the exterior.

The motive or theme of the design is that of "the wall," and the architect has used all his art to emphasize the mass, the strength, the beauty, of this dominant conception. The result is overpowering in the right way, for in modern times the ideas of strength and of beauty are too little associated. Indeed, a layman is inclined to ask himself if the conception of the wall is not the most satisfying way of overcoming the awkwardness of the isolated oblong building, for what is more simple or more satisfying, what more strong or more beautiful, than a wall's simplicity? Turn from this towering mass of stone, relieved and emphasized by the five pairs of buttresses, to the spiky constructions of the older buildings near at hand and you discover one reason why the new chapel has the repose and simplicity which they

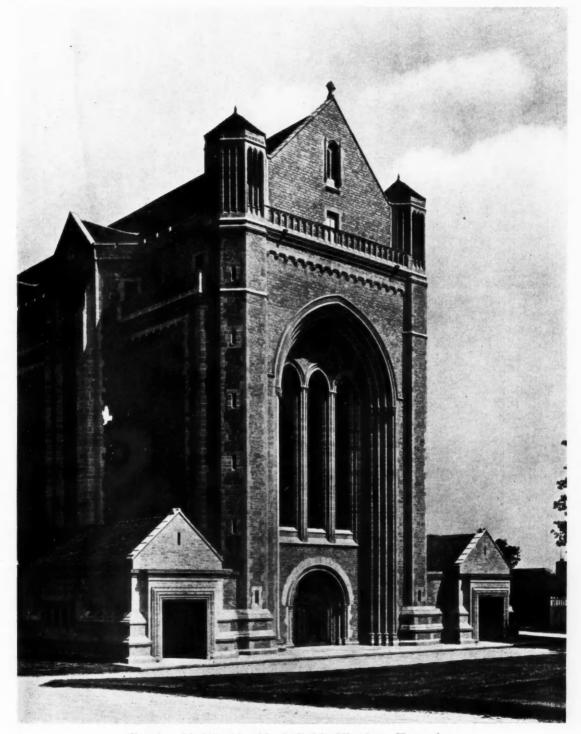


Charterhouse School War Memorial. By Sir Giles Gilbert Scott. Above, left, the west door; and, right, the entrance door to the mason's porch. Below, the plan.

lack. To maintain the conception of the wall it was necessary that the fenestration should be subordinate, and the five windows on each side are practically invisible, except when you happen to stand opposite to one of them. The buttresses conceal the lancets so effectually that they diminish into narrow slits, hardly more, indeed, than the shadows of recesses. It is the wall that dominates you,

and everything is done to enhance its height, its mass, and its simplicity. The gallery that runs round the outside of the building is no more than the point of rest given by the capital of a pillar, for the lancets between the buttresses are crowned by gables that carry the eye up to the skyline of the roof.

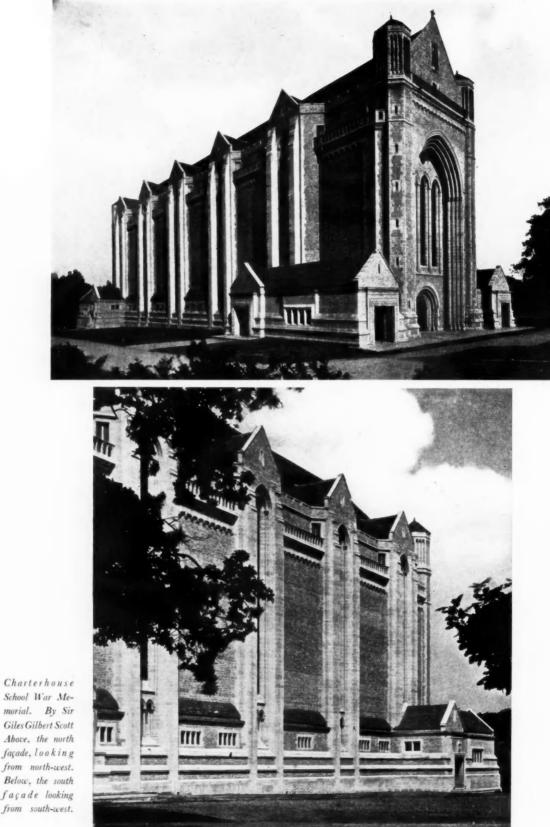
The sides are satisfying and splendid, and they lead you



Charterhouse School War Memorial. By Sir Giles Gilbert Scott. The west front.

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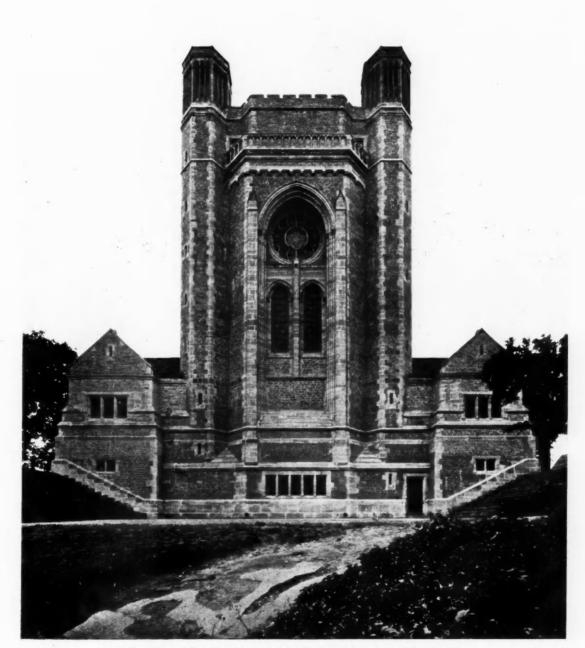
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School War Memorial. By Sir Giles Gilbert Scott Above, the north façade, looking from north-west. Below, the south façade looking from south-west.

to turn with interest to the east and west ends, for the narrow vertical fronts will clearly offer a greater difficulty. Both these ends have towers to flank the central recessed window. The recess is formed by a pointed arch enclosing, at the west end, three lancets with a small circular window in the tympanum above, and at the east a large rose-window with shorter lancets below it. Nothing, I fancy, can make the

narrow, vertical fronts of a tall, oblong building entirely satisfactory; and again, of course, the windows must bear a proportionally larger part in them. The abruptness of the skyline of the west end is softened by the gable which links the corner turrets, complementary to the porches at the corners, which modulate its spring from the ground. Here, as elsewhere, there is a grateful absence



Charterhouse School War Memorial. By Sir Giles Gilbert Scott. The east end.

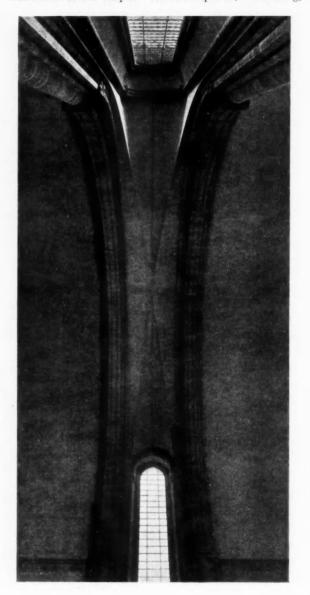


of ornament, and a primitive grandeur is the spirit of the whole.

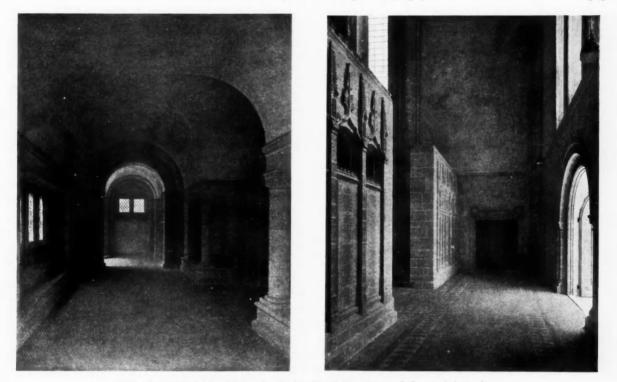
A quarry in the grounds of the school has supplied the Bargate stone with which the building is faced; most of the dressings are of Weldon stone, both without and within, and the work has been done by direct labour on the spot, without the ordinary general contractor, under the supervision of Mr. A. Boxall, the resident clerk of works. The roof is covered with hand-made sand-faced tiles of a soft grey tone, and the ceilings are plaster-vaulted, except for the transverse arches, which are of Weldon stone. It may be said at once that the colour of the stone, near that of a honeycomb and therefore not very different from the travertine that makes so much of Rome a golden city, is very pleasant, even in its first newness of today.

> Charterhouse School War Memorial. By Sir Giles Gilbert Scott. Above, the east end and reredos. Below, view of the groined vaulting to one of the narrow window bays.

As we pass into the interior by one of the four porches, we notice the (deliberately) faint carving over the outside doors, and the primitive, but effective, carved capitals of the pillars that carry the vaultings within. They repeat the idea of the whole building, which is that of an original conception based on, but modifying, a simple, almost archaic tradition, as if the architect were looking backward from today and thinking out afresh some conception that might almost have occurred in the early days of lancet windows. Once within, and looking toward the east end, where the purpose of the building is emphasized in the sarcophagus included in the reredos, you notice again that none of the side windows can be seen. The clustered shafts, corresponding with the double buttresses on the outside, lead the eye from arch to arch toward the chancel. These shafts are also in pairs; the windows run up into the vaulting, and the vaults themselves are extraordinarily narrow. Hardly visible from the end, these narrow vaults are one of the fascinations for the eye to those seated on either side of the chapel. When completed, the seating,



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Charterhouse School War Memorial. By Sir Giles Gilbert Scott. Left, one of the porches, with stone benches for school books; and right, view inside west entrance along memorial screen.

arches above. These open spaces of white, especially the pair divided by the reredos, seem to ask for magnificent pieces of tapestry, in such colour as can still be had from the Morris looms. No doubt one reason why the building seems so well lighted, in spite of its invisible windows, is because the walls and the woodwork are so light in tone. The only darker shades at present are the stone of the reredos, the black cross hanging against the pair of lancets in its centre, and the two figures in the stained-glass windows of the lancets themselves. If the aim of the interior is to make the reredos the focal point, then it must be admitted, in my opinion, that the reredos is somewhat disappointing. Its top seems to be confused with the rose-window on which it trespasses, and neither emphasis nor proportions are very happy. Indeed, the

of colour darker in tone than the white plaster between the and it is the outside, I believe, that the Charterhouse

with its canopies and panelling, will, in time, form a band interior of the building is less satisfying than the outside,

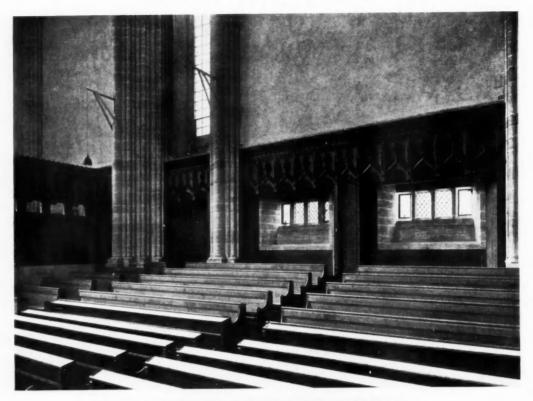
boys will learn to love, and which will remain, when they have left the school, their abiding memory. The conception of power and beauty is best achieved by the exterior, where the dignified simplicity embraces the spectator with a protective strength and awe in which humanity can confide and before which humility is a blessing. So far as a limited experience goes, the new Charterhouse Chapel is the most satisfying architectural war memorial that I have seen.

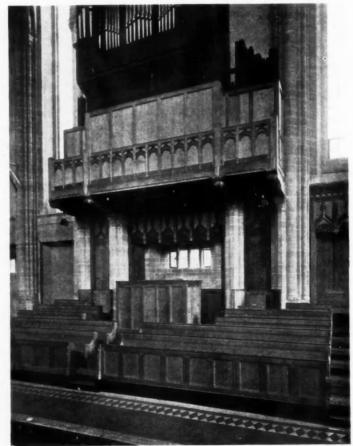
Charterhouse School War Me-

morial. By Sir Giles Gilbert Scott. The chapel door in one of the porches.



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Charterhouse School War Memorial. By Sir Giles Gilbert Scott. Above, the north-west corner. Below, theorgan console and lower part of organ case.

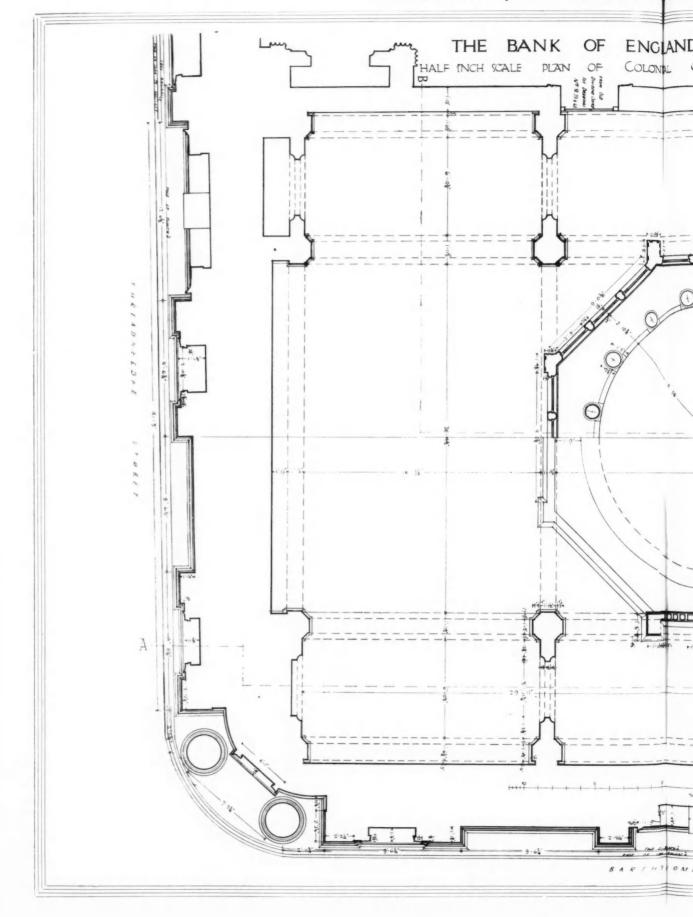
## SOANE'S BANK OF ENGLAND

#### viii : THE COLONIAL OFFICE

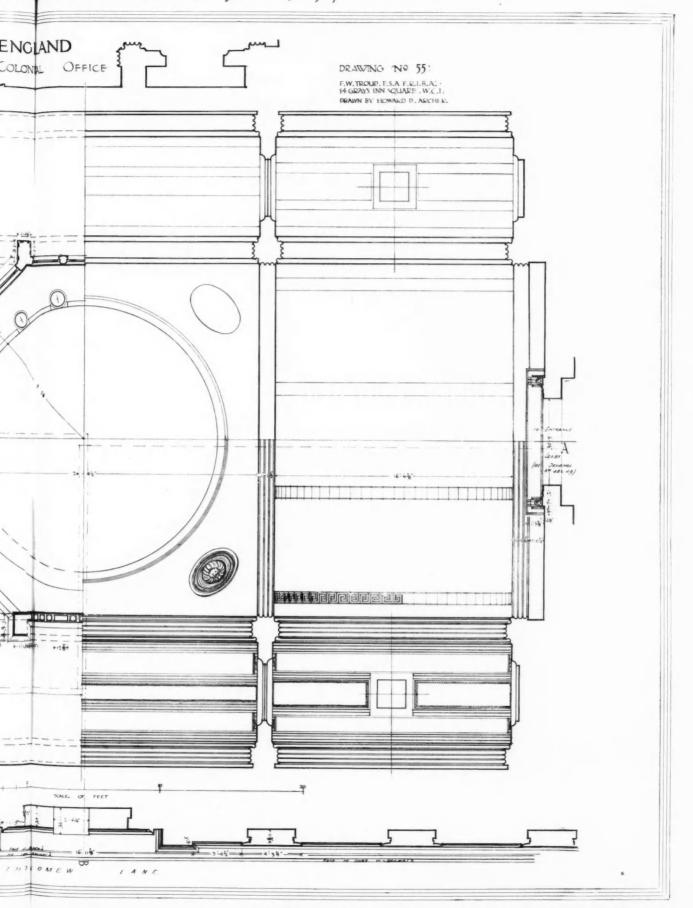
#### a: The Plan

The Colonial Office, together with its neighbour, the Old Dividend Office, were erected by Soane on the site of the remaining Taylor Transfer Offices which were pulled down in 1818. The new halls were practically identical in their main dimensions and had the same fluted stone piers rising without break into stone arches supporting dome and barrel vaults. They differed in surface treatment and in the form of the lantern, the latter feature in the Colonial Office being as simple as that in the Old Dividend Office was elaborate. The plan shows the absence of relation between the hall and the façades of Threadneedle Street and Bartholomew Lane, behind which it was placed.—[H. ROOKSEY STEELE.]

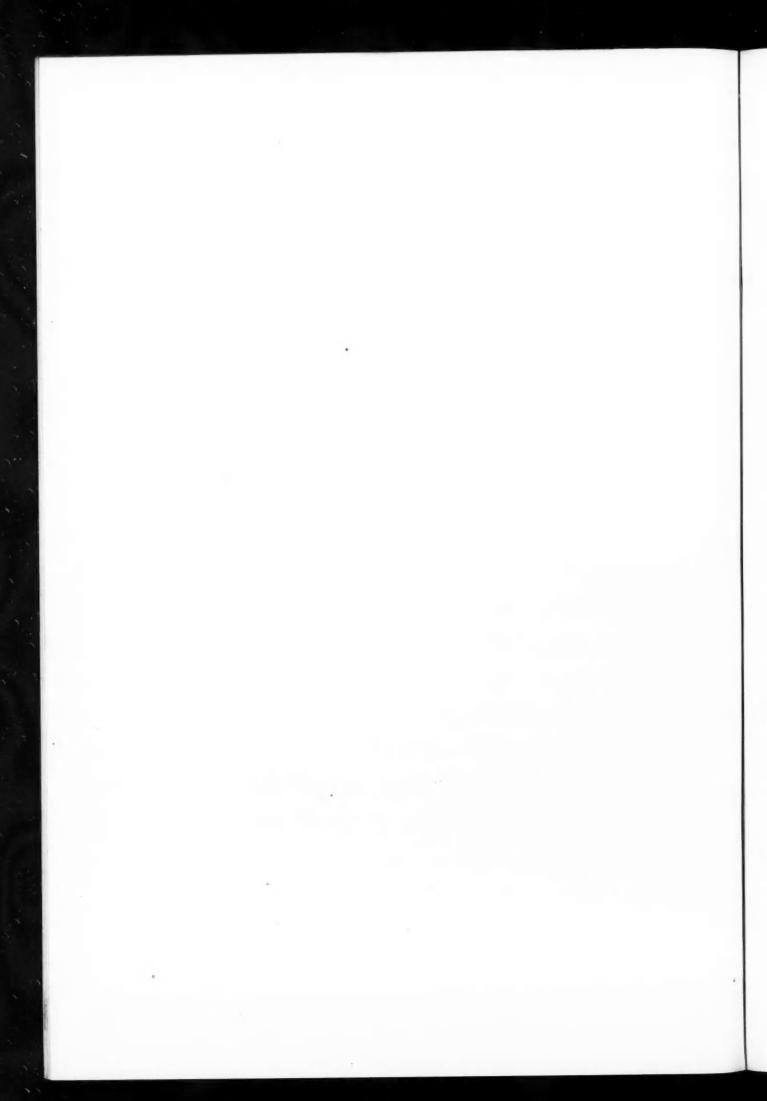




ED IAWINGS SUPPLEMENT FOR JUNE 22, 1927



SOANE'S BANK OF ENGLAND. MEASURED DRAWINGS OF THE INTERIORS. (viii) THE COLONIAL OFFICE. (a) THE PLAN



# PLYWOOD OF TODAY

#### [BY JOHN C. ROGERS]

#### ii: DEFINITION, MANUFACTURE AND CONSTRUCTION.

As the name denotes, plywood consists for the greater part of laminations or veneers of wood cemented together with the grain of adjacent layers at right angles. The typical product is the three-ply board with which everyone is well acquainted, though its many qualities are not understood. This consists of two sheets of veneer laid with the grain parallel, while interposed is a third veneer with its grain at right angles to the outer plies, the three being united by a powerful glue or cement under pressure, and herein lies the secret and success of the product. High-class plywood would be impossible without the special glue or cement that has been specially devised and is kept a close secret in that section of the trade which uses it exclusively. In the previous article the weakness across the grain of ordinary sawn timber (especially if it be sawn thin) was pointed out. It will be realized that the method of constructing plywood overcomes this disadvantage comp'etely; in fact, compared with plain sawn wood of equal thickness, plywood is very much stronger, both in length and breadth, and, regarding the latter dimension, the improvement upon sawn timber is immense, jointing is avoided, and the board or panel is immune from shrinking and splitting. Moreover, elasticity is much increased.

Before further describing the actual manufacture of plywood, it will be of interest to note the special methods by which the trunk of the tree is converted. The supplies of material are derived from the rotary cutting of logs by which very large sheets of veneer thickness are pee ed from the log. While this peeling of the log is

an alternative to the older method of conversion by sawing, it will be realized that the result is practically a different commodity, and, as the trade claims with some justification, the usefulness of timber as an industrial material is considerably extended thereby. Rotary cutting at once suggests the question: What is the limit to the length and breadth of the sheet that the knife will peel from the log? For surely this will control the size of the finished product, and suggests sheets of considerable area. I find, however, that many technical points have to be taken into account, and that it is not simply a matter of peeling a big log and keeping it going as long as possible. Of course, the breadth of the sheet is determined by the length of the log that the lathe will take; but when it comes to cementing the plies or sheets together, the superficial dimensions of the finished board will depend upon limitations imposed by the machinery or plant, and, generally speaking, the larger the presses the wider and longer the plywood boards.

In the previous article I commented on the difficulties of seasoning sawn timber, and showed that a condition of real stability was seldom, if ever, reached. When, however, the wood is peeled off in a very thin sheet it becomes comparatively simple to dry it to a degree exactly to suit the methods of making plywood. The log is cut in a wet state, but the veneer is immediately put through the drying process, which induces the necessary shrinkage and stabilizes the cellular structure of the wood. Then follows the cementing of the surfaces and the passing of the assembled veneer into hydraulic presses, which are kept hot while the drying-out and setting of the cement is completely accomplished. It will, therefore, be seen that, by the very nature of the processes, wood



A table and panels of plywood. For Messrs. Austin Reed. By P. J. Westwood and Emberton.

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has been converted into something that is an advance on wood, a new material that can claim greater stability and permanence than it could ever have possessed as ordinary solid timber.

I must now pass on to a short description of the methods employed in manufacture and construction. The log from which it is intended to cut the veneer is sawn into suitable lengths, and is then mounted in a powerfully-built lathe between the centres in the same way as a turner sets his work. It is then rotated against the edge of a steel blade or knife which extends the full length between the centres, the thickness of the cut being adjustable. Inasmuch as the log is likely to vary in diameter, the cut obtained from the first few rotations will be narrower than the

full width, of irregular outline, and possessing holes or gaps in the surface; but this quickly alters to a full width, and to a beautifully smooth peel directly the log becomes a true cylinder, and thence onward the veneer should be as perfect as the state of the wood will permit. Towards the centre knots are encountered, and those that are dead generally pull out, leaving small holes. The veneer is cut into sheets of certain sizes as it comes off the lathe, and sorted for quality according to freedom from knots or otherwise. But from the manufacturer's point of view smooth peeling is essential. Providing knife and log are in perfect condition for cutting, future labour in smoothing the surfaces is unnecessary with most woods employed. It is important to remember that practically all birch and alder veneers are made up and sold with the surface just as it came from the rotary cutter, whereas it has always been found necessary to put pine-faced ply-



wood through the sanding machine to render it smooth and free from small splinters in the grain.

The next operation in the manufacture of plywood is the drying of the plies. In the case of most of the plywood produced today the plies or veneers are carefully dried to a definite moisture content before being built up into a plywood board. There are many methods of drying in use in modern plywood mills. Some are extremely simple, and others are more elaborate and require the installation of costly machinery. The usual method adopted is to pass the plies through a roller, endless belt of hot-plate drier, the operation usually taking about forty-five minutes. The drier may be equipped with horizontal moving bands arranged one



above the other. The pliesplaced on these bands are always in contact with warm air, and move slowly through the drier at a rate which ensures that they shall be dried sufficiently on emerging at the other end. This careful drying results in a stable condition of the wood fibres and ensures perfect flatness of the finished boards.

The processes described above are those usually employed in a plywood factory. There are some mills, however, in which a somewhat cheaper process of manufacture is adopted, though the resulting product is a thoroughly sound board. Such factors, combined with presence or absence

Above, left, panelling in plywood; and right, greywood veneer laid on plywood; for Messrs. Peter Robinson. By T. P. and E. S. Clarkson and H. Austen Hall. Below, veneered plywood panelling for Messrs. Austin Reed. By P. J. Westwood and Emberton.

of natural faults in the wood, constitute the basis upon which qualities are determined, and a general axiom for users of plywood is to specify plywood in the same manner as ordinary timber is specified, i.e. if it be required for face work and will remain exposed, nothing less than first quality will suffice, and so forth. More will be said about qualities in the next article.

The actual gluing or cementing next calls for a few remarks. In the words of a well-known authority in the trade, " The glory of the best European plywood is the waterproof cement which is used." It will be readily understood that the success and usefulness of plywood very largely depends upon the permanence of the cement holding the plies together; the composition of this cement is a carefully guarded secret. Years ago glue was used that was affected by damp in the same way that has caused veneers on old furniture to come away, but this is entirely altered with the powerful waterproof cement now used, which ensures lasting adhesion under all climatic conditions. There are several waterproof glues now on the market, prepared by mixing water with a dry powder, so dispensing entirely with the messy glue-pot always boiling over on the gas-ring. Builders are turning to these for general use in their joiners' shops in increasing numbers, but joiners do not take readily to the new material. Boards glued up with rubbed joints in which the waterproof glue has been used, and fixed in new, damp houses, will not come apart. The hot presses through which plywood of either process passes after gluing, though large, are necessarily limited in size, and this, it almost goes without saying, is one important factor controlling the dimensions of the sheet of finished plywood board. Necessary trimming of ragged edges still further reduces the superficial area.

I must conclude this article with a note on construction, because it is most important to understand that two principal types are made, though sizes and thicknesses must be held over till the next article. Plywood may be divided into two main classes under construction; and the first may be again subdivided into a and b. 1(a): The three-ply board, which, as I have already explained, is assembled with the grain of the core veneer at right angles to that of the two face veneers, and 1(b): A multiplication of the layers of veneer, adhering strictly to the principle of setting the grain at right angles in adjacent plies. This is termed multi-ply, and the thicker boards contain fifteen layers or even more. 2: The second class is designed for boards that start at 3 in. thick, and are built on a different principle; first, a core is made of a number of narrow strips or slats which are glued and pressed together side by side on edge, to form a large sheet, and upon either side of this ordinary plies are glued down giving the same surface appearance as multi-ply, but, of course, quite unlike in section. Plywood so made is termed a " laminated board," where the core material is of very narrow slats; and "batten boards" when the core strips are sawn and the board is thick. This form of construction gives remarkable rigidity, to which I will refer when dealing with the uses of plywood.

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Based on laboratory tests, the following facts are worth bearing in mind. First, dealing with multi-ply which contains a larger number of plies than three-ply boards, we have a wide, long board in which tensile strength and resistance to shear are equal to these values in an ordinary solid board of the same wood, but present in the plywood in both dimensions of width and length; and in width, exceeding the solid board five or six times without joint. Most of the fibres having been severed in peeling the veneer, such a board is practically immune from shrinkage, and in any case such strains as may survive are checked by those of equal quantity in the opposite direction, so that the structure may be said to be at rest. Where it is important to provide adequate strength against splitting, a board should be selected with a large number of thin plies, and, generally speaking, the plies should all be of the same thickness, especially in the thinner kinds of boards and where the common woods such as birch and alder are used; but the practice is varied in the more expensive and thick grades of higher class material, which I will deal with in the next article.

[To be continued]

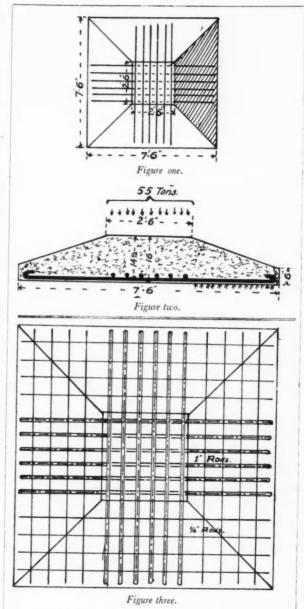
# FOUNDATIONS FOR PILLAR OR STANCHION

#### [BY PROFESSOR HENRY ADAMS]

In considering this class of reinforced concrete foundation it will be instructive to take the same load as with the grillage foundation (see the JOURNAL for June 8) and the same supporting power of the soil, say 55 tons total load including foundation and  $1\frac{1}{2}$  tons sq. ft. resistance of soil, base of pillar a ft. 6 in. square, base of foundation 7 ft. 6 in. square. The main reinforcement will be placed very similar to the top row of the R.S.J. grillage, and the same in both directions, as in figure one.

Length of cantilever= $\frac{7\cdot 5-2\cdot 5}{2}=2\cdot 5$  ft. Area of the cantilever as

shown shaded in figure one  $=\frac{7.5+2.5}{2} \times 2.5 = 12.5$  sq. ft.,  $12.5 \times 1.5$ 



=18'75 tons reaction of soil.  $18'75 \times \frac{2'5}{2} = 23'4375$  tons-ft. B.M.  $23'4375 \times 2,240 \times 12 = 630,000$  lbs.-in. bending moment. The effective section required will be given by the formula:—

B.M.=95  $bd^2$ ,

or 630,000 
$$\times$$
 95  $\times$  2.5  $\times$  12  $\times$  d

:  $d^2 = \frac{630,000}{95 \times 2^{\circ}5 \times 12} = 221$ , from which  $d = \sqrt{221} = 14^{\circ}5$  in.

effective depth. Allow, say, 1 per cent. of the effective sectional area of concrete for the sectional area of reinforcement, then 255×135×1455

 $\frac{2^{\circ}5 \times 12 \times 14^{\circ}5}{100} = 4^{\circ}35$  sq. in. Assume six rods, then each will be

0'725 sq. in. area, or say, 1 in. diameter, at 5 in. centres.

The corners of the slab, as shown in figure one, have no reinforcement, while their overhang from the main reinforcement is rather more than the strength of the concrete alone may be able to resist. The simplest remedy will be to lay  $\frac{1}{4}$  in. rods parallel with the main reinforcements and between them and the edge of the slab at, say, 6 in. centres. All rods to be bound at each crossing with No. 16 S.W.G. soft steel wire. Another method of reinforcing is to use expanded metal in a double layer reversed, keeping the same effective depth. According to theory the ends of the reinforcing bars should be bent up or hooked in order that they may not draw under the stress, but it is not often done in the case of foundation slabs. It will be desirable to add some shear stirrups. They can hardly be calculated, but it may be assumed that  $\frac{3}{16}$  in. rods twisted on each alternate main bar and bent outwards at an angle of 45 degrees will be sufficient at 6 in. centres outside the area of the base of the column. The completed foundation is shown in section in figure two and plan figure three.

Such foundations as this are generally used for reinforced concrete pillars and may be circular or square according to the cross section of the pillar. Square construction is generally preferred because it lends itself readily to form-work of flat boarding. The size of the pillar will depend upon its height and the load to be carried; the base may be extended to give a greater area, but this should form part of the foundation.

There is a method of burying the end of a stanchion in a block of concrete to serve as a support for the load and also as a resistance to the action of the wind in causing a bending moment on the stanchion, but as this requires special consideration it had better form the subject of a later article.

# LITERATURE

#### ON MODEL MAKING

LONG before Bush House became one with London, I remember peeping through a hole in a box containing a beautiful model that had been made personally by Mr. Harvey Corbett the architect, in order to be sure that his building made, on the one side, a fitting termination to the vista down Kingsway, on the other, a pleasant background for the historic church of St. Maryle-Strand, and from all sides a noble composition. It was an affair of pasteboard and ingenuity, but so delicately and accurately made that it could be fitted into photographs of the existing surroundings to deceive the eye completely while truthfully depicting the future. I believe, too, that it had the property of charming grave councillors into acquiescence and bending by-laws. It was, in short, a magic model. However that may be, it was so important and so useful in all the stages of design that it may well serve to illustrate what Mr. Harvey in his more scientific analysis of the model makes manifest, namely, that models are not only necessary for the purpose of instructing clients and explaining completed designs, but can be made to register the growth of the building nearly from its inception, and, being used so, are a guard against the pitfalls of " slick " draughtsmanship and a surer guide towards that harmonious unity which can be attained best when a building is designed in the solid and from every side.

This, I venture to think, is the highest use that the model can be put to; therefore I am glad that Mr. Harvey devotes a good deal of space to the elaboration of the best methods of using the model as a medium for design. His explanation of the technique of the art as he practises it, will be found a mine of suggestion to all those whose care for good design is a constant torment to them. When they have tested the joys of studying their designs in accurate miniature, they will share with him the wider enthusiasm for the art as a whole, and be spurred perhaps to make a model for the sake of the thing itself; or, at least, to present with their next completed building a tiny model that may be kept on the premises for ever.

One sometimes comes across this last type of model when measuring old buildings. I can remember one in Oxford, constructed of built-up sections in wood, undecorated and severely mounted a not too elaborate grace note from the designer, and discovered therefore among the cobwebs. It might be an interesting variation to make a model of intentions unfulfilled—a model richly dight to set beside the ungarnished boxwood of the sober truth. But this again carries us into the richer field where the model is an end in itself and not the handmaiden of design. It is a rich field. East and West make contribution, and the programme is infinitely varied, ranging from the precious fancies of Eastern potentates to those most beautifully constructed models of ocean liners that keep us dawdling before the steamship companies' windows on the streets of this commercial West.

These things are, like toys in childish days, very serious things. They represent to us the truth of the subjects they portray, being worth more than whole libraries of erudition. In the same way do architectural models minister to our needs as creators of



Above, a model showing the effects produced by simple massings, and by the contrasts of solids and voids, coloured shutters and foliage. Below, the same model opened for inspection of the interior rooms on the ground- and first-floors. The house is by Stanley Hamp, and the model by Miss Swift. [From Models of Buildings: How to Make and Use Them.]

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buildings, turning our arrangements of lines into the solid truth of the matter, before we have set stone upon stone. Surely models are indispensable to good design, and since it is foolish in hurried times to learn every new thing by slow experience, Mr. Harvey's book is an introduction to the art, commensurably indispensable. E. MAXWELL FRY

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Models of Buildings : How to Make and Use Them. By William Harvey-Architectural Press. Price 7s. 6d.

#### THE FUTURE OF THE COUNTRYSIDE

If the lover of rural England stands too long while the river of indiscriminate progress flows on, he will find his fair heritage engulfed. Therefore he must "adopt some bolder policy than that of gazing at the flowing stream." That is the moral drawn by Mr. Eriggs in his timely homily based on the text from Horace: "Rusticus exspectat dum defluat amnis." The slim volume, addressed to the dweller in the country and also to the "urban invaders of the countryside," is one of the topical pamphlets in Messrs. Kegan Paul's Today and Tomorrow series. It is a sane, tactful, and constructive, at times a passionate, pleading of an urgent cause which is " no petty professional grievance," but an affair of public concern. The well-qualified advocate bids us look on this picture and on that-the English village before and since the advent of coal and petrol-not simply in order to decry the latter and to suggest shortsighted reversion to conditions implicit in the beauties of the former, but in order to formulate a future policy of "saving the best of the old and making the best of the new." He gives a salutary reminder that "ruin in itself is not a worthy subject for admiration," but that there is a "genuine æsthetic attribute" in the mellowness of antiquity. He indicates that much of the beauty of old buildings arises from the simplicity necessitated by limited available materials, a condition reversed at the present day. Among the inevitable developments of modern life, combined with pre-war and postwar and petrol influences, the "bungalow" is responsible for much of the unsightliness desecrating the countryside; but the manner in which the author touches the subject of this and similar types of dwelling shows a sympathetic comprehension of the pathology of the "bungalow craze." He treats roads, "litter," zoning, and other branches of his subject with common sense, stressed sometimes by a mordant wit. The final section of this pleasantly presented little book mentions ways of attempting preservation of threatened rural beauties, and outlines the functions of various organizations aiming at this desirable, but difficult, goal. Addresses of the most outstanding of these are given, so that inaction of individuals and local bodies cannot be excused on the plea of ignorance of suitable agencies to which to apply for advice or assistance. To many lovers of England's fields and trees "town planning" is a phrase suggesting kerbed footways, straight, treeless motor roads, and the artificial orderliness of an industrial suburb. This is partly owing to the name, which seems to imply a concern with urban amenities to the exclusion or destruction of rural. Incomplete interpretations of this kind should be rarer after reading this book. "Town planning is idealized common sense."

One is tempted to quote extensively. The poignant passage

beginning, "And, lastly, there are the trees . . ." crystallizes the tragedy of drastic tree-felling. The lamentable picture of the beauty spot where " all the charm of the place has gone in bribes to the tripper, and when he tires of it the ugliness will remain," is, alas ! no isolated case. But to quote overmuch would be to skim from the few score pages the cream which one would leave to the reader to imbibe and digest for himself. Townsman, countryman, garden-citizen, week-ender, and official will find half-a-crown well spent in acquiring, and an hour well occupied in reading this study of one of the most pressing problems of our time. Public opinion is the ultimate determining force that can detain, divert or direct the oncoming flood. Rusticus can gain nothing by the " tactics of Canute." V. M. C.

Rusticus, or, the Future of the Countryside. By Martin S. Briggs. London : Kegan Paul. Price 28. 6d.



Above, a model by Miss Swift of a house by Stanley Hamp. Below, a sketch model in plaster by F. V. Blundstone. [From Models of Buildings: How to Make and Use Them.]

### CORRESPONDENCE

#### THE ARCHITECTS' REGISTRATION BILL

#### To the Editor of THE ARCHITECTS' JOURNAL

SIR,—University representatives in Parliament have a direct interest in the promotion of this measure, which must improve the general, as well as the special, education of the great profession of architecture.

We are entitled to look to the experience of other professions to gauge the effects of registration. The experience of my profession has been that registration has transformed out of all knowledge the education and the social status of the medical practitioner. No one, least of all the general public, would wish to go back in medicine to the system which prevailed before 1858, the year in which medical registration was enforced. The phenomenal improvement in the personnel of the medical profession since that date can best be realized by comparing the medical practitioner of seventy years ago, as depicted in contemporary literature, with the medical practitioner of today. Registration in medicine has not had the result which seemed to be feared by many speakers in the debate on the present Bill. Avenues for poor students have been nowhere closed; in my small circle of acquaintance I can name three famous surgeons who started life, one as a butcher's errand boy, one as the son of a small village tradesman, one as the son of a yeoman farmer. Registration in medicine has not increased the cost to the general public or diminished the scope of medical services, which are everywhere obtainable at a very moderate price.

The application of science to architecture, long overdue, implies a grounding in science and in general education which it is the main purpose of this Bill to achieve. We have just been celebrating the centenary of Lister, who, by applying science to surgery in the face of the most bitter opposition of the "practical" (i.e. unscientific) men of his time, has lifted that art to a plane so immeasurably higher that it looks to those who can compare the two periods, before and after Lister, as if they had come into quite another world. What science has done for surgery and medicine it can also do for architecture.

An unaccountable nervousness seems to be exhibited that the architect, when he becomes better taught, will become less efficient. Surely that is the most heinous of heresies, contradicted by experience in every other walk of life. The need for more scientific knowledge in the building and planning of houses may be gauged by a very cursory inspection of the recent report of a committee of the Privy Council on Scientific and Industrial Research. Some subjects of investigation which are therein mentioned may be cited: Heating and ventilating problems; moisture and condensation on internal wall coverings; effects of weather on building materials; architectural acoustics, etc. I would emphasize two quite new needs which press to be satisfied. The intelligent use of sunlight is one: I look forward to the time when every house, however humble, shall have its solarium or sun chamber, where sun baths may be habitually taken. The second is the provision of labour-saving devices in our houses, by which the architect can save our women-folk from a strain which is one of their most grievous burdens of today-the strain of running antiquated houses with very inadequate domestic service.

From a strictly utilitarian aspect it is obvious that the work of the architect is becoming daily more and more necessary; but a more intangible, though perhaps even more important, influence which architecture exercises, lies in the degree in which it can procure or deny the attainment of beauty. The curse of our modern civilization, it is more and more being realized, is the prevalent ugliness of our material surroundings made by man as contrasted with the works of Nature, and the conscience of the community is being largely awakened to the insidious evil which ugliness brings in its wake. The continual contemplation of ugliness may, indeed, account for much of the discontent and misery of modern civilization. Those interesting persons who, as Calverley said, "Go mad and beat their wives, plunge, after shocking lives, scissors and carving knives into their gizzards," may have been stimulated to those unpleasant actions by the ferocity bred by ugly surroundings, and surely the crime of crimes is to deface a countryside such as ours, beautiful beyond compare, with the execrable products of the jerry-builder, products the hideousness of which is only accentuated by comparison with the relics of an older domestic architecture such as some of the lovely Tudor examples which still survive.

It is to be hoped that the promoters of this Bill, which obtained its second reading on promises of amendments calculated to partly nullify its value, will stand to their guns, and that an enlightened public opinion will support them in carrying through Parliament a measure which can only result to the public benefit.

#### E. GRAHAM LITTLE

#### PROTESTANTISM AND ART

#### To the Editor of THE ARCHITECTS' JOURNAL

SIR,-I came across the following in Letters from England, by Karel Capek: " If you search in the London collections for ivory carvings . . for the perfection of human work, you will find it in the Indian Museum and the Babylonian gallery. . . . But then you leave this accumulation of all the world's treasures and you can ride for hours and miles on the top of a bus, from Ealing to West Ham, and from Clapham to Bethnal Green; and you will scarcely find a place where your eye could derive pleasure from the beauty and lavishness of human work. Art is what is deposited behind glass in galleries, museums, and in the rooms of rich people; but it does not move about here in the streets, it does not twinkle from the handsome cornices of windows, it does not take up its stand at the street-corner like a statue, it does not greet you in a winsome and monumental speech. I do not know: perhaps, after all, it is only Protestantism which has drained this country dry in an artistic respect."

#### KENNETH GLOVER

#### THE BUILDING INDUSTRY

#### To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Your leader under the above heading suggests that "it is false pride and petty snobbishness" that a bricklayer should feel uncomfortable when riding home "beside a black-coated worker." Surely this is nothing more than a natural feeling of dislike to cause discomfort to others. Anyone who has seen a group of bricklayers and plasterers returning home in the tube must be conscious of the reason for this feeling in contact with well-dressed men and women—particularly women. If the tired workman prefers to straphang, don't let's call it "snobbishness." You and I, Mr. Editor, may have invited building workmen

You and I, Mr. Editor, may have invited building workmen to our homes; but have we not first reflected on whom we might ask to meet them, or found an occasion when we were not anticipating other guests? We have had to take into account snobbish feelings—but not primarily those of the workmen.

#### F. HERBERT MANSFORD

#### INDUSTRY AND ART

#### To the Editor of THE ARCHITECTS' JOURNAL

SIR,—The writer of the leading article in your issue for June 1 seems to have a grouse against industry, and takes Mr. Chesterton too much to heart. I venture to suggest also that he has very little knowledge of modern business practice. There seems no reason why industry and art should be divorced; in fact, in my view, there is every tendency in the opposite direction. In the old days a craftsman had hand tools to make his furniture, his metal work, or whatever work he did. Now machinery has come to his assistance and he has a very much more efficient tool, designers, instead of crying for the so-called "good old days," are applying machinery.

There is no reason why mass-production furniture could not be

as beautiful as it is now mostly ugly. In fact, there is already a tendency to make simpler and more straightforward furniture by machinery. Furniture gains its beauty from simplicity of line, and this, from a manufacturing point of view, is all to the good. It is a fallacy to suppose that we would get better articles by going back to the so-called "good old davs."

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Then the writer of your article goes on to suggest that it is desirable, under modern business conditions, to sell an article which will wear out quickly, and therefore a repeat sale is more rapidly obtained. If you buy a pair of pyjamas which wear in holes the first night you sleep in them, would you go back to the same place and buy another pair? No, of course not! That particular make of pyjamas would be the last kind you would ever consider buying again.

Modern business practice is forced more and more to make the best possible article at the lowest possible price, and more and more are designers using machinery for their tools. The writer of your article would probably find information of considerable value to him if he examined the Year Books of the Design and Industries Association, and also some of the pamphlets which they have produced.

T. CRAVEN PRITCHARD

#### LAW REPORTS

#### INSURANCE : RIGHTS OF LESSOR

#### Tredegar v. Harwood and the Principality Building Society. Chancery Division. Before Mr. Justice Tomlin

This was an action by Lord Tredegar against Mrs. A. Harwood and the Principality Building Society, occupier and mortgagees respectively of 27 Axminster Road, Cardiff, claiming possession of the house on the ground of breach of a covenant in the lease to insure against fire in a named office.

Mr. Gavin Simmonds, K.c., for Lord Tredegar, said his client did not want forfeiture of the lease, which was for ninety-nine years from 1924, but he sought to establish an important principle in the management of his estates, on which there were thousands of houses, namely, that the landlord had the right to have the properties insured against fire in one responsible office. The reason was the serious inconvenience and extra work entailed if the lessees were allowed to insure in various offices. The Law Fire Office kept a special record from which it could be ascertained at once if the premiums were in arrear. The covenant in question provided that the property should be insured against fire " with the Law Fire Office or some other responsible office approved by the lessor." At the instigation of the Principality Building Society Mrs. Harwood had insured her house with the Atlas Assurance Society without the lessor's assent.

Mr. Spens, k.c., for the defendants, said his clients, the Building Society, were mortgagees of a large number of houses on the Tredegar estates. Their dispute with Lord Tredegar had been going on for many years. They insisted upon the mortgagors insuring with the Atlas Company, so that Mrs. Harwood was being attacked on the one hand by her landlord for not insuring with the Law Fire Office, while on the other hand the society were preventing her from doing so. On the construction of the clause he submitted that the tenant had the right to insure in "some other responsible office" which the landlord aproved. The only reason given by Lord Tredegar was the convenience of managing his estates. He had not considered any alternative office at all, which he was bound to do under the covenant.

His lordship held that the defence failed, and as forfeiture was not asked for, Mrs. Harwood must insure with the Law Fire Office, and the defendants must pay the costs of the action. The language of the covenant was plain. The alternative to the Law Fire Office was not some alternative to which the lessee had a right, but an alternative to which she might get the benefit if the conditions annexed were fulfilled. The conditions were that the office was responsible and that it was approved by the lessor. They were not limited to the responsibility of the office. It rested with the landlord to say whether or not he approved, and he was not bound to give any reason at all for his disapproval. He had, however, given some reasons connected with the management of his estates, and that was reasonable in his lordship's view.

#### WATER MAINS TO AN ESTATE: LIABILITY

#### Ryde Corporation v. Carter. Court of Appeal. Before Lords Justices Bankes, Atkin, and Lawrence

This appeal raised a point as to whether the Ryde Corporation were bound at their own cost to provide and lay new water mains and service pipes from existing mains to the Knighton estate. The defendant appealed from a decision in favour of the Corporation given by Mr. Justice Roche in the King's Bench Division.

Sir Reginald Coventry, K.C., for the appellant, said in 1854 Commissioners were appointed by Act of Parliament for the management of the Borough of Ryde. In some cases they were given power to supply water and in other cases they had power to lay pipes. In 1861 it became necessary for them to get a further supply of water, and they were empowered by statute to take and use water from the Knighton ponds or springs near the Knighton Mills, and they had been taking water since from that source. They came to an agreement with the then owner of the estate to pay £ 180 a year for taking this water and to afford a water supply for any building on the estate. The Corporation were willing to afford a supply, but the present dispute was whether they were obliged to carry it to the houses or buildings on the estate. The contention of the Corporation was that they had fulfilled their obligation by having a supply available and that Mr. Carter must supply the mains and fitments for carrying the water to where it was wanted on the estate. Mr. Carter, however, contended that there was an obligation on the Corporation to bring the water in pipes to within reasonable distance of the houses on the estate. Mr. Justice Roche held in favour of the Corporation, and the defendant now appealed. Counsel contended that as the "undertakers promise to furnish a supply of water," the obligation was upon the Corporation to bring the supply within a "reasonable distance " of the cottages or houses.

Mr. Hawk,  $\kappa.c.$ , for the Corporation, argued that the Corporation had fulfilled the obligation that was ùpon them.

The Court allowed the appeal, holding that the Corporation, under the covenant in the agreement, were under an obligation to bring the water within such a reasonable distance from the premises in question as would render the supply available to the occupier or owner, the latter providing the necessary communication pipes at their own expense for that purpose. They were of opinion that the Corporation could not say that they had complied with their obligation under the covenant by having a pipe conveying the water 440 yards away from appellant's premises.

#### SOCIETIES AND SCHOOLS

#### Bequests to the R.I.B.A.

The R.I.B.A. have received information of the following bequests which have been made for the purpose of founding scholarships or bursaries for architectural students:

1: The late Mr. A. C. Houston, A.R.I.B.A. Under the will of the late Alfred Charles Houston, the residue of his estate is bequeathed to the R.I.B.A., for the purpose of providing educational and maintenance scholarships for the sons of architects and artists who may be, or at the time of their death were, in impecunious circumstances, such scholarships to be known as "The Houston Scholarships." The amount to be received is not yet ascertainable. 2: The late Mr. C. W. Hunt, A.R.I.B.A. Under the will of the

late Charles William Hunt the sum of £500 is bequeathed to the R.I.B.A., for the purpose of forming a fund the income of which

shall be applied annually in the purchase of book prizes, medals, or in such manner as the Institute shall think fit for the person or persons of British nationality and under the age of thirty years, who each year, in the opinion of the Institute, submit the best plans, drawings, or designs in connection with housing and town planning or similar purposes. The residue of the estate up to  $\pounds 2,000$  is to be divided equally between the vicar and churchwardens of the Parish of Burwell and the R.I.B.A., for the same objects as the legacies before bequeathed. The estimated residuary estate is stated to amount to  $\pounds 3,118$ .

3: The late Mr. Delissa Joseph, F.R.I.B.A. Under the will of the late Mr. Delissa Joseph, subject to the payment of certain legacies, the Institute will receive, after the death of his wife, one quarter of the residue of his estate for the purpose of founding an annual bursary to be known as "The Delissa Joseph Bursary," to be awarded annually, subject to conditions to be from time to time laid down by the president for the time being, to an approved student or students who shall have passed the necessary qualifying examinations of the R.I.B.A., to enable him or them to visit the United States for the purpose of studying architecture. Each student to whom the bursary is awarded shall on his return furnish a written report on his visit which shall be printed in the *R.I.B.A.*. Journal. Mr. Joseph, who died on January 10, left estate of the gross value of £32,606, with net personalty of £25,925.

#### R.I.B.A. Examination for Candidature as District Surveyor in London

It is to be regretted that more candidates do not sit for the Statutory Examination which should be taken by all students who are anxious to test their knowledge in building craft, whether they intend to apply for appointments as district surveyors or not, as the examination is a strictly practical one, and the preparation for the examination is an excellent training. The London County Council are anxious to increase the number of architects qualified for appointment to district surveyorships. All the appointments are to districts, the fees of which amount to at least £1,000 per annum, and it is felt that were this fact better known many more practising architects would present themselves for examination by the R.I.B.A. with a view to obtaining the certificate of competency required under section 140 of the London Building Act, 1894. The appointments for which the Council invites applications by advertisement are, it should be noted, for the less lucrative districts, as it is the Council's practice to appoint the district surveyors of proved capacity to the more lucrative districts as vacancies occur.

#### The Architects' Benevolent Society

At the annual meeting of the Society, held recently, the Council for 1927-28 was elected as follows: President, the President of the R.I.B.A.; vice-presidents, Mr. Thomas Dinwiddy, Mr. H. S. E. Vanderpant; hon. treasurer, Mr. W. Hilton Nash; hon. secretary, Sir Charles Nicholson, Bart. Ordinary members: A. H. Moberly, H. D. Searles-Wood, Osborn C. Hills, Arthur Crow, Michael Waterhouse, L. S. Sullivan, H. V. Ashley, Sir Banister Fletcher, E. Bates, Sir A. Brumwell Thomas, Sir John Burnet, A. Saxon Snell, R. Dircks, E. Stanley Hall (representing the Architectural Association), Henry Lovegrove (representing the London Society). The seventy-seventh annual report of the Council, which was passed at the meeting, stated that eighty-five applicants had been assisted with grants during the year, an increase in the number of eight over last year. Fourteen beneficiaries had received pensions, three of which were annuities founded by the generosity of Mr. Thomas Dinwiddy, and one-the Henry L. Florence annuity-by Mr. H. S. E. Vanderpant. One pensioner died in the course of the year, and two new pensioners were appointed. The Council acknowledge donations from Mr. H. S. E. Vanderpant, Mr. H. Greville Montgomery, Mr. Stanley Peach, Mr. W. Hilton Nash, Captain L. A. D. Shiner, the York and East Yorkshire Architectural Society, Mr. A. G. Morrice, and the Liverpool Architectural Society. Legacies were received from the late Mr. Arthur Charles Galbraith and from Mr. H. G. Turner. The

Society's insurance department continued its scheme of advertisement during the year and negotiated the issue of new policies in all branches of insurance. The Council report with sincere regret the retirement of Sir Aston Webb, G.C.V.O., C.B., R.A., from the trusteeship of the Society, which he has resigned " not through any lack of interest in the Architects' Benevolent Society," but solely " because he feels that the time has come to divest himself of this kind of responsibility." In accepting his resignation the Council wish to record their indebtedness to Sir Aston Webb for the generous gifts and the personal help which he has always so freely given to the Society in the past. To fill the vacancy caused by his retirement, the Council have the pleasure to nominate Sir Edwin Lutyens, R.A., as third trustee. The Society has lost by death many supporters during the year. To fill the vacancies caused by retirements and the death of Mr. Fellowes Prynne, the Council have the pleasure to nominate: Mr. H. V. Ashley, Sir Banister Fletcher, Mr. E. Bates, Sir A. Brumwell Thomas, Sir John Burnet, and Mr. A. Saxon Snell.

#### The Giza Society of Architectural Students

Professor A. F. Wickenden, F.R.I.B.A., in delivering his presidential address to the Society of Architectural Students at the Royal School of Engineering, Giza, Cairo, said: "The fact that there is so much that a student can do and ought to do during his period of training makes it absolutely necessary that there should not be too much time and energy spent on matters of minor importance. In the training of architectural students one of the greatest dangers of wastage always has been, and I suppose always will be, in the matter of draughtsmanship. In my student days I was most enthusiastic over good drawing and rendering, and I still fully appreciate their very great value, especially in the early years of training. Beyond a certain reasonable point, however, during the later years of studentship, drawing and rendering may very easily become sheer waste of time, energy, and drawing materials. Students should learn to use discretion as to when elaborate draughtsmanship is necessary and when it is not. Another source of danger to which architectural students are, in my opinion, exposed, is that of becoming too theoretically minded in dealing with design and composition. I believe that too much theory tends to dull the imagination. Students should be very careful how they read and what they read in the way of books on the theory of architecture. The safe and useful rules governing architectural design are comparatively few in number, but the vague theories and ever-changing individual opinions are unlimited in number. Once you have mastered the few fundamental principles, learn to think for yourselves, and do not be afraid of being original. By doing this you will have many failures, you will meet with much violent criticism, especially from brother architects, but if you achieve only one real success in your life you will not have lived in vain."

#### COMPETITION NEWS

#### The Soane Medallion and the Tite Prize

As a result of the preliminary competitions for the Soane Medallion and the Tite Prize the following have been selected to take part in the final competitions:

#### The Soane Medallion

Mr. S. G. Chaplin, Bartlett School of Architecture, University of London.

Mr. E. F. Davies, Bartlett School of Architecture, University of Liverpool.

Mr. Raymond Erith, School of Architecture, Architectural Association.

Mr. D. H. McMorran.

Mr. Leonard Monroe, School of Architecture, The Technical College, Cardiff.

Mr. W. B. Oldacre. Mr. W. Percik, School of Architecture, Architectural Association. Mr. J. W. Wood, School of Architecture, Architectural Association.

Mr. J. B. Wride, School of Architecture, The Technical College, Cardiff.

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#### The Tite Prize

Mr. A. G. Armstrong, School of Architecture, Northern Polytechnic, London.

Mr. H. I. Ashworth, School of Architecture, University of Manchester. Mr. A. Bailey.

Mr. W. G. Benoy, School of Architecture, University of Manchester,

Mr. J. W. Buchanan, School of Architecture, Architectural Association.

Mr. R. M. Butler, Birmingham School of Architecture.

Mr. E. J. Carter, School of Architecture, Architectural

Association. Mr. P. J. Doran, School of Architecture, University of Liverpool.

Mr. E. J. Harrison. Mr. H. A. Hunt, School of Architecture, Northern Polytechnic,

London.

Mr. Allan Johnson, School of Architecture, Leeds College of Art.

Mr. C. H. Jones, School of Architecture, University of Cambridge.

Mr. B. St. C. Lightfoot, School of Architecture, University of Liverpool.

Mr. J. L. Martin, School of Architecture, University of Manchester.

Mr. Patrick McNeil, Glasgow School of Architecture.

Mr. Alec Owen, School of Architecture, University of Liverpool.

Mr. J. W. Parr, School of Architecture, Architectural Association. Miss C. W. Preston, School of Architecture, Architectural Association.

Mr. J. R. Tolson, School of Architecture, Leeds College of Art. Mr. Walter Watson, Birmingham School of Architecture.

#### Northern Polytechnic Scholarship

The preliminary stage has been held of the competition, value  $\pounds_{50}$  per annum for two years, tenable at the School of Architecture, Surveying, and Building, Northern Polytechnic, offered by the Leeds Fireclay Company, Ltd., for the promotion of the study of terra-cotta. The following students have been selected to take part in the final stage: Messrs. E. W. Clark, C. S. Oakes, J. Singleman.

#### Suggested Eastbourne Competition

Councillor Brooker is suggesting that the Eastbourne Corporation should at once take steps to institute a public competition in conjunction with the R.I.B.A. for the immediate development of the Redoubt site, and that a further competition be instituted as to a scheme for development of the Wish Tower site.

#### COMPETITION CALENDAR

The conditions of the following competitions have been received by the R.I.B.A.

- June 30. Designs for the planning of the Civic Centre, Birmingham. Assessor, Mr. H. V. Lanchester, F.R.I.B.A. Premium of  $\pounds_{1,000}$  to the design placed first, and a further sum not exceeding  $\pounds_{1,000}$  divided between the authors of other approved designs. Particulars from Mr. Herbert H. Humphries, M.INST.C.E., City Engineer and Surveyor. Deposit  $\pounds_{1}$  1.S., which will be returned after the receipt of a design or the return of the documents supplied.
- June 30. New school for 1,000 boys for the Governors of the Bradford Grammar School. Premiums, £300, £200, and £100. Assessor, Mr. Arnold Mitchell, F.R.I.B.A. Particulars and plan of site from Mr. W. Brear, Secretary, Grammar School, Bradford, Yorks. Deposit £1 15.

July 1. The Reading Corporation invite architects residing or practising in Berkshire, Buckinghamshire, or Oxfordshire, to submit, in open competition, designs for a chapel which it is proposed to erect in a new cometery. A premium of 50 guineas will be awarded to the author of the design placed first by the assessor, Mr. Charles J. Blomfield, F.R.I.B.A., and twenty-five guineas to the author of the design placed second. Particulars from the Borough Surveyor, Town Hall, Reading. Deposit  $\pounds 2$  2s., which will be returned after receipt of a *bona fide* design. Should architects, on receipt of the particulars, not desire to compete, the deposits will be repaid provided the papers are returned within four weeks. Designs in sealed packages, endorsed "Design for Chapel," to Mr. Charles J. Blomfield, F.R.I.B.A., 13 Ashburn Gardens, London, S.W.7.

#### IN PARLIAMENT

#### [ BY OUR SPECIAL REPRESENTATIVE ]

Mr. Forrest asked the Minister of Health if he could state the number of houses now being built by private enterprise for working-class families only, indicating in each case whether they were receiving the subsidy or not?

Mr. Chamberlain said he had no information as to the intended occupancy of houses which were under construction by private enterprise. But 45,495 subsidy houses were under construction in England and Wales by private enterprise on the 1st inst., but statistics were not available as to the number under construction without State assistance.

Mr. Viant asked the Minister if he would state the number of houses erected in this country from the beginning of the year 1919 to the end of March 1927, and their estimated value; and whether he had any figures showing the number and value of buildings erected for commercial purposes?

Mr. Chamberlain said that it was estimated that some 866,000 houses were erected in England and Wales between the beginning of 1919 and the end of March 1927, but no particulars were available as to the estimated value. The answer to the last part of the question was in the negative; but the statements published quarterly in the *Ministry of Labour Gazette*, which were based on returns received from a number of local authorities in Great Britain, gave the estimated cost of various buildings for which plans were passed by those authorities during the period.

Mr. Chamberlain informed Mr. Robinson that proposals had so far been submitted by forty local authorities under the Housing (Rural Workers) Act, 1926. Other local authorities had schemes under consideration, but had not yet actually submitted proposals. With regard to the last part of the question, statistics as to action taken under the Act were not yet available. The following was the list:

County Councils. Cheshire, Cornwall, Cumberland, Derby, Devon, Dorset, Essex, Gloucester, Hereford, Kent, Lancashire, Lincoln (Holland), Lincoln (Lindsey), Middlesex, Northampton, Northumberland, Somerset, Stafford, Suffolk East, Surrey, Sussex East, Westmorland, Wiltshire, Worcester, Yorks East Riding, Yorks North Riding, Yorks West Riding, Anglesey, Brecknock, Carnarvon, Carmarthen, Denbigh, Montgomery, Monmouth, Pembroke.

#### County Boroughs. Worcester.

Rural District Councils. Aylsham R.D.C., Isle of Wight R.D.C., Smallburgh R.D.C., Wayland R.D.C.

Sir A. Holbrook asked the Minister of Health whether, in view of the fact that Part II of the Rent and Mortgage Interest Restrictions Act was to continue for five years after December next, and that it provided for referring any matters of hardship to the Court, he would consider the termination of Part I next December; and whether, in any circumstances, he would consider making provision that persons who had bought houses for their own occupation, but who were now debarred from occupying them, might be allowed to take possession of their properties ?

Mr. Chamberlain said that the suggestions would be carefully considered in connection with the future of the Rent Restrictions Acts. Mr. Womersley asked the Minister of Health whether he was aware that a number of local authorities, in advertising appointments under the Rating and Valuation Act, required *ab initio* that applicants should be members of the Surveyors' Institution; and whether he would take steps to see that qualified rating surveyors who were members of such bodies as the Rating Surveyors' Association, the Incorporated Society of Auctioneers and Landed Property Agents, or the Auctioneers' Institute should be afforded an equal opportunity of securing such posts ?

Mr. Chamberlain said that under the Rating and Valuation Act, 1925, local authorities were empowered to appoint valuation officers and other officers as they thought fit, and to pay those officers such reasonable salaries as they thought fit. He had no control over such appointments, and he could not, therefore, take any such steps as his hon, friend suggested.

#### THE R.I.B.A. ELECTION RESULT.

The result of the R.I.B.A. election for the Council was announced as follows at a meeting of the Royal Institute held at 9 Conduit Street on Monday evening last.

#### COUNCIL

PRESIDENT : Walter John Tapper.

VICE-PRESIDENTS : Henry Philip Burke Downing : Henry Vaughan Lanchester ; Percy Edward Thomas (Cardiff) ; Maurice Everett Webb.

HONORARY SECRETARY : Edwin Stanley Hall.

MEMBERS OF COUNCIL: Henry Victor Ashley; Robert Atkinson; Sir Herbert Baker; Walter Cave; Major Hubert Christian Corlette; Arthur Keen.

ASSOCIATE MEMBERS OF COUNCIL: Harold Chalton Bradshaw; Charles Cowles-Voysey; Michael Theodore Waterhouse.

LICENTIATE MEMBERS OF COUNCIL : Arthur Baldwin Hayward; Captain Augustus Seymour Reeves.

PAST PRESIDENTS : Edward Guy Dawber; John Alfred Gotch (Kettering).

#### REPRESENTATIVES OF ALLIED SOCIETIES

NORTHERN PROVINCE OF ENGLAND: J. M. Dossor (York and East Yorks Architectural Society); F. E. P. Edwards (Sheffield, South Yorkshire and District Society of Architects and Surveyors); H. S. Fairhurst (Manchester Society of Architects): E. B. Kirby (Liverpool Architectural Society); T. B. Wilson (Leeds and West Yorkshire Architectural Society). One representative to be appointed by the Northern Architectural Association.

MIDLAND PROVINCE OF ENGLAND: E. T. Allcock (Leicester and Leicestershire Society of Architeĉts); E. C. Bewlay (Birmingham Architeĉtural Association); E. T. Boardman (Norfolk and Norwich Association of Architeĉts); J. W. Fisher (Northamptonshire Association of Architeĉts); J. Woollatt (Nottingham and Derby Architectural Society).

SOUTHERN PROVINCE OF ENGLAND : A. C. A. Norman (Devon and Cornwall Architectural Society); T. Overbury (Wessex Society of Architectural Association); J. A. Smith (Hampshire and Isle of Wight Architectural Association); one representative to be appointed by the Berks, Bucks and Oxon Architectural Association.

ALLIED SOCIETIES IN SCOTLAND: T. M. Cappon (Dundee); J. K. Hunter (Glasgow); T. F. Maclennan (Edinburgh); G. P. K. Young (Perth),

SOUTH WALES INSTITUTE OF ARCHITECTS : C. S. Thomas (Swansea).

ALLIED SOCIETIES IN IRELAND : Professor R. M. Butler (Royal Institute of the Architects of Ireland); E. R. Kennedy (Ulster Society of Architects).

ARCHITECTURAL ASSOCIATION : G. H. Jenkins.

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS : W. H. Hamlyn.

#### LEITH COMPETITION AWARDS

Sir George Washington Browne, the assessor in the Leith Town Hall and Library Competition, has awarded first place to Messrs. Bradshaw, Gass and Hope, of Bolton. The second, third and fourth places have been awarded respectively to Messrs. Collcutt and Hamp, of London; Mr. Henry Boddington, of London; and Mr. James B. Dunn, of Edinburgh, in collaboration with Mr. Herbert H. Wigglesworth, of London.

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#### TRADE NOTES

We recently had an opportunity of inspecting the works of Messrs. Gibbons and Dean, Ltd., 6-14 High Read, Ilford, Essex, specialists in leaded lights, memorial windows, glass signs, glass fascias, illuminated signs, and wood-letter makers. We were also shown work *in situ* which had been executed by them, including two leaded light cupola domes, of conventional design, approximately 24 ft. diameter, which have been fitted into the roof of a large showroom. The work was carried out in excellent taste, the colour and ornament being in keeping with the surrounding decoration. The firm is well equipped and staffed to undertake any leaded light and fascia work.

Lower building costs and faster work are claimed to be easily obtained when laying wood floors upon concrete by the adoption of the Bull-Dog method. This method consists of the use of a patent clip, called the "Bull Dog " floor clip (obtainable from the Adamite Company, Ltd.), to anchor the wood floor to the concrete. The floor is laid in six rapid operations. The clips are embedded in the concrete with their tops flush, at intervals and in rows of 16 in. apart. The correct setting out of the clips can be done easily and quickly by using a measuring guide constructed of two planks, and marked with saw cuts. Then the top tabs of the clips are bent up with a chisel, and the sleepers are placed between the raised tabs, levelled up, and nailed through the holes punched in the tabs. The low places between the sleepers and the concrete are then wedged and slushed in with thin cement mortar, and the finished floor is nailed to the sleepers in the usual manner. All conduits are laid on top of the concrete where they are readily accessible. The clips can be fixed rapidly even by men having no previous experience of their use. In fact, contractors do not find the slightest difficulty in fixing five hundred clips per hour.

#### OUR GREATEST WAR MEMORIAL

Following are the names of the specialists and subcontractors for the Charterhouse War Memorial School Chapel, illustrated on pages 897 to 904: G. Tosi, decoration of reredos; Trussed Concrete Co., steelwork; Ames and Finnis, roofing tiles; Powell and Sons (Whitefriars), Ltd., stained glass for east window; J. Jeffreys & Co., heating installation; Grierson Ltd., electrical installation; Osler and Faraday, Ltd., electric light fittings; John Daymond and Son, Ltd., stone carving; W. D. Gough, reredos carving; J. Whitehead and Sons, marble portion of reredos; Mr. Herbert G. Ratcliff, architectural carver, was responsible for the hanging cross in the reredos, the wood carvings to the oak panelling, and the lectern pulpit. The Guildford Glass Works were responsible for the leaded lights, wrought-iron casements, and the iron stanchion bars for the whole of the windows.

#### CORRIGENDA

Mr. Paul Turpin, architectural decorator, informs us that the design of the shop front of Messrs. Paris Trades Limited, illustrated in our last issue, was wrongly attributed to Mr. C. Spencer-Willmott. Mr. Turpin states that he carried out the work from the designs of Messieurs Dim of Paris.

The new address of Messrs. Lander and Tanner, architects, is 22 Surrey Street, Strand, W.C.2, and not that given in our last issue.

THE ARCHITECTS' JOURNAL for June 22, 1927

# THE WEEK'S BUILDING NEWS

The MANCHESTER Education Committee is to renew flooring in various schools.

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Mr. W. E. Oram has a scheme for the erection of motor-body works at the corner of Eastern Avenue and Redbridge Lane, ILFORD.

The BIRMINGHAM Corporation has obtained a piece of land at the corner of Fosbrooke Road and Hobmoor Road, Small Heath, as a site for the municipal bank.

Mr. J. R. Keyte, of Alderbrook Road, Solihull, has acquired land on the Yardley estate, BIRMINGHAM, for the crection of eight shops.

\*

The Bishop's Commission has purchased from the BIRMINGHAM Corporation a site on the Spring Road estate, Tyseley, for the erection of a church.

The BIRMINGHAM Education Committee is to extend the accommodation at the central technical institute, Suffolk Street.

The BIRMINGHAM Education Committee is acquiring land at Sandwell for purposes of an open-air school.

The BIRMINGHAM Corporation is preparing a scheme for effecting a straightening of the River Cole between Coventry Road and the canal at Tyseley.

The sheffield Corporation has decided to erect thirty-six houses on the Dykes Hall estate, and the city architect is to obtain tenders.

The SHEFFIELD Corporation has obtained sanction for the clearance of the Matthew Street unhealthy area.

At the LEEDS Electricity Committee the sanction of the Electricity Commissioners to the borrowing of £500,000 for the erection of a generating station at Kirkstall was reported. The members appointed to consider and report generally upon the question of the making of any necessary appointments in connection with the establishment of the new generating station reported, and the manager was authorized to prepare specifications and obtain tenders for the machinery to be installed in the station. Competitive designs and tenders are to be invited from constructional engineering firms for the construction of the necessary buildings.

The Leeds Greyhound Racing Association, Ltd., are to construct an electric hare course off Elland Road, LEEDS. The LEEDS Corporation Gas Committee has approved a modified scheme for the erection of a one-story building for the proposed new gas depot on the site at the junction of New York Road and Bridge Street at an estimated cost of £50,000.

\*

Plans passed by the LEEDS Corporation: Four houses, Hetton Road, Harehills, for Mr. William Corker; six houses, Foundry Lane, Killingbeck, for Messrs. Purdy and Son; sixteen houses, Nora Place and Terrace, Bramley, for Mr. Frank Rawnsley; eight houses, Wensley Drive, Chapel Allerton, for Messrs. W. E. Batty & Co.; twelve houses, Upland Grove and Gipton Wood Avenue, for Messrs. Bailey Bros.

The LEEDS Watch Committee has passed amended plans of dance hall and billiard hall, etc., 66 Kirkstall Road and Sale Street, for Mr. William Ogden.

The LEEDS Watch Committee has passed amended plans of a palais-de-danse, Harehills Avenue and Roundhay Road, for Messrs. William Hill and Sons (Carriers), Ltd.

The LEEDS Watch Committee has passed amended plans of showrooms, dance hall, etc., Sheepscar Street, Leeds, for Messrs. Vernon Gash, Ltd.

The LEEDS Watch Committee has passed plans submitted by the Shaftesbury Cinema (Leeds) Ltd., for a cinema, music hall, shops, ballroom, nineteen w.c.'s, urinal, at Harehills Lane and York Road.

Messrs. G. F. Bowman and Son, architects, are to crect a memorial hall in Adel Lane, LEEDS.

\*

The chief of the fire brigade is asking the ILFORD Corporation to provide married firemen's quarters.

The WESTMINSTER City Council is to prepare a scheme for the erection of a tuberculosis dispensary and a maternity and child welfare centre on the site of Ebury Bridge Mortuary and portion of the adjoining towing path.

The EASTBOURNE Corporation has asked the Borough Engineer to report in regard to the erection of houses for the employees of the electricity department.

The Borough Engineer of EASTBOURNE has prepared plans for the development of the remaining portion of the Victoria Drive site by the erection of ninety-six non-parlour houses. The EASTBOURNE Corporation Entertainments Committee has asked the Borough Engineer to prepare plans for the development of the Redoubt site for the purpose of a music garden with adequate shelter accommodation, and a bathing pool, allowing for the demolition of the Redoubt buildings or otherwise.

The LEICESTER Corporation is acquiring land for widening Welford Road.

Messrs. H. Somerford and Son, Ltd., are to creft Sunday schools adjoining the Cottenham Park Wesleyan Church, Worple Road, WIMBLEDON.

The PLYMOUTH Corporation is to obtain reports on the question of providing housing accommodation (one or two bedrooms) to meet the needs of small families.

\*

The PLYMOUTH Corporation Health Committee is to consider the question of providing a day nursery in conjunction. with the Education Committee, in the grounds of Winter Villa, STONEHOUSE.

The sum of £6,000 has already been promised towards the £56,000 needed for church extension in COVENTRY, and the Coventry parishes have subscribed nearly £10,000.

The woolwich Borough Council is to erect fifty-three more houses at Eltham at a cost of  $\pounds 30,647$ .

The NEWRY Urban Council has decided to spend £26,000 on street and road improvements, including a new bridge over the canal at a cost of about £5,000 or £6,000.

The WANDSWORTH and Fulham Councils are considering improving the approaches to Wandsworth Bridge.

\*

At a recent meeting of the Wesleyan General Chapel Committee, consent was given to the erection of new chapels at Catterick Camp, FAZAKERLEY, and Thornbury (Bradford). A substantial grant has been given by the War Office towards the cost of the chapel at Catterick Camp. Seven of the other buildings have been made possible by the special extension fund placed at the disposal of the committee by a generous layman.

The OLDHAM Watch Committee has passed revised plans showing proposed alterations of the Star Picturedrome to meet the committee's requirements.

#### 916

The CUMBERLAND Infirmary Governors have announced a further scheme of extension. In addition to the new out-patients' department, which is approaching completion, two wards, an operating theatre, and more staff accommodation are to be built. The new extensions are estimated to cost  $\pounds 27,000$ . The operating theatre will be a memorial to the late Mr. C. Balfour Paul, an eminent surgeon connected with the institution. About  $\pounds 20,000$  has been subscribed, and the Governors are appealing to the public for  $\pounds 7,000$ .

The Notts c.c. has sanctioned the extension of the Picture House, Newcastle Avenue, WORKSOP, so as to provide seating accommodation for an additional 350 persons.

The Notts c.c. proposes to proceed with the construction of a by-pass road at CHILWELL at a cost of  $\pounds$ 11,500.

The BERMONDSEY B.C. has passed drainage plans in connection with the erection of a cinema at the corner of Tower Bridge Road and Bermondsey Street, by Mr. George Smart, 331 Mare Street, Hackney, and in connection with the erection of a brewery in Gainsford Street by Mr. F. M. Kirby, surveyor for Messrs. Courage & Co., Ltd.

The BERMONDSEY B.C. is seeking sanction to a loan in connection with the purchase of the freehold land, Corbetts Lane; the erection of seventeen temporary houses on the Brunel Road, Corbetts Lane, and Pottery Street sites; the conversion of the warehouse and renovation of house, Pottery Street, into three flats; and provision of paved courtyard and connection to sewer, Pottery Street.

The BERMONDSEY B.C. is making application for a loan of  $\pounds_{19,250}$  for the erection of the remaining thirty-five cottages on the Salisbury Street area site.

The PLYMOUTH Corporation is seeking sanction for a loan of  $\pounds$  100,000 for further housing advances.

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The medical officer of health of PLYMOUTH is inquiring for a site for the erection of a smallpox hospital.

The plymouth Corporation is to proceed with the completion of the Burrator reservoir at an estimated cost of  $\pounds$  30,000.

Mr. W. G. Gingell is to erect a badminton hall and seven garages in Eggbuckland Road, Plymouth.

The OSSETT Corporation has decided to negotiate for the acquisition of the Swithenbank estate for a housing scheme.

Plans passed by the ossETT Corporation: Alterations, Station Road, for Yorkshire Penny Bank, Ltd.; slaughterhouse, Park Square, for Mr. T. Y. Proctor; bakehouse, Station Road, for Mr. Lister.

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Plans passed by the DARTFORD U.D.C.: Recreation hall, Joyce Green Hospital, for Metropolitan Asylums Board; additions Dartford Grammar School, for Kent Education Committee; two bungalows, Havelock Road, for Mr. H. C. Wright; two bungalows, Havelock Road, for Mr. G. Giles; alterations and additions, 29-31 Highfield Road, for Mr. C. Heddle.

The DARTFORD U.D.C. is being asked to consider the expediency of erecting slipper baths near the public library or on another suitable site.

The NEWPORT (I. o. W.) Corporation is to consider a scheme for the erection of houses for sale.

The CHESTERFIELD Markets Committee of the Corporation has inspected the site of the slaughterhouse proposed to be erected by Messrs. Haag and Sons, in Tontine Road, Chesterfield, and is to confer with Messrs. Haag and Sons as to the possibility of an alternative site.

Messrs. Body and Son have prepared plans for new streets on the Barne estate, St. Budeaux, and Messrs. A. Searle and Son have prepared plans for new streets on the Whitleagh estate, Higher St. Budeaux, PLYMOUTH.

The COULSDON U.D.C. surveyor has prepared plans for fifty houses in Westleigh Avenue, and tenders for their erection are to be invited.

At the SHIPLEY U.D.C. Baths Committee the surveyor submitted revised plans and estimates for cottage baths at Windhill. The scheme provides for six slipper baths, ticket office, waiting-room, w.c., urinal, and store on ground floor, and boiler-house and coke store in the basement.

Plans passed by the SHIPLEY U.D.C.: Extension of store, Bradford Road, for Mr. J. Charlesworth; garages, Great Cross Street, for Mr. C. Cawthorne; seven houses, Nab Wood Grove, for Messrs. Wm. Pitts and Sons.

\*

Plans passed by the COULSDON U.D.C.: Six houses, Upper Selsdon Road, Sanderstead, for Mr. S. E. Taylor; ten houses, Queenhill Road, and thirty-four houses, Foxearth Road, Selsdon, for Messrs. R. Costain and Sons, Ltd.; ten houses, Rickman Hill, Coulsdon, for Mr. D. King; fifteen houses, Purley Downs Road, Sanderstead, for Mr. H. P. Hawkes. Messrs, J. S. H. Abbott and C. B. Heaton are to construct three new roads on land at the junction of Copse Hill and Coombe Lane, WIMBLEDON.

Plans passed by the WIMBLEDON Corporation: Additions, band premises, Arthur Road, for the Westminster Bank, Ltd.; fifteen houses, Salisbury Road, for Mr. F. H. Skeens; extension to shops, Coombe Lane, for Messrs. H. Wakeford and Sons.

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The WIMBLEDON Corporation has asked the borough surveyor to confer with the medical officer of health and prepare a draft sketch plan of a school clinic and infant welfare centre for erection on the site in Pelham Road, Wimbledon.

Mr. E. Proctor, 83 St. Paul's Churchyard, is to erect buildings on a site in Old Kent Road, between Kinglake Street and East Street.

\*

The Worcestershire c.c. is considering the possibility of acquiring a site for a smallpox hospital near the City of Worcester Smallpox Hospital at NEWTOWN, and as the result of an informal conference with the Health Committee of the City of Worcester, it is proposed that representatives of the city and county should meet to explore the possibilities of the formulation of a joint scheme.

The ISLINGTON B.C. has now agreed upon the proposed extension to the municipal buildings. These plans provide for a hall providing accommodation for 691 persons seated, and dancing accommodation for 410 persons, reception or dance-room with accommodation for 224 persons seated, or 178 dancing, and a banquet or supper room, with accommodation for 91 persons seated at tables. The estimated cost of the proposed extension, including furniture, fittings, etc., is £48.000.

The BRADFORD Corporation has obtained sanction to borrow £132,504 for the erection of 326 houses on the Eccleshill housing site.

The borough engineer of EAST HAM is to prepare a scheme for the erection of houses on part of the Flanders Road site.

At the request of the Alvechurch Parish Council the WORCESTERSHIRE c.c. has promised in next estimates to make provision for the reconstruction of Hopwood canal bridge.

Messrs. Snelling and Sharman are to construct a new street between Falcon Road and Cambridge Road, HAMPTON.

\* The woking U.D.C. is acquiring land for the erection of twenty-four houses. aton d at mbe

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•THE ARCHITECTS' JOURNAL for June 22



# BUILDING CONTR



# Warwick Gardens.

Architects : C. H. Roberts, Esq., A.R.I.B.A.,

Messrs. W. H. Gaze & Sons, Ltd., are erecting block of flats, comprising twenty-seven on six floor is entirely self-contained, and is reached by passe well as by staircase.

The whole of the construction is fireproof.

RCHITECTS' JOURNAL for June 22, 1927

# RUSCON FLOOR

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# the fifty Truscon floor nt in progress.

Westminster Ophthalmic Hospital. St. Luke's Hospital, Chelsea. Southern Genera Hospital, Govan. Derbyshire Hospital for Women. New Art Gallery, Birkenhead. Fitzwilliam Museum, Cambridge. Ampleforth College, Yorks. Mining and Technical College, Wigan. The Lord Wardsworth Agricultural College, Long Sutton. Riverside School, Stirling. Secondary Schools, East Grinstead. Hulme Grammar School. Fulham Conservative Club. Northern Daily Telegraph, Blackburn. Richmond Park Laundry, Glasgow. Northover Factory, Glastonbury. Effenden Factory, Wolverhampton. The English Sewing Cotton Co., Manchester. Dingle Mount Housing Scheme, Liverpool Corporation and The Northern Ireland Parliament Buildings, Belfast.

designed by reinforced concrete engineers, is from the point of view of load-carrying capacity, ng qualities, and speed and economy in construction. very much more efficient, in so far as it is able e domestic services in a most effective manner.

# D CONCRETE STEEL CO., LTD. NFORCED CONCRETE ENGINEERS ey Gardens, South Kensington, S.W.7

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The repo furth plete nece pal s The Governors of Queen Charlotte's Hospital, MARYLEBONE Road, have in view a scheme for considerable extensions on the site adjoining the hospital and Harcourt Street.

Messrs. H. W. Willis and W. Kaula, 22 Southampton Street, W.C., are to erect a block of flats in Park Road, St. John's Wood, LONDON.

Plans passed by the KENSINGTON B.C.: Additions and alterations, 35 Hyde Park Gate, and erection of house at rear; erection of block of flats at Kensington Palace Mansions, Victoria Road.

The Warwickshire county surveyor is preparing a scheme for the reconstruction of the bridge at COLESHILL.

\*

The Warwickshire County Council has approved the scheme for the construction of a new STARE bridge at a cost of £14,500, and the county bridgemaster is to make provision in estimates with a view to the work being commenced in the spring of 1928. Application is to be made to Quarter Sessions for the diversion of the road made necessary by the adoption of this scheme.

At the last meeting of the GLASGOW Housing Committee there was submitted a letter from Messrs. Rosslyn Mitchell and Tullis Cochran, making application for a site in Carntyne, at Cumberland Road, for the purpose of erecting a picture house, and the committee agreed to recommend that the area be leased to the applicants, at a rate to be fixed in accordance with the valuation of the district valuer.

The GLASGOW Corporation Housing Committee has approved a scheme for the erection of three-story tenements off Balmoral Street, Scotstoun.

\*

The HULL Corporation is now to acquire property for the widening of Regent Street, the cost being estimated at £10,750.

The HULL city architect has prepared plans for the conversion of the Carnegie library for the open access system.

The sheffield Corporation is preparing a reconstruction scheme for the Furnace Hill and Scotland Street unhealthy area.

Plans passed by the LEEDS Corporation: Ten houses, Easterley Crescent, Harehills, for Messrs. C. H. and F. Lax.

The MANCHESTER Education Committee reports that a second survey shows that a further sum of  $\pounds_78$ ,000 is required to complete the renewals and improvements necessary to put the premises of the municipal schools in a satisfactory state. The COULSDON U.D.C. is asking the Ministry of Transport to advise as to the most suitable line for the proposed bridge at Foxley Hill.

The COULSDON U.D.C. has appointed a committee to interview Messrs. R. H. and R. W. Clutton with regard to the development of the Mersham Manor estate.

Mr. William Hollis, Junior, is to erect forty houses in Leslie Road, Church Lane, and Leopold Road, FINCHLEY.

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The Board of Education has approved plans of the BOLTON Education Committee for the erection of Lostock open-air school, and sanctioned the expenditure of £27,115 for this purpose.

The BOLTON Corporation has obtained sanction to grant another 100 housing subsidies.

The borough engineer of BIRKENHEAD has prepared plans for the extension of the electricity offices in Craven Street, and tenders are to be invited for the work.

Mr. G. R. Farrow, Amberley House, Norfolk Street, W.C., is to erect garages on the site of 923-931 Fulham Road, FULHAM.

The LEEDS Corporation is to borrow  $\pounds_{35,520}$  for cast-iron section of mains from Headingley pumping station to Tinshill reservoir, and a main from Bramley reservoir to Whingate.

Plans passed by the MANCHESTER Corporation: Conversion of billiard hall into ballroom, Oxford Street and St. James Street; alterations, Unicorn Inn, Hyde Road and Savoy Street, West Gorton; alterations, Pack Horse Hotel, Stockport Road, Levenshulme; alterations, 53-55 High Street and Spring Alley; addition, 44 Great Ducie Street, Cheetham; factory and offices, Vesta Street, Ancoats; dining-hall and servery to hospital, Oxford Road, Chorltonupon-Medlock; alterations and additions to convent, High Lane and Acres Road, Chorlton; hotel, Claremont Road and Beresford Street, Moss Side; concrete raft to St. Crispin's Church, Llovd Street South and Hart Road, Withington.

Messrs. J. W. Watson and Son have prepared plans for the lay-out of new streets on their estate off Elland Road, LEEDS.

The LEEDS Education Committee has obtained sanction to borrow £13,100 for the remodelling of Ellerby Lane Council School, and £1,000 for furniture and fittings.

The LEEDS Corporation is to prepare a scheme for the improvement of the unhealthy area between West Street and Wellington Street. The LEEDS Corporation has purchased 19 acres at Bramley for a housing scheme.

The LEEDS Corporation has passed the plan of Messrs. A. W. Hainsworth and Sons, Ltd., showing the erection of a building over Farsley Beck.

The SHEFFIELD Corporation is to lay out 52 acres of the Longley housing estate for purposes of public walks and pleasure grounds.

The city architect of SHEFFIELD has prepared the lay-out of the fifth section of the Longley housing estate, and tenders are now to be obtained for the erection of twoand three-bedroomed houses.

#### . At a meeting of the DOVER Corporation the borough engineer reported that the architects of H.M. Office of Works, who are carrying out the restoration work of the Maison Dieu Hall, pointed out that the gates and stone piers now standing alongside the Maison Dieu Hall are not in keeping with this ancient building and considerably detract from its appearance and dignity, and that their removal would allow of a finer view of it to be obtained. He stated that he was in agreement with this advice, and suggested that the gates should be dismantled and removed to the isolation hospital for use as entrance gates there, and that the stone piers be removed to the store in the Ladywell depot for use on such occasion as may arise. The borough engineer was authorized to carry out the

necessary work.

The L.C.C. is to erect three additional blocks of tenements on the Ware Street area, HOXTON, at a cost of £29,560. It is proposed that the scheme shall be undertaken by Messrs. Rowley Bros., Ltd., who are now erecting other tenements on the estate for the Council.

The BARKING TOWN U.D.C. is to erect thirty flats in Gascoigne Road, by direct labour, to replace dishoused tenants.

The ILFORD Corporation is in negotiation for land for additional dust destructor works.

Messrs. Clutton are to develop for building purposes Crown land in the vicinity of Raymond Road, ILFORD.

The BIRMINGHAM Corporation is acquiring property in Bristol Street for a municipal branch bank.

In connection with the development of the new hospital site at Edgbaston, the BIR-MINGHAM Corporation is to construct a new road traversing the site and connecting Harborne Lane with University Road at a cost of  $f_{27,000}$ . THE ARCHITECTS' JOURNAL for June 22, 1927

#### RATES OF WAGES

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# PRICES CURRENT

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Damp course, in rolls of	41 in	per	roll	ô	2	6
DO. 9 in. per roll				õ	4	9
DO. 14 in. per roll				õ	7	6
DO. 18 in. per roll	-			Ő	9	6

VORK in stone lime	e mort	ar.			
ons or equal, per rod			£33	0	0
cement do., per rod				0	
cement do., per rod stocks, add 25 per ce	nt. per	rod.			
blues, add 100 per ce	nt. per	rod.			
blues, add 100 per ce cular on plan, add	124 pe	r cer	it. De	er I	od.
backing to masonry	add 1	21 D	er ce	nt.	per
and a manual p	,				
raising on old walls,	etc., a	dd 1:	24 pe	rce	ent.
od.					
underpinning, add	20 per	cen	it. pe	er I	od.
RICK walls in stocks	in cen	nent			
ar (1-3), per ft. sup.			£0	1	0
ig plates in cement i	nortar.	per		~	~
n			0	0	3
g window or door f	rames,	per	0	0	
n			0	0	3
G chases 2 1 in. deep 1					
ete floors not excee	aing o	in.	0	0	2
, per ft. run	*		0	0	2
G do. in old walls in c	ement,	per	0	0	4
n G, toothing and bo	nding	noir	0	0	*
to old (labour and					
sup.	materi	a15/9	0	0	7
COTTA flue pipes 9 in	diamo	tor	U.	v	
ed in fireclay, includ					
perft.run			0	3	6
ft. by 9 in. do., per ft	. run		0	6	0
HING chimney pots.	each		0	2	0
g and pinning ends		ers.			
n cement			0	1	0
s fair, per ft. sup. ext	ra .		0	- 0	3
ked stocks, per ft. su	p. extr	а.	0	0	7
d rubbers gauged a	and set	t in			~
, per ft. sup. extra			0	-4	9
salt white or ivory g	glazed,	per	0		0
p. extra			0	5	6
pinting, per ft. sup e			0	0	10
	do.	ach	0	0	0
easing with cement	nner e	acu	0	0	6
ITHIC PAVING, 1 in.	DOP 1	· A	0	0	
arme raving, 1 m.	, per 3	·	0	5	0
in., per yd. sup			õ	6	Ő
n., per yd. sup.			Ő.	7	0
ured with red oxid	e. per	vd.			
area men rea onta	ci pes		0	1	0
hed with carborundu	m. per	vd.			
			0	0	6
mall quantities in fi	nishing	to to			
etc., perft. sup			0	1	4
ig new grano. pavin	ng to	old,			
.run			0	0	4
for dishing grano,	or cem	ent			
g around gullies, each			0	1	6
NOUS DAMP COURSE	ex ro	olls,	0	0	-
sup	۰.		0	0	7
	RSE,	ın.,	0	0	0
T (MASTIC) DAMP COU			0	8	
r (Mastic) Damp Cou 1. sup.			0	11	10
r (Mastic) Damp Cou 1. sup.			0	0	10
r (Mastic) Damp Cou 1. sup.	sup.				
r (Mastic) Damp Cou I. sup. rtical, per yd. sup. Damp Course, per ft. T Roofing (Mastic	sup.	two	0	8	6
r (Mastic) Damp Cou I. sup. tical, per yd. sup. Damp Course, per ft. T Roofing (Mastic nesses. § in., per yd.	sup.	two	0	8	6
r (Mastic) Damp Cou 1. sup. tical, per yd. sup. Tamp Course, per ft. t Roofing (Mastic nesses. ‡ in., per yd. isting. 6 in.	:	:	0 0	80	6 11
r (Mastic) Damp Cou 1. sup. "tical, per yd. sup. Damp Course, per ft. T Roofing (Mastic nesses, § in., per yd. IRTING, 6 in. PARTITION BLOCK:	s, set	two in	Ō	õ	
r (Mastic) Damp Cou 1. sup. tical, per yd. sup. Damp Course, per ft., r Roofing (Mastic nesses, 2 in., per yd. IRTING, 6 in. PARTITION BLOCK: partition ber yd. sup.	s, set	:	0	0 5	11
r (Mastic) Damp Cou 1. sup. "tical, per yd. sup. Damp Course, per ft. T Roofing (Mastic nesses, § in., per yd. IRTING, 6 in. PARTITION BLOCK:	s, set	in	Ō	õ	11

THE wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as custom-ary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation it is impossible to guarantee the accuracy of the list, and readers are advised to have of the list, and readers are advised to have the figures confirmed by trade inquiry. โลลลลลลลลลลลลลลลลไ

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#### MASON

MASON, 1s. 9<sup>1</sup>/<sub>2</sub>d. per hour ; DO. fixer, 1s. 10<sup>1</sup>/<sub>2</sub>d. per hour ; LABOURER, 1s. 4<sup>1</sup>/<sub>2</sub>d. per hour ; SCAFFOLDER, 1s. 5<sup>1</sup>/<sub>2</sub>d. per hour. \*

		£0	4	6
		0	4	7
		0	- 3	- Ô
ae block	18.	•		~
		0	6	6
		0	6	9
	up.	0	2	6
		c. ab	ore	
			ore	
-	- 64			
me, pe	r 10.	00	0	0
. 00 %			2	4
			r ce	nt.
per It.	sup.	£0	2	8
		0	- 4	0
		0	3	9
		0	4	10
		0	2	6
		0	2	7
D		0	4	6
	sup.	1	2	0
			-	~
as Trer		0	1	1
	yd. su cube per ft. s xcavat one, pe e 30 ft. per ft.	perff. sup. xxavator," et one, per ft. e 30 ft. add 1 per ft. sup.	$\begin{array}{cccc} 0\\ ge blocks.\\ 0\\ rud. super & 0\\ rude & 0\\ perfl. sup.\\ 0\\ rcavator," etc., ab\\ one, per ft.\\ e 30 ft. add 15 perper ft. sup.\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

HALF SAWING, per ft. sup. . £0 1 0 Add to the foregoing prices if in York stone 35 per cent. Do. Mansfield, 12 per cent. Deduct for Bath, 33 per cent. Do for Chilmark 5 per cent.

DO. for Chilmark, 5 per cent. SETTING 1 in. slate shelving in cement,				
perft sup	£0	0	6	
RUBBED round nosing to do., per ft.	0	0	6	
YORK STEPS, rubbed T. & R., ft. cub.	1	9	0	
YORK SILLS, W. & T., ft. cub. fixed .	1	13	0	
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	6	
DO. 21 in. thick, per ft. sup	0	1	8	

#### SLATER AND TILER

SLATER, 1s. 9 <sup>1</sup>/<sub>2</sub>d. per hour; TILER, 1s. 9 <sup>1</sup>/<sub>2</sub>d. per hour; SCAFFOLDER, 1s. 5 <sup>1</sup>/<sub>2</sub>d. per hour; LABOURER, 1s. 4 <sup>1</sup>/<sub>2</sub>d. per hour, N.B.—Tiling is often executed as piecework.

		:					
Slates, 1st quality, per	1.20	: 00					
Portmadoc Ladies .					£14	0	0
Countess					27	0	0
Duchees			-		32	0	0
Old Delabole	Med	G	rey		Med.	. Gn	reen
$24 \text{ in.} \times 12 \text{ in.}$	£42	11	3		£45		
20 in. × 10 in.	31	- 4	3		33	Õ	6
16 in. $\times$ 10 in.	20		ŏ		22	- 4	9
$14 \text{ in.} \times 8 \text{ in.}$	12	1	ő		12		3
Green Randoms, per to					8		9
Grey-green do., per ton			•		7		9
Green peggies, 12 in. to	e i.	10	na	arta		3	9
In 4-ton truck loads, o	Talin	0200	NA NI	nek	Ime		
	lette	ereu	C 74 C	ne E	£0		
Clips, lead, per lb.				*	0		0
Clips, copper, per lb.				*	1	6	0
Nails, compo, per cut.	•						
Nails, copper, per lb. Cement and sand, see	4170		*	. 22	U	Louis	10
Cement and sand, see Hand-made tiles, per M Machine-made tiles, per	E	xca	vator	r, et	£5	10	0
Hand-made tiles, per M						18	
Machine-made tites, per	r M.				5		
Westmortand states, tar	ge, p	erti	on		9	0	0
DO. Peggies, per ton					7	5	0
	*						
SLATING, 3 in. lap, c	omp	o r	nails	, Pot	rtma	doc	or
equal:							
Ladies, per square					£4		0
Countess, per square						5	0
Duchess, per square					-4	10	0
WESTMORLAND, in dim	inis	hing	cou	rses,			
per square .					6		0
CORNISH DO., per squar	ne .				6	3	U
Add, if vertical, per squ		apr	rox		0	13	0
Add, if with copper na							£.
approx		per.	to of ca		0	2	6
Double course at eaves	ner	ft.	ann	POT.	0	1	0
SLATING with old Del					n 3 i	n. 1	an
with copper nails. a							terb.
with copper mans. o			rev	1	Med.	Gre	en
$24$ in. $\times$ 12 in.	£5		0		£5		0
$20 \text{ in.} \times 10 \text{ in.}$	5	5			5	10	ŏ
$16 \text{ in.} \times 10 \text{ in.}$	4	15			5	1	ŏ
$14 \text{ in.} \times 8 \text{ in.}$		10				15	ŏ
Green randoms		10	0		ē	7	
Grey-green do.	•				5	9	ő
Grey-green do.	0 i.	1	*	•	4	17	Ő
Green peggies, 12 in. to					18	14	0
TILING. 4 in. gauge. ev	erv	400	cou	irse			
nailed, in hand-made	e tue	28, 8	ivera	age	-	0	0
per square						6	
Do., machine-made do						17	0
Vertical Tiling, include	ding	po	intit	ng, a	ad 15	58.	0a.
per square.					~ ~		
FIXING lead soakers, pe	r do	zen			£0	0	10
STRIPPING old slates ar							
re-use, and clearing	awa	ay	surp	lus			-
and rubbish, per squa	are				0	10	0
LABOUR only in laying	slat	es.	but	in-			
cluding nails, per sou	are				1	0	0
See "Sundries for Asb	esto	s T	iling	. 9.9			

#### CARPENTER AND JOINER

CARPENTER, 1s. 9 d. per hour; JOINER, 1s. 9 d. per hour; LABOURER, 1s. 4 d. per hour.

		*					
Timber, average	prices (	t Do	cks. Lo	nd	on St	and	ard
Scandinavian, etc.	. (eque	il to	2nds):				
$7 \times 3$ , per std.					£20	0	0
$11 \times 4$ , per std.					30	0	0
Memel or Equal.	Sligh	thy le	ss than	fo	regoi	na.	
Flooring, P.E., 1 i				1	£1	5	0
DO. T. and G., 1 i	n., per	89.			1	5	0
Planed boards, 1 in			per std.		30	0	0
Wainscot oak, per					0	2	0
Mahogany, per ft.					0	2	0
DO. Cuba, per ft.					0	3	0
Teak, per ft. sup. o	flin.				0	3	0
DO., ft. cube .					0	15	0
		*					
FIR fixed in wall p	lates.	lintel	s. sleet	er	8		
etc., per ft. cub			of breep		0	5	6
DO. framed in fl		oofs.	etc., p	er		~	
ft. cube .	· · · ·		ecory p		0	6	6
po., framed in tru	Isses. 6	te. i	neludi	nġ			
ironwork, per ft				-0	0	7	6
PITCH PINE, add			it.		~		-
FIXING only boar	ding in	floo	PS. F00	18.			
etc., per sq.					0	13	6
SARKING FELT laid	1. 1-ply	, per	vd.	-	0	1	6
DO., 3-ply, per yo				1	0	ĩ	9
CENTERING for co	ncrete	etc.	. inclu	d.		-	
ing horsing and					2	10	0
TURNING pieces				ta		-	-
soffits, 41 in. wi					0	0	41
DO. 9 in. wide an					0	1	2
					-	-	Jand
			con	1121	nued	over	seal !

CARPENTER AND JOINER:	cont	inu	ed.
SHUTTERING to face of concrete, per square Do. in narrow widths to beams, etc.,	£1	10	0
per ft. sup.	0	0	6
Use and waste of timbers, allow 25 p			
above prices.	ci ci	ALC .	U.
SLATE BATTENING, per sq	£0	12	6
DEAL boarding to flats, 1 in. thick and			
firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to			
eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer			
arches, per ft. run	0	0	4
STOUT herringbone strutting (joists		0	
measured in), per ft. run	0	0	6
Sound boarding, ‡ in. thick and fillets nailed to sides of joists (joists			
measured over), per square	2	0	0
RUBEROID or similar quality roofing,	4	0	0
one-ply, per yd. sup.	0	2	3
Do., two-ply, per yd. sup.	ŏ		
Do., three-ply, per yd. sup.	Ő		
TONGUED and grooved flooring, 11 in.	0	0	0
thick, laid complete with splayed			
headings, per square	2	5	0
DEAL skirting torus, moulded 11 in.	-	-	
thick, including grounds and back-			
ings, per ft. sup	0		
TONGUED and mitred angles to do	0	0	6
Wood block flooring standard blocks			
laid herringbone in mastic :			~
Deal 1 in. thick, per yd. sup		10	
DO. 11 in. thick, per yd. sup.		12	
Maple 11 in. thick, per vd. sup.	0	15	0
DEAL moulded sashes, 11 in. with			
moulded bars in small squares, per	0		c
ft. sup. DO. 2 in. do., per ft. sup.	0		6 9
DEAL cased frames, oak sills and 2 in.	0	4	0
moulded sashes, brass-faced pulleys			
and iron weights, per ft. sup	0	4	6
MOULDED horns, extra each	õ		
DOORS, 4-panel square both sides, 11 in.		0	
thick, per ft. sup.	0	2	6
Do. moulded both sides, per ft. sup	0	2	9
po. 2 in. thick, square both sides, per			

0 2 0

po. moulded both sides, per ft. sup. po. 2 in. thick, square both sides, per ft. sup. po. moulded both sides, per ft. sup. po. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup. In oak, mahogang

carriages, per lo, sup
DEAL wall strings, 11 in. thick, moul-
ded, per ft. run
If ramped, per ft. run
SHORT ramps, extra each
ENDS of treads and risers housed to
strings, each
2 in. deal mopstick handrail fixed to
brackets, per ft. run
41 in. × 3 in. oak fully moulded
handrail, per ft. run
11 in. square deal bar balusters,
framed in, per ft. run
FITTINGS :
SHELVES and bearers, 1 in., cross-
tongued, perft. sup
14 in. beaded cupboard fronts, moul-
ded and square, per ft. sup
TEAK grooved draining boards, 11 in.
thick and bedding, per ft. sup
RONMONGERY :

IRONMONGERY: Fixing only (including providing

BCLEMB1:				
TO DEAL-				
Hinges to sashes, per pair		0	1	2
Do. to doors, per pair .		0	1	7
Barrel bolts, 9 in., iron, eac	h.	0	1	0
Sash fasteners, each ,		0	1	
Rim locks, each		0	1	9
Mortice locks, each .		0	4	0
			-	

#### SMITH

8MITH, weekly rate equals 1s. 5 MATE, do. 1s. 4d. per hour; ERE per hour; FITTER, 1s. 9 <sup>1</sup> / <sub>2</sub> d. per ho 1s. 4d. per hour.	ECTO	R. 18	. 9	łd.
*				
Mild Steel in British standard section	ms,			
per ton	•	£12	10	0
Flat sheets, black, per ton .		19	0	0
Do., galvd., per ton		23	0	- 0
Corrugated sheets, galvd., per ton		23	0	0
Driving screws, galvd., per grs.		0	1	10
Washers, galvd., per grs		0	1	1
Bolts and nuts, per cut. and up		1	18	0
*				-
MILD STEEL in trusses, etc., erect per ton		25	10	0

per ton bo., in small sections as reinforce-ment, per ton bo., in compounds, per ton bo., in bar or rod reinforcement, per

Do., in bar or rod reinforcement, per ton WROT IRON in chimney bars, etc., including building in, per cwt. Do., in light railings and balusters, per cwt. FIXING only corrugated sheeting, in-cluding washers and driving screws, per yd.

£1 10 0 1s. 4 id. per hour. Lead, milled sheet, per cut. Do. drawn pipes, per cut. Do. soil pipe, per cut. Do. scrap, per cut. Copper, sheet, per lb. Solder, plumber's, per lb. Do. fine, per lb. Cast-iron pipes, etc.: L.C.C. soil, 3 in., per yd. Do. 4 in. per yd. Do. 4 in., per yd. Mutter, 4 in. H.R., per yd. Do. 4 in. O.G., per yd. s, etc., 0 0 6 w 25 per cent. of  $\begin{array}{r}
 13 \\
 14 \\
 17 \\
 5 \\
 1 \\
 1 \\
 1
 \end{array}$ £0 12 6 2 10 0 0 0 6 91 2 7 0 0 4 61 101 0 0 MILLED LEAD and labour in gutters, flashings, etc. LEAD PIPE, fixed, including running joints, bends, and tacks, ‡ in., per ft. Do. 1 in., per ft. Do. 1 in., per ft. LEAD wASTE or soil, fixed as above, complete, 2 in., per ft. Do. 3 in., per ft. Do. 4 in., per ft. BRASS screw-down stop cock and two soldered joints, ‡ in., each Do. 4 in., each 6 0 6 BRASS screw-down stop cock and two soldered joints, in., each DO. Jin., each In., each DO. Jin., each In red lead, 2 jin., per ft. run. DO. Jin., per ft. run DO. Jin., per ft. run CAST-HRON BLR, GUTTER, fixed, with all clips, etc., 4 in., per ft. DO. O.G., 4 in., per ft. DO. O.G., 4 in., per ft. DO. Jin., per ft. DO. Jins, per ft. DO. 13  $\begin{smallmatrix}1&7\\2&0\\2&10\end{smallmatrix}$  $\begin{array}{ccc}
 0 & 2 \\
 0 & 2
 \end{array}$ 9 4 6 3 6  $\begin{array}{ccc}
 2 & 5 \\
 1 & 3
 \end{array}$ 1 10 0 PLASTERER 

 PLASTERER

 PLASTERER, 18, 94d, per hour (plus allowances in London only); LABOURER, 18, 44d, per hour.

 Chalk lime, per ton

 Sand and cement see "Excavator," etc. above.

 Diada cement see "Excavator," etc. above.

 Lime putty, per cut.

 Plair mortar, per yd.

 To fine stuff, per yd.

 Sand and cement see "Excavator," etc. above.

 Lime putty, per cut.

 Abiv mortar, per yd.

 To fine stuff, per yd.

 Save laths, per bdl.

 O 2

 Keene's cement, per ton

 Sirapile, per ton

 1 6 5 6 Lath nails per b. LATHING with sawn laths, per yd. METAL LATHING, per yd. FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, 1 in., per yd. no. vertical, per yd. RENDER, on brickwork, 1 to 3, per yd. RENDER, on brickwork, 1 to 3, per yd. RENDER, float, and set, trowelled, per yd. RENDER, float, and set, per yd. ANGLES, rounded Keene's on Port-land, per ft. lin. WHITE flazed tiling set in Portland and jointed in Parian, per yd. FIBROUS FLASTER SLABS, per yd. 1 6 0 2 9 0 4 6  $\begin{array}{ccc} 0 & 2 \\ 0 & 2 \\ 0 & 2 \end{array}$ 0 3 3 0 0 0 0 

d.

#### $\begin{smallmatrix}1&11&6\\0&1&10\end{smallmatrix}$ FIBROUS PLASTER SLABS, per yd. GLAZIER GLAZIER, 1s. 81d. per hour. Glass : 4ths in crates : Clear, 21 oz.

0	1	1	Clear, 21 oz.					£0	0	
1	18	0	DO. 26 oz	1				0	õ	
			Cathedral white, p	er ft.				õ	õ	
			Polished plate,	Britis	hi	n., up	to	~	0	
25	10	0	2 ft. sup 1	er ft.				0	1	
			DO. 4 ft. sup.					0	2	
16	10	0	DO. 6 ft. sup.					0	3	
17	0	0	DO. 20 ft. sup.	-				0	300000	
			DO. 45 ft. sup.	24				0	3	
20	0	0	DO. 65 ft. sup.					0	3	
			DO. 100 ft. sup.					0	4	
2	0	0	Rough plate, <sup>3</sup> <sub>18</sub> i	n., pe.	r ft.			0	0	
			DO. 1 in., per ft					0	0	
2	5	0	Linseed oil putty	, per	cut.			0	17	
					36					

GLAZING in putty, clear sheet, 21 oz. DO. 26 oz.

GLAZING in beads, 21 oz.	, per fi	t	. £0	1	1
DO. 26 oz., per ft.			. 0	1	4
DO. 26 oz., per ft. Small sizes slightly less (	under	3 ft.	sup.).		
Patent glazing in rou	gh pl	ate,	norma	al sr	oan.
1s. 6d. to 2s. per ft.					
LEAD LIGHTS, plain, med usual domestic sizes, f	ixed, 1	per ft		3	0
sup. and up Glazing only, polished	plate,	6 d.	to 8d.	per	r ft.
according to size.					
PAINTER AND	DAD	FDI	I A M	CE	D
FAINTER AND	LUL	ERI	1.014	GE	I.R.
PAINTER, 1s. 8 d. per h	our : L	ABOU	RER.	18. 4	Hd.
per hour: FRENCH POLI	SHER,	18. 9	d. per	r ho	ur :
PAPERHANGER, 1s. 81d. p					
	4.				
Genuine white lead, per ci	nt .		£2	7	6
Linseed oil, raw, per gall.			0		ĕ
Do., boiled, per gall.			. Õ		8
Turpentine, per gall.			ŏ		ŏ
Liquid driers, per gall.	• •		, Ö	8	6
Knotting, per gall.	• •		ŏ	18	ŏ
Distemper, washable, in	ardina	m col			~
ours, per cut., and up		9	. 2	5	0
Double size, per firkin			ō		ě
Pumice stone, per lb.			ŏ	õ	41
Single gold leaf (trans,	ferable	). ne	P		
book		18 A.C.	. 0	2	0
Varnish, copal, per gall.	and un		. 0	18	Õ
DO., flat, per gall			1	2	0
DO., paper, per gall.			. 0	16	
French polish, per gall.			. 0	17	6
Ready mixed paints, per	aall. a	nd un			õ
and meners burned but	4				-
Tran manager and a	-		0	0	
LIME WHITING, per yd. s			. 0		36
WASH, stop, and whiten,				0	0
DO., and 2 coats distem	per wit	n pro	-		

Wash, stop, and whiteh, per yd. sup-bo., and 2 coats distempter with pro-prietary distempter, per yd. sup. KNOT, stop, and prime. per yd. sup. PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup. bo., subsequent coats, per yd. sup. BRUSH-GRAIN, and 2 coats varnish, per yd. sup. FIGURED DO., DO., per yd. sup. FRENCH POLISHING, per ft. sup. STRIPPING old paper and preparing, per picce. 7 9 24 0 1 

per piece HANGING PAPER, ordinary, per piece. DO., fine, per piece, and upwards VARNISHING PAPER, 1 coat, per piece CANVAS, strained and fixed, per yd. VARNISHING, hard oak, 1st coat, yd.

sup. DO.

#### SUNDRIES

0 3 0

0 1 2

0 11 

£0 0 21 . from Plaster board, per yd. sup. PLASTER BOARD, fixed as last, per yd. · in Asbestos sheeting, 32 in.. grey flat, per yd. sup. Do., corrugated, per yd. sup. ASBESTOS SHEETING, fixed as last, flat, per yd. sup. Do., corrugated, per yd. sup. Do., corrugated, per yd. Sup. Assesstos slating or tiling on. but not including battens, or boards, plain "diamond" per square, grey po., red Asbestos cement slates or tiles, 5 in.  $\begin{array}{ccc} 2 & 15 \\ 3 & 0 \end{array}$ DO., red Asbestos cement slates or tiles, <sup>3</sup>/<sub>2</sub> in. punched per M. grey DO., red 18 Do., red ASBESTOS COMPOSITION FLOORING: Laid in two coats, average  $\frac{3}{4}$  in. thick, in plain colour, per yd. sup. Do.,  $\frac{3}{4}$  in. thick, suitable for domestic work, unpolished, per yd. Metal casements for wood frames, domestic sizes, per fl. sup. Do., in metal frames, per fl. sup. HANGING only metal casement in, but not including wood frames, each . 0 2 10 BUILDING in metal casement frames, per ft. sup. Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used. PLYWOOD, per ft. sup.: 

5 5

41/257

6

0 11 1 0

0 6

0 0 3

PLUMBER

PLUMBER, 1s. 9 d. per hour ; MATE OR LABOURER, 1s. 4 d. per hour.

