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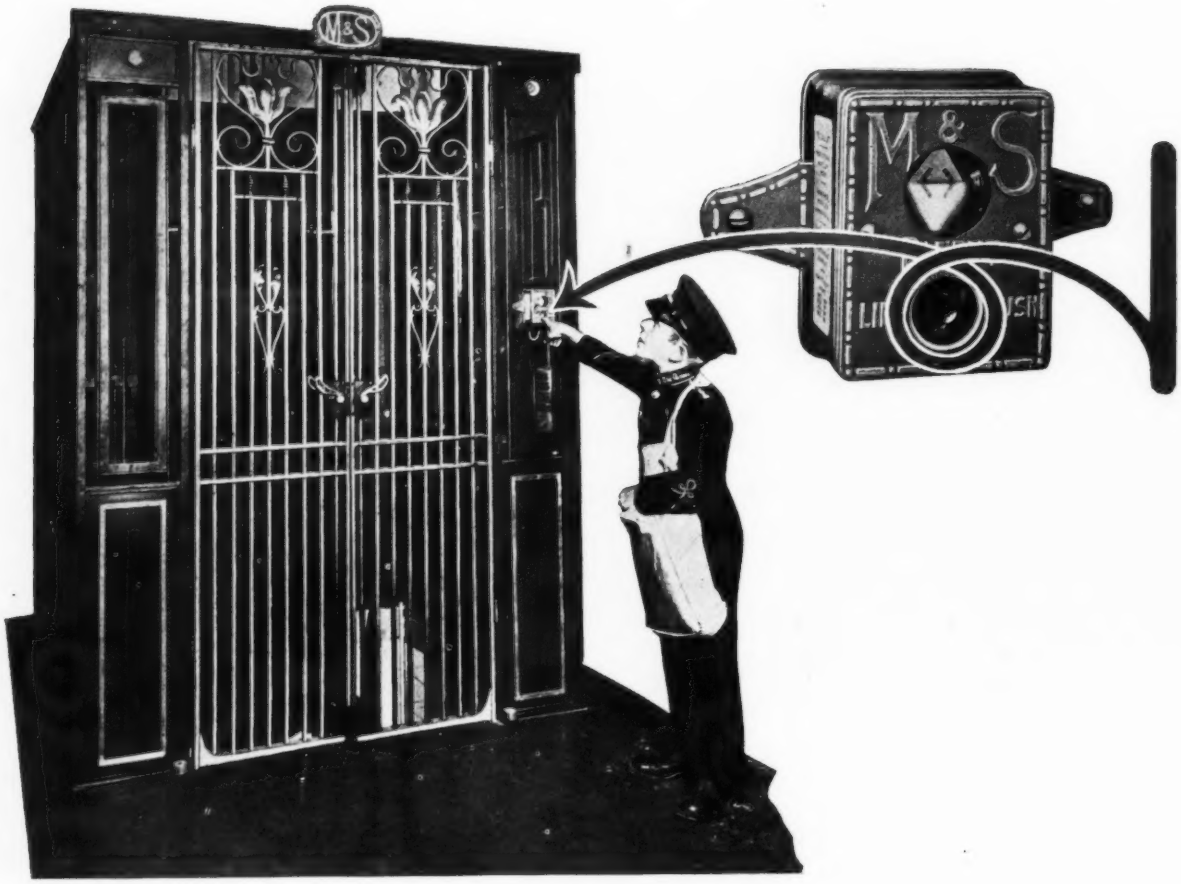

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[A working detail of this tower appears on the following page]

THE TOWER OF SAINT CYNON'S CHURCH, FAIRBOURNE, MERIONETH.

[BY JOHN B. MENDHAM]

THE WEEK'S DETAIL

[BY JOHN B. MENDHAM]

The bonnet tower shown in the larger illustration is built over the west end of the church, and grows out of the main roof, sitting well in on the east side. On the west side it rakes down, thus giving a sympathetic continuity to the large central buttress. The stone of which the walls are built comes from the site itself, and is of a slate formation, varying in its colour from brown or green to a greyish purple ; it is laid in irregular courses and is dressed with Monks Park stone. The tower is supported internally by an open oak-framed truss, which also carries the belfry staging. The truss, and all beams forming the basic support of the superstructure, is of sawn Hertfordshire oak of six years' seasoning, and has stood up with very little shrinkage. The difficulties of construction were to carry the three sides of the tower which had no wall bearing, and to allow for the weight of four bells, which have still to be added. This was accomplished by adopting a composite queen-post truss, strongly braced, and bracketed-out to take the various members of the belfry stagings. The sills, on which the superstructure of the tower rests, are supported on the truss and on the west stone wall. The lower tie-beam is carried by the strong posts which distribute the weight as from different points, the ends of the beams being built into the walls.

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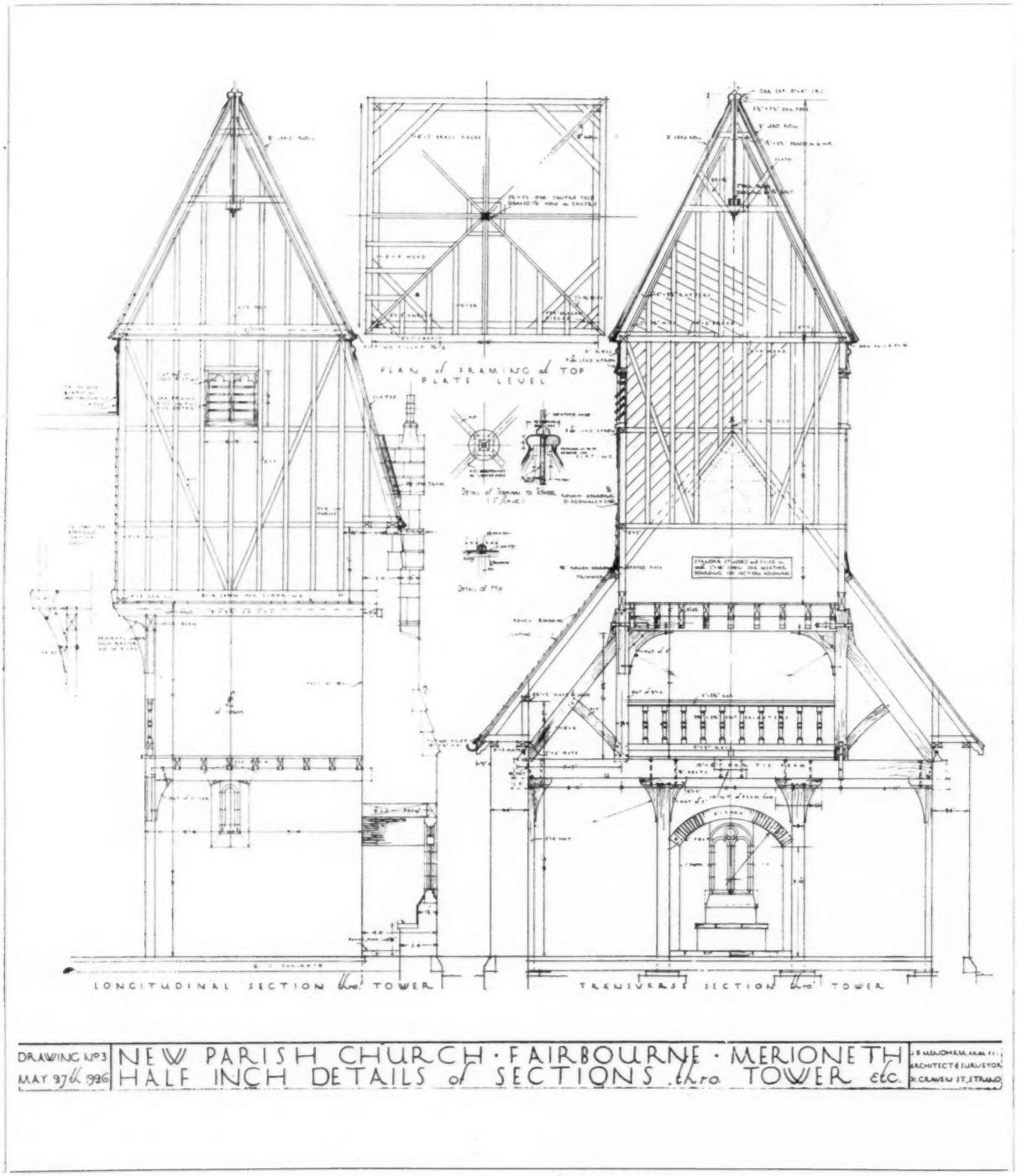


A photograph of this detail is given on the preceding page.

THE ARCHITECTS' JOURNAL

Wednesday, November 23, 1927

CIVIC WEEKS

PERHAPS some scholar will reveal to us who introduced the Civic Week, and explain whether it arose from such kindred concentrated efforts as Baby Week, Shopping Week, Rat Week, or Cricket Week. Whatever its origin, it is certainly a movement that is going farther before it exhausts itself, and it creates opportunities which, properly directed, offer valuable and lasting benefits to the community. Among these benefits the educational sections are clearly prominent to the reformer, but let him not claim that it is this side alone which gives serious justification for the efforts made. Good fellowship and gaiety are more than the jam that sugars the pill; they have quality in themselves, and the more successful the week the more conspicuous and valuable will be these lighter elements, always assuming that they are undertaken by persons of taste and responsibility who can raise the standard and not pander to the tawdry. The sense of public gala is curiously lacking in these islands, and this loss of recreational grace is reflected both in our taste and manners. "Dressing-up" ourselves or our houses is discountenanced by the respectable. It is dubbed "tomfoolery," and is believed to be incongruous with the sacred business of money-making. A successful civic week will quickly falsify this illusion. Ribbons and festoons bedeck lamp-post and typewriter; important business firms find it worth their while to guarantee large sums of money and to expend considerable amounts on garlands, lights, and jollity.

Before the week arrives there is the hectic rush and fuss which one usually associates with private theatricals, and with it the sudden and unexpected friendships that only the heat of such desperate emergencies can create. Respectable citizens borrow and barter the strangest "properties" for their particular "shows"; the organizers of the separate sections—architects, scene shifters, pageant masters, police inspectors, gas men, and musicians meet in circumstances of hurried tension that crash through the polite façade of customary formality. "They" (meaning the general public for whom all are catering) are at once sedulously courted and sarcastically scorned—as is the fate of all audiences, congregations, clients, and assemblies, at the hands of those dedicated to their service. And so the week is staged—queens of beauty, competitions, pageants, and illuminations; childish if you will, but in such playthings does a city regain its youth, and in reviving the joy of the circus it also revives its capacity for learning anew. It has been proved abundantly that the better the recreational week the better the educational side—again assuming that the recreational side has been carried out responsibly. A happy, interested crowd means many unexpected visitors to the instructional exhibits. This quality was strikingly seen at the recent civic week held in Dublin. Certainly the weather favoured all the paying outdoor shows, but it takes more than this important co-operation to make a week pay its way. In Dublin huge crowds thronged the military tattoos, the fireworks, and the thoroughfares; the indirect benefit to business was obvious, and moreover, the very large preliminary guarantee was adequately covered. In addition, the classical concerts were packed, and the educational exhibits and lectures had a substantial attendance, while the work of the week was commemorated in a handbook, entirely produced in Dublin, that was an achievement of taste and scholarship. Perhaps the Dubliner has a stage instinct that enables him to pull these things off. His horse show and the Abbey Theatre have the knack of success to an unusual degree, while the provincial Irishman, judged by his seaside attractions, is a dismal fellow sadly in need of some enlivenment lessons from the metropolis.

Returning to the streets, it is not necessary to stress the influence of well-chosen decorations, the use of good lettering, and of temporary accessory in hoarding and awning. Life is enriched and deepened, insensibly and therefore the more inevitably, and the crowds return to their homes with an added experience that must find its expression in subsequent everyday life.

To those who organize and make possible such activities more praise and thanks should be given than it is usually their lot to receive. The public likes assuming that certain people enjoy running things, just as men believe that women like washing-up. They accept their services good-humouredly, feeling rather superior that they themselves have, so they say, neither the time nor the knack. Yet it is just these same organizers who will be found to spend themselves on the ordinary activities of good citizenship. Look where you will, in any town, and the same names will recur. They are the people of good intent who have the energy of service, and on whom in the future all reformers must rely.

NEWS AND TOPICS

SIR HERBERT BAKER'S paper at the R.I.B.A. on Monday night on the Government Offices of Pretoria and the New Delhi had in it several passages of more than topical interest. One was, that in the debate in the House of Commons on the Registration Bill, a member held up the Institute examination to scorn, because the examiner had set the question "to describe a Roman amphitheatre." Now it seemed to him that the examiner set a very wise question. All over the empire, where the climate could generally be depended upon, such out-of-door meeting-places did, and would, he believed, still more in the future, become of public and national importance. He had seen many such open-air durbars, as they were called in India, and two recently in Rhodesia. The place was sometimes temporarily built, if built at all, and therefore lacked the dignity which an ordered architectural form could give. Surely, too, with the advent of loud speakers, large stadia or amphitheatres might become in the future essential architectural necessities in all countries. A second passage was, that though the labour employed in the building of the New Delhi had been entirely Indian, with Indian contractors, and attempts had been made to encourage the arts and crafts of India, little assistance had been given by the Government. "Much more might have been done to embody in the building some expression of the history, symbolism, and ideals of India through the medium of those handicrafts in which the Indians once had such skill. The skill exists, but has languished for want of such patronage and continuous markets as might have been supplied by the building of New Delhi."

* * *

Mr. Robert Pashley, speaking at a meeting of the British Waterworks Association, emphasized the value of "good will, proper organization, and the assistance of the Press" in preserving our rivers from pollution. Good will is, indeed, necessary, for, in one case that came under my notice, even the machinery of the law proved unable to prevent a factory owner from poisoning the local stream with a chemical effluent from his works. His factory having grown up piecemeal around an old mill, it was not until the water below the site had been turned into a horrible ammoniacal blue sludge that the attention of the health officer was called to the intolerable state of affairs. He promptly insisted upon the installation of apparatus in which the poisonous effluent might be neutralized, and upon its completion tested its efficacy. But as soon as the apparatus was passed as fit for use, the factory owner had the effluent turned into the stream as before to save the trifling cost of its neutralization. When last I saw and smelt the stream it was as disgusting as ever, and the purifying plant, which was not a thing of beauty, did nothing to improve the amenities of the neighbourhood!

The Correspondence which appears on pp. 680-81 of this issue is the outcome of an article by M.L.A. in the FIRST JOB *Series in our issue for November 9. Earlier letters in this controversy appeared in our issue for November 16. Those readers who would like to refresh their memory on any points that have been touched upon should write to the Manager, the Architectural Press, 9 Queen Anne's Gate, Westminster, S.W.1. Complimentary copies will be supplied so long as the issues remain in print.*

Mr. Hugh Davies of the Board of Education is to be heartily congratulated on the success of the novel departure that he organized last week-end. It is well known in the building industry that it has become imperative to secure improved facilities for the instruction of young plasterers. As a result of consultations between the Board of Education and the National Joint Council for the Plastering Industry, which includes representatives of both the employers' and operatives' organizations, it was recently agreed that the first step which might advantageously be taken was to bring all the teachers of plastering from technical schools in England and Wales to attend a week-end conference in London. The Board of Education paid the travelling expenses, while the National Joint Council made provision for maintenance as well as for out-of-pocket expenses in certain cases. The first conference was held last Friday at the L.C.C. School of Building in Ferndale Road. The methods of instruction in plastering as applied to junior day students and apprentices were explained. In the evening a paper was read by Mr. T. P. Bennett, head of the Architectural School at the Northern Polytechnic. Other conferences were held, but the climax was the visit paid, by permission of Sir Edwin Cooper, to Lloyds building in the City for the inspection of plaster work in course of construction.

* * *

On reading the news of the death last Thursday of the Right Hon. C. F. G. Masterman, I at once turned to his best-known book, *The Condition of England*, to refresh my memory as to what he had written therein about the eternal housing question. I found little or nothing that was at all illuminating. I had to be content with such familiar generalizations as this: "One type of dwelling is found to be more or less prevalent through all the urban aggregation. That is, the small four- or five-roomed cottage, containing on the ground floor a front parlour, a kitchen, and a scullery built as an addition to the main part of the house, and on the upper floor the bedrooms, the third bedroom in the five-roomed house being built over the scullery. And in such dwelling-places, if anywhere, is concealed the secret of the future of the people of England." There's the respect that gives us pause; for who is not thoroughly sated with this essentially pre-war, not to say early Victorian, type of urban small dwelling? Truly, Masterman gives us a gloomy enough picture of the condition of England, and the pessimistic tone is sustained throughout the book. But the rather dismal mass is occasionally relieved by a gleam of sardonic humour. It flashes out, for instance, in the caustic comment which Mr. Masterman appends to this passage quoted (a little freely) from Carlyle's *Sartor*: "Orpheus built the walls of Thebes by the mere sound of his lyre. Who built these walls of Weissnichtwo, summoning out all the sandstone rocks to dance and shape themselves into Doric and Ionic pillars, squared ashlar houses, and noble streets?" Mr. Masterman adds: "All cities are thus built 'to music.'" Meaning, of course, "the still, sad music of humanity"; for he very pertinently asks: "What discordant melody is responsible for the creation of Jarrow, or Salford, or Canning Town?" Why pick out these for special distinction? But the adverse reference rather disturbs my enjoyment of a happy quotation heading one of the chapters in Mr. Newton's charming *Prelude to Architecture*, to wit, "We are the music-makers."

ASTRAGAL

STONE SLATE ROOFS, OLD AND NEW

[BY NATHANIEL LLOYD]

THE use of slabs of stone for roof coverings is almost as old as man himself, and in districts where laminated stone is found near the ground surface, or otherwise accessible, we also find stone slates on the old buildings. Unfortunately, local materials are now being superseded by other natural materials which can be brought from other districts and laid at less expense, or by manufactured tiles or other coverings which are cheaper and less picturesque. In consequence, the use of stone slates is now confined to better-class work, so that the art of the slater is practised by few workmen, and these generally old men, who are not taking apprentices. Whether this will result in the art being lost in the course of the next generation, or whether the demand for slating in the old manner for better buildings will preserve it, is difficult to foresee, but it seems desirable that the stone slater's methods of working should be recorded for the guidance of those who may be called upon to embody stone slating in a specification. Moreover, slating is a close trade, the secrets of which are kept so carefully as to be a monopoly, and even bricklayers working side by side with slaters know little of their methods.

Stone slates are found and used in many counties—Westmorland, Yorkshire, Sussex, and the Cotswold districts each having its own type. The Horsham slates or slabs are exceptionally thick and heavy, and in the Cotswold district are roofs covered, some with large, heavy slates and others with much smaller and thinner ones, just as they may happen to be found in local quarries. Methods vary in each county, as do the slates; but those of the Cotswolds are sufficiently typical of stone slating generally, and perhaps as great a variety of roofs (including hips and valleys) are to be found in this district as in any other. Stonefield quarry slates, as used in the Witney district, are cleft and irregular in shape (often lacking corners), whilst in the Cotswolds slates are larger in the whole and have straight edges which are parallel.

When slates come on a job from the quarry, they are mixed up, and the slater's first task is to sort them into sizes. For this a slater's rule is used. These rules vary slightly (as do the slate sizes) in each locality. The rule is made from a piece of ¾ in. batten, 30 in. long. One is shown in plan, and also isometrically, in figure one. The peg is put into the hole in the slate and the length of the slate is determined by the notch on the rule to which its tail reaches. There are no numbers or other marks on the rule except the notches, and the significance of these is a trade secret. In the Witney (Oxon) district, from which I have these particulars, there are twenty-six slate sizes, each having its distinctive name, and each having its length indicated by one of the cabalistic marks on the slater's rule. Beginning with long sixteens* (which, by the way, are not 16 in., but 23 in. long), these decrease to short elevens (14¾ in. long), and the remaining sizes are known by strange names, as Bachelors, Becks, Muffity or Moveday, Cuttings, Thirds, and, smallest of all, Cocks or Tants.

The names and sizes of Stonefield Quarry slates, measuring from centre of peg hole to tail, in inches, are:

Long sixteens	23 in.	Short wivetty or wippetts	13½ in.
Short sixteens	22½ in.	Long nines	12½ in.
Long fifteens	21½ in.	Short nines	11 ¾ in.
Short fifteens	20¾ in.	Long bachelors	11 in.
Long fourteens	20 in.	Short bachelors	10½ in.
Short fourteens	19½ in.	Long becks or hocks ..	9¾ in.
Long thirteens	18½ in.	Middle becks	9½ in.
Short thirteens	17¾ in.	Short becks	8½ in.
Long twelves	17 in.	Muffity or movedays ..	8 in.
Short twelves	16½ in.	Long cuttings	7½ in.
Long elevens	15½ in.	Short cuttings	6¾ in.
Short elevens	14¾ in.	Thirds	6 in.
Long wivetty or wippetts	14 in.	Cocks or tants	5¼ in.

In the Witney district the pitch of roofs is from 47 deg. to 50 deg., with extremes of 45 deg. and 55 deg. The slight bellcast given at the eaves makes them look steeper than they are. The verges project about 2½ in., seldom more than 4 in., and the eaves project 5 in. to 6 in. beyond the wall face. Further west one sees roofs having a pitch of 60 deg. In some districts the roof slopes are plain and unbroken between two gable walls. In others one sees hips and valleys and dormer windows, both gabled and hipped. The wall-plate is set well back from the outer face of the wall (figure two), sometimes as far back as the inner face.

The under-eave slate is called a "cussome," and is bedded on the wall in mortar with a pitch of 15 deg., and tails under the first batten, which prevents it tilting. The width of a "cussome" may be anything from 6 in. to 24 in. or more, and thickness 1½ in. Pieces are knocked off the sides to pass the rafters and joists.

The eaves slates are the widest and heaviest of all—18 in. to 24 in. are common, but I have seen one 42 in., and heard of one 60 in. The length is from 10 in. to 36 in.—average about 16 in.—and thickness 1 in. to 1½ in.

The next course after the eaves course is always called the "follower," then come other sizes as sorted out by the slater with the aid of his rule. The laps begin with 3 in. at the foot and reduce to 1 in. at the top of the roof slope.

* In other districts they have larger slates and begin with long eighteens.

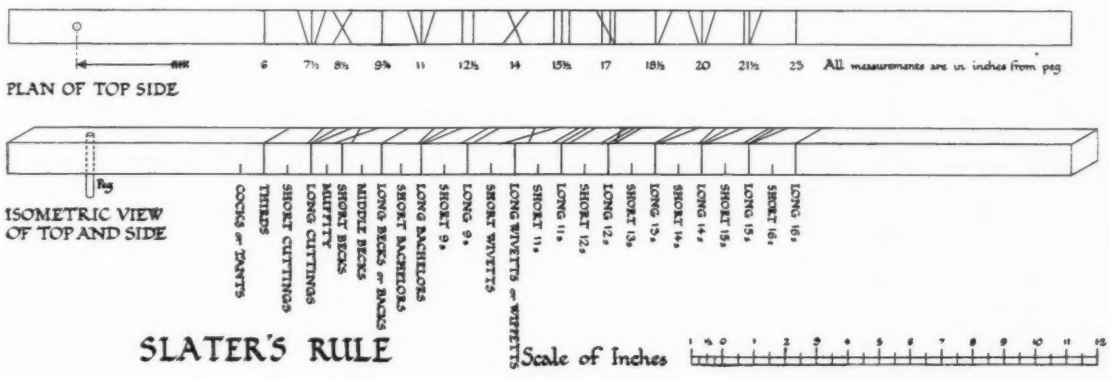


Figure one.

The gauge of the "follower" course is about 9½ in. Battens are nailed in three or four courses at a time as work proceeds and as the quantity available of each slate is ascertained. Thus, there may be three courses of 9 in. gauge, two or three courses of 8 in., diminishing to 6 in. halfway up the roof. These would correspond to a "Long Wivetty" or "Short Eleven," of which there might be enough for six or eight courses. Then comes 5 in. gauge, with "Short Nines" or "Long Bachelors." Smaller sizes follow, until at the top of the roof the gauge is no more than 3 in., lap 1 in., and thickness of slates ½ in., with width of 3 in. to 6 in. Frequently a course laid with 7 in. gauge may follow several courses of 5 in. gauge, and this in turn be followed by a couple of courses of 6 in.

Many slates have broken corners which would allow wet to pass. To obviate this and still to use such slates, a thin chipping of slate is placed underneath the joint and upon the slate beneath, thus acting as a soaker. This chipping is called a "gallet" (figure three). The selection and placing of these "gallets" require much judgment and experience, especially in the valleys.

The valleys consist of two or three cut slates in a course, except now and then when at the bottom of a slope the wider slates require four or five. The centre slate is called a "bottomer" (figure four). Those on each side of the "bottomer" are called "skews," but in the Cotswolds are known as "lye-byes." The next course, which breaks joint with the "bottomer," is worked with two "skews." Both "bottomer" and "skews" are kept narrow. Figure five is from a photograph taken at Burford (Oxon) of a roof in course of slating. It will be noticed that these valley slates are not hung on pins as are the rectangular slates, but keep their positions by reason of their wedge shapes. None of these slates are bedded, but are pointed or torched with mortar from inside after hanging.

For the poorer class of work (chiefly modern), the ridge or "cresting" is formed with mortar, but the correct "crestings" are sawn from a block of stone, as shown in the plan on figure two.

Figure six shows (on the left) stone cresting and (on the right) cresting of cement mortar—doubtless a repair. The valley in this illustration is typical of the irregularity of the

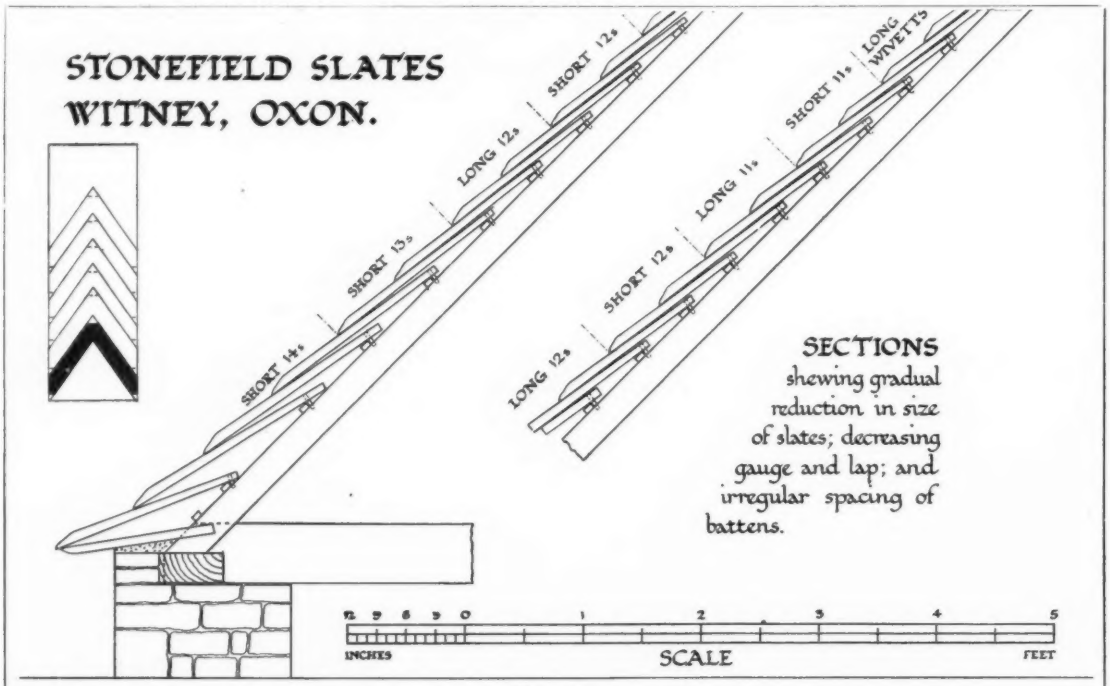
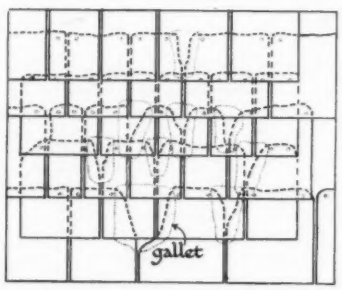
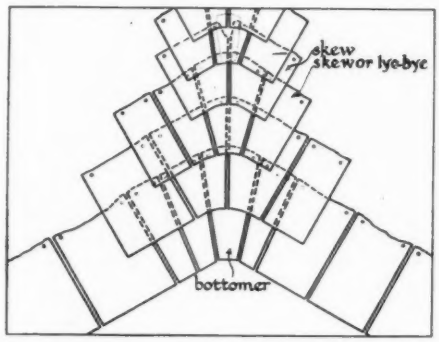


Figure two.



PORTION OF ROOF SHOWING USE OF GALLETS WHERE TOP CORNERS OF SLATES ARE BROKEN.

Figure three.



ISOMETRIC DRAWING of VALLEY. *NO SCALE*

Figure four.

Figure five. Cotswold (Burford) large slates, showing two valley courses.

work, which, however, is perfectly watertight. Attention may be drawn to the difference in the height of the eaves. This is a common feature in old work in many counties. It is more pleasing in unsymmetrical buildings than when the eaves line is carried at the same level all round. In timber-formed houses it arises from the wall-plates being laid one over the other instead of being halved at the angles. One frequently sees a piece of stone " cresting " inverted and placed at the junction of a dormer or other ridge with a main roof, as in figure seven. This is to throw off water to right and left.

Hipped dormers are rarer than gabled dormers, but that illustrated in figure eight is one of four on a roof at Burford. The hips are mitred, and the end of the ridge is at the same angle as the hipped roof, instead of being vertical. The eaves are very deep. In other respects these dormers might almost be the prototypes of those finely-proportioned ones in plain tiles with which Sir Edwin Lutyens has made us so familiar.

The stone coping of gable walls is termed " tabling."

Figure seven.

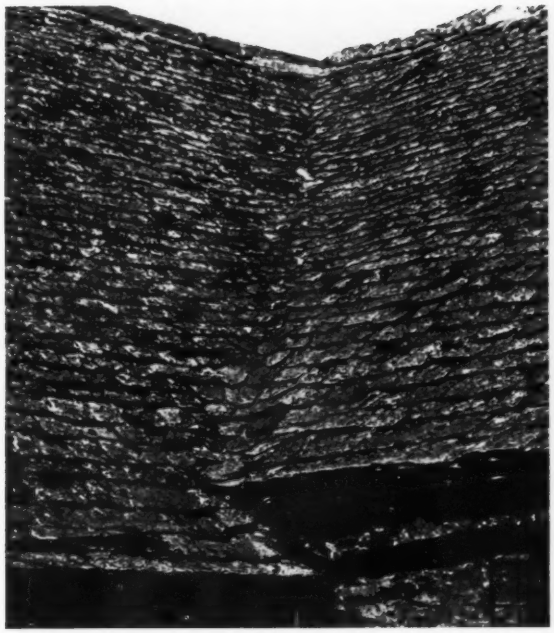


Figure six.

In many instances this is furnished with finials on the kneelers and apices, as in figure nine. A subtlety in connection with such " tabling " used with stone slates is that the pitch of the rafters must be steeper than that of the wall slope for the tabling. The necessity for this would not arise if the roof covering were pantiles or other units of equal thicknesses, but stone slates starting at the eaves with thickness of $1\frac{1}{4}$ in. to $1\frac{1}{2}$ in. and three slates thick and diminishing to slates $\frac{1}{2}$ in. thick may produce a difference between the thickness of covering at the eaves and that near the ridge of as much as 3 in.; hence the necessity to pitch the rafters more sharply. The slates are swept up to the oversailing tabling so that water may be thrown away from the junction, and this is finished with a cement fillet. This fillet, and the fact that the surface of the slates is parallel with the pitch of the tabling, is shown in figure ten. Failure in detailing to adjust the respective pitches of rafters and tabling to the slates to be used will produce ugly diverging instead of parallel lines.

Figure eight.

Figure nine.

Figure ten.

THE NEW HOME OF THE QUAKERS

[BY ALWYN R. DENT]

THE relation of Puritanism to Art has been in the past, perhaps, liable to misinterpretation. From one extreme of religious thought to the other, the insistence on exterior symbolism decreases in relation to the simplification of dogma and ritual. We should therefore expect to find in the meeting-houses of the Society of Friends that marked avoidance of symbolism and exterior show characteristic of their tenets. And such, indeed, is the unaffected simplicity of the old Quaker meeting-houses still extant, their insistence, as it were, of the spiritual upon the purely domestic plane; a plain house, unadorned save by the comeliness of its native materials, and with no indication which shall distinguish it or mark it from the humble dwellings around, neither mysteriously indicating the performance of ceremonial rites within, nor inviting to congregational participation in public worship.

Such, perhaps, are the thoughts conjured up by the glimpse through the beech glades of Buckinghamshire towards the old Jordans Meeting-House or across the hamlet of Penn. Across the Atlantic, too, now neatly housed in crisp, white-painted weather-boarding, now in the soberest tint of russet brickwork, we find the same traits expressed and clearly defined. It may then be asked, having in mind these imposed limitations, what development of outward expression—from a purely architectural point of view—could occur; and in the headquarters of the Society of Friends in Euston Square we may assume to have some answer to this speculation, bearing in mind that it is an official headquarters of an organization, including amongst its units a meeting-house within, but not necessarily externally expressed. It is significant that a certain austerity of taste accords with the trend of the best that is in modern architecture; and so, perhaps, we should not immediately connect the sober Luton grey brickwork and stone dressings with the Society of Friends; but on the main elevation to Euston Road the unadorned Doric columns, casting their shadow on to a plain stone wall behind, punctuated with doorways of domestic stature, indicate something differing from mere office premises, or from a municipal building; and, approaching the entrance through

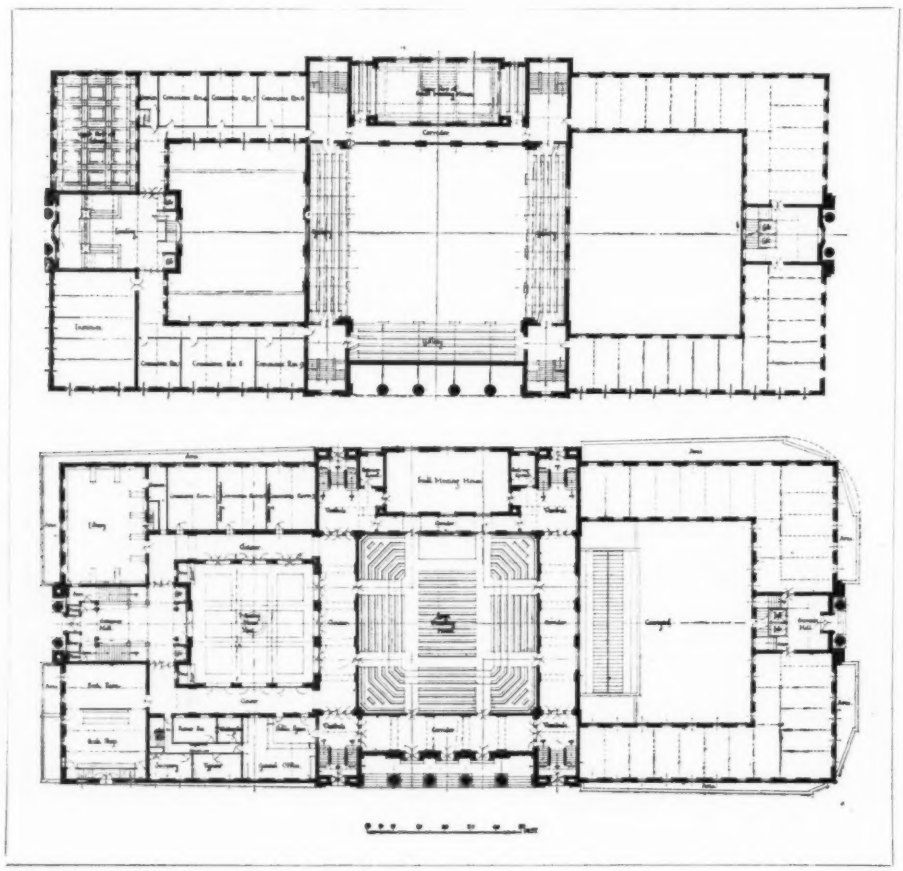
The Friends House, Euston Road, London. By Hubert Lidbetter. The large meeting-house on the north front.

the stone-flagged garden confirms our impression of a distinct purpose of construction; perhaps most successfully expressed in the inner courtyard, or as simply known as the "Yard." The simple brick-ringed fountain in the centre, with terraces on two sides, seems to impose a quietude appropriate to the surroundings. The composition towards the hall side is very successful, with plain brick pylons and arched window above. Again no symbolism, beyond the clock set in its stone slab, where, perhaps, one might expect a sundial with its surely implied inscription "*Horas non numero nisi seranas. . . .*"

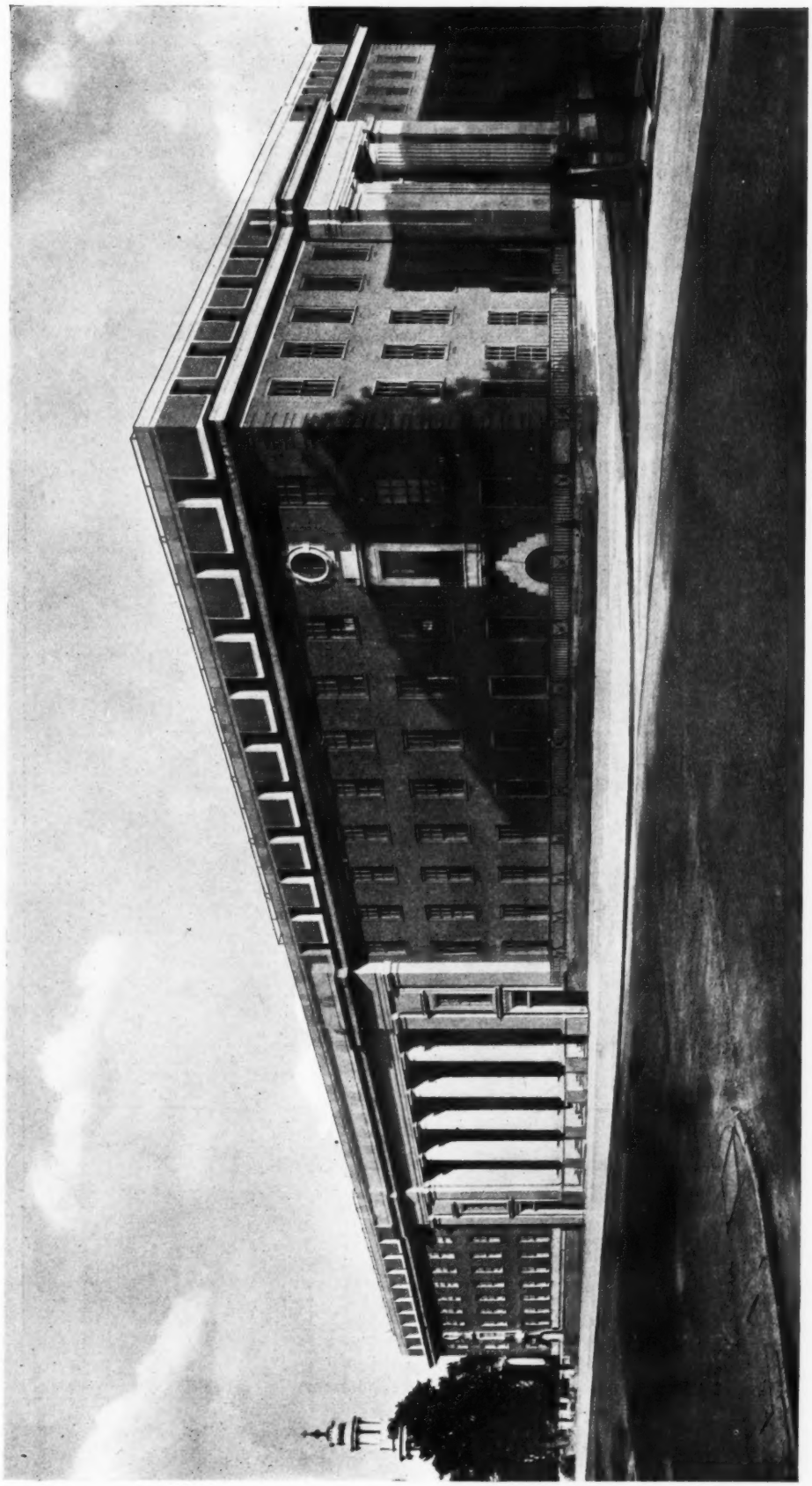
. The building, thus being planned around its spacious but sober central court, receives ample light for its various offices, meeting-halls, and, last but not least, kitchen and cloakroom accommodation. To speak of the large meeting house from an architectural point of view, we must judge this to be well arranged and lit, spacious and acoustically sound. Plain oak panelling and dull-brown seating continue the note struck on the elevation—with the minimum of applied mouldings and absence of ornamentation. Though externally unexpressed, the meeting-house itself forms the central nucleus of the plan, the right wing or commercial block again extending around an open courtyard, these premises to be divided up and let out as offices. The circulation is in all respects free and unhindered, and the staircases and vestibules well balanced and disposed in relation to the entrances and exits. The main entrance staircase would have appeared more spacious in execution had it possessed an open well between the flights; but perhaps here again the lowliness of effect produced by the deep beams in the hall was intentional, or by reason of fire regulations was desirable.

The south front departs from the Doric symbolism, in place of which we find a pleasing central composition in which semicircular arched brick windows with stone inset arches predominate. Perhaps the upper windows, whose stone surrounds project from the brickwork and over the architrave of the main cornice, are not wholly satisfactory in appearance; had they followed the sinking of the lower fenestration they might have appeared less insistent to the eye. The semicircular windows themselves light efficiently the small meeting-house, which in its simple economy is probably one of the most successful efforts of the architect. The plain panelling rising to the gallery level without any balustrading, and the tall panelled piers supporting the unmoulded ceiling beams seem to add to the character of quietude and grave simplicity appropriate to its purpose, perhaps more so than the necessarily more public atmosphere of the large meeting-house. The library, on the east front, enjoys excellent lighting, and the arrangement of the bookcases and simple trellised gallery around convey an impression of ordered thought, restraint, and unpretentiousness of character.

If a word of criticism may be offered with regard to the exterior detail, it is that the contours of the stonework seem at times rather heavy in relation to the light flush-framed Georgian sashed windows, and to offer a contrast with the brick surface, instead of appearing to grow out of it. Such relative adjustment of materials is one where differentiation becomes of subtle import, and where,



The Friends House, Euston Road, London. By Hubert Lidbetter. Plans of the ground and first floors.



The Friends House, Euston Road, London. By Hubert Lidbetter. The north front. Left, the administration block. Centre, the entrance to the large meeting-house. Right, the commercial block.

perhaps, Wren of all most excels in his combination of elements. Again, the attic story might not be thought to be entirely successful for similar reasons, visible as it is behind the projection of the cornice; but here again, the baldness of finish might be construed as directness of statement or as loss of refinement, according to the viewpoint.

It is significant, architecturally, that the designer felt unable to dispense with the dignified emphasis which the Doric Order alone gives in classic design. Not far away, Hardwicke's gigantic portico challenges the traveller to the north. Here, one may imagine, it is the symbol of power and locomotion, the gateway to industrial England. Across the other side of the square, the strange vision of fragments of the Erechtheum, as it were, lost in the London fog, greets the eye, the effort of a scholar to express in St. Pancras Church the Ionic Order, most Greek in its excellence. So are symbols outworn transmuted; and the strength and austerity of the Doric, we may consider, not inaptly conjoined with the thought and character of the Friends Meeting House.

A word must be said with regard to the town-planning aspect of this building. It is to be hoped that whatever building scheme is now in progress on the rest of the square will be in harmony with the Friends' headquarters, and in some sort of axial relation to the main axis of Euston Station. Nor, to emphasize the point, must the excellence of the building with regard to its materials and suitability of character be considered as a precedent for building over the remaining London squares, whose retention intact as the invaluable breathing spaces of the City is of such vital importance. The time has surely come, too, for clearing

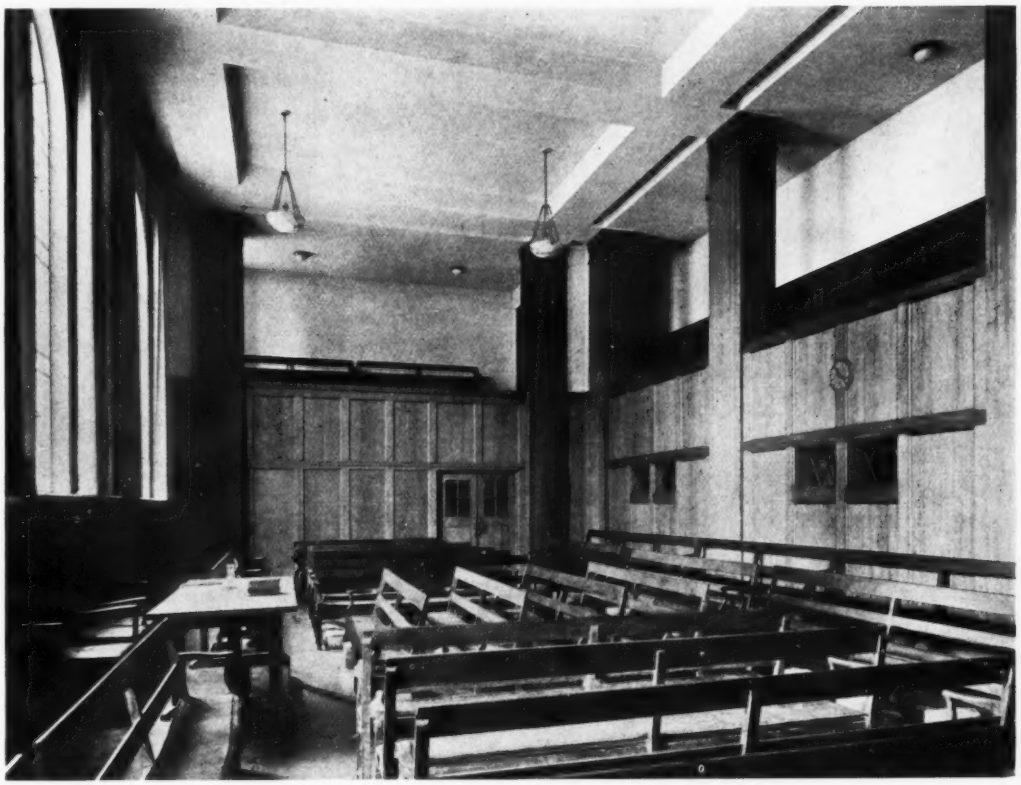
The Friends House, Euston Road, London. By Hubert Lidbetter. A detail of the north-west front.

The Friends House, Euston Road, London. By Hubert Lidbetter. A view from the garden on the east front.

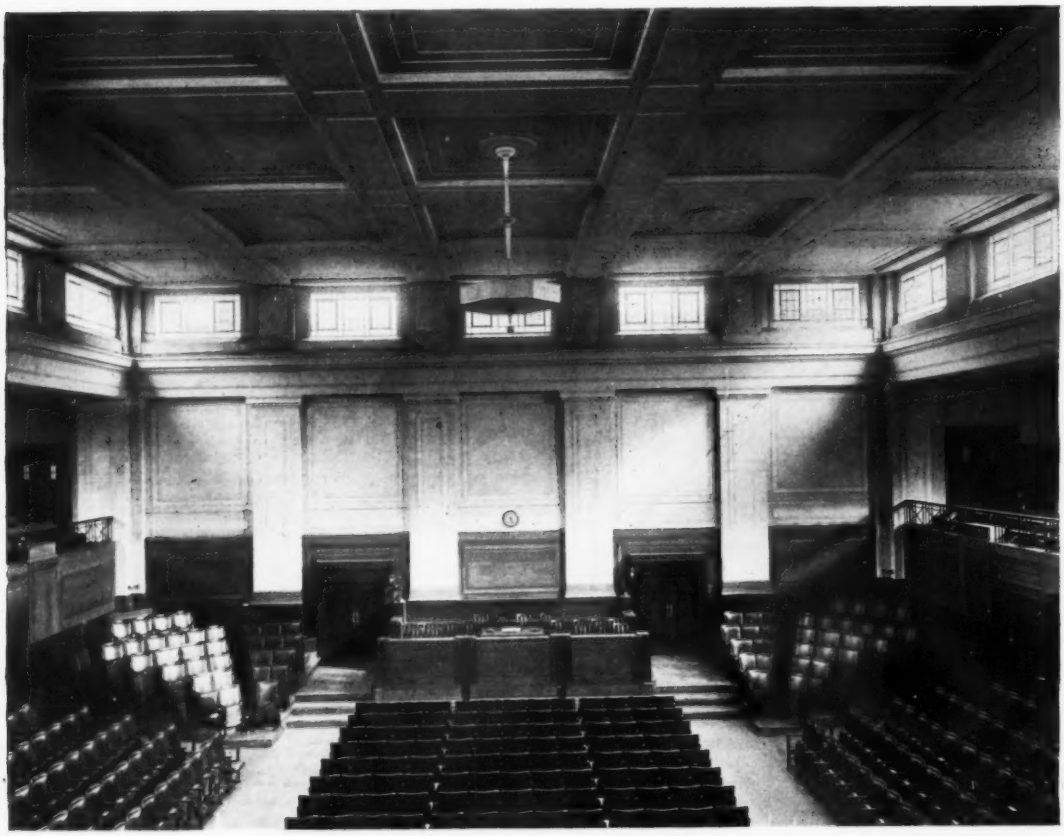
up the opposite side of the square—a somewhat confused jumble of huts and shrubbery—in view of the street widening and dignified façades arising.

The trend of development in a northern direction from the west-central area will in the course of time, no doubt, resuscitate the decayed appearance of the Euston Road—begun with auspices so far unrealized—and, we may hope, produce a fine avenue to the northern termini. In this process of reconstruction it is a hopeful sign that a building of such architectural merit and intrinsic character should have been erected by the Society of Friends at this time, and that, moreover, its designer should have received both public approbation and the highest professional recognition of its outstanding value.

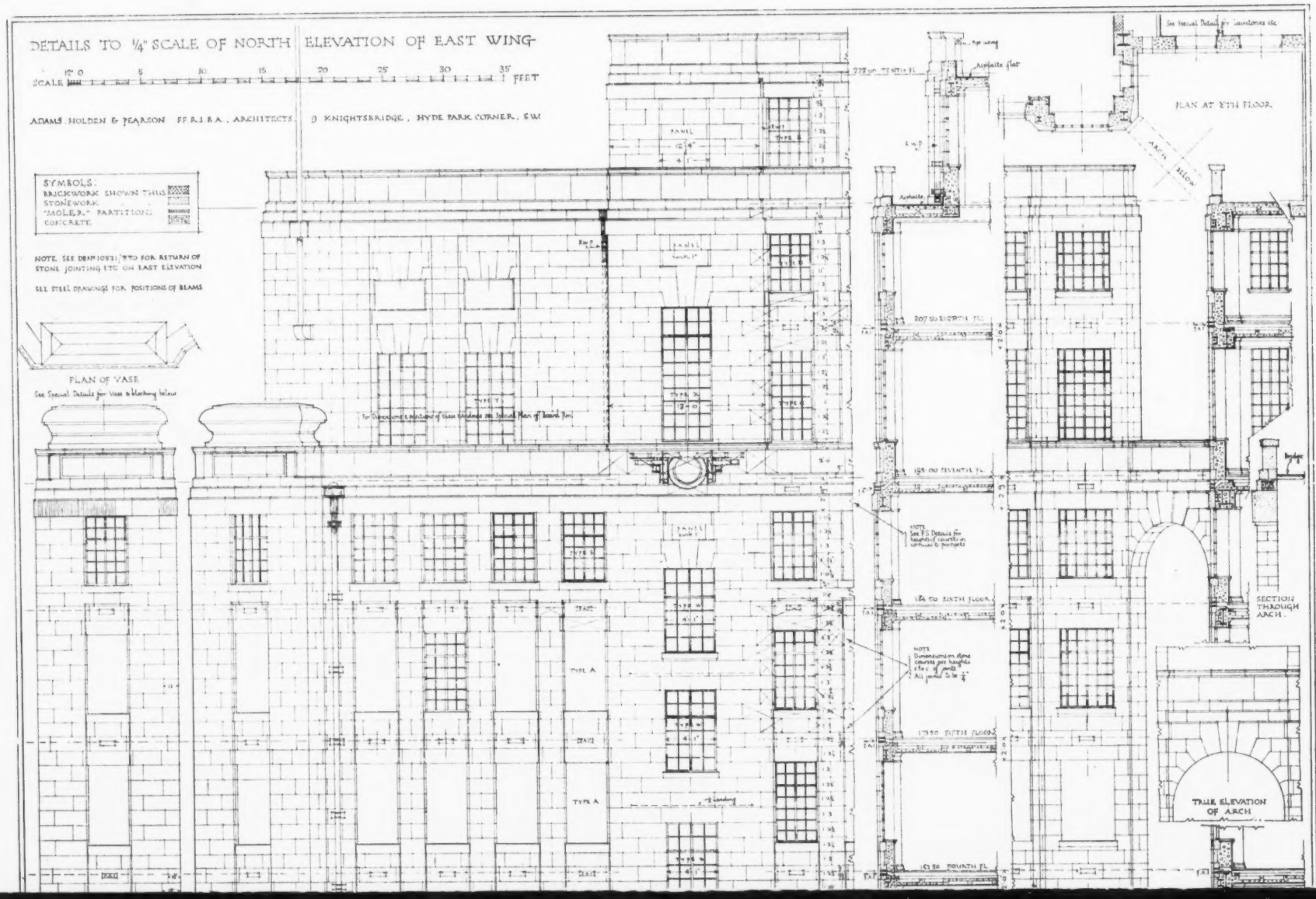
The Friends House, Euston Road, London.
By Hubert Lidbetter. The south front.



The Friends House, Euston Road, London. By Hubert Lidbetter. Above, the small meeting-house on the south front. Below, the interior.



The Friends House, Euston Road, London. By Hubert Lidbetter. Above, the hall of the large meeting-house. Below, a corridor leading from the main hall.


DETAILS TO ¼" SCALE OF NORTH ELEVATION OF EAST WING
SCALE 12' 0 5 10 15 20 25 30 35 FEET
ADAMS HOLDEN & PEARSON FF.R.I.B.A., ARCHITECTS, 9 KNIGHTSBRIDGE, HYDE PARK CORNER, S.W.
SYMBOLS:
BRICKWORK SHOWN THUS
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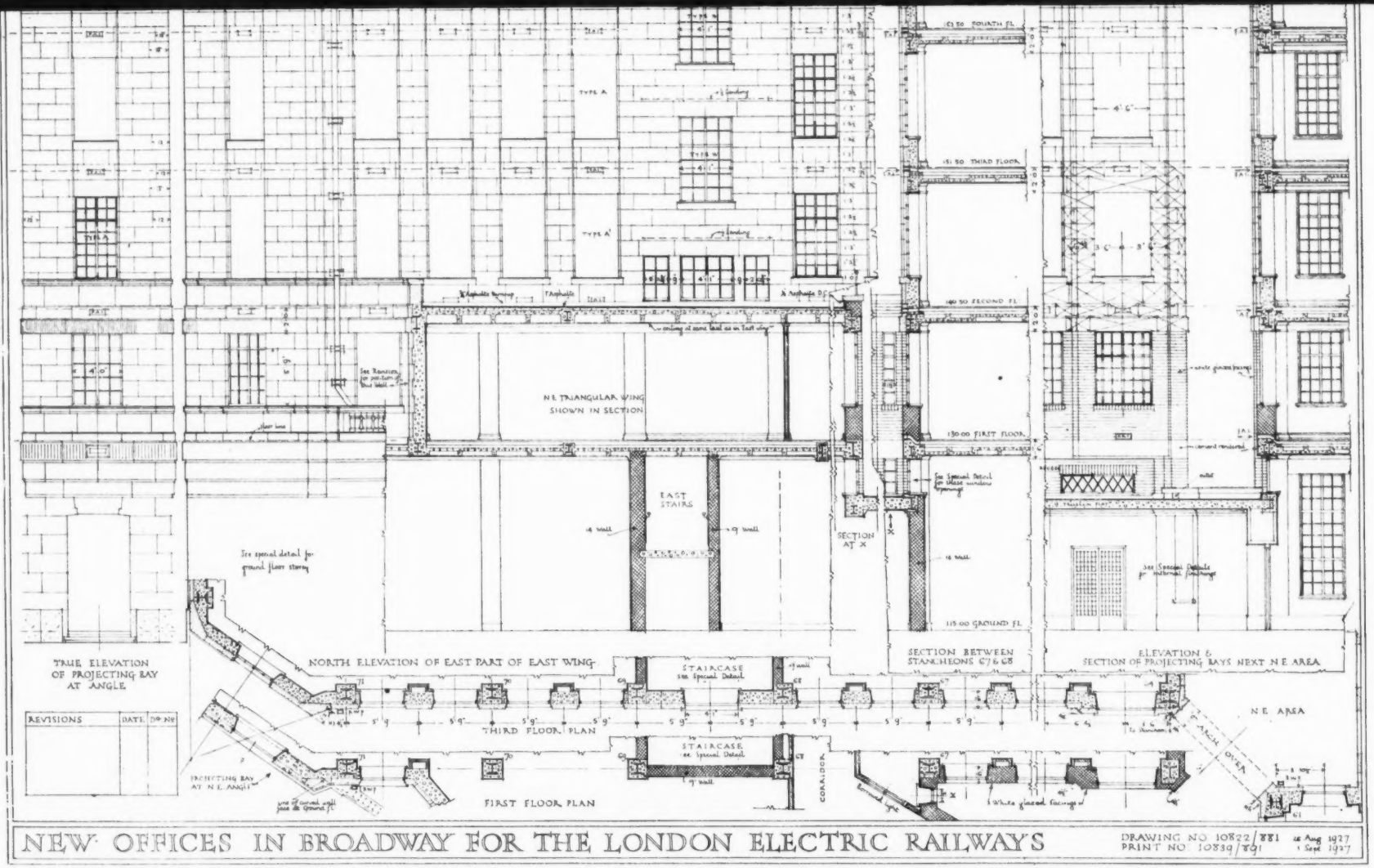
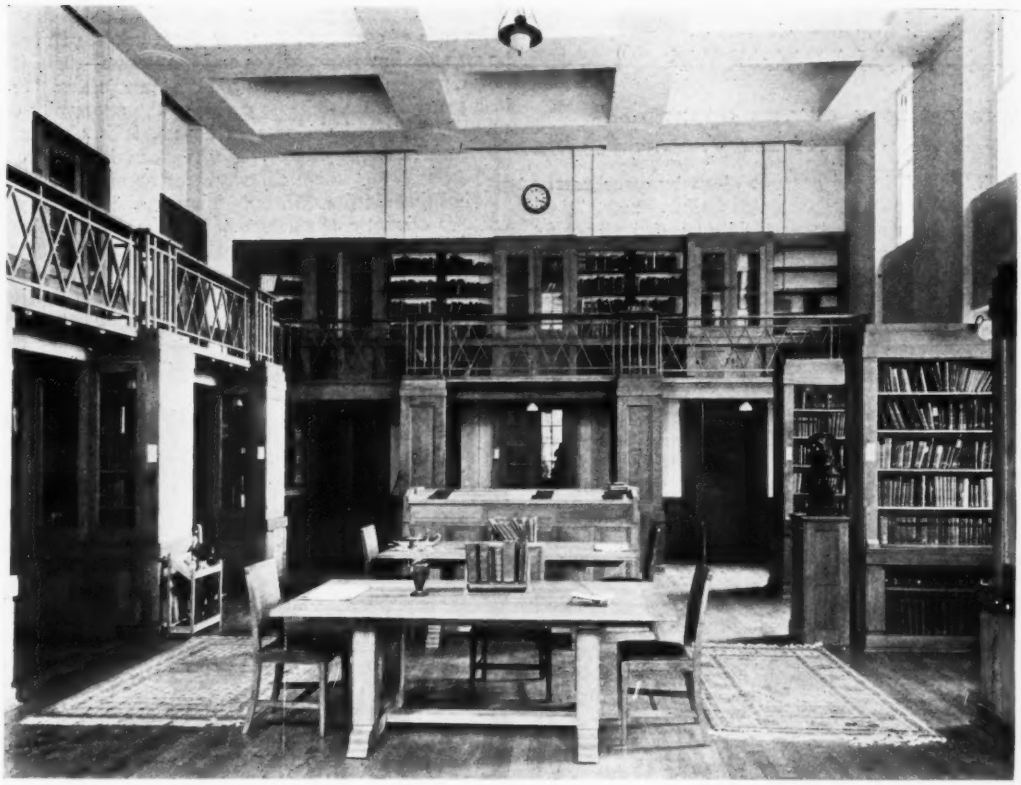
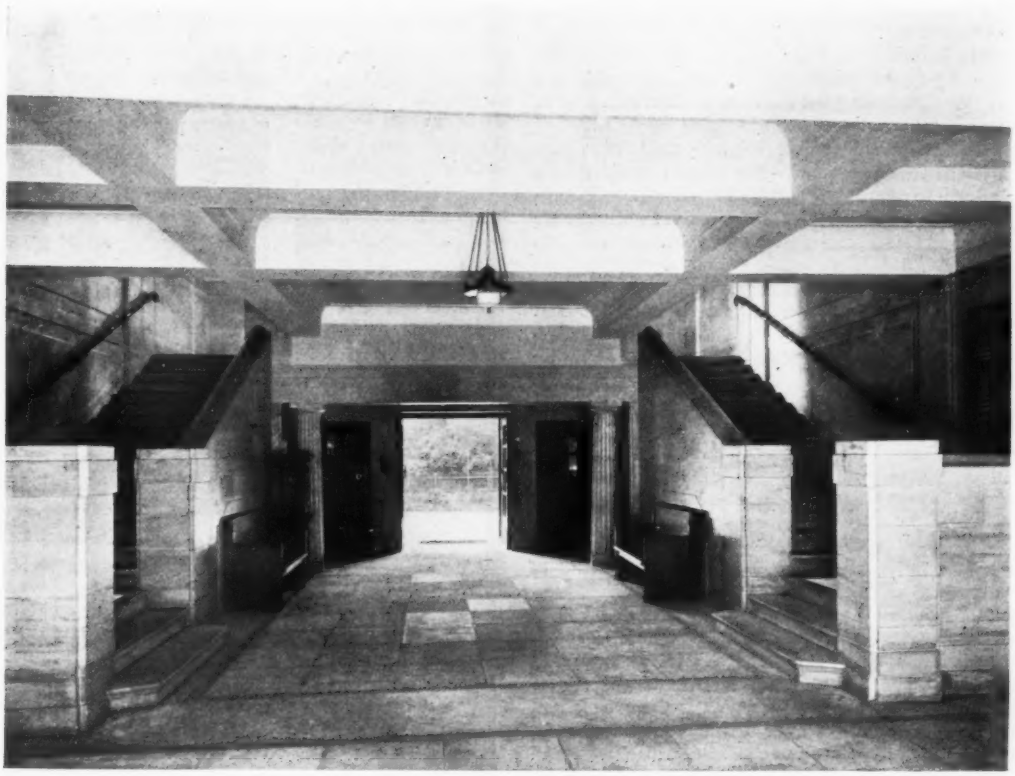
"MOLE R." PARTITIONS
CONCRETE
NOTE. SEE DRAWINGS 8713 FOR RETURN OF STONE JOINTING ETC ON EAST ELEVATION
SEE STEEL DRAWINGS FOR POSITIONS OF BEAMS
PLAN OF VASE
See Special Details for Vase & blocking below
PLAN AT 8TH FLOOR
SECTION THROUGH ARCH.
TRUE ELEVATION OF ARCH
STAIR
TYPE A
TYPE M
PANEL



NEW OFFICES IN THE BROADWAY, WESTMINSTER, LONDON, FOR THE LONDON ELECTRIC RAILWAYS. BY ADAMS, HOLDEN AND PEARSON. DETAILS OF THE NORTH ELEVATION OF THE EAST WING.





The Friends House, Euston Road, London. By Hubert Lidbetter. Above, the library and reading-room. Below, the entrance on the east side, looking towards the garden.

THE ENTERPRISING MR. SMARTERLY

THE QUALITY OF THE GOODS

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I was interested in the account given by your correspondent, M. L. A., of the methods adopted by Mr. Smarterly of starting in practice as an architect—certainly novel, and not to be commended to our younger members. But on reading it one is faced with the problem of how in a profession so overcrowded, where advertising and touting for work are deprecated, a young man can make a start.

Mr. E. Guy Dawber.

Mr. Smarterly was an assistant in an office and saw no prospect of being much else if he stayed there—so he built himself a house in a district where he thought work might follow—a perfectly legitimate thing to do.

Instead of opening an office and waiting for commissions to come, with no introductions and the prospect of many lean years to look forward to, he used his house as a bait for future clients and obtained his work in the questionable manner related by your contributor, but not in any way, as it appears to me, actually dishonourable.

I gather that his houses were of the usual spectacular sort—the kind that are destroying the quiet beauty of our countryside and outskirts of our towns, debasing the name of architecture, and in every way vulgar and garish.

But what if Mr. Smarterly had been a clever young man whose houses were a joy to look upon, carried out and conceived in a manner that added to the attractions of the district and compelling public attention by their artistic qualities? Should we then have condemned his methods so harshly as Mr. Creswell does—I wonder?

The whole problem bristles with difficulties, for conditions of practice are now so different from what they were years ago. Mr. Smarterly, after all, was nothing but an ordinary pushing tradesman, advertising, touting, and selling his goods in any way possible.

We shall always have these people with us, but their influence is negligible and they should not be taken seriously.

E. GUY DAWBER

BEWARE OF CRESWELLISM!

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—The article by M. L. A., published in your issue of November 9, interested me, and no doubt others, for it raises questions of great importance in the relations of architects to the public. It affects the æsthetic standards of modern domestic architecture. Long before reading Mr. Creswell's intemperate and pedestrian reply and the very human rejoinder of M. L. A., I had decided to enrol and range myself among the "cads and Smarterlys." This imagined antithesis of professional and commercial hand-made and machine-made is very, very unreal and out-of-date. Mr. Creswell is mistaking the means for the end. We are all here to uphold and improve the beauty and living-fitness of the houses we design and make our homes. In training his myopic vision on the "means to the end" has not your correspondent ignored the end? Has he seen the "goods?" (The cads of commercialism call them goods, you know.) Has he seen the Smarterly houses and bungalows—these illicit issues of "unprofessional" conduct? I use the adjectival "Smarterly" in a general sense, because owing to the anonymity of this fortunately untamed designer of houses, it is obvious that Mr. Creswell has not seen them. But he is certain they are "paltry" and belong to "the underworld of architectural parasites"! It is just that aloofness, that preciousness, the humbugging bedside manner etiquette of an age before the arrival of enlightened democracy, which, where it persists today, is the cause of most misunderstanding between client and architect. Mistrust of architects and misconception of their art and function by the public, particularly by a middle-class and important new-rich public, is due to the foreground being cluttered with a rubbish of conventions belonging to an age where architects were "servants of the gentry."

What is wanted is more human understanding between client and architect. Mr. Clough Williams-Ellis has made this clear in a delightful way in his book, *The Pleasures of Architecture*. In the ice of their excessive professionalism—that "not-done" bogy—Mr. Creswell's friends are driving a misperceiving public into the baited nets of the ready-made-home merchant. After all, what has poor Smarterly done? He has held an exhibition of his work, and the gallery marked one of the works "sold," afterwards marking it for resale. Reputable painters of pictures whom Mr. Creswell even could not accuse of commercialism and vulgarian devices are not unguilty of mild plotting with gallery directors to affix on Press day the decoy red seal which later may be so easily removed when required. The time has come to stop this flapping about in the darkness of Creswellism. We must leave your correspondent to walk alone in his hand-made boots the narrow plank of traditional code. The reach-me-down builder is trimming his stall with the priced goods, rotten, meretricious goods, shoddy shams, but, nevertheless, three-dimensional, ticketed specimens which kindle dreams of a home-to-be in the minds of ordinary people. This island, unlike more educated countries, is populated by hordes of ordinary people stretching from Bagshot to Brocklesby, to whom architecture is a dry-as-dust professional pursuit. To them the architect is an unhuman pedant, with a background of blue prints, miles of meaningless drawings, unpriced goods and services. To some of these plain people the architect is represented symbolically by a sort of semi-anæmic æsthete. This caricature, to some extent, is justified, for when has there been a propaganda to tell the people what architecture is, and what an architect is for? We want to alter that picture. That is why I think the Smarterlys are getting their jobs the right way. They are holding a plain public to human ideals of partnership in building houses of simple beauty and "living-fitness" for today and tomorrow.

Mr. R. A. Duncan.

NORMAN SEVERELL

MR. SHAW AND MR. SMARTERLY

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—From time immemorial artists and architects have employed some form of publicity, i.e. methods of bringing to the notice of prospective customers their ability to supply "the goods."

A history of architecture is also a history of job-snatching—this was noticeably prevalent during the Italian Renaissance.

The preaching of a gospel (irrespective of its merits) is a form of publicity which entails automatically some advertisement of the preacher. Some forms of publicity are vulgar, and some are not.

Question: Is Mr. Bernard Shaw any the less a great artist because he is the greatest publicity agent alive?

Answer: No! He is a greater artist. R. A. DUNCAN

SMARTERLY, P.R.I.B.A.?

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Does Mr. Creswell realize the facts of the case? P.Q.S. was an assistant, without friends prepared to bring jobs to him. Therefore P.Q.S. must resign himself to being an assistant all his days, or look out for the work. We are not told that P.Q.S. was a bad assistant, and wasted his master's time in idle day-dreams. No, he felt that he must build, or bust. Now, many good and great men have felt this stirring in the wombs of their consciousness, and looked forward to the happy days of delivery; without this pulse of life there cannot be any creation.

P.Q.S.'s next step was to go to a village and build a house. It is admitted that it was "a good house in the vernacular style of the neighbourhood." Good houses are not too plentiful, so my client must be very capable if he achieved one at the very beginning of his career. I am not sure if his critics think that it was immoral because he built the house for himself. I do not know how he raised the money so easily, but as there is no allegation of any dishonesty on the part of P.Q.S. I shall let this point pass. All that he did was to build the house, as a painter might paint a picture, or an author write a book, to show the world what he could do. P.Q.S.'s house was so good that many other clients came to him, and it is held to be discreditable that in his dealings with them he believed very much in the "personal element." P.Q.S. did not believe so much in the written as in the spoken word. He may, perhaps, have blown his trumpet a little, but unless friends will oblige with their wind-power what are you to do? Is this a crime? I trow not. I foresee for your hero a distinguished career. I do not know him, and may pass him in the street and not recognize him by the twinkle in his eye.

Mr. C. H. B. Quennell.

He knows that man must meet man if one is to appreciate the other's work. P.Q.S.'s first house was a good one—he is a good man—he can get on with his fellows as well. He may be an A.R.I.B.A. now—I do not know—later he will take up his fellowship. He is a worker and will be placed on committees. A little later on we shall vote for him to become a member of the Council. There his belief in the "personal touch" will stand him in good stead. He will join the Council dining clubs and be cracked as a good fellow. Inevitably he will reach the chair. We should applaud, I think, and not be envious of his good fortune. C. H. B. QUENNELL

SMARTERLY'S FEES

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Your contributor has described a young man, say, of some ability as assistant, wishing to better himself and establish a practice. He is enterprising, his method is novel, and not without risk to himself. He keeps work in architects' hands, which would probably go to an estate agent's office, where a draughtsman is employed. He does not pinch work from a brother architect. He presumably upholds good architecture as against a builder or estate agent's effort.

Smarterly cannot be condemned outright. My only criticism is as to not answering requests for information as to fees in writing. No one should shirk this, and, this being done, his interview and personal contact, including a drink or two (at the prospective client's call), need not be cavilled at. T. R. MILBURN

COMMERCIAL *v.* PROFESSIONAL

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Just at a time when we have buried words like "ladies and gentlemen" except for after-dinner speakers—many of whom would be better buried, too—and are finding "men and women" sufficient, here is a correspondent in your worthy, but too tolerant JOURNAL, digging up the "professional man." He is positively trying to re-establish the false antithesis of commercial and professional. Really, it is too bad.

The word "profession" always makes me think of Mrs. Warren, or of dentists in frock coats in 1902. It makes me think, too, of the "professional man," about the dressing and furnishing of whom Espoir Frères and Mr. Drage are caused so much concern in their Press announcements. My landladies' "dear departeds" were always "professional men." WARICK HOLMES

THE TRAGEDY OF E.C.'S

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Is there not a trace of malice in your contributor's account of the beginnings of the architectural career of Mr. Smarterly, or is it just the old problem restated—Is architecture an art or profession? If an art, may not the artist paint his own portrait and send it to the exhibition, not waiting for a sitter? But, indeed, how are we certain that that first house was done as an advertisement? The young architect cannot sit for ever twitching his idle hands; he must build, and if he is blessed with just enough of this world's goods—capitalized—surely he may build for himself as well as for another. Is it not, indeed, good for his clients that he alone should suffer through his first mistakes? And in the end it is not his fault if people admire his house and ask him to do likewise for them. For how, indeed, does the young architect find clients, or, more accurately, patrons? Friends sometimes employ him for the sake of friendship and not having a stranger about them; but most clients want to know what he is capable of, and they estimate his capacity by his surroundings, be it only a two-roomed lodging that he has.

No! This seems to me, compared with the straits that most young folk are put to, a most favourable beginning. Think again of the influence of such untrammelled beginning on our young architect's career. A friend of mine told me that his work was deadened and cramped for years because his first job was a range of E.C.'s in a church school in a country village. His illusions were shattered and his hair turned prematurely grey. Are not most early small house jobs almost as much of a martyrdom? Is not the architect on his first job a mere "tweenie," a slave to torture with instruments invented at the Ideal Home? We put up with this tyranny because there are so many of us, and because we crave for food and occupation. But when I look at all that crowd of villas in the more reputable suburbs of London, or at the better bungalows by the sea, and think what futile wrestlings have gone on for every window, maybe, what struggles for long roofs and silent cisterns, I turn sadly to the roads where are houses on wheels, clean cut and virile, made by experts for patrons who understand all the standardized productions of the age, and verily I feel I would rather by far be a salaried salesman at Olympia than a "free" professional man submitting to the Sadic cruelties of a lady-reader-reading-all-the-home-making-journals-building-a-house. H. C. HUGHES

ELECTRIC WIRING AND LIGHT FITTINGS: iii

[BY W. G. PRINGLE]

THE question of the amount of light that any given room requires is dependent upon a number of factors which the published formula cannot take into account; the colour of the ceiling and of the walls, the texture of the carpet and hangings have to be considered, as well as the actual dimensions and shape of the room, the position of the points, the type of fittings, and also the use to which the room is put. Previous experience is far more valuable than any formula in problems of this sort.

There is a large range of lamps on the market, and those in common use for house lighting vary from the 20-watt plain flame lamps, vacuum type, to the 100-watt gasfilled lamps; the latter, even if frosted, are too powerful for the eye to tolerate without discomfort unless they are masked by alabaster or other slightly opaque material. The 20-watt lamp is, in its bulk, well suited to small wall-brackets and chandeliers, with crystal or delicate metal arms, but the light this lamp gives is frequently inadequate. Within the last year or so a small 40-watt lamp has been put on the market, and is to be highly recommended. This lamp can be obtained either with the bayonet cap (B.C.) or small bayonet cap (S.B.C.).

Having dealt briefly with the simpler technicalities of wiring it is proposed to devote the remainder of this series of articles to notes on electric lighting fittings, accompanied by illustrations of such as are deemed to be of interest. No brief is held either for Period or modern fittings, as it is considered that each is best suited to its proper environment. Such fittings as are described or illustrated are mostly well within the pocket of the average house-owner as regards price, and he should know that the qualification of having artistic fittings is not of necessity a luxury nor is the cost a heavy financial burden. There are to be obtained artistic and inexpensive fittings for the owner of a £1,000 house as well as artistic and expensive fittings for the owner of a Mayfair house or a country mansion.

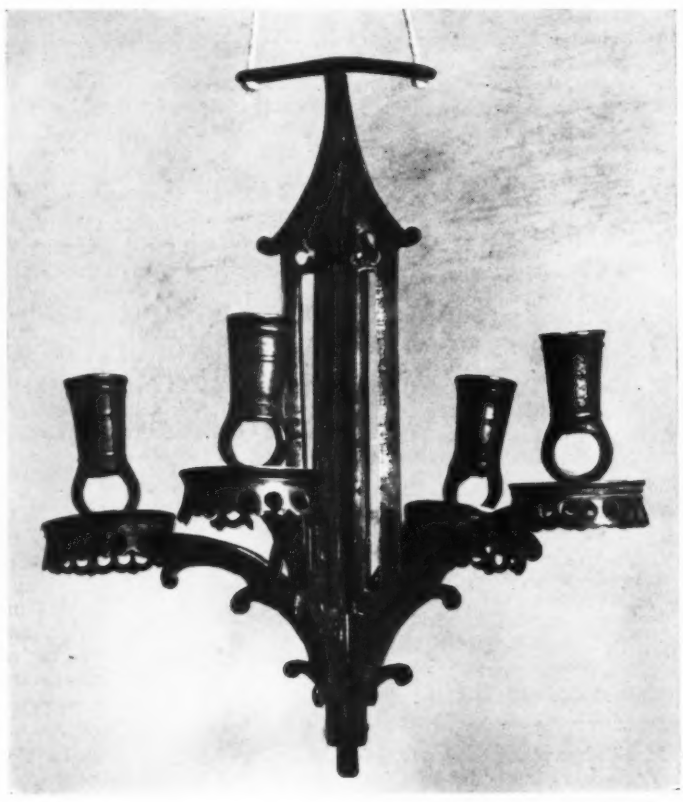
There is likely to be far more divergence of opinion as to what constitutes an inexpensive and serviceable fitting than as to what constitutes an artistic one. Obviously a fitting is serviceable if it gives the right light in the right place at low current consumption. Equally obvious is the fact that it is inexpensive if it costs only a pound or two or, more broadly speaking, if it represents in outlay only a small percentage of the total cost of the interior decoration and furnishing of a room.

As a general rule it is noticeable that the standard of electric light fittings in England compares very unfavourably with that on the Continent, particularly in Paris, both from the æsthetic and the practical point of view. On the other hand, the amount of money spent on fittings in England is proportionately very much lower, a gain which is discounted by the fact that the decorative interest is small or totally lacking. It is customary to find, in quite high-class houses and flats in England, bits of metal tube jutting out from the walls of the living-rooms, and lengths of flex hanging from the ceiling, both supporting glass or silk monstrosities which fail æsthetically and practically from every possible point of view. This is a state of affairs which it ought to be to the interest of everyone to remedy.

The present-day electric lamp bulb is a friend, but the light it gives is not "kind" unless it is softened in one of the many ways which are practical and (fortunately for the optic nerves) practised of recent years. Although much can be done by "obscuration," the actual lamp is not itself a thing of beauty.

Alabaster dish fittings meet the above requirements in a satisfactory way, but unfortunately those dishes that exhibit any marked artistic feeling in their treatment are infrequently found. It is seldom also that the bowl selected is of a size absolutely suitable for the room, still less often is it hung at the right height. If it is fitted, as unfortunately is customary, with a single lamp of high power (which is usually suspended from a length of dusty flex) the result is that heavy shadows from the supporting chains or cords are cast on to the ceiling, thus giving an inartistic and irritating effect. When dish fittings are used they should have three or more low-power lamps inside, and they should so hang as to ensure that the shadow of the bowl itself is not cast on the walls of the room in such a way as to affect adversely the surface treatment of the walls. A satisfactory level to aim at is the level of the picture-rail or the bottom moulding of the frieze, where frieze exists.

Alabaster bowls may not generally be considered to be the most artistic lighting fittings, but, leaving aside the question of their



A fifteenth-century candelabra in bronze showing German influence, particularly in the candleholders and grease cups. It is presumed to be of English workmanship.

æsthetic merits, the principle is a sound one, and has influenced very greatly the designers of " modern " fittings of the " tray " or bowl type. For this reason considerable space has here been devoted to this subject, which may be taken to embrace all such fittings, whether they be of English red-veined alabaster, Italian black-veined, or Castellina white unveined alabaster or of satined or opal glass, of porcelain, oyster-shell, vellum or silk, so long as the bowl be open at the top and the material more or less translucent.

This type of pendant has served its purpose and will continue to do so as long as there is alabaster to be quarried and other translucent materials to be procured. So long as the light has a clear passage to the ceiling, thence to be reflected downwards, and at the same time diffused light passes through the bowl or tray, it is obvious that an economical light is obtained without an overpowering glare. Novel shapes and methods of suspension have been introduced into England from Paris, the dish part being made, in most cases, of pressed glass—that is, glass shapes and designs made under pressure in steel moulds.

Reproductions of Period fittings are desirable in the more expensive rooms where some definite scheme of Period decoration has been specialized in, but such fittings, if good, are often expensive. Furthermore, the scope of selection is strictly limited so far as English fittings are concerned. The number of authentic lighting fittings, prior to the reign of Charles II, is extremely small, so that architects and decorators have perforce to accept, for Medieval and Renaissance rooms, wrought-iron candelabra and, perhaps, sheet-iron sconces and lanterns, which often lack, in every detail, the true character of the period and represent for the most part mere guesses at what the designers of the period might have evolved. Safer ground is trodden by using brass and copper fittings, such as were introduced into England in the seventeenth century by the Dutch and Flemish. They are not expensive fittings, as the treatment of the metal is simple, but reproductions fail, when they do fail, in the finished tone of the metal, which is frequently crude and harsh; a glaring piece of brass is not very satisfying to the critical eye.

Towards the end of the seventeenth century, our metal and wood work came almost entirely under the hands of Dutch and French designers. Two Frenchmen, brought into England in the last quarter of the seventeenth century—Jean Tijou, working in wrought iron, and Daniel Marot, designing for almost every material—introduced the florid and ambitious character of the Louis XIV style. It cannot be said, with certainty, that Tijou, who confined himself entirely to wrought-iron gates, railings, and grilles, influenced to any extent the design of lighting fittings; if he did, the results have long since disappeared, leaving no record behind.

However, Marot and his followers certainly have left us legacies, and these, supplemented by actual fittings imported from France, have been adopted by us as being examples of national craftsmanship and design of that period. The best known and most copied of the fittings of this period is the " Knole " chandelier (which might have been made prior to Marot's arrival in England), and if anyone doubts the source of its inspiration let him compare the arms with those of many of the candelabra of the Louis Quatorze period. The similarity is too close to be a mere coincidence in spite of the fact that there is, perhaps, a certain evidence of English craftsmanship.

It must be admitted that the French influence continued throughout the eighteenth century, though, in the early part thereof, wall sconces, when not adapted too literally from Dutch models, achieved a character that was unquestionably English in feeling.

In the reign of Queen Anne, the well-known Vauxhall mirrors forming the back-plates of sconces owed something, perhaps, to Continental influence, but were sufficiently English in feeling to harmonize with English interiors. Sconces of this type are reproduced freely at the present day, and can often be used with advantage, being both decorative and artistic in a suitable environment.

It might be well to remark, in parenthesis, that mirror sconces, and, indeed, wall lights of any type placed near mirrors, should have the lamps enclosed, front and back, so that the reflection of the naked bulb be not seen in the mirror. The brothers Adam designed chandeliers and wall lights ornamented tastefully with their stock motifs, such as vases, rams' heads, honeysuckle, ribbons, and swags, the inspiration as to detail being drawn, as is well known, more from the classical Roman than from the Louis XVI style, which, however, was contemporaneous. These Adam fittings are cleverly reproduced today, but as a general rule are spoilt in the reproduction through a variety of causes, amongst which the more salient are the poor quality of the chasing, the lack of life in the carving, and the harshness of the finished tone of the metal or of the gilding and the imperfect proportions of the component parts.

The early part of the nineteenth century saw the introduction of some pleasing examples of oil-fed fittings, which, although exhibiting some affinity with those of the French First Empire style, were more attractive in comparison in that they were generally less exuberant in detail. Professor A. E. Richardson, F.R.I.B.A., has some remarkably fine specimens of lighting fittings of this period. The introduction of gas in the middle of the nineteenth century was not without its effect on lighting fittings, and although it is not easy to hold a brief for Victorian design, some of the candelabra, particularly those in crystal, were not unsightly. They exist today in large numbers, many now converted for use with electric light.

Present-day lighting fittings are undergoing a change for a variety of reasons; it has been realized that any electric lamp exposed totally or partially, is not only unsightly, but also fatiguing to the optic nerves. The remedy employed has been to mask it with a silk or vellum shade, but this expedient has its disadvantages. Even if the shade is of sufficient opacity to conceal the filament of the lamp without reducing greatly its light-giving capacity (vellum, pig or donkey skin, is a more efficient medium than silk), either the shade must be open at the bottom or it must be of ample dimensions to avoid its being scorched. In the former case the lamp is seldom properly concealed, and in the latter case the shade or screen may look cumbrous. The real remedy seems not to lie in the screening, nor in the obscuration of the actual lamp, but rather in the design of the fitting itself, whether it be pendant or sconce. Some of the fittings present possible solutions, but are suitable only in certain environments of a " modern " character.

It is far from the intention of these articles to suggest that good reproductions from the antique have not their uses, nor, emphatically, is it advised that Period rooms should be equipped with " modern fittings." Those people who can afford to have their rooms decorated and furnished throughout in the style of any particular period would be well advised to have good fittings, or reproductions, suitable for that period; if, on the other hand, their rooms are a jumble of anachronisms, or are even " non-period," they could sensibly employ fittings which are efficient from the point of view of illumination, adaptability, and hygiene. It will be realized that some of the modern fittings do not comply solely with these three essentials, but in addition serve as features of more than ordinary decorative interest. In reproductions from the antique, to be " true " to period, it is, in most cases, essential to equip the arms with imitation candles. The ethics of this particular subject are certainly debatable, but apart from the fact that something in the nature of a cup or metal flower or tube is necessary to conceal the brass cap of the lamp and the holder, there is the further consideration that there is no real insincerity, nor attempt to deceive, in the employment of candle tubes which more or less resemble real wax candles. Certainly no one is expected to be misled into mistaking these tubes, with electric lamps above, for real wax candles, and for this very reason their use may surely be condoned.

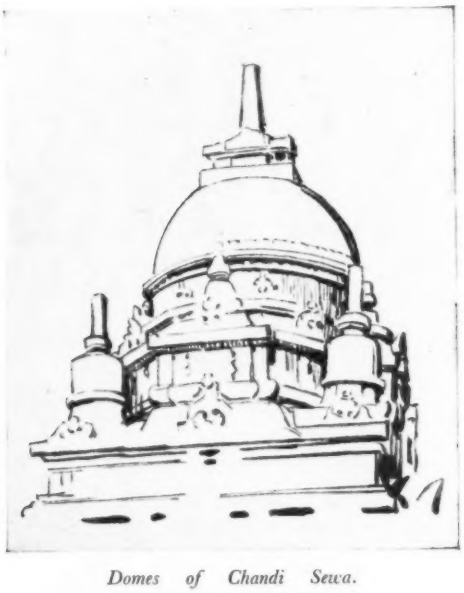
[*To be continued*]

LITERATURE

INDIAN ARCHITECTURE

THE second edition of Mr. Havell's book, *Indian Architecture*, has been published at an opportune moment to balance, and perhaps in some ways to counteract, the effect produced by the sordid revelations of Katherine Mayo's *Mother India*. Miss Mayo has described the social condition of the Hindu as seen by Western eyes, and creates an impression of horror at his lack of conformity with Western ideals of sanitation and hygiene. Mr. Havell does not seriously concern himself with these immense problems which have a bearing upon present-day architecture, or show how the Government is to find a solution for them. On the contrary, he identifies himself with the people of India, and speaks of Indian architecture with an enthusiasm which bears the mark of sincerity. For him, the Hindu is not principally a breeding ground for germs of possible world epidemics, but a living spiritual force: "There is no reason," he exclaims, "to expect that Indian civilization will become extinct or cease to fulfil its great mission in the world." It is this mission, this conversion of Hinduism of extraneous artistic elements, that most interests the author, who returns to the theme again and again in different pages of his work.

Where other writers have taken the view that Mohammedan incursions brought excellent art into the country and compelled the Hindu master builder to try his hand at working in accordance with a foreign ideal, Mr. Havell labours to prove that the Hindu way was the excellent way, and he points with obvious satisfaction



Domes of Chandi Sewa.
[*From* Indian Architecture.]

to those distinctively Hindu elements that have crept into buildings erected for the purposes of alien governors. To a certain extent, this attitude of mind is a question of individual taste. Mr. Havell has shown that, to him, the sculptures with which Hindu temples are sometimes overlaid are not in any way offensive; he enjoys their technique as art, and appreciates their symbolic meaning in connection with the religious observances of the carvers. Such an outlook upon the art of India must necessarily be exceptional among persons not of Hindu faith. A few Englishmen may have schooled themselves into a sympathetic attitude towards this particular form of art, just as some other Englishmen delight in Saracenic architecture for qualities which are not possessed by the Gothic or Renaissance work of their native land; but the great bulk of art lovers in this country, including some of those who have to do with the design of new buildings in India, must be unfitted to join in Mr. Havell's enthusiasm for an art which appears overluxuriant and unrestrained, if not positively repulsive and obscene, to men brought up with a respect for Western ways of life.

In emphasizing the value of the Hindu contribution to the

Dome of the Taj Mahal.
[*From* Indian Architecture.]

splendid monuments of Mogul architecture, Mr. Havell has brought to light some facts of great archæological interest, but his predilection for Hindu ideals causes him to minimize the worth of the Mohammedan control over the design as a whole. Supposing that it can be granted that the master craftsmen were Hindus, in spite of their Mohammedan names, "the student of Indian architecture and archæology would do well to remember that Persian and Arabic names do not always indicate Persian or Arabic craftsmen," the substitution of simply modelled surfaces for elaborately over-ornamented ones is in itself a most important variation in Indian architecture, which was imposed upon it from without by rulers imbued with a love for Saracenic tradition. The Tâj overlaid with Hindu ornament in high relief and with the anthropomorphic statuary of Hindu idolatry would no longer be the Tâj, and if the alien Sultan contributed nothing else to the design but wise selection and restraint, he contributed exactly those elements most necessary to the success of the work.

But the illustrations in Mr. Havell's book show that the Saracenic contribution to Indian art is positive as well as selective, repressive and criticial. Plate five, on which the dome of the Tâj

Arab Dome. [*From* Indian Architecture.]

is contrasted with an Arab dome and with the five domes of Chandi Sewa, shows that, if Buddhists and Hindus supplied the arrangement of main masses about five points on the plan, the ideas of continuity of surface and of delicacy in the contours of the silhouette were Arab ideas, which were as necessary to the superlative beauty of the building as the grouping of its several parts.

It is when the reader turns to the later chapters of the book that he realizes how the author's enthusiasm for Hindu art touches upon common sense and practical politics in modern building construction. The many interesting examples that he gives of work recently executed by Indian master craftsmen contrast with the deadly dull creations of the European architect in India. Hindu art may or may not be the greatest art in the world, but there is no room for doubt that the art of the Europeanized Indian bred upon the paper pattern method of architectural design is thoroughly unsatisfactory. The same method is not too satisfactory in England, where everything is arranged in accordance with scale drawings made before the commencement of the building, and where a high degree of purely manipulative skill is available.

What is wanted from men on the spot whose sympathy is with the Indian craftsman is definite and detailed instruction how to find and employ him. That present European methods of architectural design in India are bad, and lead to the erection of indifferent buildings, was recognized by the petitioners whose names are published in Mr. Havell's book and who vainly implored the Government to give the Indian craftsman an opportunity in the erection of Imperial Delhi, but it is probable that they underestimated the responsible part played by the "Medieval King or Bishop" who probably gave their contractors much more than "simple instructions as to accommodation and arrangement." In fact, it is now known from original documents that their directions were detailed and precise. It would be interesting to learn what the Government could have done instead of appointing Sir Edwin Lutyens and Sir Herbert Baker to prepare paper patterns for the Public Works Department to carry out. My own belief is that the man who aspires to employ master craftsmen to advantage, without the intervention of an architect, must be himself not only a good man of business but an excellent amateur architect and architectural critic, and it is still a question where such "a sympathetic middle-man" is to be found.

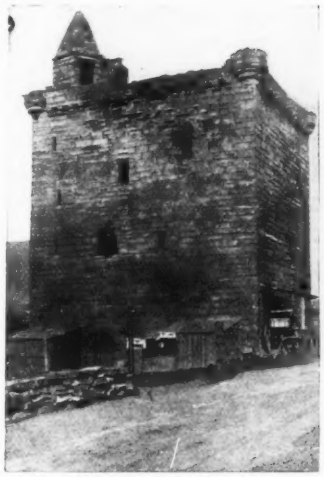
Mr. Havell's commendation of the use of a model—"Modern architectural practice has not been able to improve upon this excellent method"—indicates one possible link between the Indian master craftsman and modern methods of architectural design. If we are ever to have a return to popular appreciation of architectural art, the value of the model can hardly be overestimated.

The text of the book contains a mass of detailed information upon Indian symbolism, theory, and practice, and the many beautiful illustrations include reprints of careful measured drawings made in connection with the Archæological Survey of India, as well as photographs showing both ancient and modern examples of Indian craftsmanship. WILLIAM HARVEY

Indian Architecture: Its Psychology, Structure, and History from the firs Muhammadan invasion to the present day. By E. B. Havell. Second Edition 1927. London: John Murray. Price 42s. net.

CASTLES IN SCOTLAND

An Englishman's home is his castle; a Scotsman's castle is his home. There is always a fine distinction between the Scot and the Sassenach. It comes out right well in the account of *The Medieval Castle in Scotland*, the series of Rhind Lectures in Archæology, 1925-26, by W. Mackay Mackenzie. There is a lovable and discreet ostentation beyond the Tweed that is scarcely hidden by a national characteristic deprecation. It is displayed delightfully in the hundreds of castles which still exist in the Land o' th' Leel. They are romantic and yet they are hard; they are realistic, and yet possess a tincture of idealism, derived, I think, from the carefully cultured and much-coveted rapprochement with the French. The first castles in Scotland were those of the Normans, the Bass of Inverurie was one of them, the last—that is in history—were Renaissance-French in their latest presentation, as at Stirling. In between were the true Scottish castles, conformable,



Sauchie. [*From* The Medieval Castle in Scotland.]

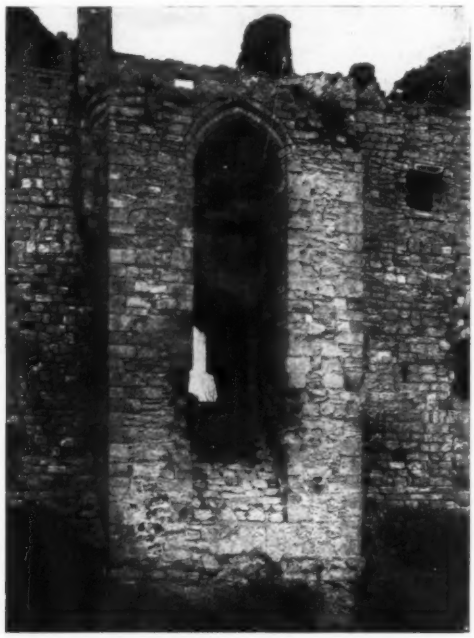
however, to the prevalent type of Northern Europe. Castle does not mean merely a building, but more embracingly a settlement. The earliest were enclosures like the mounds of the eleventh century. Mote and mote-and-bailey settlements developed in the twelfth century by extensive buildings of wood, wattle, and clay. Whatever Dr. Johnson may have said, there were trees in Scotland in those days.

There was stone, too, however difficult of transport, and so the thirteenth and fourteenth centuries produced on their mounds, escarpments, and promontories substantial plain buildings for habitation and defence rather than offence, for the castle was not a military, but a domestic institution. With the advent of the tower, offence was more possible, but not the primary desideratum which was always domestic. More privacy, better rooms, warmer quarters were provided by the towers, and greater security by means of drawbridge and natural altitude, useful for observation as well as counter-attack. The next stage was even less military in character. The hall, built on to the tower, furnished more comfortable quarters than the earlier outbuildings of the curtain, and permitted of a more social mode of life. This development in the direction of amenity evolved the luxuries of the palace, and last stage of all, the production of the galleries, which were filled with pictures and other works of art. But this was not until the sixteenth century, when the Scottish lairds had travelled in France and the Low Countries, and returned with changed ideas and desires.

These lectures carry the story on well into the seventeenth century, far beyond the medieval period, and this serves to emphasize the true character of the Scottish castle. The real thing is the tower. Of the many Scottish castles existing today, most of them consist of the tower. You can have a tower where you cannot afford a palace, and you can afford to live in a tower when the expenses of a palace with hall and gallery are out of the question. You can preserve a certain state, too, in a tower and you can, indeed, make a tower a home, comfortable, even cosy, with a feeling of security, even of lairdship, however small the territory in which the tower is raised.

The book contains many illustrations of these modest and delightful towers, one of the most attractive being Annisfield, of the year 1600, with a mixture of Gothic and Renaissance, with a steep roof and turrets and a cap house. An earlier and simpler example is Clackmannan, with fifteenth- as well as fourteenth-century design in its construction, and there are many dating in these two centuries here pictured, but one of the latest of all, Coxton Tower, is interesting from roughcasting of its main surfaces. Only the turrets, roof, and chimney exhibit the stonework. Actual construction is dealt with and well illustrated, and the architect will welcome the exhaustive notes and measurements

of the most important examples—examples representing no less than 500 years of time. The book is archæological rather than artistic in its aim and in its result. Indeed, the interest of all the earlier forms is mainly structural, ornament being restricted almost wholly to machicolation and crenellation. Later, vaulting and arcading provide added interest, but it is not until the real Middle Ages period is passed that the decoration of the castles



Dirleton. [*From* The Medieval Castle in Scotland.]

begins; the period of the halls provides some ornament in the fireplaces; that of the palaces in exterior carving.

All through the non-aggressive, non-military character of the castle is insisted on. It was a defended residence, not a military centre, nor a fort, nor even a prison as such, and the dungeons of the popular imagination, it is declared, were storehouses or kitchens. The book is authoritative in tone, and its author is insistent on his views and far from afraid of contradiction. The many illustrations are full of interest. KINETON PARKES

The Medieval Castle in Scotland. By W. Mackay Mackenzie. London: Methuen. 8vo, pp. xii and 250. Illustrations sixty-nine; plans nineteen. Price 15s. net.

LAW REPORTS

DISPUTE AS TO WATER SUPPLY

Rowell and another v. *Chamberlain. Chancery Division. Before Mr. Justice Clauson*

This was an action in which Mrs. Jessie Rowell, as owner, and her son-in-law, Mr. Bernard May, as tenant, of Blatchford Farm, Ashton, sought against Mrs. Anita Mary Chamberlain, of Ashton Manor, Ashton, a declaration that the two plaintiffs were entitled to the free and uninterrupted enjoyment of a supply of drinking water from the reservoir on defendant's land, and an injunction to restrain the defendant from trespassing on plaintiffs' land.

Mr. Archer, K.C., appeared for the plaintiffs, and Mr. Spens, K.C., for the defendant.

After the case had been partially fought, terms of settlement were arrived at on the suggestion of his lordship.

Mr. Archer said that by the terms of settlement, first, Mrs. Rowell was to pay one-third of the reasonable cost of renewing the pipe and laying a larger one, as advised by the engineer and expert, from the reservoir to the farm, and also an annual sum of 25s. in respect of the supply of water. In the second place, the defendant would covenant to give a supply of not less than 120 gallons a day, provided that she was not prevented by a dry season or act of God or other thing beyond her control for any period or periods.

In the third place, the defendant would covenant not to cut off the supply at any time, and Mrs. Rowell was to have a water supply commensurate with these terms, which would be pertinent to or the benefit of which would run with the farm. The defendant was to pay the plaintiff £350, proper deed or deeds, or other instruments were to be prepared, with the assistance of counsel on each side, and, in case of difficulty, their terms were to be settled by his lordship in person, if he were willing.

His lordship said that if they found they wished to come to him, it should be at an early date. He thought four weeks was late enough.

Mr. Spens said the sum of money Mrs. Chamberlain was paying was in full settlement of every liability, even the order for costs, and included the £5 agreed damages.

CLAIM FOR DECORATIONS AT THE SAVOY HOTEL

Leah v. *Savoy Hotel, Ltd. and Sovrani. King's Bench Division. Before Mr. Justice Roche*

This was an action by Mr. Frank Leah, of 21 Gordon Street, Gordon Square, W.C., to recover from the Savoy Hotel, Limited, and from Mr. Jean Sovrani, of 10 Winsford House, Northumberland Street, manager of the Savoy Hotel Restaurant, £155, alleged to be due in respect of works of art produced by the plaintiff for the defendants.

The claim related to decorations for the ballroom at Christmas, 1925, at the price of £50; designing and painting a scene with models and portraits for Derby Day, 1926, £70; and a water-colour painting of the new ballroom, £105. The plaintiff gave credit for £70 already paid. He alleged that the orders were given verbally by one Charles Piazzat, who was in charge of the floral decorations at the hotel, on behalf of the defendant company, or, alternatively, on behalf of the defendant Sovrani, who also gave some instructions, as the plaintiff alleged.

The defendant company denied liability and said that the work was not done on their behalf, and that neither Piazzat nor Mr. Sovrani had any authority to act on their behalf.

The defendant, Sovrani, denied that any work was done for him, or that he paid any of the money for which credit was given by the plaintiff. He said that Piazzat had no authority to give any orders on his behalf. He pleaded, alternatively, that if he gave any orders to the plaintiff, he did so on behalf of the defendant company.

Mr. T. Eastham, K.C., and Mr. N. R. Fox-Andrews appeared for the plaintiff; Mr. Joy, K.C., Mr. Harold Murphy, and Mr. Hugh E. Kingdon for the defendant company; Mr. Austin Farleigh for the defendant Sovrani.

His lordship, after hearing the evidence, entered judgment for the plaintiff against the Savoy Hotel, Ltd., for £150. He said that there were really two claims—1: for the balance of the price of work done in connection with special decorations at the hotel at Christmas, 1925, and Derby Day, 1926; and 2: for the price of a watercolour painting by the plaintiff intended to be fit for reproduction in the newspapers to set forth the attractions of the new foyer. The defendants wisely decided not to dispute that the first two items were done by the plaintiff on the instructions of persons having apparent authority, and the sole issue as to those items became whether the plaintiff had been fully paid by Piazzat. Mr. Sovrani was not concerned with those items. After reviewing the facts, his lordship said that Piazzat gave evidence from his refuge in Paris that he had paid the plaintiff in full. He entirely declined to accept that evidence, and accepted that of the plaintiff. He thought that the latter had made a mistake as to £5 which Piazzat had paid, and that the credit given for payment should be £75 instead of £70. As to the picture, he substantially accepted the plaintiff's evidence that he never undertook to paint it except for reward, that it was ordered, and that he was to be paid a price to be agreed. He awarded the plaintiff £150 and gave judgment for the defendant Sovrani, his costs to be paid by the Hotel Company.

LONDON SQUARES

THE L.C.C. AND PRESERVATION

THE Royal Commission on London Squares met at Committee Room "E" of the House of Lords, Lord Londonderry presiding.

Evidence was given by Mr. Frank Hunt, valuer to the London County Council, and head of the Valuation, Estates, and Housing Department. In the course of his evidence he said that the Council felt that further information as to the circumstances of the squares in many respects was necessary before a scheme for their preservation could be formulated. As regarded squares in London, a very considerable part of the total was comprised in seven Metropolitan boroughs, as follows:

	Squares. No.	Area (acres).
Kensington	38	48·78
Westminster	25	41·81
St. Pancras	24	25·81
Holborn	9	20·38
Chelsea	12	18·98
St. Marylebone	9	17·50
Paddington	21	12·70
Total of the above	138	185·96
Total in London	231	239·50

In these seven Metropolitan boroughs are comprised nearly 60 per cent. of the number and nearly 78 per cent. of the area of all the squares in London.

The division of squares between the north and the south of the Thames is as follows:

	Squares. No.	Area (acres).
North of Thames	194	224·01
South of Thames	37	15·49
Total London	231	239·50

Not only are there comparatively few garden squares in South London, but these squares are on the average of less than one-half the extent of those in North London.

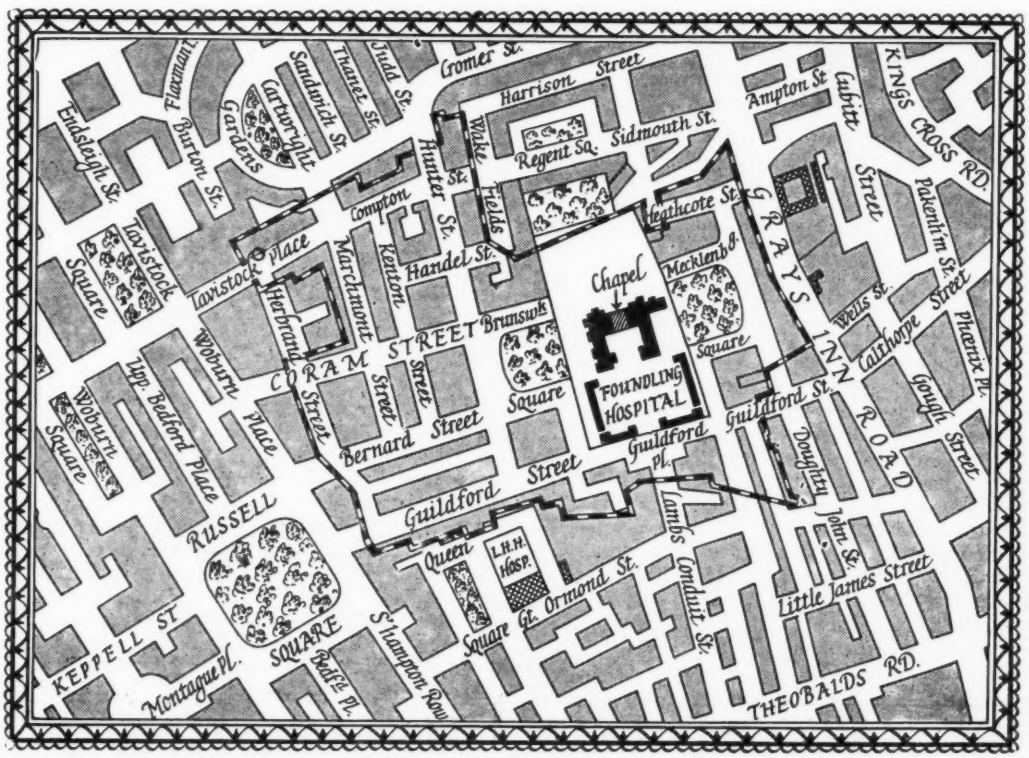
As regards enclosures the distribution in Metropolitan boroughs is somewhat different, the boroughs with the largest areas being as follows:

	Enclosures. No.	Area (acres).
Kensington	33	34·70
Paddington	19	25·87
Camberwell	14	19·04
Islington	17	15·22
City of Westminster	9	10·98
Total of the above	92	105·81
Total in London	200	160·64

In these five Metropolitan boroughs are comprised 46 per cent. of the number and nearly 66 per cent. of the area of all the enclosures.

The division of the enclosures between the north and the south of the Thames is as follows:

	Enclosures. No.	Area (acres).
North of Thames	147	124·16
South of Thames	53	36·48
Total London	200	160·64



Some of the Bloomsbury Squares, including the Foundling Hospital estate, scheduled for preservation by the London County Council under the provisions of the Town Planning Act.

The disproportion between North London and South London is not so great in the case of enclosures as in that of squares.

As regards extent, the following is an analysis of the size of the garden squares and enclosures:

Area (acres)	Number. Squares.	Enclosures.	Total squares and enclosures.
7 and over	1	—	1
6 to 7	3	2	5
5 to 6	2	2	4
4 to 5	2	3	5
3 to 4	3	4	7
2 to 3	18	11	29
1 to 2	45	29	74
¾ to 1	36	19	55
½ to ¾	37	22	59
¼ to ½	39	30	69
Under ¼	45	78	123
	231	200	431

The average size is:

	Acres.
Squares	1·04
Enclosures	0·80
Both together	0·93

A limited number of squares and enclosures have passed into the hands of public authorities by gift or purchase, and as regards the question of future preservation these can, of course, be left out of consideration. Another category is that of garden squares and enclosures which are maintained, but not owned, by public authorities. This maintenance is either under the Town Gardens Protection Act or under a lease from, or other arrangement with, the owners. The question of the preservation of these is not determined by such maintenance, as the fee simple has not been transferred to the local authorities.

Mr. Hunt then described the manner in which the London squares had been developed, and gave particulars of their management and maintenance and the means by which some of them were being preserved. Proceeding, he said: The question of taking action for the preservation of squares under the Town Planning Act, 1925, has been under the consideration of the London County Council. The Town Planning Act applies to land which is in course of development or appears likely to be used for building purposes, and under this it would no doubt be possible to make a town-planning scheme for a square proposed to be built on. To preserve it under a scheme, however, it would be necessary to schedule it as a public or as a private open space. If the former, it would be necessary under the scheme to purchase the square; and if the latter to pay compensation in respect of prohibition against building on it, and it is possible that, in certain circumstances, as was reported in the case of Endsleigh Gardens, the cost in the latter would not be much less than in the former. In this or any other method of preservation the difficulties chiefly arise from taking the square and the houses surrounding separately. Under the Town Planning Act it may, however, be possible to include some neighbourhood development, as section 1 (1) of the Act provides that where a piece of land already built upon is so situate with respect to any land likely to be used for building purposes that the general object of the scheme would be better secured by its inclusion the scheme may include such land. The principle of betterment is also provided for in the Act, but it will be seen that even where betterment can be proved the town-planning authority is only entitled to recover one-half of the amount by which the property is deemed to be bettered.

The London County Council has not applied the provisions of the Town Planning Act to any individual square. It has done so in respect of an area in Bloomsbury, one of the chief objects of the proposed scheme being the preservation of the garden squares in the neighbourhood. The area of this scheme is the greater part of that lying between Euston Road, Gray's Inn Road, Theobald's Road, and Gower Street. It includes the Foundling Hospital estate, with the site (about 9 acres) of the hospital itself, and Brunswick and Mecklenburg Squares adjacent. The greater part of the area was developed ninety-nine or more years ago, and is therefore likely to be redeveloped in the near future.

All the squares in the area have been scheduled as private open spaces, namely:

	Area (acres)
Argyle Square	·75
Brunswick Square ..	2·33
Gordon Square	2·26
Mecklenburg Square ..	2·56
Queen Square	·81
Regent Square	·68
Russell Square	5·91
Tavistock Square ..	2·38
Torrington Square ..	1·10
Woburn Square	·82

Under this proposal they are to remain the property of the present owners, but are not to be built on. These owners will be entitled to make a claim for compensation when the scheme is finally approved in respect of any injury to the property by the restriction. If such claims are made, and they should lead to awards of considerable compensation, the Council might find it necessary to reconsider the proposal.

The Chairman: I notice that the Council are anxious that the squares should be preserved. I take it that the problem that the Council feel themselves unable to solve is whether it would be equitable, having regard to the history and conditions attaching to the squares and enclosures, to restrict them against building without compensation, or, if compensation should be payable, whether it would be justifiable to assess the compensation on some special limiting basis?

The Witness: Of course, the Council speak by means of their resolution, and I should imagine those are some of the considerations which the Council paid when they passed the resolution. They felt, apparently, that they had not got enough information to declare anything in the nature of a policy.

In answer to Col. Vaughan-Morgan, the witness said that he was not sure that the application of the Town Planning Acts would necessarily protect the squares and enclosures in their present form from future building.

Questioned as to the attitude of the speculative builder, the witness said that such a man would put on a site the very maximum that the law would permit, and would tamper with the rights of the owners of adjoining property so far as he felt that he could safely do so. The speculator had no regard for amenities and very little for his neighbours.

The Commission adjourned.

ANNOUNCEMENTS

Mr. William Leah, L.R.I.B.A., P.A.S.I., has moved to new offices at 10 Clarence Street, Gloucester. Telephone Number: 2702.

Mr. Gordon Griffiths has entered into partnership with Mr. E. Brian Tyler, A.R.I.B.A. They have commenced practice at Midland Bank Chambers, East Street, Chichester, Sussex, at which address they would be glad to receive trade catalogues.

The Honan Scholarship of the Liverpool Architectural Society will this year be awarded for the best design submitted for the following subject: It is assumed that a site has been given in the new housing area outside Liverpool (together with a sum of money) for the erection of a small church and auxiliary buildings for the Established Church. The site is situated at the bifurcation of an important roadway, and terminates a splendid vista. The brick and tiled houses of the district have a simple Georgian character. Designs are to be delivered at the Society's rooms on December 31. The winner of the scholarship will be announced on "Honan Night," February 8, 1928.

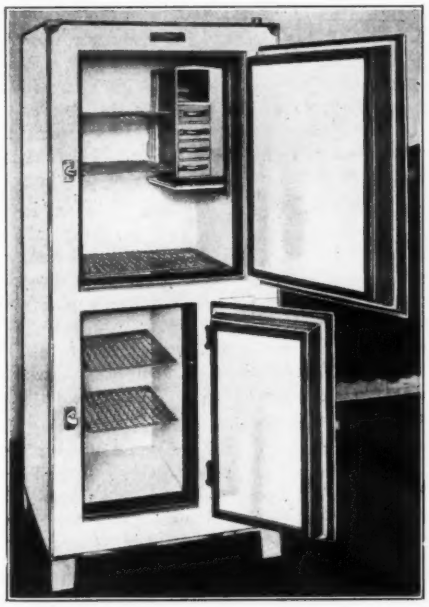
THE PUBLIC WORKS CONGRESS AND EXHIBITION

THE fourth Public Works, Roads, and Transport Exhibition was held last week at the Royal Agricultural Hall, London, under the patronage of the King and the presidency of the Rt. Hon. Neville Chamberlain, M.P., Minister of Health. The principal subjects at this year's congress were roads, sewerage and sewage disposal, concrete construction, water supply, house refuse and street cleansing, street lighting, public transport, coast erosion and smoke abatement, and a number of well-known authorities presented papers on such aspects as deserve close attention by the various classes of public authorities. At the exhibition, larger space than ever had been taken by manufacturers, and the exhibits were selected to show the latest developments in engineering and other trades which supply the special requirements of county, municipal, urban, and other authorities. Following are particulars of some of the more important exhibits:

Messrs. Parker, Winder and Achurch, Ltd., Birmingham, exhibited Excelsior steel-bladed screens, rotary screens for operation by hand and power, and screening panels suitable for incorporation with existing plant. Other exhibits were concrete mixers, hand or power driven, and a special "Parwinac" 3–4 cub. ft. capacity portable mixer of moderate cost, fitted with a "Lister" petrol engine.

On the stand of the Imperial Chemical Industries, Ltd., London, the exhibits included blocks showing the hardening effect of silicate of soda on concrete; and blocks prepared from silicate of soda and limestone only, showing their resemblance to concrete. Other exhibits included Melanoid bituminous paints in various grades to suit the requirements of every industry, complete plants of Premier electric welding and accessories, electrodes suitable for all types of metals, and gas mantles for street lighting and public works.

On the stand of Ruston and Hornsby, Ltd., Lincoln, were their No. 4 excavator, petrol paraffin driven; vertical airless injection oil engines; "Rep" portable crude oil engine; horizontal oil engine; 8 in. "CPH" pump, with 10 in. suction and delivery branches; 4¼ in. by 4 in. class "GRP" pumping plant; portable pumping plant; and a 2½ class "PR" petrol paraffin engine, with 3 in. "CPB" pump.



An Electrolux Refrigerator.

A special feature at the stand of Messrs. Electrolux, Ltd., London, was the Electrolux cleaner—"The New Cleanness." This cleaner yields a high-suction efficiency; is portable, and makes the minimum call for physical effort on the part of the user in the course of work. It is simplicity itself. There are no screws to adjust, the dustbag is totally enclosed, and dust and dirt cannot come near the motor or fan. The suction will pick up solid bodies without affecting the machinery, and the user has no weight to carry.

A Ruston and Hornsby Excavator.

The Cement Marketing Co., Ltd., Westminster, the selling organization of The Associated Portland Cement Manufacturers, Ltd., and The British Portland Cement Manufacturers, Ltd., demonstrated the uses and value of its products, "Blue Circle" Portland cement and "Ferrocrete," the rapid-hardening Portland cement. Structures, such as roads and various buildings, for which "Blue Circle" Portland cement or "Ferrocrete," the rapid-hardening Portland cement, has been used, were illustrated by photographs.

The British Steel Piling Co., Ltd., Westminster, showed a steel pile frame with mechanically-operated raking gear, equipped with Zenith double-drum friction winch and boiler, and a McKiernan-Terry steam hammer. They also showed a specimen of "Vibro" cast in situ concrete pile, which was made in the ground and afterwards extracted, samples of various sections of steel sheet piling, and various sizes of McKiernan-Terry pile-driving hammers.

Messrs. Tarkold, Ltd., Brentford, exhibited in conjunction with their North of England licensees, Dorman, Long & Co., Ltd., "Tarfroid" flowing from a barrel, in exactly the same way as it would be used on the road. A number of sections showing "Tarfroid" used for the purpose of binding various kinds of aggregate; and additionally liquid samples were also shown. There were also a number of very interesting photographs showing roads (not only in the United Kingdom, but also in countries abroad) which have been made and are being maintained with "Tarfroid."

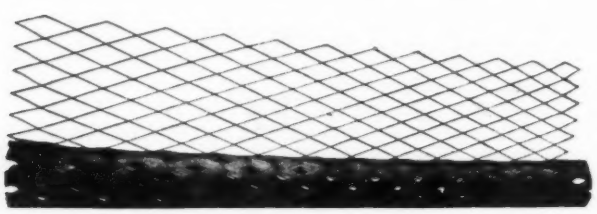
Messrs. Johnson's Reinforced Concrete Engineering Co., Ltd., Westminster. This company again exhibited Johnson's steel wire lattice reinforcement for floors, roofs, decks, and the like; "Keedon" reinforcement for beams and columns; and "Bricktor" reinforcement for brick walls. This company has been making these products for the last twenty-five years.

The Kleine Patent Fire-Resisting Flooring Syndicate, Ltd., London, showed "Duromit," a surface material, composed of imperishable crystals and crystalloids. It is claimed to be free from dust, waterproof, weather-resisting, and non-slippery.

The Portland Cement Selling and Distributing Co., Ltd., Westminster, dealt on their stand with the Red Triangle brands of cement and the Red Triangle service. The brands comprise England brand, the product of the Ship Canal Portland Cement Manufacturers, Ltd., of Ellesmere Port, Cheshire; Greaves brand, the product of Messrs. Greaves, Bull and Lakin (Harbury Works), Ltd., of Harbury, near Leamington; and Holborough brand, the product of the Holborough Cement Co., Ltd., of Snodland, Kent. A special feature was made of Vitocrete, the new rapid-hardening cement.

The Celotex Company of Great Britain, Ltd., and their wholesale distributors for England, Wales, and Ireland, The Merchant Trading Co., Ltd., exhibited a pavilion which demonstrated the uses of Celotex for all kinds of structural insulation work. Celotex is an insulating building board manufactured from bagasse—the fibre of sugar-cane, which is felted into board $\frac{7}{16}$ in. thick, having insulating and sound-deadening values.

The exhibit of the Expanded Metal Co., Ltd., Westminster, consisted of samples of the company's various products: and photographs of a few of the more important municipal works carried out on its systems. "Expamet" expanded steel sheet reinforcement for concrete has been used extensively over thirty years for foundations, floors, roofs, bridges, culverts, etc. Models showed the uses of "Expamet" in road construction and general building.



Expamet "RR" 6 in. mesh.

Messrs. Brookes, Ltd., Halifax, Yorks. The well-known products of this company of granite, stone, and other materials for roadways and buildings, are of such a nature and so well known that the exhibits of same only admitted of small but interesting samples. Messrs. Joseph Brooke and Sons and The Nonslip Stone Company claim to have the largest York stone quarries in operation, and their exhibit of York stones and of "Nonslip" stone for paving and architectural work, were familiar to their many customers attending the exhibition.

The exhibit of the British Reinforced Concrete Engineering Co., Ltd., Stafford, consisted of a display of photographic enlargements of various types of roads in which B.R.C. fabric has been used, viz. reinforced concrete surfaced roads, reinforced concrete road foundations, reinforced concrete tramtrack foundations, and reinforced tarmacadam roads. In addition to these were models showing different types of road reinforcement, including single layer, longitudinal and square mesh reinforcements, which are supplied in rolls or sheets, and double reinforcement with spacers.

The exhibits of the Hopton-Wood Stone Firms, Ltd., Wirksworth, included a balustrade in polished dark Hopton-Wood stone along the front of the stand, and examples of paving in Hopton-Wood stone on the floor. There were also samples of all sizes of roadstone and chippings in hard blue limestone for roads, concrete, etc., samples of tarred roadstone and chippings for every purpose, and samples of light Hopton-Wood stone chippings for footpaths in parks, and recreation grounds.

IN PARLIAMENT

[BY OUR SPECIAL REPRESENTATIVE]

Sir Joseph Nall asked the Under-Secretary of State for the Home Department, as representing the First Commissioner of Works, whether he had any information regarding the present condition of the ancient pavements at Bignor; whether they were scheduled under the Ancient Monuments Act, 1913; and, if not, whether they could be so scheduled?

Sir Vivian Henderson replied that the pavements were much in need of repair, but it would be both difficult and expensive to repair them. The pavements were not scheduled, but they probably would be in due course. But scheduling would not have the effect of bringing them under the care of the Office of Works.

Captain A. Evans asked if the iron gates of Grosvenor House opening into Upper Grosvenor Street had been offered to the Office of Works for erection in Hyde Park?

Sir V. Henderson said that the screen and gates from Grosvenor House were offered to the Office of Works, but after careful consideration it was decided that they could not be satisfactorily used either in Hyde Park or elsewhere.

Mr. Chamberlain informed Mr. Stephen that the total Exchequer payments made since 1919 in respect of housing schemes in England and Wales to November 12, 1927, amounted to £58,900,000, and the following amounts had been paid in respect of schemes in the county boroughs named: Liverpool, £1,707,533; Manchester, £920,001; Birmingham, £1,408,733.

Mr. T. Thomson asked the Minister of Health what was the maximum amount at present available for the annual Exchequer contributions to local authorities in connection with slum clearance schemes carried out under Part II of The Consolidated Housing Act, 1925; and what was the estimated total of the annual amount which would become payable by the Exchequer in respect of such schemes as had been approved by him up to October 31, 1927?

Mr. Chamberlain replied that no fixed allocation was made for Exchequer contributions towards the expenses of slum clearance schemes, the actual expenditure each year being dependent on the progress of the schemes sanctioned. The requirement for the year 1927-28 for which provision was included under the general housing grants sub-head of the vote for the Ministry was estimated at £65,000, and the ultimate annual Exchequer liability

in respect of such schemes approved to October 31, 1927, was estimated at £120,000.

Mr. Thomson asked how many towns had adopted town-planning schemes under the Housing and Town Planning Act, and how many had taken no action in the matter?

Sir Kingsley Wood said that there were 494 boroughs and urban districts with a population of 10,000 persons or more. The number in whose areas town-planning action had been taken, either by the local Council or by another authority, were as follows: Town-planning resolutions passed, 237; preliminary statements approved, 58; final schemes approved, 13.

Sir Arthur Steel-Maitland, the Minister of Labour, in answer to various questions, said that the estimated number of insured persons classified as belonging to the building trade in Great Britain was 833,940 at July, 1927, as compared with 789,560 at July, 1926. The number of such workers recorded as unemployed at June 20, 1927, was 52,112, as compared with 68,191 at June 21, 1926. There was thus an increase in the numbers in employment of approximately 60,000. At October 24 last, 93,190 persons in Great Britain classified as belonging to the building industry were recorded as unemployed, as compared with 58,465 at April 25, 1927. The number of insured work-people classified as belonging to the building trade in England recorded as unemployed at October 24, 1927, was 79,314, as compared with 72,754 at October 25, 1926.

SOCIETIES AND INSTITUTIONS

The A.A.S.T.A., Liverpool Division

A visit of the members of the Liverpool Division of the A.A.S.T.A. was recently paid to the works of the Liverpool Electric Cable Co., Ltd., Bootle. After an inspection of the works tea was provided in the canteen, during which a discussion took place. The chairman of the Association, Mr. Capsticks, L.R.I.B.A., moved a vote of thanks for a most interesting and enjoyable afternoon.

The International Commission on Illumination

A very successful and interesting meeting of the technical committees of the International Commission on Illumination was held at Bellagio. About seventy delegates from ten countries attended and it is pleasant to record the fact that representatives of the ex-enemy nations were present. The meeting was arranged as a precursor of the plenary session of the Commission which is due to be held in America next year. The technical Committees had a very full programme in discussing the rather numerous papers on their various subjects of study. Industrial lighting from the point of view of glare received considerable attention, and the British Specification for an Industrial Reflector Fitting, in which very successful efforts were made to eliminate glare, received favourable comment. Motor-car headlights were also discussed at some length. It appears that there is a growing concensus of opinion that "dimming" is very undesirable, and that two light distributions should be available for each headlight. In addition to the meetings of the technical committees, two delegate conferences were held, and important though rather ambitious additions to the programme of work of the Commission were made. The Commission is now committed to an intensive study of such new subjects as signal glasses, daylight illumination, street lighting, fundamental research on glare, etc. The secretarial work involved is now allotted to the various national committees, who each take responsibility for one or two subjects. Great Britain is acting as the "secretariat" for the subjects of Signal Glasses and Daylight Illumination; France for Heterochromatic Photometry; Germany for Diffusing Glassware and Street Lighting; and the United States for Factory Lighting and Automobile Headlights. Mr. C. C. Paterson (Great Britain) was elected president of the Commission in succession to Dr. E. P. Hyde (U.S.A.). There seems to be no doubt that the results of the work of the next twelve months, which will be reported in America in September 1928, should prove to be of great importance alike to the specialist illuminating engineer, the industrialist, and the public in general.

COMPETITION CALENDAR

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

November 30. New town hall and municipal buildings, proposed to be erected on a site in the Broadway, Wimbledon, for the Wimbledon Corporation. Assessor: Mr. H. V. Ashley, F.R.I.B.A. Premiums: £200, £150, and £75. Particulars from Mr. Herbert Emerson Smith, LL.B., Town Clerk. Deposit £2 2s.

December 10. The Leeds Corporation invite architects in private practice willing to submit designs in a limited competition for a proposed colony for mental defectives at Meanwood Park, Leeds, to forward their names, addresses, and particulars of their executed works of a similar character to the Chairman of the Mental Deficiency Acts Committee, 38 Park Square, Leeds. A small panel of competitors will be selected from the applications received. Mr. John Kirkland, F.R.I.B.A., has been appointed to act as assessor. Premiums of £200, £150, and £100 will be paid to the author of the designs placed by the assessor in the first, second, and third places respectively. The authors of bona-fide designs unplaced will be paid the sum of £50 if they have complied with the conditions and instructions laid down.

December 15. The Portland Cement Selling and Distributing Co., Ltd., announce a competition for architects, with prize awards totalling £1,000. The President of the R.I.B.A. has appointed the following assessors: Messrs. Maxwell Ayrton, F.R.I.B.A.; William Edward Riley, F.R.I.B.A., M.I.C.E., R.B.A., member of the Council of the Royal Sanitary Institute, late superintending architect of Metropolitan Buildings and architect to the London County Council; Douglas G. Tanner (Douglas G. Tanner and Arthur L. Horsburgh), consulting architects to the *Daily Mail* Ideal Home Exhibition; and Baker and Mallett, quantity surveyors. There will be two sections of the competition, "A" and "B"; the prize awards in each being: first prize, £250; second prize, £150; third prize, £100. In section "A," designs for a house in concrete costing £1,750 are called for, and in section "B," for a house in concrete costing £750. The winning designs will be erected at Olympia for the *Daily Mail* Ideal Home Exhibition.

COMPETITION NEWS

Seaton Layout Competition

The following notice has been issued by the Royal Institute of British Architects: "Members of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published regulations of the Royal Institute for Architectural Competitions."

THE FRIENDS HOUSE

The general contractors for the Friends House, Euston Road, London, N.W., illustrated on pages 671 to 679, were Grace and Marsh, Ltd., and among the artists, craftsmen, and sub-contractors engaged on the work were the following: Mr. Arthur Boxall, quantity surveyor; Mr. E. W. Cook, steel engineer consultant; Mr. A. H. Bennett, electrical consultant; Dr. G. Sutherland, acoustic consultant; Dorman Long & Co., Ltd., steel; Bath and Portland Stone Co., Ltd., stone; Patent Impervious Stone and Construction Co., Ltd., artificial stone and paving; Claridge's Patent Asphalt Co., Ltd., asphalt; Leckhampton Quarries Co., Ltd., interior stone; Roger Preston & Co., heating and ventilating; Girdlestone & Co., lighting; British Thomson-Houston Co., Ltd., electric fittings; Gilbert Allom, large meeting-house lighting; George Wragge, Ltd., steel windows, wrought-iron work; Adamsez Ltd., sanitary fittings; Drytone, Ltd., panelling in Austrian oak and British Columbia hemlock to the two meeting-houses; Cheal & Co., gardening; Terradura, Ltd., composition floors; May Construction Co., acoustic plaster. The architect feels that the success of the building is due to the co-operation of everyone concerned. The panelling of the small meeting-house is of British Columbia hemlock, drytoned grey. It is claimed that this building is the first in the metropolis to be panelled with this material.

THE WEEK'S BUILDING NEWS

The HAMPTON U.D.C. is negotiating regarding the acquisition of housing land on the Manor House estate.

*

The SWANSCOMBE U.D.C. is in negotiation for a site of 11 acres for housing purposes.

*

The governors of the Royal Infirmary, NEWCASTLE, are asking local authorities to render assistance in their efforts to raise £150,000 for extensions.

*

The REDDITCH U.D.C. proposes to proceed with the clearance of the Silver Street area, and the surveyor has been instructed to prepare plans for non-parlour houses.

*

Plans passed by the REDDITCH U.D.C.: Additions, Smallwoods Row, for Messrs. J. Wheatley and Sons; four houses, Bromsgrove Road, for Mr. E. L. Lewis; three shops, Evesham Street, for Messrs. Hughes (Redditch), Ltd.; club-room, Woodland Inn, Mount Pleasant, for Messrs. Flower and Sons, Ltd.

*

The Improvements Committee of the BRADFORD Corporation has approved plans of the city engineer for the construction of a new road to Oakenshaw at an estimated cost of £100,000.

*

Plans passed by the GRAVESEND Corporation: Five houses, Smarts Road, for Mr. C. A. Mills; alterations, Globe Tavern, Milton Road, for Messrs. Hoare & Co., Ltd.; house, Kings Drive, for Mr. H. Read; house, Kings Drive, for Mr. R. T. Wadhams.

*

The trustees have decided to begin the erection of a new out-patients' block at the GRAVESEND Hospital.

*

Plans have been prepared by the city engineer of GLASGOW for the provision of additional slipper baths at Govanhill.

*

The Director of Housing has prepared a scheme for the erection of thirty houses at Keppockhill Road, GLASGOW.

*

Messrs. T. H. Mawson and Sons are to erect buildings on the site of 1 to 6 Vandon Street, Buckingham Gate, WESTMINSTER.

*

The Ministry of Health has sanctioned the proposal of the OLDHAM Corporation for the erection of another 500 houses.

*

The DUDLEY Corporation has accepted the preliminary plan of Messrs. T. H. Mawson and Sons for the development of the Priory estate, and appointed the firm to act in an advisory capacity in regard to the architectural features and plotting of the estate.

The DUDLEY Corporation has scheduled a site on the Priory estate for the erection of an isolation hospital.

*

The managers are in communication with the Board of Education regarding proposals for remodelling the Bilton Street School, YORK.

*

The NEWCASTLE Corporation has acquired a housing site at Two Ball Lonnen at a cost of £28,000.

*

The DOUGLAS (I. o. M.) Corporation has asked the borough engineer to report as to the suitability of a site near South Quay for the erection of flats.

*

The DOUGLAS (I. o. M.) Corporation has asked Mr. Teare, the architect, to prepare plans for the erection of a further fifty houses on the Pulrose estate.

*

Plans passed by the WESTMINSTER City Council: North block, Grosvenor House site, Park Lane and Upper Grosvenor Street, for Messrs. Wimperis, Simpson and Guthrie; extensions, Strand Palace Hotel, Strand, for Mr. F. J. Wills.

*

The LEEDS Education Committee has obtained sanction to borrow £18,000 for the erection of an elementary school at Wyther Park.

*

The LEEDS Corporation has obtained sanction to borrow £104,000 for the erection of 276 houses on the Meanwood and York Road housing estates.

*

The LEEDS Corporation has obtained sanction from the Ministry of Transport to borrow £97,500 for the extension of the tram depot in Swinegate.

*

The Herts Education Committee has empowered an architect, to be nominated by the local authority, to prepare plans for the erection of a secondary school at LETCHWORTH at an estimated cost of £40,000.

*

The Board of Education has approved plans for the erection of the new elementary school at Charminster, BOURNEMOUTH.

*

The managers of St. Walburga's Schools have decided to proceed with a scheme for the erection of new schools on a site in Malvern Road, BOURNEMOUTH, at the earliest possible moment.

*

The Herts Education Committee is to consider the provision of new elementary school accommodation at WHEATHAMPSTEAD.

Plans passed by the BOURNEMOUTH Corporation: Seven houses, Wilson Road, for Messrs. Smith and Son; three houses, Maclaren Road, for Mr. F. Morman; six houses, Norton Road, for Mr. W. W. Baker; mission hall, Charminster Road, for Mr. S. G. Ward; club, Stamford Road, for British Legion Committee; two shops, Henville Road, for Mr. A. W. Blatchford.

*

The Herts Education Committee has authorized a scheme for the erection of a new block, containing four classrooms, at the Westbury Council School, LETCHWORTH.

*

The Herts Education Committee has authorized the erection of a new grammar school at HERTFORD in accordance with the plans prepared in 1925 by Mr. J. W. Fisher, architect, of Wellingborough, at an estimated cost of £40,000.

*

The BOURNEMOUTH Corporation has instructed the borough engineer to proceed with the construction of a sea wall, back wall, and promenade to Durley Chine, the cost being estimated at £40,000.

*

Plans passed by the SEDGLEY U.D.C.: Building, Gospel Road, for Baggeridge Colliery Company; additions, Princes Road, for Mr. R. Griffiths.

*

Mr. Teare, architect to the DOUGLAS (I. o. M.) Corporation, is negotiating for land for the new street scheme.

*

The Government has arranged a formal conference with the DOUGLAS (I. o. M.) Corporation regarding the proposed harbour improvements.

*

Plans passed by the DOUGLAS (I. o. M.) Corporation: Additions, Sefton Hotel, for Hotel Company; rebuilding shop and premises, Castle Street, for Mr. G. N. Gore; rebuilding shop and premises, Granville Street and Strand Street, for Mr. W. Tinker; new sheds, the Lake, for Messrs. Quiggin & Co.

*

The Longboro Estate Co., Ltd., is acquiring a building site in Long Lane, SOUTHWARK, from the L.C.C.

*

Preliminary steps are being taken by the L.C.C. for the development of the St. Helier estate at CARSHALTON, where 3,000 houses are to be built.

*

The Metropolitan Asylums Board has approved the plans prepared by Messrs. Paine and Hobday, the architects for the extension of Queen Mary's Hospital for Children, LONDON, at an estimated cost of £202,000.

The BOLTON Corporation is seeking sanction to borrow £175,000 for further housing advances.

*

Plans passed by the BOURNEMOUTH Corporation: Alterations and additions, 17 Southbourne Grove, for Midland Bank, Ltd.; alterations and additions, Royal Arms Hotel, Commercial Road, for Messrs. Hall and Woodhouse; alterations and additions, South Cliff Hotel, Belle Vue Road, for Messrs. Eldridge, Pope & Co.; alterations, Norwich Road, for Messrs. Bobby & Co., Ltd.; three houses, Bentley Road, for Mr. H. Masters; nine houses, Comber Road, for Mr. H. Masters; alterations, Southbourne Grove, for Barclays Bank, Ltd.; four houses, Norton Road, for Mr. H. Watton; shops and business premises, Bourne Avenue and Richmond Hill, for Messrs. Montague Burton, Ltd.; additions, Lancaster Hotel, Southcote Road, for Mr. J. F. Jones; four houses, Edgehill Road, for Mr. S. Harris.

*

Plans passed by the SWANSEA Corporation: Ten houses, Graiglwyd Road, for Messrs. T. and G. Spragg; twelve houses, Boarspit Lane, for Mr. C. M. Gustavus; four houses, Penygraig Road, for Messrs. Rogers and Davies; additions, St. Helen's Road, for Y.W.C.A.; additions, Dumbarton School, Brynymoor Crescent, for Mr. G. Thomas; eight houses, St. Illtyds Crescent, for Mr. A. E. Wright; alterations and additions, "Windsor Arms," Delhi Street, for Messrs. W. Hancock & Co., Ltd.; fifty-three houses, Grenfell Park estate, for Messrs. Jones Brothers; mission hall, Llangyfalach Road, for Mr. A. J. Chilcott; four houses, The Mayals, for Mr. E. W. Saunders.

*

The Anglo-American Oil Co., Ltd., is to construct an oil depot at the junction of Sandhurst Road and Ninfield Road, BEXHILL.

*

The MIDDLESEX County Council is purchasing property, at a total cost of £49,000, for the Bath main road widening and the Colnbrook by-pass scheme.

*

The BIRKENHEAD Corporation is considering proposals for the erection on various sites of 100 houses for rehousing displaced tenants, in accordance with plans of the borough engineer, showing houses at a total cost of £564 each, inclusive of land.

*

The Warwickshire County Council has submitted to the Ministry of Transport plans for the proposed new bridge and approach roads at STARE.

*

The Warwickshire county architect has prepared preliminary plans for the extension of the county offices at WARWICK, the cost being estimated at £34,000 for the first part of the scheme. Tenders will be invited in time for consideration next spring.

Plans passed by the HULL Corporation: Six houses, private lane, Sutton, for Mr. C. Wray; ten houses, Claremont Avenue, for Mr. W. Garbutt; twenty-eight houses, Belgrave Drive, for Mr. J. Emmerson; four houses, Savery Street, for Mr. H. Barnett; six houses, Woldcarr Road, for Messrs. R. W. and J. H. Barnett; eight houses, Springfield Road, for Mr. T. R. Barnett.

*

The HULL Corporation is seeking sanction to grant a further 200 housing subsidies.

*

Plans passed by the GRAVESEND Corporation: Eight garages, Princes Street, for Messrs. Burvill and Steen; two houses, Porrock Avenue, for Messrs. Robert Hopkins and Sons; house, Grange Road, for Mr. H. L. Smith.

*

The Barnsley Wesleyan Circuit proposes the erection of a Sunday School at LUNDWOOD.

*

The BARNSLEY Corporation is seeking sanction for a loan of £10,000 for further housing subsidies.

*

The Rev. J. Learmouth, on behalf of the Primitive Methodist Church, is inquiring for a site on the Upney estate, BARKING TOWN, for the erection of a church.

*

The governors of the Victoria Hospital, WOKING, have decided to add a new wing to the buildings in Chobham Road.

*

The City of London Corporation Markets Committee proposes the preparation of a comprehensive scheme for extending and modernizing the ISLINGTON cattle market and abattoirs.

*

The L.C.C. Education Committee has decided to erect an elementary school for 1,500 children at STREATHAM VALE.

*

A special committee of the WOKING U.D.C. recommends that 200 more houses should be provided by the Council.

*

The COULSDON U.D.C. has obtained sanction for a loan of £20,000 for further housing advances.

*

Plans passed by the COULSDON U.D.C.: Two houses, Riddlesdown Road, for Mr. G. Peskett; three houses, Purley Oaks Road, for Mr. H. Johnson; four shops and seven garages, Banstead Road, for Messrs. Morgan Baines and Clark; three houses, Oakwood Avenue, Purley, for Messrs. E. T. Brown and Son; two houses, Coulsdon Rise, for Messrs. H. Bacon and Son; new street, off Coulsdon Road, for Coulsdon Heights Estate Co.

*

The Essex Education Committee has acquired a site for the erection of a new high school for boys at LEYTON.

The PLYMOUTH Corporation is considering land at Weston Mill for housing purposes.

*

Relief works proposed by the PLYMOUTH Corporation include the construction of a low-level road at Cattewater, the continuation of Beaumont Road to Alexandra Road, and the construction of playing-fields and park at Laira Marshes.

*

Messrs. Montauhe Burton, Ltd., of Leeds, are to erect premises in Pride Hill, SHREWSBURY.

*

The BERMONDSEY B.C. has decided upon the accommodation to be provided in the Town Hall extension scheme, and for this purpose are seeking sanction for a loan of £20,000.

*

The Southern Railway Company is shortly to close SOUTH BERMONDSEY Station and erect a new station at a spot about a quarter of a mile away.

*

On behalf of the Kent Education Committee the NORTHFLEET U.D.C. has acquired a site in Percy Street for the erection of a central school.

*

The surveyor to the NORTHFLEET U.D.C. has prepared preliminary plans indicative of the accommodation needed at the proposed extensions of the council offices.

*

The NORTHFLEET U.D.C. is in negotiation for land on the Wombwell Hall Park estate for another housing scheme.

*

Plans passed by the WAKEFIELD Corporation: Two houses, Dewsbury Road, for Mr. H. Dobson; two houses, Batley Road, for Mr. H. Taylor; additions, club, Calder Vale Road, for Mr. W. T. Turner; additions to mill, for Messrs. Moore and Crabtree; additions, Rainbow Inn, Warrengate, for J. Smith's Tadcaster Brewery, Ltd.; temporary chapel, Thornes Road, for Mr. J. P. Hutchinson, on behalf of Methodist trustees.

*

The WAKEFIELD Corporation is to confer with the Ministry of Health with reference to the proposed maternity hospital to be erected on the Clayton Hospital site.

*

The WAKEFIELD Education Committee has now obtained sanction to a loan for the extension of the technical college.

*

The WAKEFIELD Corporation housing architect has prepared designs for the erection of an elementary school on the Snapethorpe housing estate.

*

The Essex Education Committee has asked the county architect to prepare plans for an elementary school at High Road, LAINDON, at an estimated cost of £14,000.

RATES OF WAGES

			I	II
			s. d.	s. d.
A	ABERDARE	S. Wales & M.	1 8	1 3½
A₁	Abergavenny	S. Wales & M.	1 7½	1 2½
B	Abingdon ..	S. Counties	1 6	1 1½
A	Accrington	N.W. Counties	1 8	1 3½
A₂	Addlestone	S. Counties	1 6½	1 2
A	Adlington ..	N.W. Counties	1 8	1 3½
A	Airdrie ..	Scotland	*1 8	1 3½
C₁	Aldeburgh	E. Counties	1 4	1 0½
A	Altrincham	N.W. Counties	1 8	1 3½
B₂	Appleby ..	N.W. Counties	1 4½	1 0½
A	Ashton-under-Lyne	N.W. Counties	1 8	1 3½
A₂	Atherstone	Mid. Counties	1 6½	1 2
B₂	Aylesbury ..	S. Counties	1 4½	1 0½
B₂	BANBURY	S. Counties	1 4½	1 0½
B₁	Bangor ..	N.W. Counties	1 5	1 1
A	BarnardCastle	N.E. Coast	1 8	1 3½
A	Barnsley ..	Yorkshire	1 8	1 3½
B₁	Barnstaple	S.W. Counties	1 5½	1 1½
A	Barrow ..	N.W. Counties	1 8	1 3½
A	Barry ..	S. Wales & M.	1 8	1 3½
B₂	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 6	1 1½
A	Batley ..	Yorkshire	1 8	1 3½
B	Bedford ..	E. Counties	1 6	1 1½
A₂	Berwick-on-Tweed	N.E. Coast	1 7	1 2½
A₂	Bewdley ..	Mid. Counties	1 7	1 2½
B₂	Bicester ..	Mid. Counties	1 4½	1 0½
A	Birkenhead	N.W. Counties	*1 10	1 4½
A	Birmingham	Mid. Counties	1 8	1 3½
A	Bishop Auckland	N.E. Coast	1 8	1 3½
A	Blackburn	N.W. Counties	1 8	1 3½
A	Blackpool	N.W. Counties	1 8	1 3½
A	Blyth ..	N.E. Coast	1 8	1 3½
B₂	Bognor ..	S. Counties	1 4½	1 0½
A	Bolton ..	N.W. Counties	1 8	1 3½
A₂	Boston ..	Mid. Counties	1 6½	1 2
B₁	Bournemouth	S. Counties	1 6	1 1½
B₂	Bovey Tracey	S.W. Counties	1 5	1 1
A	Bradford ..	Yorkshire	1 8	1 3½
A₂	Brentwood ..	E. Counties	1 7	1 2½
A	Bridgend ..	S. Wales & M.	1 8	1 3½
B₂	Bridgwater	S.W. Counties	1 5	1 1
A₁	Bridlington	Yorkshire	1 7½	1 2½
A	Brighouse	Yorkshire	1 8	1 3½
B₁	Brighton ..	S. Counties	1 6	1 1½
A	Bristol ..	S.W. Counties	1 8	1 3½
B₂	Brixham ..	S.W. Counties	1 4½	1 0½
A₂	Bromsgrove	Mid. Counties	1 7	1 2½
C	Bromyard ..	Mid. Counties	1 4	1 0½
A	Burnley ..	N.W. Counties	1 8	1 3½
A	Bursiem ..	Mid. Counties	1 8	1 3½
A₂	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 8	1 3½
A₁	Buxton ..	N.W. Counties	1 7½	1 2½
B	CAMBRIDGE	E. Counties	1 6	1 1½
B₂	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 8	1 3½
A	Carlisle ..	N.W. Counties	1 8	1 3½
B	Carmarthen	S. Wales & M.	1 6	1 1½
B₂	Carnarvon	N.W. Counties	1 5	1 1
A₁	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 8	1 3½
B₁	Chatham ..	S. Counties	1 5½	1 1½
B₁	Chelmsford	E. Counties	1 5½	1 1½
A₂	Cheltenham	S.W. Counties	1 6½	1 2
A	Chester ..	N.W. Counties	1 8	1 3½
A	Chesterfield	Mid. Counties	*1 8	1 3½
B₂	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 8	1 3½
B₂	Cirencester	S. Counties	1 5	1 1
A	Clitheroe ..	N.W. Counties	1 8	1 3½
A	Clydebank	Scotland	1 8	1 3½
A	Coalville ..	Mid. Counties	1 8	1 3½
B₁	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 8	1 3½
A₂	Colwyn Bay	N.W. Counties	1 6½	1 2
A	Consett ..	N.E. Coast	1 8	1 3½
A₂	Conway ..	N.W. Counties	1 6½	1 2
A	Coventry ..	Mid. Counties	1 8	1 3½
A₂	Crewe ..	N.W. Counties	1 6½	1 2
A₂	Cumberland	.....	1 6½	1 2
A	DARLINGTON	N.E. Coast	1 8	1 3½
A	Darwen ..	N.W. Counties	1 8	1 3½
B₂	Deal ..	S. Counties	1 4½	1 0½
A₂	Denbigh ..	N.W. Counties	1 6½	1 2
A	Derby ..	Mid. Counties	1 8	1 3½
A	Dewsbury ..	Yorkshire	1 8	1 3½
B	Didcot ..	S. Counties	1 6	1 1½
A	Doncaster ..	Yorkshire	1 8	1 3½
C₁	Dorchester	S.W. Counties	1 4	1 0½
A₂	Driffield ..	Yorks	1 6½	1 2
A₂	Droitwich ..	Mid. Counties	1 6½	1 2
A₁	Dudley ..	Mid. Counties	1 7½	1 2½
A	Dundee ..	Scotland	1 8	1 3½
A	Durham ..	N.E. Coast	1 8	1 3½
B₁	EASTBOURNE	S. Counties	1 6	1 1½
A	Ebbw Vale	S. Wales & M.	1 8	1 3½
A	Edinburgh	Scotland	1 8	1 3½
A	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 8	1 3½
B	Exeter ..	S.W. Counties	*1 7	1 2½
B₂	Exmouth ..	S.W. Counties	1 5	1 1
B	FELIXSTOWE	E. Counties	1 6	1 1½
A₂	Filey ..	Yorks	1 6½	1 2
A	Fleetwood ..	N.W. Counties	1 8	1 3½
B₂	Folkestone	S. Counties	1 5	1 1
A	Frodsham ..	N.W. Counties	1 8	1 3½
B₂	Frome ..	S.W. Counties	1 4½	1 0½
A	GATESHEAD	N.E. Coast	1 8	1 3½
B₁	Gillingham	S. Counties	1 5½	1 1½
A₂	Gloucester	S.W. Counties	1 6½	1 2
A₂	Goole ..	Yorkshire	1 7	1 2½
B	Gosport ..	S. Counties	1 6	1 1½
A₂	Grantham	Mid. Counties	1 6½	1 2
A₁	Gravesend	S. Counties	1 7½	1 2½
A	Greenock ..	Scotland	*1 8	1 3½
A	Grimsby ..	Yorkshire	1 8	1 3½
B₁	Guildford ..	S. Counties	1 5½	1 1½
A	HALIFAX ..	Yorkshire	1 8	1 3½
A	Hanley ..	Mid. Counties	1 8	1 3½
A	Harrogate	Yorkshire	1 8	1 3½
A	Hartlepools	N.E. Coast	1 8	1 3½
B₂	Harwich ..	E. Counties	1 5	1 1
B₂	Hastings ..	S. Counties	1 4½	1 0½
B₁	Hatfield ..	S. Counties	1 5½	1 1½
B	Hereford ..	S. W. Counties	1 6	1 1½
B	Hertford ..	E. Counties	1 5½	1 1½
A₁	Heysham ..	N.W. Counties	1 7½	1 2½
A	Howden ..	N.E. Coast	1 8	1 3½
A	Huddersfield	Yorkshire	1 8	1 3½
A	Hull ..	Yorkshire	1 8	1 3½
A	ILKLEY ..	Yorkshire	1 8	1 3½
A	Immingham	Mid. Counties	1 8	1 3½
B	Ipswich ..	E. Counties	1 6	1 1½
C₁	Isle of Wight	S. Counties	1 4	1 0½
A	JARROW ..	N.E. Coast	1 8	1 3½
A	KEIGHLEY	Yorkshire	1 8	1 3½
B₁	Kendal ..	N.W. Counties	1 5½	1 1½
B₁	Keswick ..	N.W. Counties	1 5½	1 1½
B	Kettering ..	Mid. Counties	1 6	1 1½
A₂	Kidderminster	Mid. Counties	1 7	1 2½
B₂	King's Lynn	E. Counties	1 5	1 1
A	LANCASTER	N.W. Counties	1 8	1 3½
A₂	Leamington	Mid. Counties	1 7	1 2½
A	Leeds ..	Yorkshire	1 8	1 3½
A	Leek ..	Mid. Counties	1 8	1 3½
A	Leicester ..	Mid. Counties	1 8	1 3½
A	Leigh ..	N.W. Counties	1 8	1 3½
B₂	Lewes ..	S. Counties	1 4½	1 0½
A₂	Lichfield ..	Mid. Counties	1 6½	1 2
A	Lincoln ..	Mid. Counties	1 8	1 3½
A	Liverpool ..	N.W. Counties	*1 10	1 4½
A₂	Llandudno	N.W. Counties	1 6½	1 2
A	Llanelly ..	S. Wales & M.	1 8	1 3½
	London (12 miles radius)		1 9½	1 4½
	Do. (12-15 miles radius)		1 9	1 4
A	Long Eaton	Mid. Counties	1 8	1 3½
A	Loughborough	Mid. Counties	1 8	1 3½
B	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 8	1 3½
A₁	MACCLESFIELD	N.W. Counties	1 7½	1 2½
B	Maidstone	S. Counties	1 5½	1 1½
A₂	Malvern ..	Mid. Counties	1 6½	1 2
A	Manchester	N.W. Counties	1 8	1 3½
A	Mansfield ..	Mid. Counties	1 8	1 3½
B₂	Margate ..	S. Counties	1 4½	1 0½
A₂	Matlock ..	Mid. Counties	1 6½	1 2
A	Merthyr ..	S. Wales & M.	1 8	1 3½
A	Middlesbrough	N.E. Coast	1 8	1 3½
A₂	Middlewich	N.W. Counties	1 6½	1 2
B₂	Minehead ..	S.W. Counties	1 5	1 1
A	Monmouth	S. Wales & M.	1 8	1 3½
	S. and E. Glamorganshire			
A₁	Morecambe	N.W. Counties	1 7½	1 2½
A₂	NANTWICH	N.W. Counties	1 6½	1 2
A	Neath ..	S. Wales & M.	1 8	1 3½
A	Nelson ..	N.W. Counties	1 8	1 3½
A	Newcastle ..	N.E. Coast	1 8	1 3½
A	Newport ..	S. Wales & M.	1 8	1 3½
A	Normanton	Yorkshire	1 8	1 3½
A₂	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 8	1 3½
A	North Shields	N.E. Coast	1 8	1 3½
A₂	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 8	1 3½
A	Nuneaton ..	Mid. Counties	1 8	1 3½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 8	1 3½
A₂	Oswestry ..	Mid. Counties	1 6½	1 2
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 8	1 3½
C	Pembroke	S. Wales & M.	1 4½	1 0½
A	Perth ..	Scotland	*1 8	1 3½
A₂	Peterborough	Mid. Counties	1 6½	1 2
A	Plymouth	S.W. Counties	*1 8	1 3½
A	Pontefract	Yorkshire	1 8	1 3½
A	Pontypridd	S. Wales & M.	1 8	1 3½
B	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 8	1 3½
A	QUEENSFERRY	N.W. Counties	1 8	1 3½
B	READING ..	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A₂	Retford ..	Mid. Counties	1 6½	1 2
A	Rhondda Valley	S. Wales & M.	1 8	1 3½
A₂	Ripon ..	Yorkshire	1 6½	1 2
A	Rochdale ..	N.W. Counties	1 8	1 3½
B	Rochester	S. Counties	1 5½	1 1½
A₁	Ruabon ..	N.W. Counties	1 7½	1 2½
A₂	Rugby ..	Mid. Counties	1 8	1 3½
A₂	Rugeley ..	Mid. Counties	1 6½	1 2
A	Runcorn ..	N.W. Counties	1 8	1 3½
A₂	ST. ALBANS	E. Counties	1 6½	1 2
A	St. Helens	N.W. Counties	1 8	1 3½
B₂	Salisbury	S.W. Counties	1 4½	1 0½
A₁	Scarborough	Yorkshire	1 7½	1 2½
A	Scunthorpe	Mid. Counties	1 8	1 3½
A	Sheffield ..	Yorkshire	1 8	1 3½
A	Shipley ..	Yorkshire	1 8	1 3½
A₂	Shrewsbury	Mid. Counties	1 6½	1 2
A₂	Skipton ..	Yorkshire	1 7	1 2½
B	Slough ..	S. Counties	1 5½	1 1½
A₂	Solihull ..	Mid. Counties	1 7	1 2½
A₂	South'pton	S. Counties	1 6½	1 2
B₁	Southend-on-Sea	E. Counties	1 5½	1 1½
A	Southport ..	N.W. Counties	1 8	1 3½
A	S. Shields ..	N.E. Coast	1 8	1 3½
A₂	Stafford ..	Mid. Counties	1 7	1 2½
A	Stockport ..	N.W. Counties	1 8	1 3½
A	Stockton-on-Tees	N.E. Coast	1 8	1 3½
A	Stoke-on-Trent	Mid. Counties	1 8	1 3½
B	Stroud ..	S.W. Counties	1 5½	1 1½
A	Sunderland	N.E. Coast	1 8	1 3½
A	Swadlincote	Mid. Counties	1 8	1 3½
A	Swansea ..	S. Wales & M.	1 8	1 3½
B	Swindon ..	S.W. Counties	1 6	1 1½
A₁	TAMWORTH	N.W. Counties	1 7½	1 2½
B₁	Taunton ..	S.W. Counties	1 5½	1 1½
A	Teeside Dist.	N.E. Counties	1 8	1 3½
B	Teignmouth	S.W. Coast	1 6	1 1½
A	Todmorden	Yorkshire	1 8	1 3½
A₂	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 4	1 0½
B₁	Tunbridge Wells	S. Counties	1 5½	1 1½
A	Tunstall ..	Mid. Counties	1 8	1 3½
A	Tyne District	N.E. Coast	1 8	1 3½
A	WAKEFIELD	Yorkshire	1 8	1 3½
A₁	Walsall ..	Mid. Counties	1 7½	1 2½
A	Warrington	N.W. Counties	1 8	1 3½
A₂	Warwick ..	Mid. Counties	1 7	1 2½
B	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 8	1 3½
B	Weston-s-Mare	S.W. Counties	1 6	1 1½
A₂	Whitby ..	Yorkshire	1 7	1 2½
A	Widnes ..	N.W. Counties	1 8	1 3½
A	Wigan ..	N.W. Counties	1 8	1 3½
B₂	Winchester	S. Counties	1 5	1 1
B	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 8	1 3½
A₂	Worcester ..	Mid. Counties	1 6½	1 2
A₂	Worksop ..	Yorkshire	1 6½	1 2
A₁	Wrexham ..	N.W. Counties	1 7½	1 2½
B	Wycombe ..	S. Counties	1 6	1 1½
B₁	YARMOUTH	E. Counties	1 5½	1 1½
B₂	Yeovil ..	S.W. Counties	1 5	1 1
A	York ..	Yorkshire	1 8	1 3

§ The initial letter opposite each entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing. §

* In these areas the rates of wages for certain trades (usually Painters and Plasterers) vary slightly from those given. The rates for each trade in any given area will be sent on request.

PRICES CURRENT

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4½d. *per hour*; LABOURER, 1s. 4½d. *per hour*; NAVVY, 1s. 4½d. *per hour*; TIMBERMAN, 1s. 6d. *per hour*; SCAFFOLDER, 1s. 5½d. *per hour*; WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	11	0
Pit gravel, per yd.	0	18	0
Pit sand, per yd.	0	14	6
Washed sand	0	15	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	19	0
Lias lime, per ton	2	10	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.

Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5

DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.

IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	2	3	0
DO. 6-2-1, per yd. cube	1	18	0

DO. in upper floors, add 15 per cent.
DO. in reinforced-concrete work, add 20 per cent.
DO. in underpinning, add 60 per cent.

LIAS-LIME CONCRETE, per yd. cube	£1	16	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete 4–2–1 in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	2	6
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 4½d. *per hour*; TIMBERMAN, 1s. 6d. *per hour*; BRICKLAYER, 1s. 9½d. *per hour*; PLUMBER, 1s. 9½d. *per hour*; WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. 6 in., *per ft.*	0	1	3
DO. 9 in., *per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. 6 in., *per yd.*	0	8	6
Portland cement and sand, see "Excavator" above.			
Lead for caulking, per cwt.	£2	5	6
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9

CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	0
DO. 6 in., per ft.	0	10	0

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9½d. *per hour*; LABOURER, 1s. 4½d. *per hour*; SCAFFOLDER, 1s. 5½d. *per hour.*

London stocks, per M.	£4	15	0
Flettons, per M.	2	18	0
Staffordshire blue, per M.	9	10	0
Firebricks, 2½ in., per M.	11	3	0
Glazed salt, white, and ivory stretchers, per M.	24	10	0
DO. *headers, per M.*	24	0	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0

Cement and sand, see "Excavator" above.

Lime, grey stone, per ton	2	17	0
Mixed lime mortar, per yd.	1	6	0
Damp course, in rolls of 4½ in., per roll	0	2	6
DO. 9 *in. per roll*	0	4	9
DO. 14 *in. per roll*	0	7	6
DO. 18 *in. per roll*	0	9	6

BRICKWORK in stone lime mortar, Flettons or equal, per rod . . £33 0 0
DO. in cement do., per rod . . 36 0 0
DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano, paving to old, per ft. run	0	0	4
Extra for dishing grano, or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ½ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in..	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

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 customary, 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 the figures confirmed by trade inquiry.

MASON

MASON, 1s. 9½d. *per hour*; DO. *fixer*, 1s. 10½d. *per hour*; LABOURER, 1s. 4½d. *per hour*; SCAFFOLDER, 1s. 5½d. *per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	7
Bath stone, per ft. cube	0	3	0

Usual trade extras for large blocks.

York paving, av. 2½ in., per yd. super	0	6	6
York emplates sawn, per ft. cube	0	6	9
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6

Cement and sand, see "Excavator," etc., above.

HOISTING and setting stone, per ft. cube . . £0 2 2
DO. for every 10 ft. above 30 ft. add 15 per cent.

PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4

HALF SAWING, per ft. sup. . . £0 1 0
Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	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. 2½ in. thick, per ft. sup.	0	1	9

SLATER AND TILER

SLATER, 1s. 9½d. *per hour*; TILER, 1s. 9½d. *per hour*; SCAFFOLDER, 1s. 5½d. *per hour*; LABOURER, 1s. 4½d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

Portmadoc Ladies				£14	0	0
Countess				27	0	0
Duchess				32	0	0
Old Delabole	*Med.*	*Grey*		*Med.*	*Green*	
24 in. × 12 in.	£42	11	3	£45	1	0
20 in. × 10 in.	31	4	3	33	0	6
16 in. × 10 in.	20	18	0	22	4	9
14 in. × 8 in.	12	1	0	12	16	3
Green Randoms per ton				8	3	9
Grey-green do., per ton				7	3	9
Green peggies, 12 in. to 8 in. long, per ton				6	3	9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	1	10

Cement and sand, see "Excavator," etc., above.

Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med.	*Grey*		*Med.*	*Green*	
24 in. × 12 in.	£5	0	0	£5	2	0
20 in. × 10 in.	5	5	0	5	10	0
16 in. × 10 in.	4	15	0	5	1	0
14 in. × 8 in.	4	10	0	4	15	0
Green randoms				6	7	0
Grey-green do.				5	9	0
Green peggies, 12 in. to 8 in. long				4	17	0

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	5	6	0
DO., machine-made do., per square	4	17	0

Vertical Tiling, including pointing, add 18*s.* 0*d.* per square.

FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries for Asbestos Tiling."

CARPENTER AND JOINER

CARPENTER, 1s. 9½d. *per hour*; JOINER, 1s. 9½d. *per hour*; LABOURER, 1s. 4½d. *per hour.*

Timber, average prices at Docks, London Standard Scandinavian, etc. (equal to 2nds):

7 × 3, per std.	£20	0	0
11 × 4, per std.	30	0	0

Memel or Equal. Slightly less than foregoing.

Flooring, P.E., 1 in., per sq.	£1	5	0
DO. *T. and G., 1 in., per sq.*	1	5	0
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	6
DO., *ft. cube*	0	15	0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	5	6
DO. framed in floors, roofs, etc., per ft. cube	0	6	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	7	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO. 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	10	0
TURNING pieces to flat or segmenta soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

continued overleaf

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
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 measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one-ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	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.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1⅛ in. thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	6
If ramped, per ft. run	0	5	0
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1¼ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding, per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour;* MATE, *do.* 1*s.* 4*d. per hour;* ERECTOR, 1*s.* 9½*d. per hour;* FITTER, 1*s.* 9½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	19	0	0
DO., *galvd., per ton*	20	0	0
Corrugated sheets, galvd., per ton	20	0	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0

*

MILD STEEL in trusses, etc., erected, per ton	25	10	0
DO., in small sections as reinforcement, per ton	16	10	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	20	0	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour;* MATE OR LABOURER, 1*s.* 4½*d. per hour.*

*

Lead, milled sheet, per cwt.	£1	13	6
DO. *drawn pipes, per cwt.*	1	14	0
DO. *soil pipe, per cwt.*	1	17	0
DO. *scrap, per cwt.*	1	5	6
Copper, sheet, per lb.	0	1	9
Solder, plumber's, per lb.	0	1	3
DO. *fine, per lb.*	0	1	9
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	4	0
DO. *4 in. per yd.*	0	4	9½
R.W.P., 2½ in., per yd.	0	2	2
DO. *3 in., per yd.*	0	2	7
DO. *4 in., per yd.*	0	3	6½
Gutter, 4 in. H.R., per yd.	0	1	6½
DO. *4 in. O.G., per yd.*	0	1	10½

*

MILLED LEAD and labour in gutters, flashings, etc.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	0
DO. ⅝ in., per ft.	0	2	3
DO. 1 in., per ft.	0	3	0
DO. 1¼ in., per ft.	0	4	0
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	0
DO. 3 in., per ft.	0	7	0
DO. 4 in., per ft.	0	9	9
WIPED soldered joint, ½ in., each	0	2	6
DO. ⅝ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ⅝ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	7
DO. 3 in., per ft. run	0	2	0
DO. 4 in., per ft. run	0	2	10
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	2	0
DO. O.G., 4 in., per ft.	0	2	3
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	4	6
DO. 3 in., per ft.	0	3	6
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 9½*d. per hour (plus allowances in London only);* LABOURER, 1*s.* 4½*d. per hour.*

*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	1	15	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	9
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Thistle plaster, per ton	3	9	0
Lath nails, per lb.	0	0	4

*

LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	3
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock. ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	7
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	9
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	3
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8½*d. per hour.*

*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	6
DO. *4 ft. sup.* "	0	2	9
DO. *6 ft. sup.* "	0	3	0
DO. *20 ft. sup.* "	0	3	7
DO. *45 ft. sup.* "	0	3	9
DO. *65 ft. sup.* "	0	3	11
DO. *100 ft. sup.* "	0	4	4
Rough plate, ⅞ in., per ft.	0	0	6¾
DO. *¼ in. per ft.*	0	0	6¾
Linseed oil putty, per cwt.	0	15	0

*

GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 oz., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span 1*s.* 6*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8½*d. per hour;* LABOURER, 1*s.* 4½*d. per hour;* FRENCH POLISHER, 1*s.* 9*d. per hour;* PAPERHANGER, 1*s.* 8½*d. per hour.*

*

Genuine white lead, per cwt.	£2	7	6
Linseed oil, raw, per gall.	0	3	6
DO., *boiled, per gall.*	0	3	8
Turpentine, per gall.	0	4	0
Liquid driers, per gall.	0	8	6
Knotting, per gall.	0	18	0
Distemper, washable, in ordinary colours, per cwt., and up	2	5	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	14	0
DO., *flat, per gall.*	1	2	0
DO., *paper, per gall.*	0	16	0
French polish, per gall.	0	17	6
Ready mixed paints, per gall. and up	0	15	0

*

LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	10
DO., subsequent coats, per yd. sup.	0	0	9
DO., enamel coat, per yd. sup.	0	1	2½
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	2
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing, per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.
The measured work price is on the same basis . . . per ft. sup. £0 0 2½

FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds per ft. sup. . . . from 3d. to	0	0	6
Plaster board, per yd. sup. . from	0	1	7
PLASTER BOARD, fixed as last, per yd. sup. . . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup.	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casement in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement.
Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	7/16 in.			½ in.			5/8 in.			¾ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon												
Mahogany	4	3	3	6½	5½	4	9½	7½	—	1 0½	10	—
Figured Oak												
1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak												
1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—