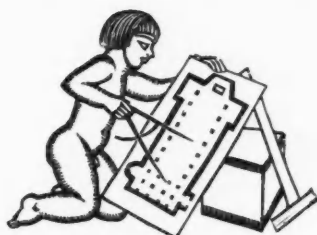


# THE ARCHITECTS' JOURNAL



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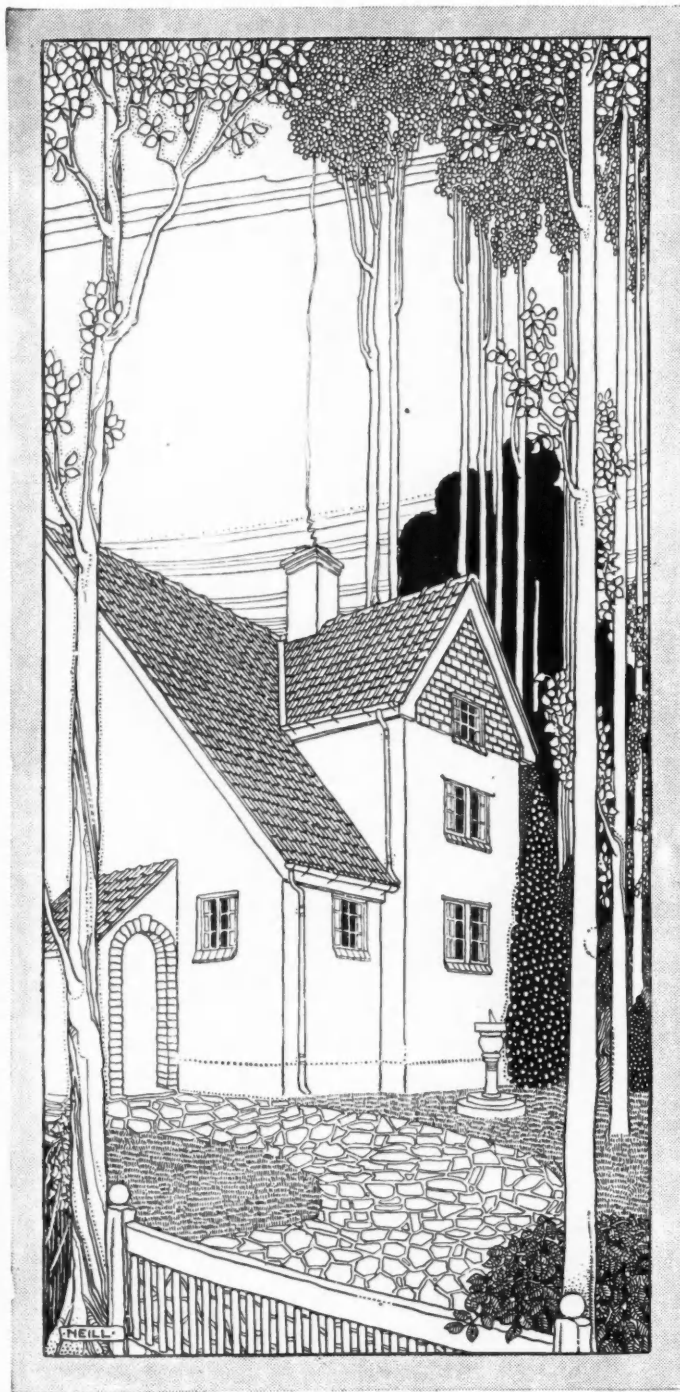
WEDNESDAY, APRIL 13, 1927

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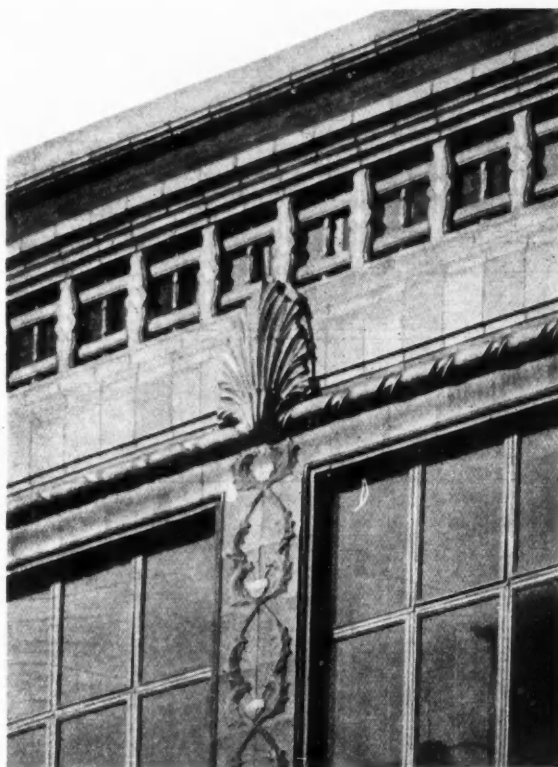
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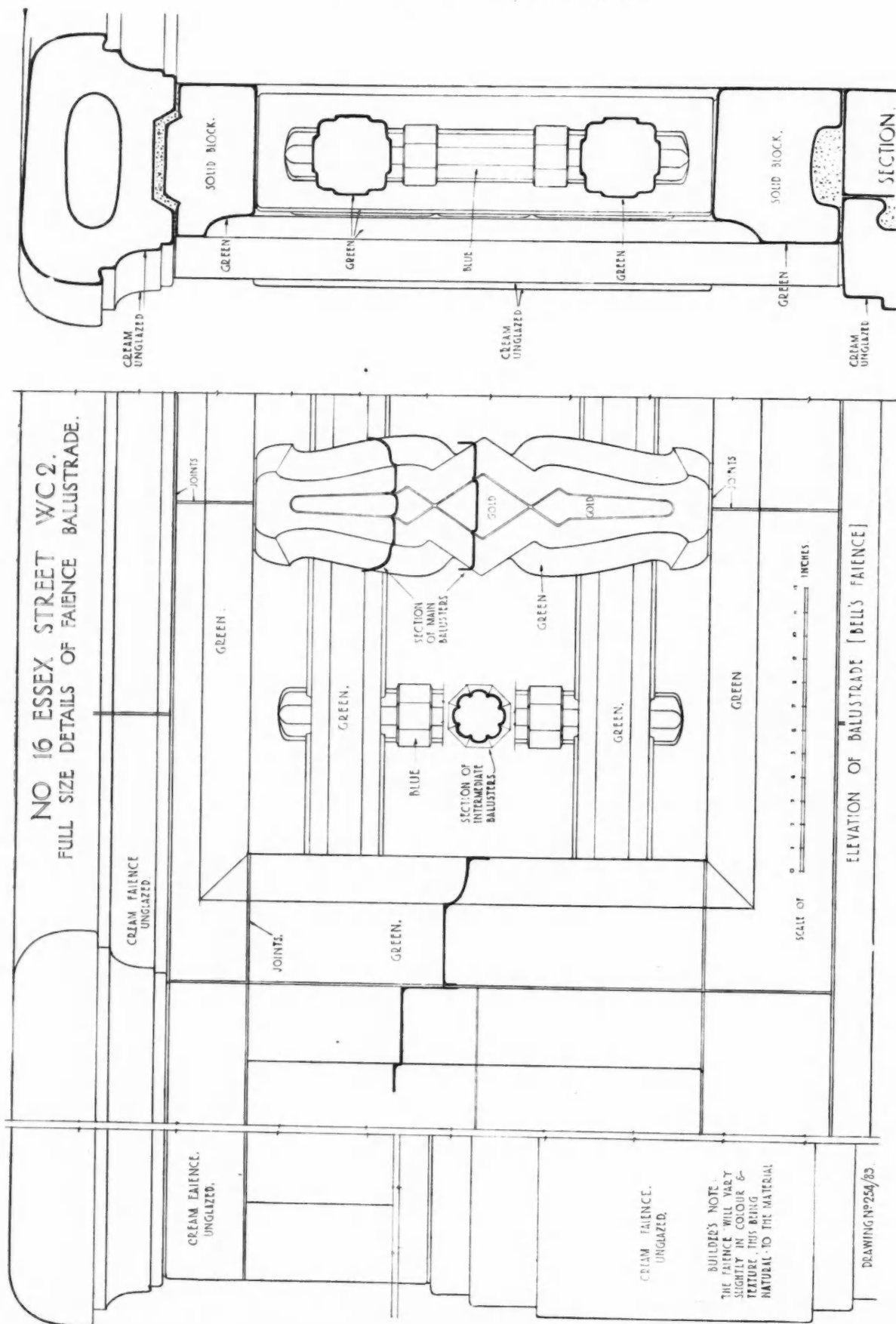
FAIENCE WORK AT NO.  
16 ESSEX STREET, W.C.2

[ BY WILLIAM AND EDWARD HUNT ]

#### THE WEEK'S DETAIL

[ BY WILLIAM AND EDWARD HUNT ]

*Last week's frontispiece showed the top of the central pier which is given in the photograph. On the next page is a full-size detail of the balustrade, which is also of faience. The slight unevenness of texture and colour, which the photograph indicates, is a definite characteristic of the material. The general scheme of colour in this work is in blue and green picked out in gold, but the main cornice band and the end piers of the balustrade are of a cream tone left unglazed.*



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





Wednesday, April 13, 1927

## DO ARCHITECTS READ?

Do architects read? It will be realized that to us this is a very pertinent question, for if they do not read, then what, in heaven's name, is the use of our writing? What, indeed, replies the cynic. The question, however, is not one that was raised by ourselves, but by the chairman of the Committee on Allied Arts of the American Institute of Architects. "There is one member of this committee," says the report, "who, with the passage of the years, has developed a certain amount of cynicism, and who would like to know another thing: that is, do architects read? He doubts it." To the English architect this may not seem surprising, for after all the American architect can have little time for reading, but in England, despite the rapid importation of American ideals, leisure is still not unknown; nevertheless, we are inclined to share the doubts of the chairman of the Allied Arts Committee. Yet surely the need for reading of a certain kind is more necessary today than it has ever been in the past, for the printed word has become the medium for the exchange of ideas; an exchange which in the past took place by means of the spoken word.

It is necessary to discriminate between the exchange of ideas and the acquirement of knowledge, for both are served by means of the printed word. But if a generalization concerning these things is permissible, we would say that while the first is concerned with ideas the second is concerned with facts, and that while we are burdened with too many facts we are sadly lacking in ideas. And might it not even be said that our architecture bears out the truth of this statement? For there is about it a display of knowledge which would have astounded our architectural ancestors, but there is also a lack of ideas that might have appalled them. In this age of rush and hurry there seems to be no time for those personal encounters, those contacts of brain with brain which sharpen and brighten the wits as surely as the friction between steel and stone sharpens the metal, which beget ideas as surely as steel and stone beget sparks. To us it may seem pitifully foolish that our ancestors should argue at length and with seriousness as to the number of angels that could be accommodated upon the point of a needle, but the result was a sharpening of the intelligence, a multiplication of ideas, and a clarification of doubts.

It might be thought, with our enormously increased facilities for intercourse by means of rapid transport, that opportunities for the personal exchange of thought would be increased rather than diminished; but man rarely if ever turns his inventions and discoveries to wholly good

purposes. It would be interesting to study methods by which this intercourse was maintained throughout the ages. Whatever they were they survived well into the eighteenth century, when the coffee-house was the place for forgoing, and even into the nineteenth century, with its fashion for breakfast parties; gradually, however, the printed sheet replaced these personal contacts, which became less and less frequent, at any rate in England. In France, a country which, as we have reminded our readers more than once, never became properly industrialized—industrialized, that is, after the manner of England and America—in France the café is still a place for the interchange of ideas, for in France pure thought is still valued.

And so it comes about that in a provincial town of modern England it is possible for an architect not to meet his fellows from year's end to year's end, and the only substitute for this lack of communication is to be found in reading, for only thereby can a man hope to keep in touch with the ideas of his fellows, with the aspiration of his age. In so much as it makes good this deficiency in our social organization, the Press, and we are thinking now more particularly of the architectural Press, is performing a really useful function, for it is the duty of this particular Press to know just what architects are thinking and feeling, both on professional and on artistic matters.

Do architects read? Yes, it is a question that we cannot help asking ourselves again as we write this article; and the thought that perhaps these very words are, as it were, shouted in a wilderness is, to say the least of it, disheartening, and fills us with sadness. And how shall we ever know? The orator, although he addresses a smaller multitude, is in no doubt as to the reception of his words; but as for ourselves, we live in doubt. But our adjuration to architects to read has about it a large, a very large measure of disinterest, for we are convinced that something must take the place of the erstwhile personal interchange of thought and ideas; and if, as it seems, the modern architect, with his immensely increased responsibilities, working in a modern world with all its manifold calls, has not leisure to meet his fellows, then he must keep his wits brightened, his mind alert and pliable by other means, and we suggest that the means are available—inferior means though they be; but on all sides we find ourselves paying penalties for the inventions and contrivances which continue to heap up around us, threatening us, indeed, with ultimate submergence.

Do architects read? We hope so.

## NEWS AND TOPICS

THE REGISTRATION BILL BEFORE PARLIAMENT—BUILDERS  
IN THE LAW COURTS—LONDON'S LATEST THEATRE—

WOODHENG

THE decision of the House of Commons to give a second reading to the Architects Registration Bill, and afterwards to send it to a Select Committee, rather than to the usual Standing Committee, means that the measure is unlikely to become law this session. But it also means that the promoters will be in a much stronger position next session, when it may be possible to bring in something in the nature of an "agreed" Bill. Before a Select Committee evidence can be heard from all interested parties, and technical details can be gone into in a way which is impossible in an ordinary Standing Committee, which is merely a committee of the House of Commons in miniature, and is not, therefore, competent to pronounce an expert verdict on technicalities. The debate on Friday showed how complex is the problem of registration. Member after member from all parts of the House rose and expressed himself in favour of the principle of registration, but pointed out the difficulty of devising a system of registration that would include the great variety of qualifications requisite to the profession of architecture. Great stress was also laid on the fact that an architect must possess artistic talent, as well as a knowledge of construction. The general tone of the debate reached a high level. Members scorned the making of mere debating points, and showed a keen desire to arrive at a satisfactory solution of an admittedly difficult problem.

\* \* \*

The pity of it, that the London master builders, organized and unorganized, could not agree to settle their little differences without invoking the law. For "when they do agree, their unanimity is wonderful," but when they fall out there is "the devil's own" to pay; and the diabolical penalty of wages-default is very severe. I am forced to suppose, however, that if indeed "there is reason in roasting eggs," there must also be some reason, equally obscure to me, for roasting inoffensive master builders in open court—not literally, of course, but with comparable effect to that of the Smithfield horrors. What that reason really is, I could never conjecture. Roasting builders alive for a week or more before the fierce fire of cross-examination is, at any rate, a cruel sport and a costly. Possibly the lawyers, case-hardened to it, may not share the wonderment of the lay public. What can have been the underlying motive for so painful an exhibition of the rigours of the game—of thus "putting men to the question"? I can hardly suppose that publicity was the object, for that could have been achieved much more effectually, and at cheaper rates, through the usual channels; so I must abandon the problem to Satan. It is too hard for me.

\* \*

On the whole, the libel suit was a grim and dreary drama, and I snatched eagerly at an item of low-

comedy relief. One of the witnesses for the defence, while under cross-examination by formidable Sir John Simon, incontinently and quite gratuitously confessed his own political creed, and in the same *faux pas* betrayed that of his torturer. With the same guileless candour that had marked this witness's demeanour throughout, he blurted out, "I am not a trained orator, Sir John. I am a Liberal, and regard you as my political head." Oh, *sanctissima simplicitas*. Fancy giving away the game like that! And when, a minute later, the same witness was asked: "What penalty do you impose on unruly members?" the dear man naively answered the poser with another question: "What penalty would *you* suggest?" he asked, as if it was possible to get counsel's opinion for nothing while you wait. "Oh," blandly answered wily Sir John, "I would have them taken out and shot by a squad of London builders who are doing the same thing. That would make the punishment fit the crime." Would it, Sir John? Like Lord Westbury, "I doubt." And the shooting lacks *Mikado* precedent: "something humorous, but lingering, with either boiling oil or melted lead," is recorded in the authentic reports of the celebrated case of which Sir John made such a careless citation.

\* \* \*

The *Electrical Contractor* for April contains an appeal to architects to permit the words Prime Cost or their initials, "P.C.," to be accepted as meaning "List Prices" where electrical appliances are concerned. The writer of the appeal states that: "In many provincial districts the 'P.C.' figure represents the 'list' or ordinary retail price of the article in question," and discovers in this "lack of agreement among architects themselves a prolific cause of trouble, misunderstanding, and dispute in electrical trading circles." The sad fate of the electrical contractor who is compelled to confess his real trade price to the architect on pain of loss of prospective business is feelingly put on record, but there is really no doubt that the definition of P.C. prices in the R.I.B.A. form of contract is the sound basis for all such trade transactions. Unless the competing firms quote net prices there is no method of judging in a reasonable time and with the expenditure of a reasonable amount of attention which price is really cheapest. Then, too, if the electrician is to claim the right of quoting list prices as P.C. prices, why should not the gasfitter, the ironmonger, and the sanitary engineer or any other special tradesman clamour for similar treatment? The evil is not that a net price should be quoted to the architect, but that a pernicious system of trade discounts should ever have been established. Whatever may be customary in "many provincial districts," the practice of London architects and the ruling of the R.I.B.A. have been directed to plain dealing, and electrical contractors will do well to direct their transactions upon the lines that have proved acceptable to plain dealers in times past. The remedy is in their hands, for they can refrain from composing list prices which differ from their net prices.

\* \* \*

Why do English governing bodies feel so pleased with themselves whenever they pass a motion sanctioning the destruction of some priceless work of art, or whenever they are informed that some artistic project must be abandoned? The L.C.C., it will be remembered, displayed this trait to

the world at large, thus incidentally displaying a singular lack of intelligence and susceptibility, on the passing of the motion condemning Waterloo Bridge. The other day Sir A. Holbrook asked the Prime Minister whether he would consider the advisability of setting up a committee to formulate proposals for the establishment of a National Opera House, England being the only country in Europe without one. The Prime Minister replied that the finances of the country were such that the proposal could not be entertained at the present time. *And this statement was greeted by cheers.* The fact that England could spend millions in armaments, in straightening roads to enable motorists to hurl themselves from place to place with greater speed, in subsidizing industries, and yet could not spare a few hundred thousands for a project that every other country in Europe had long accepted as an essential public undertaking—as essential as public lavatories, policemen, and State education—was a matter for rejoicing on the part of the country's elected representatives. I give it up!

\* \* \*

One of the most interesting pieces of architecture in the city of Bath has been carefully restored and preserved this spring by the architect of the Baths Committee, Mr. Alfred J. Taylor, the last president of the Society of Architects. This is the so-called Hot bath, built by John Wood, junior, exactly 200 years ago. A well-proportioned building, it has been derelict for some time past, but with the increasing popularity of Bath as a spa it has become necessary to search for more accommodation, and the old Hot bath has been reconstructed. Fortunately, the original façade has been retained and certain excrescences have been removed. It is expected that this Hot bath will be opened either this month or in May. Mr. Taylor is carrying out a good deal of interesting preservation work in Bath, and his zeal and enthusiasm for archaeological research give good reason for hoping that nothing will be done to injure in any way the many architectural treasures of the city of John Wood and Beau Nash.

\* \* \*

There is, I find, a great deal of misunderstanding with regard to the clause in the Bath Corporation Act, designed to control the architecture of new buildings. Even Mr. Guy Dawber stated at a public dinner the other day that the Advisory Committee, consisting of a Fellow of the Royal Institute of British Architects, a Fellow of the Surveyors' Institute, and a Justice of the Peace, was "working very satisfactorily." As a matter of fact, this committee has not yet even been formed, and no action whatsoever, so far as I can gather, has been taken either by the Bath Corporation or by the local architects. The city engineer, Mr. Sissons, tells me that before any action can be taken it is necessary to draw up by-laws that will provide for the deposit of the drawing of the elevation and particulars as to the materials to be used in the erection of any building within the city, or any addition to an existing building. When these by-laws are completed and approved, the committee will no doubt be set up, but it will only be able to deal with such questions as are referred to it by the Corporation. This proviso very much restricts its powers. So far as I can ascertain, for example, the committee will have no voice should the Corporation itself decide to erect



*Building in the City: the appearing of the new Lloyds.*

a building which may not be considered of a character that harmonizes with its surroundings.

\* \* \*

According to an article in the new archaeological journal, *Antiquity*, which is edited by Mr. O. G. S. Crawford, of the Ordnance Survey, an air photograph taken near Amesbury, in Wiltshire, showed, by the difference in the colour of the vegetation, a series of concentric markings inside the area of what was thought to be merely a ploughed-over ring barrow. These marks, however, indicated that the soil had at some time been dug into, giving the corn better nourishment than the shallow chalk around. Pits of this sort invite investigation, and when they were explored it became evident that every hole had once contained a wooden post or tree trunk of 1 ft. to 3 ft. in diameter. The posts had been arranged in six circles, with a further but irregular group in the centre, and the whole scheme so strongly reminded the excavators of Stonehenge that they christened it "Woodhenge." Though two skeletons and a few other relics have been found, only half the earthwork, which measures some 250 ft. across, has yet been dug up, and any attempt at dating is premature.

\* \* \*

After a long life of hard work and close attention to business, an architect died, leaving a fortune of £100,000. (The £100,000 was the money paid by an oil company upon the discovery of a rich well of oil in his back garden.)

ASTRAGAL



## THE SENSE OF SCALE

[ BY T. S. ATTLEE ]

WHEN we were small, and had been for a rather dreary walk round the ordinary, uninteresting roads of our suburb, we would sometimes vary the monotony of the return journey by suddenly stopping and straddling our legs wide apart. Then we would bend double, and look through them, upside down, at the familiar landscape. It must have appeared odd to passers-by, but it never failed to interest and amuse us, because things looked so different, viewed in that way. There was our road, recognizable, of course, but the bend in it seemed exaggerated, the slight hill steeper. Our house was in its proper place, but surely farther off than usual, and different, too, in some way, like a coat that has been turned by a tailor, and has its buttons and pockets on the right side instead of the left. It was a simple expedient for adding to the interest of our daily walk, but it illustrates one of the minor mysteries with which we are faced—our mysterious power of seeing things differently, if we want to—when the same objects are seen, but another description of them is sent to the brain. In this case it was not a conscious re-valuation of the ordinary impression that took place, but a new aspect of the scene that was discovered; it was vision, rather than revision. I don't know whether the change came about from one's being upside down: I suspect that it was really due to the change of level; a reversion to the viewpoint of Three from that of Seven; a harking back to something of the abandoned outlook of earlier years.

We do not, perhaps, realize entirely how greatly relations between ourselves and things around us change as we grow up; what new strata come into habitual cognizance with each access of height; what a different world lies before Sixteen, compared with Six's! Only when you perform a gymnastic feat, mental or (as in the case I have described) physical, can you travel back in a moment down the change that has been so gradual, and grasp with amazement its extent. That is an explanation of one side of the mystery; but there is another aspect of it. We can consciously and intentionally create the mystery for ourselves, and we do it by deliberately altering the scale. So, looking into the glowing coals, we change their distance from us; we look across a dry, dusty plain, and at once, far away in the distance, "the splendour falls on castle walls"—credible castles and crags, as long as you will use that tiny scale.

So, in my grandfather's house, there were two cupboards that were always places of mystery. They were set in the wall on either side of the fireplace in the long attic. Being set at the intersection of the tall, gable-ended roof with the centre span which joined it to its fellow on the opposite wing, the cupboards tapered rapidly internally, following the lines of the roof-valleys. Thus on opening the door you looked into a sort of distorted funnel; pushing aside the coats that hung near the entrance, it needed scarcely a conscious effort of the imagination to see down that dim alley a corridor in rapid perspective, leading whither? Perhaps the great rabbit-hole which Alice entered suggested the line of thought; anyhow the fancy took it up, and those old cream-coloured doors with their worn brass handles became the portals of a dim mansion that was

almost as real as the room itself, for the one always came into your mind when you thought of the other.

This matter of scale seems to account for a considerable part of the fascination which some buildings have for us. At Lübeck, for instance, the almost terrifying aspect of those monsters of towers that flank the west end of the Church of St. Mary is due to the violent contrast in scale between the sheer, towering mass and the small red bricks which compose it; the imagination is set skipping by the thought of such endless multiplications of a brick. Inside, too, when the eye is browsing contentedly among the details of the clerestory windows, that bold little gallery with its tiny doors set high up in the circle of the apse, suddenly strikes the same note, gives the scale, and starts you giddily wondering at the incomprehensible fascination of height.

To an architect this matter of scale is of prodigious importance. A man is the real unit of measurement, and, unless you can relate him to your building, you will fail to make the impression at which you aim. The greatest building will fail to create awe in the beholder, if it is at all great; but perch on a bastion of your pile the tiny quarters of the caretaker, with a dwarfish gable and small many-paned windows, and the majesty of the huge structure stands out; it shoulders its greatness and menaces you with its ponderous bulk. You have held up the scale against it.

So at Beauvais, the soaring splendours of the choir would astonish anywhere; but some part of the amazement which sets your heart thumping, when you suddenly come upon it out of the market-place, is the scale given to it by those neat, dumpy little houses which huddle round it, like rabbits at the base of a pine.

Sometimes the scale is made in the opposite sense. On coming home for the holidays from the big, gaunt, lofty classrooms of school, how snug and diminutive the rooms at home appeared, how comfortably shallow the stairs! Yet those rooms had been spacious and impressive in our childhood's days. The tricks that can be played in designing and equipping houses and gardens, in this matter of scale, are endless. The great problem, however, is how to carry about with us an eye that is fastidiously alert to apply to everything its appropriate scale, so that it makes upon us the impression that is proper to it.

### ARRANGEMENTS

MONDAY, APRIL 25

*At the Architectural Association.* 7.30 p.m. Professor S. D. Adshead, M.A., F.R.I.B.A., on Regional Planning. (Illustrated by Lantern Slides.)

WEDNESDAY, APRIL 27

*At the Royal Institute of British Architects.* Exhibition of Modern British Architecture. (Until June 2.)

FRIDAY, APRIL 29

*The Town Planning Institute.* (At the Caxton Hall.) 6.0 p.m. Professor S. D. Adshead, M.A., F.R.I.B.A., on Replanning Bloomsbury.

*At the Royal Institute of British Architects.* 8.0 p.m. Annual General Meeting.

## A MODERN NEWSPAPER OFFICE

[BY GORDON H. G. HOLT]

MIDWAY in Fleet Street, on the right-hand side going towards St. Paul's, stand the new London premises of the *Glasgow Herald*. The building is a tribute to the acumen of the proprietors and to the skill of their architects, for, together, these gentlemen have shown it is not impossible to see a newspaper housed really in accord with the spirit of information, efficiency, and broadmindedness that should distinguish it. These characteristics, not only the *Glasgow Herald*, but its new home, possess in a degree so apportioned between the two that it is fair to say no other journal can, in London, evidence so true a combination.

The façade is tall and narrow; it rises at the shortest end of a site not unlike an unopened fan. That, considering the purpose to which it will be put, is likely to be an awkward site, and, in fact, it proved to be so, but as one walks in and out, up and down, the difficulties — though they be noticed by the qualified mind in the solution evolved out of them—are, I daresay, not so much as suspected by any other. One advantage the site did yield: the short side opposite Fleet Street, and one of the long sides were free from encumbrances, and therefore, on those open sides, and up their full height, light could be had directly by means of windows. This being so, the typical newspaper offices were strung out on this part of the periphery, and the blind side made to hold the two staircases. Between them, from the first to the fourth floor, sets of lavatories were intercalated, and the light for them and for the public staircase procured by creating a well useful not only for that purpose, but also for top-lighting the back of the "writers' general offices" on the ground floor. Ancillary difficulties arose out of Ancient Light rights and were got over by "zoning" the back and side from the

fourth to the sixth story. That, in short, is the general planning.

Coming to more detailed planning, the lack of right angles in the outer walls proved somewhat tiresome, especially in the N.-E. corner on the ground floor, where the main entrance was needed. Almost automatically, an architect will endeavour to make all the articulations of his building work on axes, but there are times when too much can be made of them. In this particular instance, Messrs. Percy Tubbs, Son and Duncan had no hesitation in breaking the one that less sturdy minds would have tried to keep unbroken, namely, the long axis, in plan, of public doorway and public staircase.

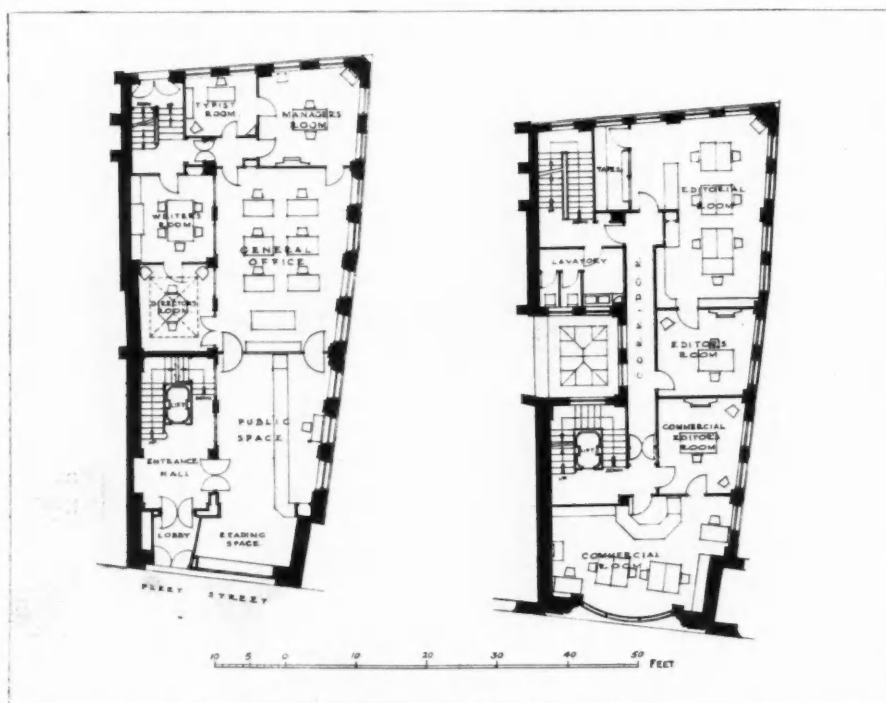
As a matter of fact, the deviation is so small as to be hardly noticed. The pleasant funnel-shape of the outer vestibule conceals the structural awkwardness of this corner. With the chief entrance on one side, an asymmetrical arrangement of the lower façade — considering that from the first floor up, a central axis is imperative—here again, would have been thought likely to give trouble, but the architects, by frankly carrying out their opinion that too much formal fuss can be made of a door, even a main door, framed it and the display windows on its side, within a broad, simple marble fascia. By so doing they at one stroke, sat the remainder of the façade on a satisfactory geometrical base and kept undisturbed, as here it should be kept, its central, vertical axis. A neat enough solution and one not too generally found.

This façade is 23 ft. 3 in. wide. Now that is indeed very narrow, and a lot of persistent enthusiasm allied to



The Glasgow Herald building, Fleet Street, London. By Percy Tubbs, Son and Duncan.





*The Glasgow Herald building, Fleet Street, London. By Percy Tubbs, Son and Duncan. Above, the entrance. Below, the ground and first floor plans.*



*The Glasgow Herald building, Fleet Street, London. By Percy Tubbs, Son, and Duncan. Above, the public office. Below, the staircase and lift.*



much architectural knowledge was needed to convey within so restricted a span the emphatic statement so necessary to a newspaper: "Here I am, and you just look at me." In this case, horizontal direction was not possible; the dominant must be vertical, but it is the easiest thing in the world to find it monotonous. Countless actual examples bear this out in England and in America. Running a set of vertical features to its very last inch in height does afford a sense of power, but unless the thing is very, very skilfully done, and unless fair space is available from which to view it, it might well appear extravagant or too facile a treatment. As I read and understand it, what can be observed on the frontage of 56 Fleet Street is the result of satisfying several quite different desiderata:

1. The demand that the proper claim to prominence of the first, second, and third floors should be met.

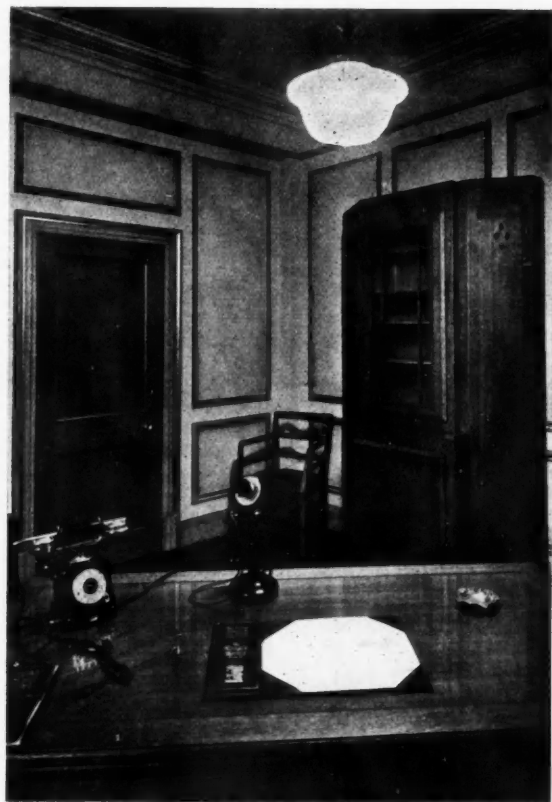
2. The demand of variety or, if you will, of legitimate liveliness; the headquarters of a go-ahead newspaper are entitled to it; also the eye of the passer-by, perceptibly dulled during the last 100 years.

3. The demand that inasmuch as a daily newspaper works day and night, its building, more than any other, is entitled to advertise the fact day and night also. Thus, flood-lighting is called in to help, and a façade so lighted will have to be designed in relation to requirements as peculiar as any. Flood-lighting is a factor rich in potentialities, but new, therefore not yet mastered. Fascinating developments are in the offing; they will no doubt deeply affect the character of urban architecture; conceiving and carrying out a block of offices will then be thrilling.

These demands were embodied in a façade whose height is three and a-half times its width, no great area, yet all were expressed without the spectator being able to say: "It is overcrowded." On the other hand—and this is my

own and one adverse criticism—he might be justified in saying: "This is a good elevation; it has vitality, order, and a sense of values, but the separate features do not *quite* hang together." This is more noticeable in day than in artificial light. In the latter, everything looks right, and, anyway, it must be dreadfully difficult to combine really well the claims of day and night! As to the liveliness so apparent, there can be no two opinions about it; it is shown most ingeniously. The risk taken was run when this liveliness was admitted, especially in the upper part, from the truncated cornice upwards. The architects commissioned Mr. C. W. Dyson Smith to help in and then carry out the design for stone and bronze work. The result of their policy is just this: that, at the more important model points of the elevation, the eye sees, and therefore the mind appreciates, good plastic punctuation of no extraordinary significance, I admit, but nevertheless sound and pleasing. That's a gain, and so let it be known.

Inside everything has an admirable reticence. Walls, ceilings, and furniture have been specially designed and decorated. Little fault can be found with them. All the woodwork—partitions, desks, counters, chairs, tables, and cupboards—gives an impression of endurance. It is solid without being heavy, quite simple, and most of it belongs, as it were, to strict architecture and to pure decoration. Colour was most happily introduced. For the finished achievement proprietors and architects alike owe a debt to the superb skill and taste of Mr. Walpole Champneys, an artist to his finger-tips and one possessing a sound, extensive architectural knowledge, a rare gift in an artist these days. The quiet but subtle colour-schemes which he applied to

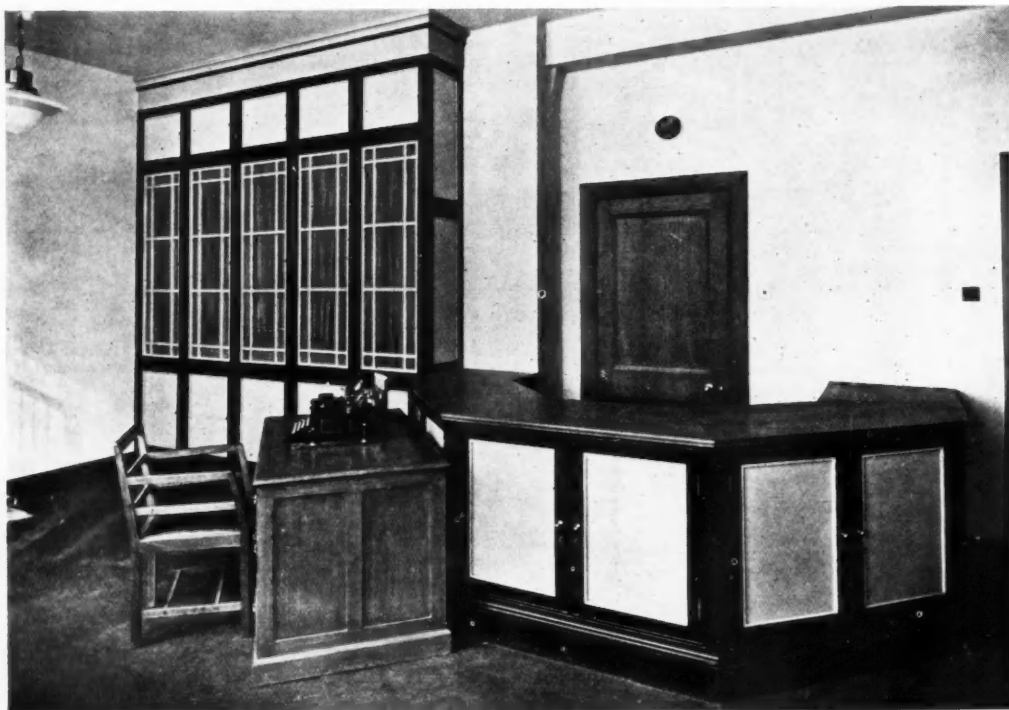


The Glasgow Herald building, Fleet Street, London. By Percy Tubbs, Son, and Duncan. Above, the directors' room. Below, the city editor's office.



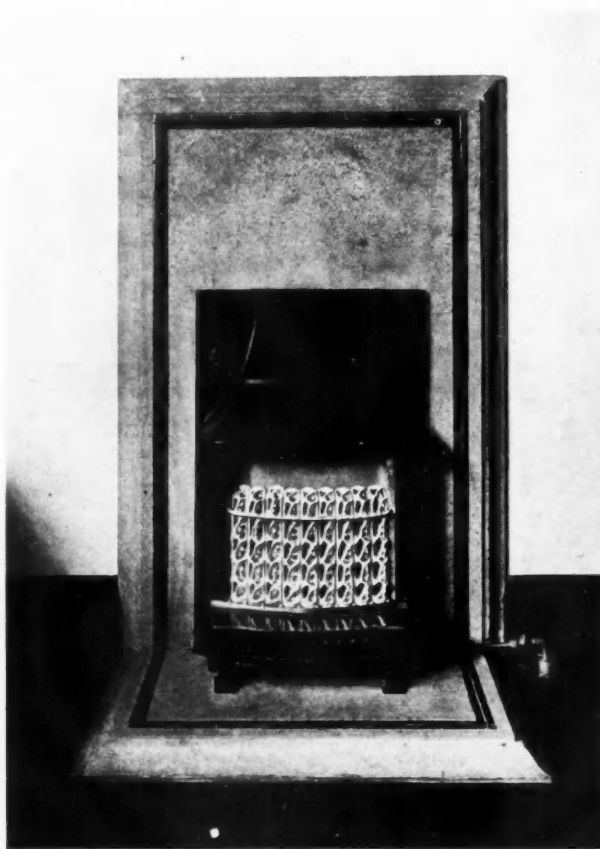
*The Glasgow Herald building, Fleet Street, London. By Percy Tubbs, Son, and Duncan. Above, the sub-editors' room. Below, the general office.*





various offices, to the corridors, and to the public lift give the whole interior a fresh and delightful touch. Mr. Champneys will, let us hope, adorn more public or semi-

public buildings, for his sense of colour and of form is an asset that should prove invaluable to many owners or architects. Cork flooring is used in the building.



*The Glasgow Herald building, Fleet Street, London. [By Percy Tubbs, Son, and Duncan. Above, counter and cupboards in the commercial editor's room. Below, Hopton - Wood fireplace in the commercial editor's room.*





## DRAUGHTSMEN OF TODAY

iii: L. H. BUCKNELL

[ BY ERIC R. JARRETT ]

THE opportunity for observing and analysing the manner and technique of an architectural draughtsman occurs, for the majority of those interested, at the annual exhibition of the Royal Academy. There, in that small, quiet room, tucked away in a corner like a harbour of refuge gained after battling with a turgid floor of art-lovers of Great Britain, breath may be regained and the perceptive faculties revived. The more favoured few, who know and possibly work with the man, have better opportunities of judging his work, of tracing the influences which may at one time have inspired him, although possibly eschewed later, and of noting fresh

tendencies in the expression of his own personal outlook and the widening of his mental equipment.

Art cannot stand still. There must be a continuous change and progress, experiment and exploration, and there can be no finality. Reaction there may be, a harking back to a previous era, not with an idea of slavish imitation but rather a lively investigation of principles, causes, and effects in the endeavour to find a reasonable, logical, and functional expression, and always with this primal necessity in view—a modern solution to fit a modern need. Advance there must be. The artist who, having consolidated



Above, an ink factory in Middlesex. By Wallis, Gilbert and Partners. From a watercolour perspective by L. H. Bucknell. Below, Bird's-eye perspective of a Richmond town-planning scheme. From a watercolour drawing by L. H. Bucknell (in collaboration with Robert Lowry).

and matured a definite technique, is content to rest on his laurels will soon find that this brilliant technique, applauded so highly when first seen, can rapidly develop into a mannerism and a trick which becomes tiring by reiteration and also runs the risk of being exploited by lesser men. An architectural perspective is a complex piece of mechanism and is judged from a practical as well as an æsthetic standpoint. It must represent the building—its materials, texture, colour; it must take cognizance of its character, function, locality, setting, and surroundings; it must bring forward the important and subdue the less interesting features of the design. In fine, it must convey to the beholder an impression of the building viewed from the most satisfactory station point and under conditions of atmosphere and lighting which will most enhance its merits, though naturally the view should be one that could normally be seen, with the exception of a bird's-eye. Besides this, the drawing must compose well, make a good pattern, present a definite colour scheme and, above all, must appear solid. The draughtsman who can satisfy all these needs must be a man of observation, ingenuity, resource, and imagination. He may be called upon to represent on one day a modern factory on a railway siding, with its attendant trucks, lorries, and general air of busy competence; on another a commercial building in China or Jamaica; and on a third a town-planning scheme; and he must be able to visualize and put

down an impression of each of them which will be true and satisfactory.

Amongst the drawings which find regular places in the Architecture Room, none is looked for and recognized with more pleasure and satisfaction than those bearing the signature, "L. H. Bucknell." In him we certainly see a man who does not stand still, but who, by fearless experiment, wise selection, and careful elimination, is ever progressing along a definite line of thought and producing drawings which, while bearing unmistakably his own impress, are always fresh. It is this freshness that makes his work so stimulating. One approaches a drawing by him knowing that there will be something to learn from it; some method of presentation, some technique in handling, or some scheme of colour which was not apparent in the last drawing of his one saw, and also one will have the satisfaction of observing that the presentation is his own, and that, analyse it as closely as may be, it will remain his own expression and not a skilful adaptation of the methods of a contemporary.

There are two men who, as Mr. Bucknell will readily admit, have exercised considerable influence upon his draughtsmanship. They are Monsieur Chaurés and the late E. A. Rickards. At the foundation of the first atelier by the Society of Architects in 1912, run on the system of the Ecole des Beaux-Arts with Chaurés as *sous-patron*, he saw the opportunity of continuing



Scheme of decoration for the Chelsea Arts Ball. From a sepia drawing by L. H. Bucknell (in collaboration with Percy Tubbs and Augustus John).

his architectural studies commenced at the R.A. schools. He was one of the first students and certainly the hardest working and most successful. In Chaurés he found a man of keen intellect and unbounded energy and enthusiasm, possessing a highly trained, logical Gallic mind, an unerring sense of composition in plan and elevation and, with it all, a breathtaking swiftness and certainty of draughtsmanship. A man of strong personality, and a limitless source of information on new materials and methods of presentation. Is it to be wondered at that he should have left his mark? Concurrent with this influence was that of Rickards, in whose office he was working up to the time of the war. Who, having once seen them, can forget his slashing sketches of complicated baroque detail and moulding, his vivid watercolours executed at breakneck speed, his life drawings or his caricatures; true, satirical, rather bitter, and sometimes a little cruel? All dissimilar types of drawing, but all an outward expression of that dynamic, sensitive spirit that burnt itself out before the age of fifty. Again, is it surprising that some of that nervous, rapid intensity of purpose should have been absorbed by the author of such a drawing as the Richmond Town-Planning Scheme?

On these foundations he has raised a superstructure of his own

fashioning, amplified and adorned by the results of his own intuitions and researches. Blest with an innate *flair* for colour, he has broadened his basis of knowledge of the subject by much reading and discussion. Possessing, too, a natural instinct for pattern, a sense of form and a strong feeling for composition, he brings these attributes to bear upon any drawing he undertakes.

Until the claims of a practice compelled him to resign a year ago, Mr. Bucknell was in charge of the fourth and fifth years at the A.A. schools. Those who were fortunate enough to receive tuition from him will not readily forget his faultless judgment and sound but somewhat caustic criticism of design, colour or construction; his resource in suggesting a solution of a scheme which appeared so hopelessly tied up as to be impossible, or the quick, accurate, perspective sketches with which he would illustrate his points. On the lighter side of school life, his versatility was often called upon as a designer of scenery and dresses for the school pantomime, or the decoration of a "stunt" for the Chelsea Arts Ball. A drawing of his is reproduced, showing the scheme for the setting of the ball, in 1920, on which he worked in collaboration with Percy Tubbs and Augustus John. It shows that he can play with as much concentration and success as he can work.

## THE MEASUREMENT OF WASTE

[BY T. SUMNER SMITH]

THERE is a tradition amongst quantity surveyors that if they begin to make allowance for each and every kind of waste it will involve them in all sorts of intricate calculations. How, then, is the estimator to cope with these problems, for the quantities in most cases afford him no guide? That the contractor should take the risk of these wastes which are prejudicial to himself seems to be anything but fair in a contract of equity. If we take as an example the standard method of measurement of stonework and items in other trades we find that certain kinds of wastes are measured. In the past the measurements of wastes by surveyors were matters merely of convenience and expediency; the dominant idea today is to measure them as a policy of equity. Let us, therefore, examine the subject of "wastes" generally, and see what ought to be measured to ensure this. The vast advancement in the measurement of labours and wastes in recent years is indicative of the importance of these matters.

Waste, with which we have to deal, falls mainly under two general headings—1: Natural waste, and 2: Constructional waste. These phrases, though not literally correct, answer our purpose, and express our meaning clearly. Natural waste may be said to be waste that arises out of, and during, manufacture, breakages in transit, and handling. Constructional waste may be said to be waste that occurs during conversion from the manufactured state into the finished product or fixed article.

In the manufacture of bricks a certain amount of waste takes place; also there is waste arising from breakages in transit and handling. In the cutting up of a tree into scantling a certain amount of waste takes place; also there is waste arising from breakages in transit and handling. Besides these, there is waste arising out of defects in quality. Waste of these descriptions comes under the first heading, about which we are not concerned. These are solely the contractor's risk, and as he is conversant with the percentage of waste that takes place, he knows what to allow in his price to cover it. It may lead to a better understanding if we say that the manufactured article is material purchased by the contractor. This is hardly true in every instance, say, with regard to sand, for example. However, even in that case, sand takes on the nature of a manufactured article in that labour will have been expended "in getting it"; also it

may have been screened and washed in addition, and in other cases it may have been obtained by crushing sandstone.

The contractor constructs the building from the materials purchased, and during this operation, roughly, two kinds of waste occur: one due to the conversion of certain materials into constructional parts, and the other may be said to be committed in incorporating the materials into the structure. Strictly speaking, both are constructional waste, but we need to differentiate between them because only in the former is waste measured, and then only in certain cases; whilst in the latter waste is never measured. Hence, it helps to an understanding by classifying constructional waste either as conversional waste or committed waste, as the case may be. Now it

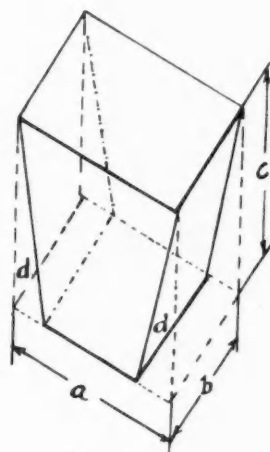


Fig. 1.



will be observed that the latter—the computation of the quantity—is the contractor's risk entirely.

Waste, say, arising from the conversion of materials into a door is a conversional waste, but it is not measured. On the other hand, waste, say, arising from converting a stone from a rectangular solid into any other shape or form is a conversional waste and is measured; that is to say, the stone that is measured is the minimum size rectangular solid from which the other shape or form of stone is obtainable. It is not always easy to distinguish which conversional waste is measured and which is not, unless we apply a test. The test is a simple one, and it is this: Is it a manufactured article? If it is, then we do not measure waste. A door may be said to be a manufactured article, whether or not it is made by the contractor, in the same sense as a brick; as also may be a cupboard, or counter, or other fitting. But we are careful in making that clear in the expression of any of these items in the bills of quantities. What we do is to turn the contractor into a surveyor, and make him calculate the quantity of materials required (beyond giving him the basic sizes), and also to compute the amount of waste. On the other hand, stone that takes any shape from that of a rectangular solid is not termed a manufactured article. And for this reason: because in general a rectangular solid stone is the customary form of manufacture, that is to say, as it is issued from the quarry on a sale and purchase basis.

Taking a keystone as the finished constructional part, the cube measurement of which will be the minimum rectangular solid stone from which it is obtainable, as thus:  $a \times b \times c$ , see figure one; the wedge-shaped pieces  $d$  are waste, but are included in the cube measurement of the stone. But this does not constitute the whole of the waste on the stone. The minimum size rectangular stone is less than the original quarried stone: it has been reduced in size by bringing it to a true rectangular solid shape with true faces. The difference between the "original" and the "reduced" stone is waste. This difference may be greater or less according to the selection of a stone of suitable size and adaptable for the purpose, and also by the method and skill of the mason in working the stone. Hence, in this case, the contractor is the more capable person to compute the waste, and for that reason it is not measured. Although it is not measured nor taken into account in a bill of quantities, nevertheless a contractor may form a rough estimate of the quantity from the items of "Labours on Cube Stonework."

With regard to "committed" waste, one example should suffice. "Committed" waste is here intended to mean that the contractor commits waste. In theory he may avoid it, but in practice it is next to impossible. In laying bricks a certain amount of mortar is wasted, depending generally upon the thickness of the wall and the method of working; the bricklayer, if he makes downward sweeps with his trowel in cleaning off the joints, will cause more waste than if he makes upward sweeps. There are also other causes of waste, but we need not enter into them here. What we have to bear in mind is that this waste is one under the control of the contractor, and it is his risk—he must compute the amount as best he can.

A knowledge of wastes is essential to the surveyor, both in taking off and in valuing work. But it is imperative in the case of the estimator; in fact, without such knowledge he could scarcely price because wastes vary with different materials, and in some instances as much as 50 per cent. An estimator is quite capable as a rule of calculating the quantity and estimating the value of natural wastes. His experience: the sensing of the circumstances that produce waste, and, we may reasonably suppose with the data at his command, he should without much difficulty accomplish these tasks. We are aware that exceptional or abnormal circumstances may play havoc with his figures in that there may be more or less waste than he anticipated or allowed for, and thus reduce to ineptitude his experience. However, there is very little in which we can help him further, and there we must leave him. But as regards constructional wastes, neither his experience in these nor his data will be of much assistance to him in calculating the quantity and estimating the value

unless he obtains guidance and help from the quantities, for the circumstances which give rise to waste and the quantity in each case are in general unknown factors to him. For example, he cannot possibly calculate the quantity, and estimate the value, of waste as at present given in an item of "rods of brickwork" where there are openings in the work of brick-setting, nor even when he obtains a little further help in shape of an item of "hollows." Therefore it would appear to be the duty of the surveyor to give the information, wherever practical, in the bills of quantities. It should be noted that we cannot in all instances assign a definite amount or quantity of waste, and in some instances it is doubtful whether there would be any waste arising from the operation. However, what we can do, or should do, is to indicate that there is, or there may be, waste, and imply such in our item. We can and should locate probable waste, that is the vital point.

Constructional waste with some semblance of definiteness should be measured; that, the amount of which can only be ascertained by the contractor, which may be said to be indefinite, should not be measured; that, the amount of which is doubtful, which may be said to be rather uncertain, should be implied; and that, the amount of which is under the control of the contractor, should neither be measured nor implied, being his affair entirely. This, then, should be the principle of dealing with waste, and it would clearly define the risk the contractor takes.

## OVERHANGING TREES

### SOME ASPECTS OF THE LAW

THE legal aspect as to overhanging trees is intensely interesting, and has more than a passing attraction to those who live in the country. As a rule, trees are planted and grown on land for the purpose of a screen to afford privacy to the estate and to add attraction to it. But they should be carefully inspected from time to time by a competent woodman, especially those trees whose branches overhang the highway. It may happen that a bough has become cracked, that water may penetrate, and that slight decay had set in. In that case it is liable to break and fall, and it may thus be impossible for the owner or his servants to know that the bough is dangerous, the fracture being due to a latent defect not discoverable by any reasonably careful inspection. Should an accident result from the snapping of the bough a claim based on negligence would be out of the question.

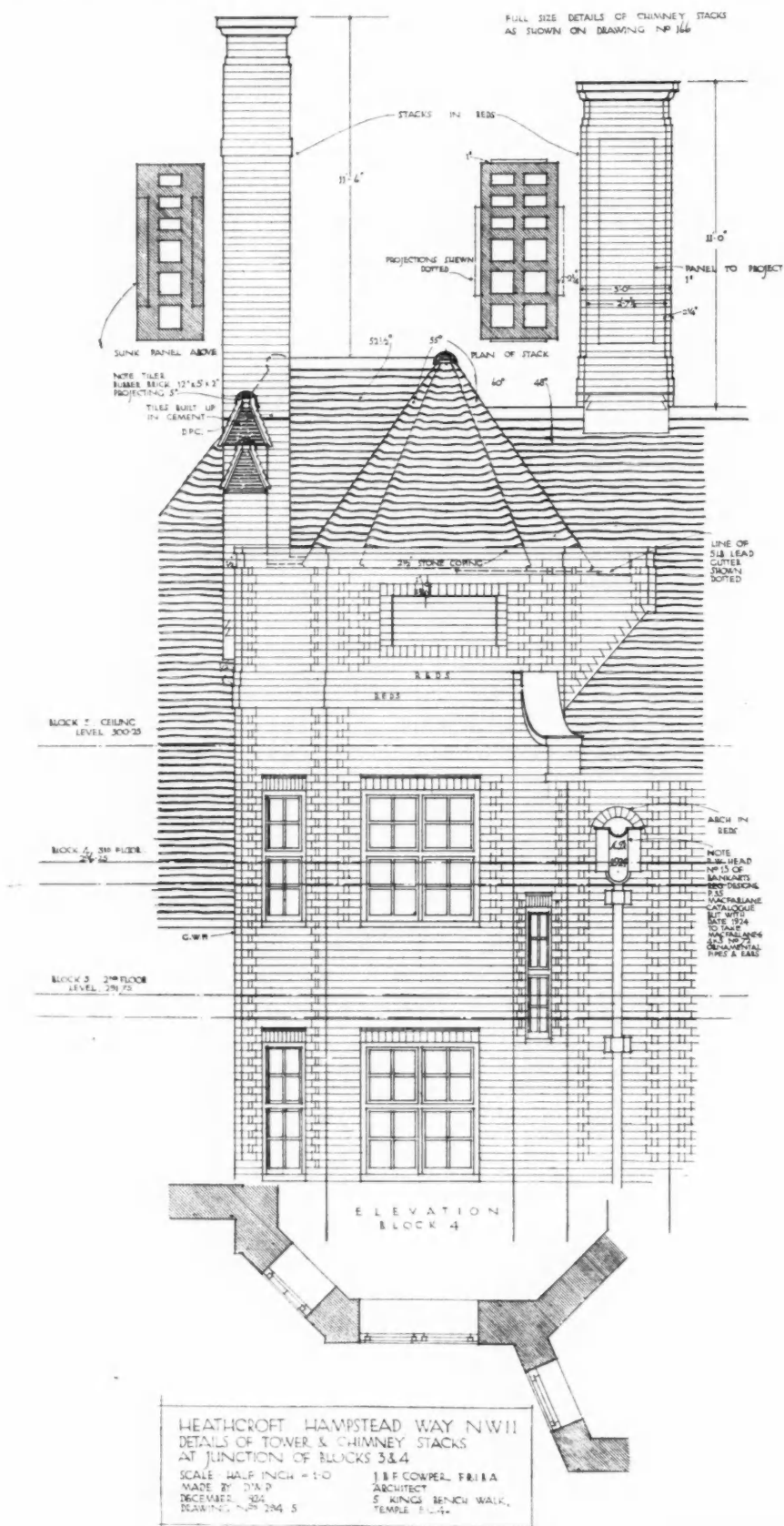
But would the owner of the tree be liable for a nuisance? To grow a tree is one of the natural uses of the soil, and it makes no difference whether the tree is planted or self-grown, or with what object, for ornament, shelter, or for the timber, it was planted or maintained. In itself a tree is not a dangerous object, though in decay it may become so. It is a far-reaching proposition to say that the mere fact that a tree overhangs the highway makes it a nuisance, seeing that it would apply not only to roadways, but to footpaths. If such a proposition were sound it would follow that every lamp or clock or awning so overhanging would be in themselves illegal erections. The right of the public in a highway is merely to pass and repass, and so long as that right is not interfered with, the passer-by cannot complain of what is in the air above or on the earth beneath. Can an owner be made liable when he neither knows nor ought to have known of the actual danger of a defective bough? The answer to this must be in the negative.

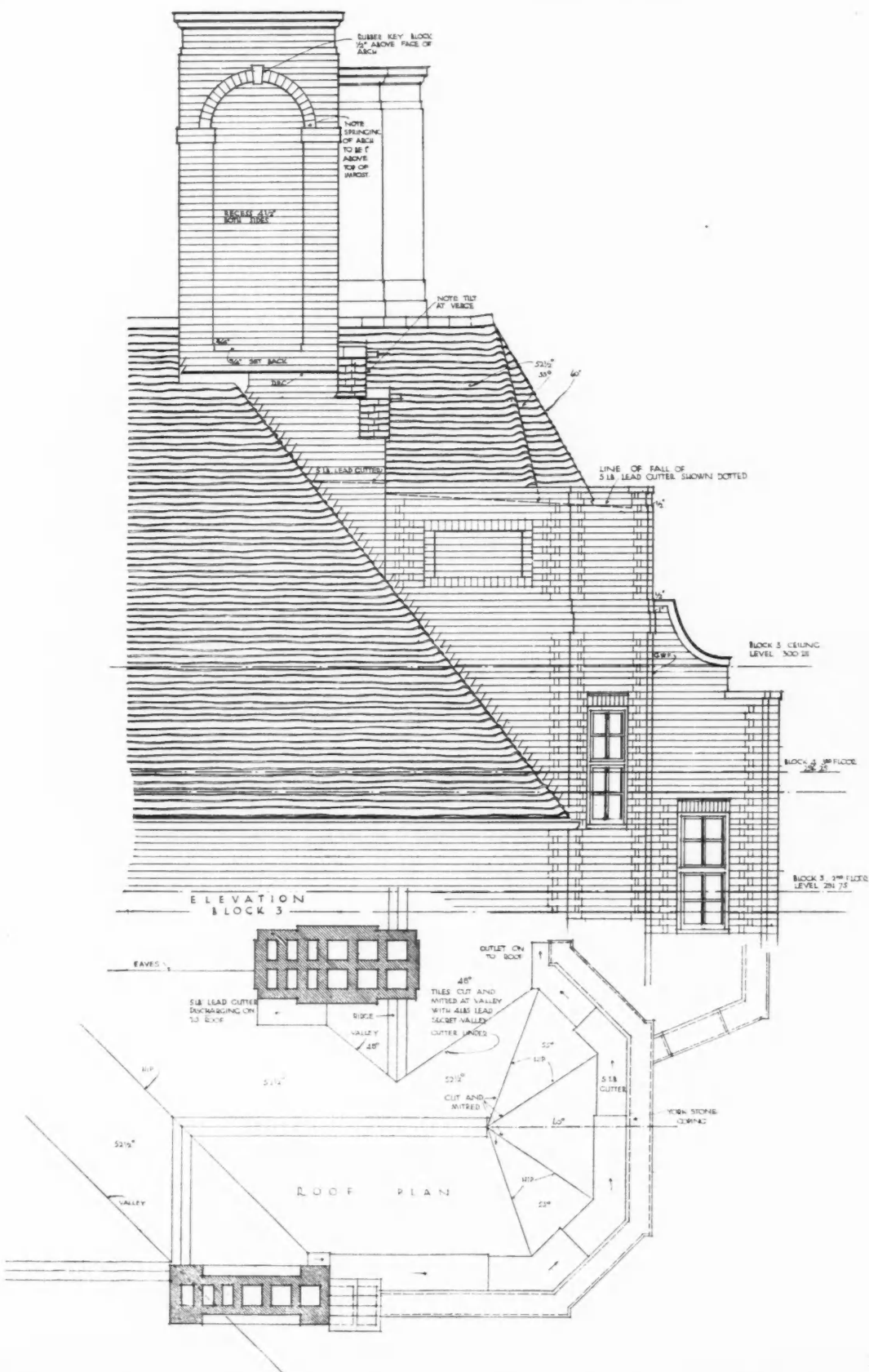
An owner is liable for a nuisance constituted by the state of his property if he caused it; if by the neglect of some duty he allowed it to arise; or if when it had arisen, without his own act or default, he omitted to remedy it within a reasonable time after he did or ought to have become aware of it.

Is an owner liable to support a branch which overhangs the roadway? There is no ground for saying that an owner is to become an insurer of Nature, or that any default is to be deputed to him until it was ascertained that Nature could no longer be relied upon. Where a person uses his land in the ordinary way and damage happens to adjoining property without any default or negligence on his part, no liability attaches to him.

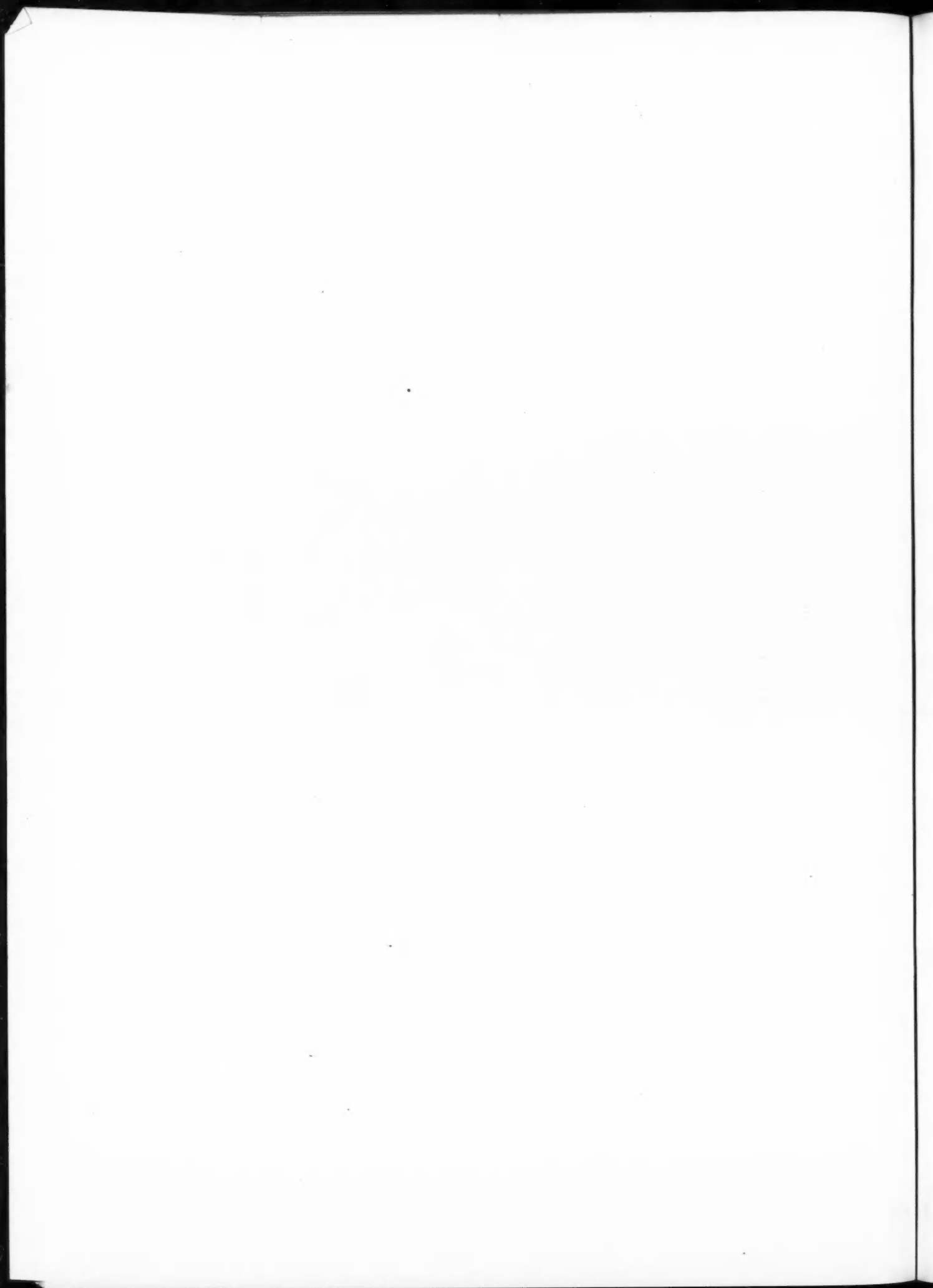






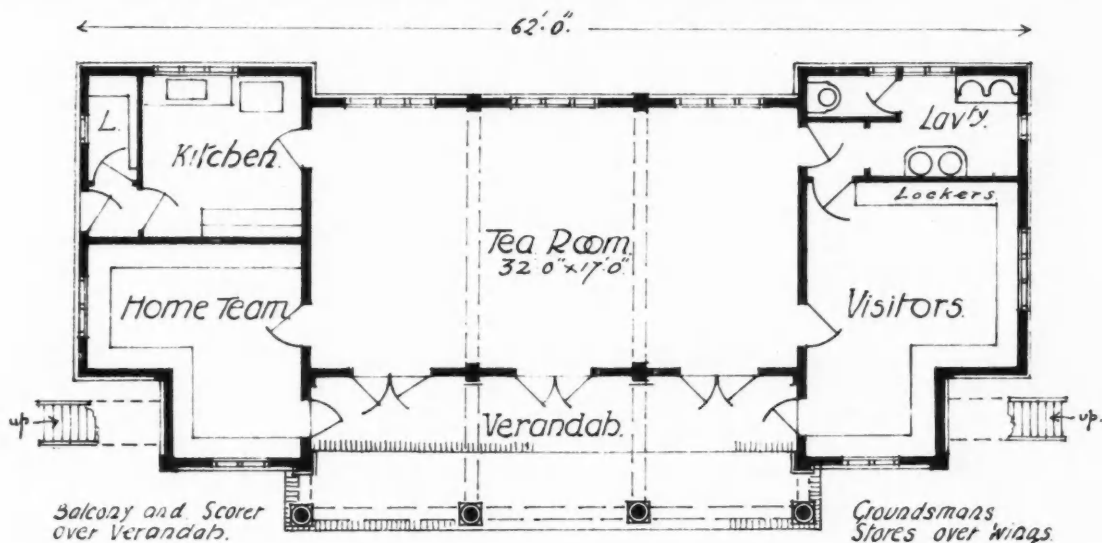
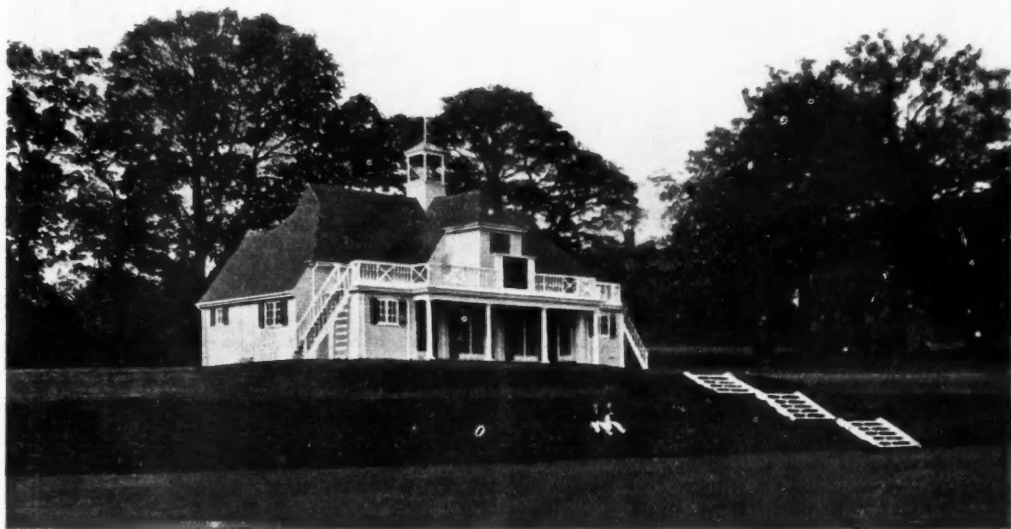


BLOCK OF FLATS AT HAMPSTEAD. BY J. B. F. COWPER. DETAILS OF TOWER AND CHIMNEY STACKS



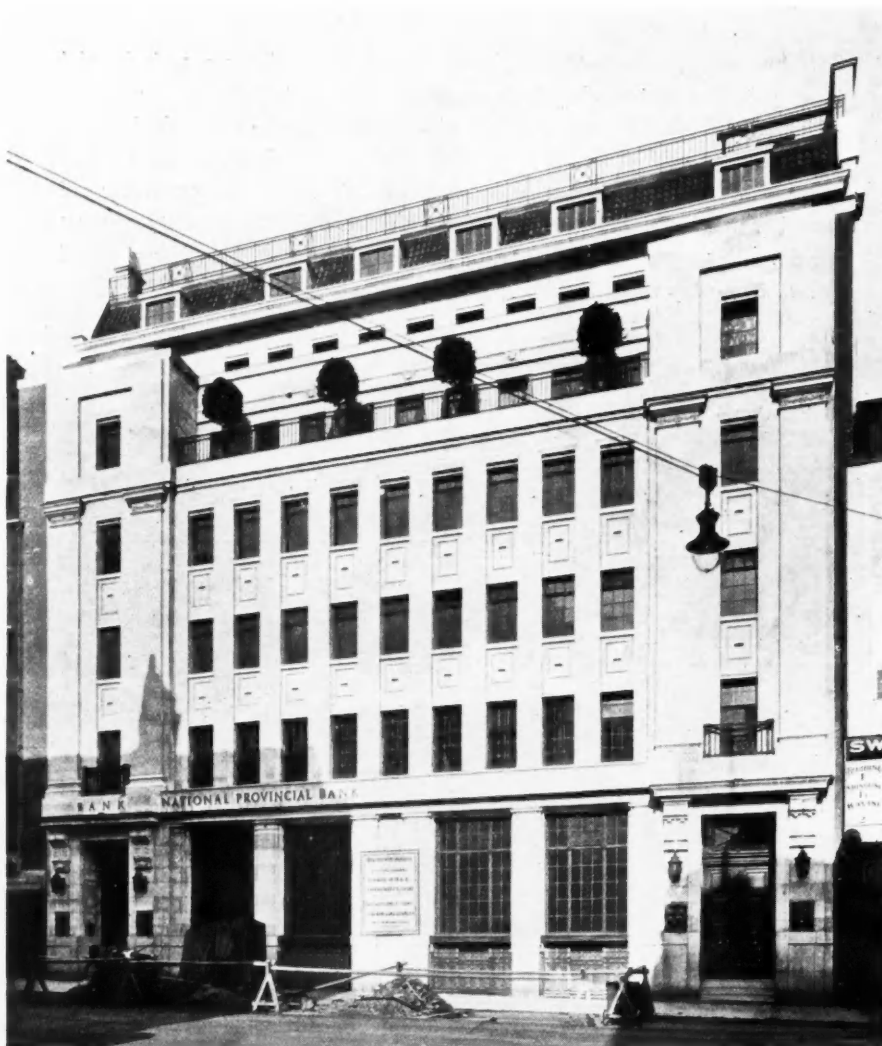
## CURRENT WORK

*This new section, which appeared for the first time on February 9, is intended to complete the picture of contemporary architecture as presented in our regular critical articles. Nothing like the whole of the field can possibly be covered in these articles, each of which is devoted to a single building or a single personality. The CURRENT WORK section, if read in conjunction with them, will show more clearly and more fully what is being done by architects throughout the United Kingdom at the present moment. Photographs and plans submitted for publication will be carefully considered by the Editor; they should be addressed to him at 9 Queen Anne's Gate, Westminster.*

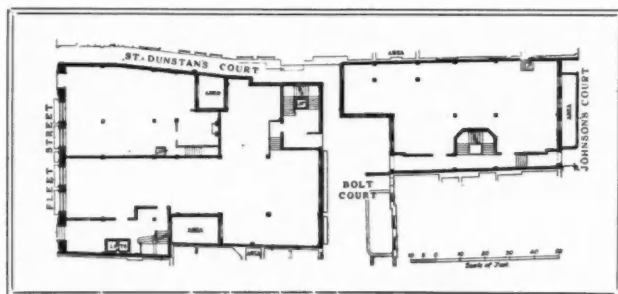


*Ground Floor Plan.*

*New cricket pavilion at Mill Hill School. By R. S. Balgarnie Wyld.*



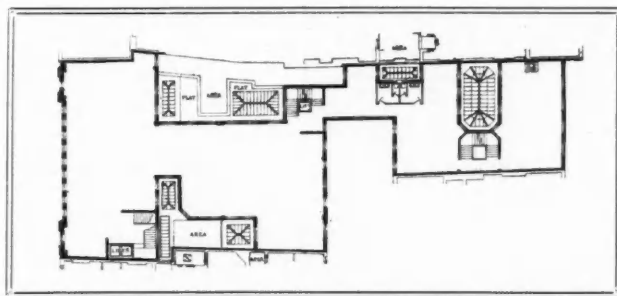
*Bouverie House, 154-160 Fleet Street, London. By Campbell Jones, Sons and Smithers. Consisting of a ground floor and basement, and six upper floors, the building contains over 40,000 sq. ft. of actual office accommodation. The façade is of Portland stone. Oil-fired furnaces have been adopted for the central heating installation, and pure water is supplied to the building by its own artesian well. Above, the front, facing Fleet Street. Below, the ground-floor plan.*







*Bouverie House, 154-160 Fleet Street, London. By Campbell Jones, Sons and Smithers. This important office building, which has been designed to ensure the maximum of natural light, embodies the latest practice as regards heating, ventilation, lift accommodation, and sanitation. Above, the staircase. Below, the first-floor plan. This plan is reproduced to the same scale as that on the facing page.*







*of* NORTH WALES



*Memorial Buildings, Bangor, for the University College of North Wales. By Alan E. Munby. Above, the oak library of the Department of Agriculture. This block, which includes the administration, is connected by corridors to the agricultural, chemistry, and forestry departments. Below, the ground-floor plan of the north-east portion of the site. This plan and the one on page 522 should be read as if joined together.*

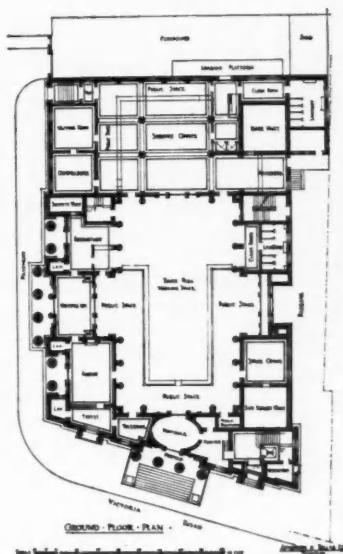


*Memorial Buildings, Bangor, for the University College of North Wales. By Alan E. Munby. Above, the elementary students' laboratory in the chemistry department. Below, the large lecture theatre, physics department.*



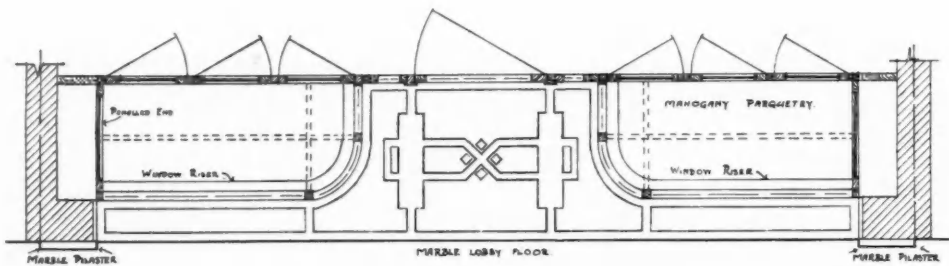


*The Tientsin branch of the Hong-Kong and Shanghai Banking Corporation. By Atkinson and Dallas. Above, a view from the south-east. Right, the main banking hall. Below, the ground-floor plan.*



*The site faces east and south, and the building—which has three stories and a basement—rises to a height of 52 ft. above the pavement level. As a protection from the sun's heat, three columned porticos or verandas are provided on the south front. The whole of the exterior is built of light-red Tsingtau granite.*





Above, front view of No. 27 Glebe Street, Stoke-on-Trent, as converted into shop premises by A. Glyn Sherwin. Centre, the shop front plan, on which is shown the design for the inlaid paving. The scale of the plan is  $\frac{1}{4}$  in. to 1 ft.



Left, view of Messrs. Charringtons' coal order office, Church End, Finchley, as altered by John Seely and Paul Paget. The new window and entrance are of oak, glazed with plate-glass, and the brick base is built of sand-faced multi-colour bricks.

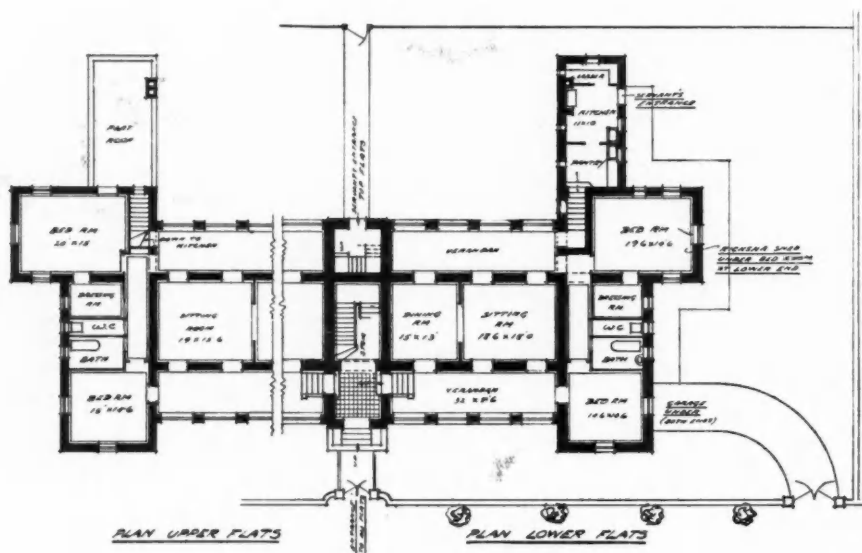


Above, Messrs. Charringtons' coal order offices at Romford, Essex. By John Seely and Paul Paget. The building has been entirely re-modelled, the work including the simplification of the gable copings and chimney-stack and the insertion of new windows and a door. The brickwork is lime-whited and the door and window heads are of red roofing tiles laid on edge. Below, new shop premises to No. 11 Cornfield Road, Eastbourne. By B. Stevens. The shops are well lighted, and are approached from the wrought-stone entrance doorway at the junction of the two frontages.





A block of four flats in Zanzibar. By P. C. Harris. These sun-excluding flats were recently erected by the Public Works Department for the occupation of Europeans, and are planned to secure the full benefit of the north-east and south-west monsoons. The walls are of coral rag, plastered externally and internally; the roofs are covered with Mangalore red tiles; and the veranda rails and "ghallis" are cast in white Portland cement. Above, a general view. Below, the plans, which are reproduced to a scale of  $\frac{1}{32}$  in. to 1 ft.



## LITERATURE

## WORMS IN FURNITURE

THERE is little doubt that the worm has caused, and is still causing, greater loss amongst fine old furniture and woodwork than all other causes of destruction. Large sums have been spent in various attempts to render the wood immune from further attacks and in repairing and piecing the substance. Yet hitherto the collector and owner of treasured specimens of old furniture has experienced considerable difficulty in finding even the briefest mention of curative methods in the literature dealing with the subject, and inquiry amongst practical men has revealed no unanimity of opinion as to the most efficient treatment. It has therefore become almost a pressing necessity that a reliable treatise on the subject should appear and so fill a long-felt want.

In *Worms in Furniture and Structural Timber* we have a volume that not only is extremely well written, but is clear, thorough, and, withal, perfectly simple; so that the processes described are as readily and efficiently carried out at the hands of the amateur as the professional furniture restorer. The author, some years ago, was faced with the problem of destroying worms in old furniture, and, finding no trustworthy information could be had, commenced to conduct his own experiments upon wood of various sorts and conditions, with the result that he definitely proved the efficacy of his methods, and has now set them forth so that all may have the benefit of his first-hand knowledge and experience. It cannot be claimed that his methods are altogether new; in fact, he uses materials that have long been tried, but where many have failed he has met with success, and just how he discovered the secret he explains with the greatest care.

With furniture, especially, a first consideration is that the destructive agents employed must be such that there is no risk of damage or destruction of the polished surfaces or that they in any way affect the colour of the wood. There must, moreover, be no objectionable smell or poisonous vapour, and no risk of burning the hands. In short, a harmless solution is the ideal medium, yet one that is absolutely deadly to the worm. The author's experiments prove conclusively that a mixture of turpentine and paraffin is amply strong enough to destroy any living organism in timber, but they also disclose that a mere superficial wash over with a brush does not permit sufficient of the fluid to soak in and traverse all borings made by the worm. Wormed wood especially will absorb a large quantity of this fluid, and in order thoroughly to

treat the substance and mass of all parts of a piece it is highly important to saturate the wood. Exactly how this is accomplished is described in every detail, the process varying according to the type and condition of furniture.

Chapters ii, iii, and iv describe and illustrate a series of interesting experiments with turpentine and paraffin carried out on pieces of wormed wood taken from old furniture, etc., and also on sound pieces. The fluid was stained with Sudan red in order that it should provide a strong contrast and show clearly in the illustrations, many of which show the wood sectioned after the stained liquid has penetrated, as figure three, here reproduced. These tests revealed many surprising facts as to manner in which various woods absorb turpentine both when sound and when worm-eaten.

Chapter v gives information on the insecticidal value of turpentine and paraffin, followed by a note on saturation tests. Then practical work on furniture becomes the subject, and the reader is first instructed in the simple outfit and materials required. With great clearness the author has divided his processes into five. A: deals with exterminating the worm by a thorough application of turpentine and paraffin. B: describes how the worm-holes and any cracks and crevices are to be filled and sealed on all *unpolished* surfaces; and C: the method of accomplishing this on the *polished* surfaces. D: is a most useful note on restoring damaged and missing points by means of coloured wax preparations; and E: shows how liquid fillers may be inserted into fragile pieces to stiffen the fibres of the wormed wood. Chapter xii supplies some important information on the composition and properties of various materials dealing principally with oils and waxes, and the last and thirteenth chapter gives further information on wax preparations.

But the author does not leave his subject here. He adds appendices which, with characteristic thoroughness, deal respectively with the application of his process to structural timber, such as roof trusses (of very great value to architects); their application in tropical countries; a note on patination and polishes; and, lastly, the results of experiments usefully set forth as tables and graphs. The writer, by reason of his own experiments and research on similar lines, can support the author in his claims, and considers Mr. Girdwood is to be congratulated upon the production of so interesting and useful a work. All who possess or have the care of important woodwork and furniture will read it to their distinct advantage.

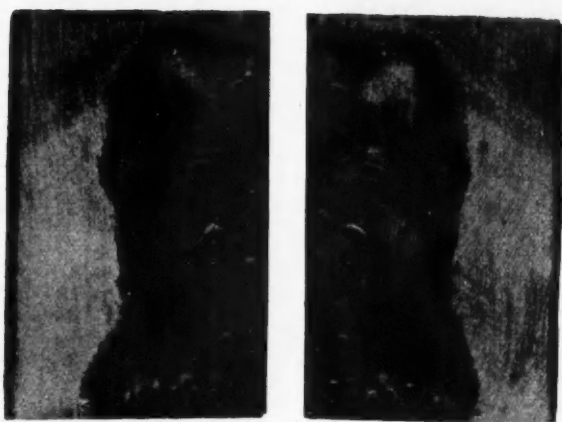
JOHN C. ROGERS

*Worms in Furniture and Structural Timber.* By John Girdwood. Oxford University Press. London: Humphrey Milford. 1927. Price 12s. 6d. net.

## A GREAT ART HISTORY

At last the world is in possession of a real history of art. Art in all its phases, of all times and of all peoples. Professor Joseph Pijoan, of Pomona College, California, has written as ethnographer as well as art critic. His research has been prodigious, and he has commandeered science as well as art in its service. He has looked upon art as the supreme manifestation of human development and as satisfying the most important aspirations of humanity, and he has written about it in a plain and interesting way so that all may understand. His history is for everyman, while at the same time it is indispensable to every student of art in all its forms, and a necessary adjunct to every practising artist's equipment; to architect, sculptor, metal-worker, and potter; to painter, mural decorator, miniaturist, engraver, maker of textiles; and it is no exaggeration to say that this great work opens up new avenues to culture by its sane method of exposition and its embracing view of the function of history.

To the architect the work makes a special appeal, for it treats of building from the human point of view: the aspirations of man's soul which led him to make beautiful and useful abodes



Block of wormed wood cut in half after treatment with turpentine and paraffin (stained with Sudan red). Complete saturation of the affected area is indicated. [From *Worms in Furniture and Structural Timber*.]



for its satisfaction, as well as for the satisfaction of his body. In this sense the author offers the whole of the arts and crafts as the servants of architecture; an offer which is as applicable to primitive as to the most sophisticated tastes. The idea is not so much stated as implied, but it is irresistible, and so the beginnings of the arts are traced with a care as great as that devoted to the heights to which they reached. It is peculiarly interesting to follow the discoveries of the first modelling, pottery, bronzes, carvings in wood and stone, and polychrome; the first paintings and textiles, and to note the places and periods in which they originated. It is increasingly wonderful to trace the paths by which the arts travelled over the face of the earth; to note those which had influence and those which failed in this respect, as did that of Egypt on the art of the Renaissance while Greek and Roman had full play. As an indication of the thoroughness with which contemporary scholarship is treated in this work, Professor Pijoan's last chapter of the second volume is devoted to pre-Columbian America. In it he traces the influences from abroad which served to modify aboriginal art, and indicates the sources from which the extraordinary outbursts of architectural and sculptural art in Central America were derived, giving illustrations of Maya and other work from Tikal, Palenque, Quirigua, and elsewhere. No ethnographical nor archaeological research of importance seems to have escaped him, and for those who care to pursue research in greater detail every chapter is provided with a bibliography.

The production of this work must have been immensely difficult. The mere collecting of its 2,500 illustrations and its 159 wonderful plates, many of them in colour-reproduction of the finest quality, is a feat for the most discerning and critical mind. The assimilation of this with the results of world-wide investigation must have been a task of huge proportion spread over many arduous and busy years. The result is the addition of not only an authentic work of reference such as we have never had before, but an original view of the art of the world. It is gratifying to learn that no less than 12,000 copies in Spanish, in which it was originally written, have been sold, and it is this success that has emboldened its enterprising publishers to not only issue it in English, but to print it therein at Barcelona in a translation which has practically no flaws. When the third volume is published the work will run to 1,660 pages of text in which the unhackneyed illustrations appear with an imposing profusion. In outward appearance the three volumes will be a welcome addition to any library, and every public library in the world should possess a copy either in Spanish or in English.

KINETON PARKES

*History of Art.* By Joseph Pijoan. Foreword by R. B. Harshe; translated by Ralph Roys. Barcelona: Salvat Editores, S.A. 1927. Quarto, vol. i, pp. 12 + 548 + plates lxi; vol. ii, pp. 8 + 564 + plates lii. Illustrated. £2 per vol.

## ANNOUNCEMENTS

Mr. F. Clemes, A.R.I.B.A., would be glad to receive catalogues and samples of British products at Bolt Head Hotel, Salcombe, S. Devon.

Mr. Francis C. Polden, of Messrs. Francis Polden & Co., Ltd., has been elected to fill the vacancy on the Court of Common Council of the City of London as a representative of the Ward of Vintry.

Messrs. Hodgson, Lunn & Co., Chartered Architects, have moved their offices to Somerset Hall, 201 High Street, Guildford.

Mr. E. W. Hobbs has moved his office to 66 Farringdon Street, E.C.4.

At a special general meeting of the R.I.B.A., Sir Herbert Baker, A.R.A., F.R.I.B.A., was elected by the Members, and his name will be submitted to His Majesty the King as a fit recipient of the Royal Gold Medal for Architecture for the year 1927.

## SOCIETIES AND INSTITUTIONS

*R.I.B.A. Maintenance Scholarships in Architecture*

The Maintenance Scholarships Committee have received a contribution of ten guineas from the Wessex Society of Architects towards the Maintenance Scholarships Fund.

*R.I.B.A. Examinations*

Following is a list of the dates of the R.I.B.A. examinations for 1927:

## Intermediate Examination

May 20, 21, 23, 24, and 26. Last day for receiving applications, April 20.

November 11, 12, 14, 15, and 17. Last day for receiving applications, October 18.

## Final Examination

July 6, 7, 8, 9, 11, 12, 13, and 14. Last day for receiving applications, June 3.

December 7, 8, 9, 10, 12, 13, 14, and 15. Last day for receiving applications, November 7.

## Special Examination

July 6, 7, 8, 9, 11, and 12. Last day for receiving applications, June 3.

December 7, 8, 9, 10, 12, and 13. Last day for receiving applications, November 7.

Special Examination in Design for Former Members of the Society of Architects

July 6, 7, 8, 9, and 11. Last day for receiving applications, June 3.

December 7, 8, 9, 10, and 12. Last day for receiving applications, November 7.

## Special Examination of Licentiates to Qualify as Fellows

November 28, 29, 30; December 1 and 2. Last day for receiving applications, October 31.

## Statutory Examination

October 19, 20, and 21. Last day for receiving applications, October 3.

*The R.I.B.A. Prizes and Studentships*

The R.I.B.A. have issued a booklet giving the general and revised conditions governing the award of the prizes and studentships for 1927-1928. Among the information are the names of the jury of the assessors for the various competitions, the qualifications and age of the competitors, and the dates at which the forms of application and the designs are to be submitted. One of the most useful features is a diagram illustrating the stages in a student's career at which the competitions are to be taken. Copies of the booklet can be obtained from the R.I.B.A., price 1s. net.

*R.I.B.A. Council Meeting*

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

R.I.B.A. Examinations Overseas. On the recommendation of the Board of Architectural Education, a definite sum was allotted for the payment of examiners conducting the R.I.B.A. examinations in the Dominions.

The Surveyors' Institution and the R.I.B.A. Form of Articles of Pupilage. Permission was granted to the Surveyors' Institution for the adaptation of the R.I.B.A. form of articles of pupilage for use by members of the Institution and their pupils.

R.I.B.A. Business Meetings. On the recommendation of the Practice Standing Committee, a scheme was approved providing for informal discussions of matters of current professional interest



at general business meetings at the conclusion of the formal business.

**Draft Revised L.C.C. Drainage By-laws.** The comments of a joint committee of representatives of the Practice and Science Standing Committees on the draft revised Drainage By-laws made by the L.C.C. under Section 39 (1) of the Public Health (London) Act, 1891, with respect to water-closets, etc., were approved for submission to the L.C.C.

#### *Registration as Probationer R.I.B.A.*

The Council of the R.I.B.A. has decided that after December 31, 1928, no one shall be registered as a Probationer unless that person has passed one of the recognized public examinations in the required subjects. A list of the examinations recognized may be obtained free at the R.I.B.A.

#### *R.I.B.A. New Members*

At the last general meeting of the R.I.B.A. held, the following members were elected:—

##### *As Fellows (18)*

Beard, John Stanley Coombe.	Holmes, Arthur Herbert.
Beckett, John Herbert.	Hubbard, Philip Waddington,
Betts, William Vallance.	M.A. (Cantab.)
Bryant, Herbert Phillips.	Lyon, Maurice, D.S.C., B.A.
Buckingham, Ernest Hugh.	(Liverpool).
Bulloch, Archibald.	Merson, John Bruce.
Byron, Hugh.	Mundell, Joseph Edward.
Gardner, Gilbert Thomas Francis.	Orphoot, Burnett Napier Hender-
Hardwick-Terry, Edward.	son.
Hawkes, Thomas Frank.	Schooling, Stanley Philip.
Hendry, Harry Duncan.	

##### *As Associates (30)*

Black, John Alexander.	Harrison, John.
Boisclair, Paul.	Hope, Arthur Fentem.
Buckland, Francis John.	Jackman, Frank Leonard.
Bunce, Gerald Edgar.	Kemp, Francis Henry Norbrook
Cannell, James.	Crew.
Collins, Tom Anderson.	Lancashire, John Edwin.
Craig, Archibald.	Lindo, Harold Walter Eustace.
Creese, John.	Lodge, Arthur Frank.
Edmunds, Edwyn Emrys.	Lomax, Alan, M.C.
Evans-Vaughan, George Frederick	Morley, Chester Stanley.
Fowler, Ernest Elias.	Overnell, Harold.
Gardner, Alfred Herbert.	Salisbury, John Eustace.
Glass, Charles William, M.C.	Savage, Herbert.
Goodin, Frederick Glanville.	Silva, James Frederick Leopold de
Graddon, Reuben Harold.	Stedman, Leonard Rowland.
Guy, Roderick Nelson.	

##### *As Hon. Associate (1)*

Reynolds-Stephens, William.

#### *Regional Conferences of Local Authorities*

The National Housing and Town Planning Council has arranged to hold, as in previous years, a series of regional conferences of local authorities in different parts of England and Wales. The centres to be visited this year are London, Manchester, Leeds, Newcastle-upon-Tyne, Birmingham, Nottingham, Plymouth, Bristol, Portsmouth, Cambridge, Cardiff, and Llandudno. The agenda for the conferences embraces many important subjects, including the administration of the Housing Acts, the maintenance of good standards of planning and design, the problem of the slum, the rural housing problem, the preservation of rural England, and town and regional planning. Full particulars may be obtained on application to the Council's offices at 41 Russell Square, London, W.C.1.

#### *The A.A.S.T.A. Metropolitan Division*

A large party of members paid a visit to Messrs. Austin Reed's new building in Regent Street. The object of the visit was to inspect the interior effects, fittings, and finishings. On behalf of the Association, Mr. Shepard thanked the manager for conducting them over the premises, and congratulated Mr. Austin Reed on the able manner in which the architects, Messrs. Westwood and Emberton, had carried out the building.

#### *The Professor Charles Gourlay Memorial Scheme*

At a meeting of the committee, held in the Royal Technical College, Glasgow, under the presidency of Mr. A. Cullen, A.R.I.B.A., the secretary reported that eighty-seven pounds had been subscribed, and that further contributions practically assured the sum of one hundred pounds being realized. It was agreed that Messrs. A. Cullen and W. J. Smith be invited to co-operate to prepare a design for the memorial headstone and medallion together with the estimated cost. The committee desire all past students and friends of the late Professor Gourlay to have the full opportunity and privilege of subscribing. Subscriptions should be sent to Mr. J. Macaulay, hon. secretary, 37 St. Vincent Crescent, Glasgow, C.3.

#### *Architecture for Workers in the Building Trades*

The third of the series of informal illustrated lectures on architecture confined to workers in the building trades was held by the R.I.B.A. on March 15 in the R.I.B.A. Galleries, 9 Conduit Street, W.1. Mr. Henry M. Fletcher, F.R.I.B.A., presided, and Professor C. H. Reilly, O.B.E., F.R.I.B.A., read a paper illustrated by lantern slides on "Liverpool Cathedral." At the conclusion of the lecture, which was well attended, a short discussion took place.

## CORRESPONDENCE

### DEFECTS IN BUILDINGS

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

SIR,—The R.I.B.A. contract reads: "Any defects, shrinkage or other faults which may appear within . . . months from the completion of the works, arising in the opinion of the architect from materials or workmanship not in accordance with the drawings and specification or the instructions of the architect," etc. In view of the fact that it is almost impossible to obtain seasoned wood, it would be useful to have the views of your readers as to what attitude the architect should take in regard to: 1: Cracked ceilings caused through shrinkage of timber; 2: shrinkage of panels in doors and shrinkage of other joinery; 3: easing of doors, etc., being properly fitted caused by swelling due to damp in building.

AJAX

### KARSHISH AND THE PENALTY CLAUSE

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

SIR,—I notice that Karshish has twice stated in the course of his articles that the penalty clause is—to use a war phrase well worth preserving—"eye-wash." Yet with a practice, I am sure, not comparable in scope to that of Karshish, I beg, sir, to differ. My experience has been quite otherwise, and on more than one occasion I have extracted money under the terms of the penalty clause, and that, too, without great difficulty.

What happens is something like this. The building—I am concerned only with moderate-sized domestic work—is, under contract, due to be finished in, say, twenty-four weeks. Actually it is finished in thirty-two weeks. I have a chat with the builder; he points out that the weather has been against him. It always is. I refer to my diary in which I make a note of the weather every day. This precaution would be useless to a man whose practice is widely scattered, but mine is local. However, I concede him, say, a fortnight for bad weather; as the penalty is in terms of weeks, all adjustments must be in terms of weeks. We then discuss the extras and agree that three weeks are ample for these, thus leaving a balance of three weeks, the penalty for which, varying from £2 to £10 per week according to the class of job, is deducted from the final account. To a man who really wanted his house by a certain date, £6 or £30 is probably no compensation for the inconvenience and, perhaps, monetary loss which he may have suffered; but to a man who was not particular to within a couple of months as to when his house was finished, this sum may be a pleasant offset against the bill of extras.

Again, I cannot agree with Karshish that most builders do not regard the penalty clause seriously. On the contrary, I

have known some who refuse to take on the work unless it is deleted lock, stock, and barrel, and I have had to explain to my client that Mr. A.'s tender is the lowest, but he refuses to be bound to a date of completion. Mr. B.'s tender is so much more, but he undertakes to complete under penalty in so many weeks. Which is to be accepted?

It would be interesting to hear the experience of other architects.

#### CHARTERED ARCHITECT

### LAW REPORTS

*Bovis, Ltd. v. Thorne and others*

On Wednesday, April 6, Mr. Justice Greer and a special jury concluded the hearing of the action in which Bovis, Ltd., builders, contractors, and decorators, of Upper Berkeley Street, W., claimed from Mr. F. Thorne, late president of the London Master Builders' Association, and other members and officers of the Association, damages for alleged libel.

The five defendants were: Mr. F. Thorne, of Messrs. Fred and T. Thorne, of Manchester Road, E.14; Mr. H. T. Holloway, a director of Holloway Brothers (London), Ltd., of Bridge Wharf, Grosvenor Road, S.W.; Sir Walter Lawrence, a director of Walter Lawrence and Son, Ltd., of 19 Finsbury Square, E.C.; Mr. Ernest J. Brown, the director of the London Master Builders' Association, of Lee Terrace, Blackheath, S.E.; and Mr. W. J. Rudderham, secretary of the Association, of Russell Square, W.C.

The plaintiffs complained that in April, May, June and July, 1925, the defendants, on behalf of the Association, published circulars and other documents in which it was stated that the plaintiffs were in "wage-rate default."

The defendants denied publication and pleaded justification and privilege.

Sir John Simon, K.C., Mr. R. A. Willes, and Mr. L. H. Gluckstein appeared for the plaintiffs; Mr. Stuart Bevan, K.C., Mr. Jowitt, K.C., and Mr. E. J. Rimmer for the defendants. Mr. Blanco White held a watching brief for the Royal Institute of British Architects, to the Members of which, it was alleged, one of the documents complained of had been sent.

Sir John Simon, in opening, said the plaintiffs brought the action for libel against the five defendants, who were officers of, or members of, the committee of the London Master Builders' Association. This body was what the law called a trade union of employers. The wrong of which the plaintiffs complained was a very flagrant and serious one. It was this, that in the summer of 1925, in the months of April, May, June and July, a series of libels were issued by the authority of these defendants, announcing that the plaintiffs were what was called "in wage-rate default." A great deal of the battle would rage round what meaning was to be put on those words. If one said of any firm they were in default, it was making a serious reflection upon them. There was no truth in the defendants' statement, and it was a falsehood and a very injurious falsehood, and the plaintiffs had suffered to the tune of thousands of pounds. The only excuse of the defendants was that there was a special meaning attached to the phrase. The defendants had a special dictionary, and if it was consulted it would be found that it meant that the plaintiffs were not prepared to sign a document in which they undertook to do everything contained in the document, especially what the Association told them to do. The defendants pleaded privilege. It would be for his lordship to rule whether, in respect of any of those libels, the occasions were privileged. He (Sir John) should submit that there was no occasion of privilege at all, because these libels seemed to have been broadcast to the world. They had been distributed by the thousand during the months he had mentioned in 1925. The Association were within their rights in saying that the plaintiffs were not going to remain members of the Association, but there was no justification for the statement issued by the Association as to the plaintiffs being wage-rate defaulters.

Mr. Sidney Gluckstein, one of the managing directors of the plaintiffs, said the company was registered in 1908 and for some years witness was a member of the Association.

Witness, in cross-examination, said he complained that the Association was not enforcing their rules. If the Association did not prevent him from getting permits for overtime after he resigned from that body, they did nothing to help him to get them. His own feeling was that they actually prevented him. He admitted that for a month he exceeded the standard rate by paying half a dozen bricklayers out of a thousand employees. It was a special job, and he wanted to increase the output.

Mr. Bevan: Was not the real reason why you resigned from the Association in October, 1923, the fact that you found that in some cases it suited you to pay something in excess of the standard rate? —No, it was not. I only paid it on one job, and I did not pay it afterwards.

Mr. Gluckstein said Mr. Thorne had congratulated the firm in its attitude during the strike. If Bovis, Ltd., received a proper invitation, he would advise his colleagues to re-join the Association.

Mr. Joseph, a director of the plaintiff firm, said after the publication of the circular, when he called on architects, he was shown the door.

Mr. Frederick Charles Mitchell, a Licentiate of the Royal Institute of British Architects, practising as Messrs. Burdwood and Mitchell, at 80 George Street, Portman Square, W., said that he received and read the document sent out by the London Master Builders' Association on April 8, 1925. He knew the firm of Bovis, Ltd., quite well, and had employed them before he received the document. There was no valid reason why he should not have continued to employ them, but he did not do so for a few months because of the notice in the document that they were in wage-rate default. At the foot of the communication was a note that it was contrary to the rules of the Association for its members to tender in competition with firms which were in wage-rate default.

Mr. E. F. Q. Henriques, solicitor, of the firm of Messrs. Bartlett and Gluckstein, said that he found that there were over eighty members of the London Master Builders' Association who did not sign "Form A" under which the members agreed to pay the standard rate of wages and to obey the instructions of the Association.

Mr. Stuart Bevan, for the defendants, contended that the plaintiffs had suffered no damage by the publication of the alleged libels. He said that if they had suffered at all it was because certain members of the Association had refused to tender against them. Counsel submitted that the occasions on which the alleged libels were published were privileged.

His lordship, after hearing legal arguments, said he was clearly of opinion that the publication to the members of the Association, to the associated institutions federated with the members, and to the architects was privileged. The publication to bodies such as the London County Council, the Metropolitan Police, and other public bodies of the kind was also privileged. As regarded a large part of the case, it was necessary for the plaintiffs to establish malice.

Mr. Bevan said that the phrase in wage-rate default was used by Mr. Thorne in a letter which he sent in the course of his own business, and he alone was responsible for that. The by-laws of the Association were as widely distributed as the circulars themselves, and therefore the word "default" was not coined for that particular publication so as to give a sinister meaning to the conduct of Bovis, Ltd. The phrase "wage-rate default" was no evidence of malice at all, because, when they looked at the correspondence, they saw that "default" was not used in the ordinary meaning of that word.

Mr. Ernest James Brown said that he had been the director of the London Master Builders' Association for the last eight years, and he denied that he ever treated Bovis, Ltd., differently from any other members of the Association. They were on extremely friendly terms, and before this action Mr. Gluckstein or Mr. Joseph had never charged him with bad faith in his treatment of them.

The Association, he said, had no power to give overtime permits without the permission of the operatives. He had no objection to Bovis, Ltd., getting permits. He could have vetoed them, but he agreed that they should be granted. None of the Association's members had ever put a spoke in the wheel to prevent Bovis, Ltd., getting permits. All the big firms in the Association were often refused them.

In 1924 trouble started in Liverpool and there was a lock-out in London. At first, Bovis, Ltd., supported the policy of the Association, but afterwards they took the men back at a 1/4d. an hour more than the other employers had agreed to give. That was most detrimental to the masters. It weakened their position and the men began to hoist the flag of victory.

After it was found that Bovis, Ltd., were paying more than the standard rate of wages, the members of the Association decided that they would tender in competition with firms who were paying the standard rate or not at all. The object of that decision was the stabilization of wages.

After the trouble in 1924 the Council of the Association formed a special committee to consider the question of wage stabilization, and in November it was decided to amend the rules. By-laws were adopted, and another special committee was formed to carry out the procedure relating to unfederated firms. "Form A" was sent to all the members of the Association and to thirteen non-members, including Bovis, Ltd. Anyone who did not sign the form was declared to be in wage-rate default if it were known that he was paying more than the standard wages.

On March 25, 1925, at a meeting of the special committee, three of the defendants being present, definite information was forthcoming that Bovis, Ltd., were paying more than the standard rate of wages, and it was decided to send them "Form B," which called on them to sign "Form A" within seven days.

On April 8, no reply having been received from Bovis, Ltd., it was decided to declare that that firm was in wage-rate default, and to circularize the members and others interested in building operations to that effect. He was not aware that at that time Bovis, Ltd., had posted a notice at their works that they were discontinuing the payment of more than the standard wages. Had he known that, he would have welcomed the news that they were coming into line with the other builders, and would have taken steps to stop the notice that the firm was in wage-rate default. The notice was sent to the members of the Association, to architects and quantity surveyors in the London area, and to public bodies, such as the War Office, the Admiralty, the Office of Works, and the Air Ministry. The circular was sent to the secretary of the Surveyors' Institution that he might advise his members what course they should pursue in view of the crisis which had arisen. It was also sent to the engineers of a number of big companies.

Mr. Fred Thorne, one of the defendants, and President of the London Master Builders' Association in 1925, said he regretted writing a letter which his firm had sent to Mr. Harley, architect, the borough engineer and surveyor of Poplar, on March 30, 1925, in which they said that they would be pleased to tender for a clinic provided that Bovis, Ltd., and three other firms in wage-rate default, as defined by the London Master Builders' Association, were not in the list. He did not do it spitefully. He added that it was his idea to get peace in the industry. There were two or more firms who had gone out to pay more than the standard rate of wages, and that was creating trouble. Acting in his capacity as President, upon whom great responsibility rested, he visited the offices of Higgs and Hill, Ltd., on June 5, 1925. He saw the two Mr. Hills and Mr. Joseph, of Bovis, Ltd., whom he did not know at that time.

He thought that that was an opportunity of reconciling them to the Association. He suggested that both firms should return to the Association, sign "Form A," and come under the same regulations as their fellow-members. He promised that on their return notices should be published in the Press and that letters should be sent to all the persons to whom the by-laws and the circulars had been sent previously, stating that Higgs and Hill, Ltd., and Bovis, Ltd., were again in full membership,

differences between them and the Association having been amicably settled. The main trouble was that the firms in question would not sign "Form A." He admitted that Bovis, Ltd., had written saying that they had not paid more than standard wages since April 17.

In publishing the documents complained of it never occurred to him that the language used could be construed in a defamatory sense of Bovis, Ltd. Had it done so he would certainly not have been a party to the publication of the documents.

His Lordship: Do you suggest that the man who leaves an association because he does not approve of its policy and does not wish to be bound by its rules is doing something which you think is wrong and improper?—Yes; I think he is wrong.

Do you think that he is wrong morally?—Quite.

Witness admitted that there were members of the Association who had not signed "Form A," but he did not agree that there was unfair discrimination. Sir James Carmichael eventually signed the form.

Sir Walter Lawrence, President of the Association in 1913 and 1914, since when he had been on the Council, said the by-laws, or the application of them, were not directed against any firm in particular on personal grounds. The policy expressed in them was considered to be the best way out of the difficulty which confronted them.

Mr. Bevan: Had you any desire to defame Bovis, Ltd.?—Our only desire was to see that no one paid more than the standard wages. It was of vital importance that the employers should stand together and the second part of "Form A" was very necessary.

His Lordship: Did your Council look at the dictionary to see what was the meaning of "default"?—No, we relied on our legal advisers.

Mr. W. J. Rudderham, secretary of the Association since 1919, said he had no feeling of ill will towards Bovis, Ltd., or any other builders. He had done nothing in this matter but what he was told to do by his employers.

Mr. H. T. Holloway, another defendant, denied that he was actuated by any ill feeling or spiteful motives against the plaintiffs. The phrase "wage-rate default" was not invented by him, but by counsel, and he regarded it as a "tongue twister."

In cross-examination, witness said that his personal view was that, whether Bovis, Ltd., were members of the Association or not, they were morally bound to adhere to the conditions of employment agreed upon in the building trade. He agreed that the circular of April 8, 1925, was not fair if it conveyed to the minds of persons receiving it that Bovis, Ltd., were "defaulters" in the ordinary sense of the word.

Witness admitted that on June 22, 1924, after he knew of the assurances of Bovis, Ltd., that they were paying standard wages, the London Master Builders' Association sent to some 1,700 different addresses a statement that a certain other firm had ceased to be in wage-rate default. Although the people who were thus circularized had received the notice that Bovis, Ltd., were in wage-rate default, the Association did not inform them that the plaintiffs were then paying the standard rate of wages.

Witness said that the policy of the Association had been absolutely justified; it had saved the situation. He thought that, having weathered the storm, they could now dispense with the by-laws.

Mr. John E. Drower, quantity surveyor to the London County Council, Fellow of the Surveyors' Institution, and premier vice-president of the International Federation of Surveyors, expressed the opinion that from a national point of view it was essential that there should be a strong body of employers on the one side to meet the highly organized body of operatives on the other, and that wages should be standardized.

In cross-examination, the witness agreed that if every quantity surveyor in London had his mind poisoned against a particular builder, that builder would be likely to suffer very severely and might be ruined.

His lordship, at the close of the defendants' case, after hearing legal arguments, said his ruling on the question of privilege was



that as regarded the supplemental list the matter complained of was published to all the public bodies and persons in that list on a privileged occasion. With regard to the other publications, a very considerable number of the London architects to whom the alleged libels were published were those who were in the active exercise of their profession and might within a reasonable time have had to consider what firms should be invited to tender, and the publications to them were on a privileged occasion. There were, however, individuals in the list who had neither a duty nor an interest in regard to the subject of the alleged libels, and in those cases the jury would not be troubled with the question whether or not express malice had been proved.

His lordship summed up, and the jury answered the questions left to them as follows:

1. Is the letter of April 8, 1925, a libel on the plaintiffs, either (a) because it means what is stated in the innuendo; or (b) because it is, in the ordinary meaning of the words used, defamatory?—(b) Yes.

2. Do you give the same decision as to all the other three documents complained of?—Yes.

3. In publishing the libels were the defendants, or some or one of them, guilty of malice?—No.

4. Are the libels true?—No.

5. What damages do you award if the defendants are responsible for all the publications of the libels?—No answer.

6. What damages do you award in respect of the publications of the libels on occasions that were not privileged?—£25.

Mr. Willes asked for judgment, with costs, including those of the first trial, which were to abide the result of the present trial.

His lordship said that costs of the first action followed the event.

Mr. Willes said that the plaintiffs asked for an injunction to prevent the defendants from repeating the libel.

Mr. Jowitt said that it was not likely that the defendants would repeat the words "wage-rate default" after what had happened. They were last used in July, 1925, and there was not the slightest ground for believing that they would be repeated.

His lordship said that if he thought that there was any intention of repeating the libel in the way in which it had been sent out he would grant an injunction, but he did not think that one was necessary.

Mr. Jowitt said that a considerable amount of the costs had been incurred on the issue of malice on which the defendants had succeeded, and he asked that they should not be ordered to pay them.

His lordship, after hearing legal arguments, held that the question of malice was a separate issue in so far as it related to the libels published on privileged occasions, and that the defendants were entitled to recover costs on that issue, such costs to be set off against those recovered by the plaintiffs.

### THE GLASGOW HERALD BUILDING

The general contractors for the *Glasgow Herald* building, 56 and 57 Fleet Street, London, illustrated on pages 509 to 514 were Bovis, Ltd., who were also responsible for the oak panelling, cupboards, counters, and other special joinery. Amongst the artists, craftsmen, and sub-contractors engaged on the work were the following: James Gibbons, Ltd., bronze and steel windows, bronze entrance doors, bronze radiator cases, bronze lettering, ornamental lead work, locks and door furniture; G. and A. Brown, Ltd., and Cashmore Art Workers, decorative plasterwork; Fenning & Co., Ltd., marble work to exterior, entrance and staircase, also cast lead lettering; Kingsmill Art Metal Co., Ltd., wrought-iron lift enclosure; British Thomson-Houston Co., Ltd., electric light fittings and flood light equipment; J. W. Singer and Sons, Ltd., bronze floodlight brackets; Stevens and Adams, Ltd., oak block flooring; John Elbo, cork tile flooring; Glasgow Engineers, Ltd., electric lift; Norris Warming Co., Ltd., central heating and hot-water service; Archibald D. Dawnay and Sons, Ltd., constructional steelwork; Fred L. McGhee & Co., electric lighting; C. Ellis and Sons, sanitary engineering and plumbing; Tylors Limited, sanitary fittings;

May Construction Co., Ltd., Cabot's quilt ceiling to wire room, Furnishing and Equipment; Peter Waals, chairs; "Token" Furniture, private office desks and cupboards; J. and J. Box, office desks and cupboards; Trollope and Sons, upholstered chairs, carpets and curtains; Bennet Furnishing Co., Ltd., wire room desks and fittings; Prince's Electrical Clocks, Ltd., electric clocks; Lamson Pneumatic Co., automatic carrier; E. Shipton & Co., Ltd., automatic telephones.

### CURRENT WORK

Following are the names of the contractors and some of the sub-contractors for the buildings illustrated on pp. 519 to 528.

Bouverie House, 154-160 Fleet Street, E.C.4, for Messrs. Benn Bros., Ltd. General contractors, Messrs. F. D. Huntingdon, who were also responsible for the foundations, reinforced concrete, and plaster work; clerk of works, Mr. T. J. Nye. Sub-contractors: Ames and Finnis, bricks and roof tiles; F. J. Barnes, Portland stone; Empire Stone Co., artificial stone; Cooper Wettern & Co., granite; Morris Westminster Guild, patent glazing; Art Pavements and Decorations, Ltd., tiling and cork flooring; George Wright (London), Ltd., stoves; George Wright (London), Ltd., and O'Brien Thomas, grates; Rashleigh Phipps, Ltd., electric wiring; Pontifex, Ltd., sanitary fittings; Luxfer Co., pavement lights; Charles Smith & Co., Ltd., door furniture; Morris Westminster Guild and West Bromwich Engineering Co., casements and window furniture; Haywards, Ltd., iron staircases; J. Avery & Co., sunblinds; Modellers and Plastic Decorations, Ltd., decorative plaster; Charles Smith & Co., Ltd., and Birmingham Guild, Ltd., metalwork; Samuel Elliott (Reading), Ltd., and Central Aircraft Co., Ltd., joinery; Express Lift Co., passengers' lifts; Geo. Johnson, book lift; W. Aumonier and Son, carving; H. Stubler, outside lamps.

Memorial Buildings, University College of North Wales, Bangor. General contractors, Messrs. J. Laing and Son; contract price, £69,625 (actual cost later); equipment, £19,000; Sub-contractors: Brunner Mond & Co., Ltd., and The Carnarvon Brick Co., bricks; Young & Co., structural steel; Kleine Patent Fire-resisting Flooring Syndicate, fireproof construction; Oakeley Slate Quarries Co., Ltd., slates; F. A. Norris & Co., patent glazing; G. and T. Earle, waterproofing materials; G. N. Haden and Sons, Ltd., central heating; George Wright & Co., Ltd., gas fires; Drake and Gorham, Ltd., electric wiring, electric light fixtures switchboards, batteries and machines, and electric power; Morrison, Ingram & Co., Ltd., and Oates and Green, Ltd., sanitary fittings, laboratory sinks; James Gibbons, Ltd., door furniture; Merryweather and Sons, Ltd., hydrants; T. A. Norris & Co., iron staircases; Pyrene Co., Ltd., fire extinguishers; Halstead Bros., blinds, joinery, and technical office fittings; John Heywood, Ltd., oak fittings; Art Metal Construction Co., steel furniture.

Coal Order Office for Messrs. Charringtons, Romford. General contractor, Partridge.

Flats in Zanzibar. The veranda rails and jhallis are in Atlas White cement.

Hongkong and Shanghai Banking Corporation: New Building. Tientsin. The general contractor was Chinese; that for the granite and marble work, Italian. Twyford & Co., Tientsin, heating, ventilating, and sanitary installations; Twyford & Co., Hanley, and Crane Co., U.S.A., fittings; Babcock and Wilcox, ventilating apparatus; American Radiator Co., boilers; Jardine Engineering Corporation, electrical installation; Braby & Co., Glasgow, steel windows and bronze doors; Henry Hope and Sons, Birmingham, roof lights; Pilkington & Co., St. Helens, glass; Bigazzi & Co., Florence, bronze work; N. F. Ramsay & Co., Newcastle, hardware; Henry Richard Tile Co., tiles; Armstrong Cork Tile Co., U.S.A., cork tiles; Waygood-Otis, Ltd., passenger and goods lifts.

New Cricket Pavilion, Mill Hill School, N.W. General contractor, N. C. Wade, Whetstone, N. General foreman, Peter Mead; carpenter foreman, Charles Vivian; price per foot cube, 1s. 3d. Sub-contractors, H. Nethercot & Co., tiles; Dent & Hellyer, sanitary fittings; Yannedis & Co., door and window furniture.

## THE WEEK'S BUILDING NEWS

The PLYMOUTH Corporation has given permission to the borough engineer to prepare plans for and supervise the layout of the roads, etc., in connection with the housing scheme of the Admiralty at St. Budeaux.

The Special Works Committee of the PLYMOUTH Corporation has asked the borough engineer to prepare a modified scheme for the proposed low-level road at Cattedown.

Plans passed by the PLYMOUTH Corporation: Four houses, Row Lane, for Mr. W. Winter; five houses, Hillcrest Avenue, for Mr. T. W. Box; eight houses, Glenhurst Road, for Messrs. Jackson and White; eight houses, Glenhurst Road, for Mr. G. H. Webber; eight houses, Salisbury Road, for Mr. W. Mumford; addition to depot, Manor Street, Stonehouse, for the Dunlop Rubber Co., Ltd.; motor showroom, dwelling apartments, and store, Stuart Road, for Mr. W. S. Reed.

The PLYMOUTH Corporation has approved plans for the erection of fifty-two houses at Mount Gold by the Astor Trustees.

The West Riding Education Committee is to adapt the present school at WETHERBY as a middle school and erect a new elementary school at the rear.

The NEWCASTLE Watch Committee is to erect a new police and fire brigade station and police courts in Pilgrim Street, Newcastle, at an estimated cost of £125,000.

The NEWCASTLE Education Committee has obtained sanction to borrow £72,000 for the erection of an elementary school on Pendower estate.

The MERTHYR Corporation is to convene a special meeting to consider a report of the medical officer of health on the insanitary and slum dwellings in the borough.

The NEWCASTLE Corporation is negotiating for the acquisition of 432 acres of land outside the city boundary, situate to the north of the Cowgate housing estate and extending to Kenton.

The NEWCASTLE Corporation has decided to provide an additional tuberculosis pavilion at Walkergate Hospital.

The PLYMOUTH Education Committee has now arranged for the borough engineer to prepare the plans for the proposed new elementary school at North Prospect.

The HOLBEACH U.D.C. is to erect twelve houses on the Spalding Road site.

The PLYMOUTH Education Committee is acquiring a site at Lambhay Hill for the erection of an elementary school.

The LANCASTER Corporation is obtaining a Provisional Order to enable them to erect shops on improved areas.

Plans passed by the YORK Corporation: Three houses, Campleson Road, for Mr. C. Martin; new street, The Mount, for Mr. J. W. Cooper; additions, "King William IV," Layerthorpe, for J. J. Hunt, Ltd.; two houses, Lindley Street, for Mr. A. Temple; four houses, Glen Avenue, for Mr. W. West; new street, Tadcaster Road, for Sir R. Newbald Kay; warehouse, Wigginton Road, for Messrs. Rowntree & Co., Ltd.

The YORK Corporation Housing Committee has purchased twenty-six acres of land adjoining Hull Road, just outside the city boundary, for a new housing scheme.

The Salvation Army is to erect a hall in Brunswick Place, NORTHAMPTON.

Plans passed by the NORTHAMPTON Corporation: Eight houses, Kingsthorpe Grove, for Messrs. A. L. and H. W. Chown; timber mill and store, Old Towcester Road, for Messrs. E. T. Trenery and Sons; three houses, Beech Avenue, for Messrs. W. J. Richardson and Son; dairy, Charles Street, for Mr. C. H. Brown; seventeen houses, The Drive and Brookland Road, for Messrs. S. G. Gale & Co.; billiard room, Winton Villa, Cliftonville, for Mr. W. Lees; alterations and additions, Bear Hotel, Sheep Street, for Messrs. Hartopp, Ltd.; clubroom, "Bat and Wickets," Baliff Street, for Messrs. P. Phipps & Co., Ltd.; extension to works, Kingsthorpe Hollow, for the Northampton Foundry Co.; three houses, Rothersthorpe Road, for Messrs. Henry Martin, Ltd.

The BIRMINGHAM Corporation is to allocate £15,000 for the purposes of additions at the General Hospital, Birmingham.

The BIRMINGHAM Watch Committee is to have plans prepared for a central fire station and weights and measures office estimated to cost £200,000.

The BIRMINGHAM Corporation Estates Committee is preparing an improvement scheme for the New Summer Street area.

The BIRMINGHAM Education Committee is purchasing land at Erdington for the purpose of an open-air school.

The BIRMINGHAM Education Committee is acquiring land at Rednall for the erection of an elementary school.

The BIRMINGHAM Education Committee is acquiring land at Yarley Wood as a site for an elementary school.

The BIRMINGHAM Education Committee is to erect a third block at the new council school, Hastings Road, Perry Common, at a cost of £20,500.

The BIRMINGHAM Corporation is to prepare plans for the erection of a modern suite of baths at Sparkhill and to obtain tenders for the work.

The Diocesan Authorities have obtained a site on the Pye Haves Estate, BIRMINGHAM, for the erection of a church.

The LEYLAND District Council has decided to erect two lots of twenty houses each for letting under the Housing Act, 1923.

The Bishop's Commission has obtained a site for the erection of a church on the Witton Lodge Estate, BIRMINGHAM.

The Birmingham Watch Committee is acquiring premises in Speedwell Road, EDGBASTON, for the purposes of a police station.

Plans passed by the EASTBOURNE Corporation: Additions to gymnasium and chapel, Ascham St. Vincent's, for Mr. F. G. Cooke, architect; eight houses, The Crescent and North Avenue, for Mr. P. D. Stonham, architect; alterations and additions to the Whitehall Hotel, Howard Square, for Messrs. G. Bainbridge and Sons; house and garage, Park Avenue, for Messrs. Tanner and Sons; four houses, Brassey Avenue, for Mr. Wm. Hookham; fourteen houses, St. Anthony's Avenue, for Mr. S. G. Scales, architect.

The CHELTENHAM Corporation is to erect twenty houses in Gloucester Road and Milton Road.

Plans passed by the CHELTENHAM Corporation: Alterations and additions, Daffodil Picture House, Suffolk Parade, for Directors; four houses, Old Bath Road, for Messrs. J. D. Bendall and Sons.



The greater part of ADELPHI, lying between the Strand and the Victoria Embankment, and flanked by the Hotel Cecil and Charing Cross Station, is to be sold by auction on June 21. It is probable that in 1932, when the existing leases expire, the buildings now standing on the site will be demolished and replaced by modern office blocks. The frontage on the Embankment allows the construction of buildings of the maximum height permitted by the London Building Act.

A war memorial is to be erected on one of the highest peaks of the DOLOMITE ALPS in memory of the Italian mountain troops who fell on that front. Situated at a height of nearly 10,000 ft., it will probably be the loftiest war memorial in the world.

Plans passed by the SHEFFIELD Corporation: Six houses, Prince of Wales Road, for Messrs. R. T. Hinchliffe and Sons, Ltd.; four houses, Hallam Grange Crescent Road, for Mr. W. H. Rowan; 158 houses, Longley Estate, Scheme 4, for Estates Committee of the Corporation; four houses, Retford Road, for Mr. S. G. Bailey; six houses, Swaledale Road, for Mr. C. S. Smith; four houses, Dalewood Road, for Mr. A. J. Belton; four houses and salesshops, Main Road, Handsworth, for Messrs. Oliver Bros.; three houses and shops, Sandygate and Selbourne Roads, for Messrs. F. Ridal and Son; four houses, Springfield Road, for Mr. R. Bottomley.

The SHEFFIELD Corporation Estates Committee has instructed the city architect to proceed with the erection by direct labour of about twenty three-apartment bungalows at Ridgeway Road.

Plans passed by the OLDHAM Corporation: Seven houses, Harper Street, for Mr. H. Partington; eleven houses, Grange Avenue, for Mr. J. Partington; three shops and assembly hall, Manchester Road, Hollinwood, for the Oldham Industrial Co-operative Society, Ltd.; new vestry to Congregational Church, Hope Street, for Minister; alterations and extensions to Northmoor Wesleyan Sunday Schools, for Trustees; extension to schoolroom, Manchester Road, for St. James's Free Church; sixteen houses, Thurland Road, for Mr. F. Thompson; new Sunday school, Pitt Street East, for Trustees of Glodwick Baptist Church; thirty houses, Merton Avenue, for Mr. W. Makin.

The EASTBOURNE Watch Committee has asked the borough engineer to prepare plans for extensions at Grove Road fire station.

The ILFORD Education Committee is to enlarge the elementary school in Valentine's Lane to accommodate a further 200 scholars.

The ESSEX Education Committee has passed sketch plans for alterations and additions for the adaptation of the existing premises of the Romford Mawney Road Council Boys' School to provide accommodation for an intermediate school of about 280 pupils, and for the erection of a portable school for 200 boys on an adjoining piece of land to serve as the boys' department.

Mr. F. W. Meredith has prepared plans for the erection of a Palais de Danse at Bridge Street and St. George's Road, BOLTON.

The BOLTON Corporation has passed plans submitted by Messrs. G. E. Tong and F. Holt for the erection of a picture house at Churchgate, Bolton.

Plans passed by the HULL Corporation: Alterations, Inkerman Tavern, Alfred and Edgar Streets, for Moors' and Robson's Breweries, Ltd.; eight houses, Ormonde Avenue, for Mr. E. Mowforth; six houses, James Reckitt Avenue, for Mr. W. H. Dowell; sixty houses, Loveridge Avenue, for Mr. W. H. Loveridge; four houses, Ceylon Street, for Mr. W. H. Gray; seven houses, Clarence Avenue, for Mr. E. Batty; eight houses, Springfield Road, for Mr. T. R. Barnett; eight houses, Parkfield Road, for Messrs. J. H. Fenwick and Son, Ltd.; six houses, Parkfield, for Mr. A. J. Waller.

Plans passed by the LEEDS Corporation: Twelve houses, Lincroft Estate, Broad Lane, Bramley, for Mr. A. E. Collett; four houses, Swinnow Avenue, Bramley, for Messrs. J. W. Dufton and Sons, Ltd.; thirty-two houses, Firth Avenue and Grove, Beeston, for Messrs. J. Pullan and Sons, Ltd.; four houses, Lower Wortley Road, for Mr. Arthur Kellett; fourteen houses, Potternewton Crescent, Scott Hall Road, for Messrs. F. Reddyhoff and Son; six houses, Park Spring Gardens, Bramley, for Messrs. A. Gibbs and Son; four houses, Gipton Wood Road, Harehills, for Mr. James Ambler; six houses, Barkly Road, Beeston, for Messrs. A. Roddy and Sons; four houses, St. Anne's Drive, Headingley, for Messrs. Park and Birch; eighteen houses, Stainbeck Road, for Mr. Mark Bristow; twenty-two houses, Marsden Avenue and Grove, Beeston, for Mr. Ernest Todd; five houses, Sunnyside Road, Bramley, for Mr. Frank Rawnsley.

The HULL Corporation Mental Hospital Committee has approved revised plans of the city architect of the admission hospital and nurses' home at the Mental Hospital.

The MANCHESTER Education Committee has obtained sanction to borrow £30,250 for the erection of an elementary school at Boyle Street.

The Board of Education has approved the site at Birchfields Road, Rusholme, for the erection by the MANCHESTER Education Committee of an elementary school.

The OLDHAM Corporation is to borrow a further £10,000 for housing subsidies.

Messrs. T. Ring and Frederick Higley are to provide a public Roman Catholic elementary central school in Lucas Street, STEPNEY, to accommodate about 400.

The WIMBLEDON Corporation recommends a grant of £2,000 to the Nelson Hospital Committee to extend their hospital at Merton, such extensions to provide a maternity home (about twenty-one beds) and a child welfare department, with school and ante-natal and post-natal clinic; the total cost is estimated at £20,000.

The Ministry of Health has held an inquiry into the proposal of the Corporation to borrow £10,000 for the development of the WIMBLEDON Park estate.

Amended plans have been prepared by the borough engineer of WIMBLEDON for the construction of a new swimming bath, and the plans have been forwarded to the Ministry of Health for approval.

The borough engineer of WIMBLEDON is to prepare revised plans for the erection of a day nursery.

The Indian Government has acquired one of the two vacant sites at ALDWYCH, and the L.C.C. is now negotiating for the disposal of the other site.

The L.C.C. is to proceed with the reconstruction of LAMBETH Bridge, and a tender will probably be accepted next week.

Plans passed by WIMBLEDON Corporation: Extension of classroom and boiler-house, "Rokeby," the Downs, for Messrs. Belfrage, Saville & Co.; lobby, South Western Hotel, Wimbledon Hill Road, for Messrs. Chessell and Sons; two workshops, Elm Grove, for the Sycamore Works Co.; seventeen houses, Melbury Gardens and Durham Road, for Mr. S. Derwent; fifteen houses, Salisbury Road, for Mr. F. H. Skeens.

Plans passed by the OXFORD Corporation. Alterations and additions to 21 Cornmarket Street, for Messrs. Collard, Stewart and Watt, Ltd., 49 Old Bond Street, W.1; boiler-house, St. Edward's School, for the warden; extensions, Merton Street, for Corpus Christi College; alterations to the "Ampney Cottage" public-house, Cowley Road, for Hall's Oxford Brewery, Ltd.

The LEEDS Corporation is acquiring property required in connection with the construction of the new street (including the widening of Sheepscar Street) between Buslingthorpe and Sheepscar.

The LEEDS Corporation has approved Sir Reginald Blomfield's amended design of buildings to be erected on the site at the corner of Guildford Street and Cookridge Street, proposed to be transferred to the Leeds Permanent Building Society.

The LEEDS Corporation has sanctioned the erection of shops on a site in Oakwood Lane.

The LEEDS Corporation has asked a committee to negotiate for land in the Armley and Wortley district for the erection of district baths.

The LEEDS Corporation has asked the city engineer to report on the proposal of the University of Leeds for a diversion of St. George's Road and the construction of two bridges across the road in connection with an extension of the school of medicine.

The LEEDS Corporation has arranged for the various committees to consider the question of the construction of subways to carry mains, cables, etc., with a view to the avoidance of the constant breaking up of highways.

The OLDHAM Corporation has sold a portion of the Smethurst Street site to H.M. Office of Works for the erection of an employment exchange.

In connection with the reconstruction of the Marshall Street Baths the WESTMINSTER City Council now suggests that the President of the Royal Institute of British Architects should be asked to nominate five members with experience of the erection of such buildings from whom an architect can be selected.

The BOLTON Corporation has appointed a sub-committee to consider the provision of a municipal golf course.

The BOLTON Corporation Markets Committee is to confer with butchers and farmers regarding a proposal for the establishment of a larger cattle market.

The BOLTON Education Committee is considering the advisability of the provision of additional accommodation at Tonge Moor School.

Plans have been passed by the L.C.C. for the erection of the "Shakespeare" public-house at 29 Great Marlborough Street, WESTMINSTER, next to Foubert's Place.

The BIRKENHEAD Corporation is seeking sanction to borrow £36,500 for the reconditioning of Queen's Buildings and the provision of washhouses.

The BIRKENHEAD Corporation Electricity Committee is to extend the electricity showroom in Grange Road West.

The MANCHESTER Education Committee is acquiring land for the enlargement of the Plymouth Grove Council School.

The MANCHESTER Education Committee is acquiring a site in Briscoe Lane, Newton Heath, for school purposes. It is intended in the first instance to build a school for infants, but the site proposed is large enough to provide for future developments.

Plans have been passed by the MARYLEBONE B.C. for the erection of a block of flats on the site of 73 Portland Place.

Messrs. Marshall and Snelgrove have prepared plans for the reconstruction of their premises in Oxford Street, Henrietta Street, Vere Street, and Marylebone Lane, LONDON.

In connection with the reconstruction of Madame Tussauds, the MARYLEBONE B.C. has prepared a scheme for widening Marylebone Road.

Mr. J. H. Furmedge, of the Portman estate, is in communication with the MARYLEBONE B.C. regarding a development scheme which will involve the closure of Welsted Yard and Wyndham Yard and the extension of Linhope Street.

The MARYLEBONE B.C. is acquiring land in Marylebone Road and Great Quebec Street for the erection of a central library. The cost of the proposed library is £50,000.

The BERMONDSEY B.C. has obtained land at the Neckinger depot for the central library extension scheme.

The COLCHESTER Corporation is to reconstruct and widen East Bridge at a cost of £10,500.

The HULL Corporation has passed plans submitted by Mr. E. Whitlock on behalf of Messrs. Hellyer for new streets on an estate off Pickering Road, and by Mr. J. M. Blaydon for a new street from Bricknell Avenue.

The HULL Education Director has submitted plans for the Malet Lambert High School, and the Education Committee has forwarded them to the Board of Education.

The HULL Education Committee has obtained a larger site adjoining the training college for the provision of an open-air school.

Messrs. Freeman, Son and Gaskell have prepared plans on behalf of the Hull Brewery Co., Ltd., for the erection of a bridge over Garden Street, HULL.

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

The Essex Education Committee has passed revised plans for the erection of a portable building to accommodate 500 scholars on the DAGENHAM section of the L.C.C. housing estate at a cost of about £3,650. Plans have also been passed for the erection of a seventh elementary school on the estate at a cost of £35,000.

The MARKET HARBOUROUGH U.D.C. has instructed Mr. H. G. Coales to prepare plans for another thirty-six non-parlour houses to be erected on the Council's estate.

The OLDHAM Corporation Baths Committee is again to consider the advisability of erecting a public washhouse on land adjoining the Hollingwood Baths.

It is probable that, as the outcome of a recent joint meeting of the representatives of the respective bodies, a suitable hall may be built at WORKSOP in which the business of the Urban Council, the Guardians, and the Rural Council may be transacted.

Taking up the ADDISCOMBE tramway rails and remaking the road will cost £27,000.

A training college for Salvation Army officers is to be built at DENMARK HILL, S.E.

Among the plans for which linings were granted at GLASGOW Dean of Guild Court were those for the new housing scheme at Bilsland Drive. The plans were for 340 houses of three apartments and 168 of four apartments, as well as for twelve shops. Linings were also granted to the Salvation Army to erect a hall in Kelvin Street, Partick; to James Templeton & Co. to erect a factory in William Street; to the Strathclyde Cinema Co. to erect a picture house in Summerfield Street; and to the Kelvinside Lawn Tennis Club to erect a clubhouse in Montgomerie Crescent.

For the purpose of paving a portion of Camden Road, Tollington Road, and Isledon Road with  $3\frac{1}{2}$  in. of asphalt on 9 in. of reinforced concrete, the ISLINGTON Borough Council propose to borrow £39,375.

## RATES OF WAGES

		I		II				I		II						I		II	
		s.	d.	s.	d.			s.	d.	s.	d.					s.	d.	s.	d.
A	ABERDARE	S. Wales & M.	1 8	1 3	1 3	A	E. Glamor-	S. Wales & M.	1 8	1 3	1 3	A <sub>3</sub>	NANTWICH	N.W. Counties	1 6	1 2	1 6	1 2	
A <sub>1</sub>	Abergavenny	S. Wales & M.	1 7	1 2	1 2	A	ganishire &					A	Neath	S. Wales & M.	1 8	1 3	1 8	1 3	
B	Abingdon	S. Counties	1 6	1 1	1 1	B	Monmouthshire					A	Nelson	N.W. Counties	1 8	1 3	1 8	1 3	
A	Accrington	N.W. Counties	1 8	1 3	1 3	B	Exeter	S.W. Counties	1 7	1 2	1 2	A	Newcastle	N.E. Coast	1 8	1 3	1 8	1 3	
A	Addlestone	S. Counties	1 6	1 2	1 2	B <sub>2</sub>	Exmouth	S.W. Counties	1 5	1 1	1 1	A	Newport	S. Wales & M.	1 8	1 3	1 8	1 3	
A	Adlington	N.W. Counties	1 8	1 3	1 3							A	Normanton	Yorkshire	1 8	1 3	1 8	1 3	
A	Airdrie	Scotland	1 8	1 3	1 3	B	FELIXSTOWE	E. Counties	1 6	1 1	1 1	A <sub>2</sub>	Northampton	Mid. Counties	1 7	1 2	1 7	1 2	
C <sub>1</sub>	Aldeburgh	E. Counties	1 4	1 0	1 0	A	Filey	Yorks	1 6	1 2	1 2	A	North Staffs.	Mid. Counties	1 8	1 3	1 8	1 3	
A	Altrincham	N.W. Counties	1 8	1 3	1 3	A <sub>2</sub>	Fleetwood	N.W. Counties	1 8	1 3	1 3	A	North Shields	N.E. Coast	1 8	1 3	1 8	1 3	
B	Appley	N.W. Counties	1 4	1 0	1 0	B <sub>1</sub>	Folkstone	S. Counties	1 5	1 1	1 1	A <sub>3</sub>	Norwich	E. Counties	1 6	1 2	1 6	1 2	
A	Ashton-un-	N.W. Counties	1 8	1 3	1 3	A	Frodsham	N.W. Counties	1 8	1 3	1 3	A	Nottingham	Mid. Counties	1 8	1 3	1 8	1 3	
	der-Lyne					B <sub>2</sub>	Gravesend	S. Counties	1 7	1 2	1 2	A	Nuneaton	Mid. Counties	1 8	1 3	1 8	1 3	
A	Atherstone	Mid. Counties	1 6	1 2	1 2	A	Frome	S.W. Counties	1 4	1 0	1 0								
B	Aylesbury	S. Counties	1 4	1 0	1 0	A	GATESHEAD	N.E. Coast	1 8	1 3	1 3	B	OAKHAM	Mid. Counties	1 5	1 1	1 5	1 1	
						B <sub>1</sub>	Gillingham	S. Counties	1 5	1 1	1 1	A	Oldham	N.W. Counties	1 8	1 3	1 8	1 3	
						A <sub>2</sub>	Gloucester	S.W. Counties	1 6	1 2	1 2	A <sub>3</sub>	Oswestry	Mid. Counties	1 6	1 2	1 6	1 2	
B <sub>2</sub>	BANBURY	S. Counties	1 4	1 0	1 0	A <sub>2</sub>	Goole	Yorkshire	1 7	1 2	1 2	B	Oxford	S. Counties	1 6	1 2	1 6	1 2	
A	Bangor	N.W. Counties	1 5	1 1	1 1	B	Gosport	S. Counties	1 6	1 1	1 1	A	PAISLEY	Scotland	1 8	1 3	1 8	1 3	
A	Barnard Castle	N.E. Coast	1 8	1 3	1 3	A <sub>2</sub>	Grantham	Mid. Counties	1 6	1 2	1 2	C	Pembroke	S. Wales & M.	1 4	1 0	1 4	1 0	
A	Barnsley	Yorkshire	1 8	1 3	1 3	A <sub>1</sub>	Grantham	Mid. Counties	1 6	1 2	1 2	A	Perth	Scotland	1 8	1 3	1 8	1 3	
B	Barnstaple	S.W. Counties	1 5	1 1	1 1	A <sub>1</sub>	Greenock	Scotland	1 8	1 3	1 3	A <sub>2</sub>	Peterborough	Mid. Counties	1 6	1 2	1 6	1 2	
A	Barrow	N.W. Counties	1 8	1 3	1 3	B	Grimsby	Yorkshire	1 8	1 3	1 3	A <sub>3</sub>	Plymouth	S.W. Counties	1 8	1 3	1 8	1 3	
A	Barry	S. Wales & M.	1 8	1 3	1 3	B	Guildford	S. Counties	1 5	1 1	1 1	A	Pontefract	Yorkshire	1 8	1 3	1 8	1 3	
B	Basingstoke	S.W. Counties	1 4	1 0	1 0							A	Pontypridd	S. Wales & M.	1 8	1 3	1 8	1 3	
B	Bath	S.W. Counties	1 6	1 2	1 2	A	HALIFAX	Yorkshire	1 8	1 3	1 3	B	Portsmouth	S. Counties	1 6	1 2	1 6	1 2	
A	Batley	Yorkshire	1 8	1 3	1 3	A	Hanley	Mid. Counties	1 8	1 3	1 3	A	Preston	N.W. Counties	1 8	1 3	1 8	1 3	
B	Bedford	E. Counties	1 6	1 2	1 2	A	Harrogate	Yorkshire	1 8	1 3	1 3								
A	Berwick-on-	N.E. Coast	1 7	1 2	1 2	B <sub>2</sub>	Hartlepool	N.E. Coast	1 8	1 3	1 3	A	QUEENS-	N.W. Counties	1 8	1 3	1 8	1 3	
	Tweed					A	Harwich	E. Counties	1 5	1 1	1 1	FERRY							
A	Bewdley	Mid. Counties	1 7	1 2	1 2	B <sub>3</sub>	Hastings	S. Counties	1 4	1 0	1 0	B	READING	S. Counties	1 6	1 2	1 6	1 2	
B	Bicester	Mid. Counties	1 4	1 0	1 0	B <sub>1</sub>	Hatfield	S. Counties	1 5	1 1	1 1	A	Reigate	S. Counties	1 5	1 1	1 5	1 1	
A	Birkenhead	N.W. Counties	1 10	1 4	1 4	B <sub>2</sub>	Hereford	S. W. Counties	1 6	1 2	1 2	A <sub>2</sub>	Retford	Mid. Counties	1 6	1 2	1 6	1 2	
A	Birmingham	Mid. Counties	1 8	1 3	1 3	A	Hertford	E. Counties	1 5	1 1	1 1	A	Rhonda	S. Wales & M.	1 8	1 3	1 8	1 3	
A	Bishop	N.E. Coast	1 8	1 3	1 3	B	Heysham	N.W. Counties	1 7	1 2	1 2		Valley						
	Auckland					A	Howden	N.E. Coast	1 8	1 3	1 3	A <sub>3</sub>	Ripon	Yorkshire	1 6	1 2	1 6	1 2	
A	Blackburn	N.W. Counties	1 8	1 3	1 3	A	Huddersfield	Yorkshire	1 8	1 3	1 3	A	Rochdale	N.W. Counties	1 8	1 3	1 8	1 3	
A	Blackpool	N.W. Counties	1 8	1 3	1 3	A	Hull	Yorkshire	1 8	1 3	1 3	B	Rochester	S. Counties	1 5	1 1	1 5	1 1	
A	Blyth	N.E. Coast	1 8	1 3	1 3							A <sub>1</sub>	Rugby	N.W. Counties	1 7	1 2	1 7	1 2	
A	Bognor	S. Counties	1 4	1 0	1 0							A <sub>2</sub>	Runcorn	Mid. Counties	1 6	1 2	1 6	1 2	
A	Bolton	N.W. Counties	1 8	1 3	1 3							A <sub>3</sub>	Runcorn	N.W. Counties	1 8	1 3	1 8	1 3	
A	Boston	Mid. Counties	1 6	1 2	1 2														
B	Bournemouth	S. Counties	1 6	1 2	1 2							A <sub>2</sub>	ST. ALBANS	E. Counties	1 6	1 2	1 6	1 2	
B	Breray Tracey	S.W. Counties	1 5	1 1	1 1							A	St. Helens	N.W. Counties	1 8	1 3	1 8	1 3	
A	Bradford	Yorkshire	1 8	1 3	1 3							B	Salisbury	S.W. Counties	1 4	1 0	1 4	1 0	
A	Brentwood	E. Counties	1 7	1 2	1 2							A	Scarborough	Yorkshire	1 7	1 2	1 7	1 2	
A	Bridgend	S. Wales & M.	1 8	1 3	1 3							A	Scunthorpe	Mid. Counties	1 8	1 3	1 8	1 3	
B	Bridgewater	S.W. Counties	1 5	1 1	1 1							A	Sheffield	Yorkshire	1 8	1 3	1 8	1 3	
A	Bridlington	Yorkshire	1 7	1 2	1 2							A	Shiley	Yorkshire	1 8	1 3	1 8	1 3	
A	Brighouse	Yorkshire	1 8	1 3	1 3							A	Shrewsbury	Mid. Counties	1 6	1 2	1 6	1 2	
B	Brighton	S. Counties	1 6	1 2	1 2							A	Skipton	Yorkshire	1 7	1 2	1 7	1 2	
A	Bristol	S.W. Counties	1 8	1 3	1 3							B	Slough	S. Counties	1 5	1 1	1 5	1 1	
B	Brixham	S.W. Counties	1 4	1 0	1 0							A	Sollihull	Mid. Counties	1 7	1 2	1 7	1 2	
A	Bromsgrove	Mid. Counties	1 7	1 2	1 2							A <sub>2</sub>	South'pton	S. Counties	1 6	1 2	1 6	1 2	
C	Bromyard	Mid. Counties	1 4	1 0	1 0							B	Southend-on-	E. Counties	1 5	1 1	1 5	1 1	
A	Burnley	N.W. Counties	1 8	1 3	1 3							Sea							
A	Burslem	Mid. Counties	1 8	1 3	1 3	A	ILKLEY	Yorkshire	1 8	1 3	1 3	A	Southport	N.W. Counties	1 8	1 3	1 8	1 3	
A	Burton-on-	Mid. Counties	1 7	1 2	1 2	A	Immingham	Mid. Counties	1 8	1 3	1 3	A	S. Shields	N.E. Coast	1 8	1 3	1 8	1 3	
	Trent					B	Ipswich	E. Counties	1 6	1 2	1 2	A	Stafford	Mid. Counties	1 7	1 2	1 7	1 2	
A	Bury	N.W. Counties	1 8	1 3	1 3	C	Isle of Wight	S. Counties	1 4	1 0	1 0	A	Stockport	N.W. Counties	1 8	1 3	1 8	1 3	
A	Buxton	N.W. Counties	1 7	1 2	1 2							A	Stockton-on-	N.E. Coast	1 8	1 3	1 8	1 3	
												Tees							
B	CAMBRIDGE	E. Counties	1 6	1 2	1 2	A	JARROW	N.E. Coast	1 8	1 3	1 3	A	Stoke-on-	Mid. Counties	1 8	1 3	1 8	1 3	
B	Canterbury	S. Counties	1 4	1 0	1 0							Trent							
A	Cardiff	S. Wales & M.	1 8	1 3	1 3	A	KEIGHLEY	Yorkshire	1 8	1 3	1 3	B	Stroud	S.W. Counties	1 5	1 1	1 5	1 1	
A	Carlisle	N.W. Counties	1 8	1 3	1 3	B	Kendal	N.W. Counties	1 5	1 1	1 1	A	Sunderland	N.E. Coast	1 8	1 3	1 8	1 3	
B	Carmarthen	S. Wales & M.	1 6	1 2	1 2	B	Keswick	N.W. Counties	1 5	1 1	1 1	A	Swadlincote	Mid. Counties	1 8	1 3	1 8	1 3	
B	Carnarvon	N.W. Counties	1 5	1 1	1 1	B	Kettering	Mid. Counties	1 6	1 2	1 2	A	Swansea	S. Wales & M.	1 8	1 3	1 8	1 3	
A	Carnforth	N.W. Counties	1 7	1 2	1 2	A	Kiddermin-	Mid. Counties	1 7	1 2	1 2	B	Swindon	S.W. Counties	1 6	1 2	1 6	1 2	
A	Castleford	S. Counties	1 5	1 1	1 1	B <sub>2</sub>	ster												
B	Chatham	S. Counties	1 5	1 1	1 1		King's Lynn	E. Counties	1 5	1 1	1 1								
B	Chelmsford	E. Counties	1 5	1 1	1 1														
A	Cheltenham	S.W. Counties	1 6	1 2	1 2	A	LANCASTER	N.W. Counties	1 8	1 3	1 3	A	TAMWORTH	N.W. Counties	1 7	1 2	1 7	1 2	
A	Chester	N.W. Counties	1 8	1 3	1 3	A	Leamington	Mid. Counties	1 7	1 2	1 2	B	Taunton	S.W. Counties	1 5	1 1	1 5	1 1	
A	Chesterfield	Mid. Counties	1 8	1 3	1 3	A	Leeds	Yorkshire	1 8	1 3	1 3	A	Teesside Dist.	N.E. Counties	1 8	1 3	1 8	1 3	
B	Chichester	S. Counties	1 4	1 0	1 0	A	Leek	Mid. Counties	1 8	1 3	1 3	B	Teignmouth	S.W. Coast	1 6	1 2	1 6	1 2	
A	Chorley	N.W. Counties	1 8	1 3	1 3	A	Leicester	Mid. Counties	1 8	1 3	1 3	A	Todmorden	Yorkshire	1 8	1 3	1 8	1 3	
B	C																		



## 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 13 0
Pit gravel, per yd.	0 18 0
Pit sand, per yd.	0 14 6
Washed sand, per yd.	0 15 6
Screened ballast or gravel, add 10 per cent. per yd.	
Clinker, breeze, etc., prices according to locality.	
Portland cement, per ton	£2 19 0
Lime, per ton	2 10 0
Stocks 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

HARDWARE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup. 0 2 10

do. 6 in. thick, per yd. sup. 0 2 10

PUDDLING, per yd. cube 0 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.

LIME-CEMENT CONCRETE, per yd. cube £1 16 0

do. in lintels, etc., per ft. cube 1 7 0

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 yd.	£0 1 3
do. 6 in., per yd.	0 2 8
do. 9 in., per yd.	0 3 6
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0 6 9
do. 6 in., per yd.	0 9 2
do. 9 in., per yd.	0 10 0
Portland cement and sand, see "Excavator" above.	
Lead for caulking, per cwt.	£2 5 6
Gaskin, per lb.	0 0 5½

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 blues, add 25 per cent. per rod.

DO. in backs, 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

FLAUNCHING chimney pots, each 0 6 0

CUTTING and pinning ends of timbers, etc., in cement 0 2 0

FACINGS fair, per ft. sup. extra 0 1 0

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 10 0

ASPHALT ROOFING (MASTIC) in two thicknesses, ½ in., per yd. 0 8 6

DO. SKIRTING, 6 in., per yd. 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. firer, 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, at 2½ in., per yd. super	0 6 6
York templates 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, 33½ 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.

States, 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. x 12 in. £42 11 3 £45 1 0

20 in. x 10 in. 31 4 3 33 0 6

16 in. x 10 in. 20 18 0 22 4 9

14 in. x 8 in. 12 1 0 12 16 3

Green Randoms, per ton 8 3 9

Green-green do., per ton 7 3 9

Green pebbles, 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. £5 18 0

Hand-made tiles, per M. 5 8 0

Machine-made tiles, per M. 9 0 0

Westmorland slates, large, per ton 7 5 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. x 12 in. £5 0 0 £5 2 0

20 in. x 10 in. 5 5 0 5 10 0

16 in. x 10 in. 4 15 0 5 1 0

14 in. x 8 in. 4 10 0 4 15 0

Green Randoms 6 7 0

Green-green do. 5 9 0

Green pebbles, 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 18s. 0d. 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 Specification, etc. (equal to 2nds):

7 x 3, per std. £20 0 0

11 x 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. x 11 in., per std. 30 0 0

Wainscot oak, per ft. sup. of 1 in. 0 2 0

DO. Cuba, per ft. sup. of 1 in. 0 3 0

Teak, per ft. sup. of 1 in. 0 3 0

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 33½ 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 segmental soffits, 4½ in. wide, per ft. run 0 0 4½

DO. 9 in. wide and over, per ft. run 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, 1 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, 1 1/2 in. thick, laid complete with splayed headings, per square	2 5 0
DEAL skirting torus, moulded 1 1/2 in. thick, including grounds and back-lings, 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. 1 1/2 in. thick, per yd. sup.	0 12 0
Maple 1 1/2 in. thick, per yd. sup.	0 15 0
DEAL moulded sashes, 1 1/2 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, 1 1/2 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, 1 or 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. x 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 1 1/2 in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0 2 6
DEAL wall strings, 1 1/2 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
4 1/2 in. x 3 in. oak fully moulded handrail, per ft. run	0 5 6
1 1/2 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
1 1/2 in. beaded cupboard fronts, moulded and square, per ft. sup.	0 2 9
TEAK grooved draining boards, 1 1/2 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 1s. 9d. per hour; MATE, do. 1s. 4d. per hour; ERECTOR, 1s. 9d. per hour; FITTER, 1s. 9d. per hour; LABOURER, 1s. 4d. per hour.

Mild steel in British standard sections, per ton	£12 10 0
Sheet steel:	
Flat sheets, black, per ton	19 0 0
Do., galv., per ton	23 0 0
Corrugated sheets, galv., per ton	23 0 0
Driving screws, galv., per grs.	0 1 10
Washers, galv., 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
WROUGHT 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, 1s. 9d. per hour; MATE OR LABOURER, 1s. 4d. per hour.

Lead, milled sheet, per cwt.	£2 4 6
DO. drawn pipes, per cwt.	2 6 0
DO. soil pipe, per cwt.	2 8 0
DO. scrap, per cwt.	1 9 6
Copper, sheet, per lb.	0 1 0
Solder, plumber's, per lb.	0 1 2
DO. fine, per lb.	0 1 5
Cast-iron pipes, etc.:	
L.C.C. soil, 3 in., per yd.	0 4 1
DO. 4 in., per yd.	0 5 0
R.W.P., 2 1/2 in., per yd.	0 2 0
DO. 3 in., per yd.	0 2 5
DO. 4 in., per yd.	0 3 3
Gutter, 4 in. H.R., per yd.	0 1 5
DO. 4 in. O.G., per yd.	0 1 9
MILLED LEAD and labour in gutters, flashings, etc.	3 12 6
LEAD PIPE, fixed, including running joints, bends and tacks, 1 in. per ft.	0 2 1
DO. 1 in., per ft.	0 2 5
DO. 1 in., per ft.	0 3 3
DO. 1 1/2 in., per ft.	0 4 6
LEAD WASTE or soil, fixed as above, complete, 2 1/2 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, 1/2 in., each	0 2 6
DO. 1 in., each	0 3 2
DO. 1 1/2 in., each	0 3 8
BRASS screw-down stop cock and two soldered joints, 1/2 in., each	0 11 0
DO. 1 in., each	0 13 6
CAST-IRON rainwater pipe, jointed in red lead, 2 1/2 in., per ft. run	0 1 6
DO. 3 in., per ft. run	0 1 11
DO. 4 in., per ft. run	0 2 9
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, 1s. 9d. per hour (plus allowances in London only); LABOURER, 1s. 4d. per hour.

Chalk lime, per ton	£2 17 0
Hair, per cwt.	0 18 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 bd.	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	3 2 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, 1/2 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, 1s. 8d. per hour.

Glass: 4ths in crates:	
Clear, 21 oz.	£0 0 5
DO. 26 oz.	0 0 5 1/2
Cathedral white, per ft.	0 0 7 1/2
Polished plate, British 1/2 in., up to 2 ft. sup.	0 1 8
DO. 4 ft. sup.	0 3 2
DO. 6 ft. sup.	0 3 4
DO. 20 ft. sup.	0 3 11
DO. 45 ft. sup.	0 4 1
DO. 65 ft. sup.	0 4 3
DO. 100 ft. sup.	0 4 6
Rough plate, 3/8 in., per ft.	0 0 6 1/2
DO. 1/2 in., per ft.	0 0 7
Linseed oil putty, per cwt.	0 17 6
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 1s. 6d. to 2s. 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, 6d. to 8d. per ft. according to size.

## PAINTER AND PAPERHANGER

PAINTER, 1s. 8d. per hour; LABOURER, 1s. 4d. per hour; FRENCH POLISHER, 1s. 9d. per hour; PAPERHANGER, 1s. 8d. per hour.

Genuine white lead, per cwt.	£3 11 0
Linseed oil, raw, per gall.	0 3 7
DO., boiled, per gall.	0 3 10
Turpentine, per gall.	0 6 2
Liquid driers, per gall.	0 9 6
Knottling, per gall.	1 4 0
Disperser, washable, in ordinary colours, per cwt., and up	2 0 0
Double size, per firkin	0 3 6
Pumice stone, per lb.	0 0 4
Single gold leaf (transferable), per book	0 1 11
Varnish, copal, per gall. and up	0 18 0
DO., flat, per gall.	1 2 0
DO., paper, per gall.	1 0 0
French polish, per gall.	0 19 0
Ready mixed paints, per gall. and up	0 10 6
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 2 1/2
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 2 1/2  
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, 5/8 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, 5/8 in. punched per M. grey . . . 16 0 0  
DO., red . . . 18 0 0  
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average 1/2 in. thick, in plain colour, per yd. sup. . . 0 7 0  
DO., 1/2 in. thick, suitable for domestic work, unpunched, 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.

work, unpolished, per yd.	0	6	6						
<div>⤵</div>									
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6						
DO., in metal frames, per ft. sup.	0	1	9						
<div>⤵</div>									
HANGING only metal casement in, but not including wood frames, each	0	2	10						
<div>⤵</div>									
BUILDING in metal casement frames, per ft. sup.	0	0	7						
<div>⤵</div>									
<b>Waterproofing compounds for cement.</b>									
Add about 75 per cent. to 100 per cent. to the cost of cement used.									
<div>⤵</div>									
<b>PLYWOOD, per ft. sup.:</b>									
Thickness	$\frac{3}{8}$ in.		$\frac{1}{2}$ in.		$\frac{3}{4}$ in.		$\frac{1}{2}$ in.		
Qualities	A.A.	A.	B.	A.A.	A.	B.	A.A.	A.	B.
Birch	4	3	2	5	4	3	7	6	5
Alder	3	2	5	4	3	6	5	4	3
Gaboon	4	3	5	4	3	6	5	4	3
Malabany	4	3	5	4	3	6	5	4	3
Figured (Oak)	4	3	5	4	3	6	5	4	3
1 side	8	7	10	8	11	10	11	10	9
Plain Oak	6	5	7	6	9	8	10	9	8
Oregon Pine	5	4	6	5	8	7	9	8	7



1 1  
1 4  
span

3 0  
per ft.

GER  
s. 41d.  
hour;

11 0  
3 7  
3 10  
6 2  
9 6  
4 0

0 0  
3 6  
0 4

1 11  
18 0  
2 0  
0 0  
19 0  
10 6

0 3  
0 6

0 9  
0 7

0 10  
0 9  
1 2½

3 8  
5 6  
1 2  
0 6

1 7  
1 10  
2 4  
9 0

3 0

1 2

0 11

0 2½

0 6

1 7

2 8

2 3  
3 3

4 0  
5 0

15 0  
0 0

0 0  
0 0

7 0

6 6

1 6  
1 9

2 10

0 7

½ in.  
A. B.  
d. d.  
7 6

0 10 —

5 — —

0 — —



Chapel at Luton; ceiling lined with "Essex" Board, manufactured by Thames Board Mills, Limited, Purfleet, Essex.

# BRITISH FIBROCEMENT WORKS

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LTD.

## ASBESTOS-CEMENT MANUFACTURERS

### "FIBROTILES"

(Sizes—4 ft. x 3 ft. 10 ins.)

### CORRUGATED SHEETS

Sizes—4 ft. to 10 ft.

Width—30 inches.

$\frac{1}{4}$ " thick.

### "FIBRO FIVES"

45 ins. wide.

### 5" CORRUGATIONS

Lengths 4 ft. to 8 ft.



### CURVED SHEETS TO ANY RADIUS

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12" x 12", 15 $\frac{1}{2}$ " x 7 $\frac{1}{2}$ ", 15 $\frac{1}{2}$ " x 15 $\frac{1}{2}$ ",  
24" x 12", 24" x 24"

Duchess and Ladies size for straight cover, colours, Grey, Red, Blue-Black, and Antique Brown.

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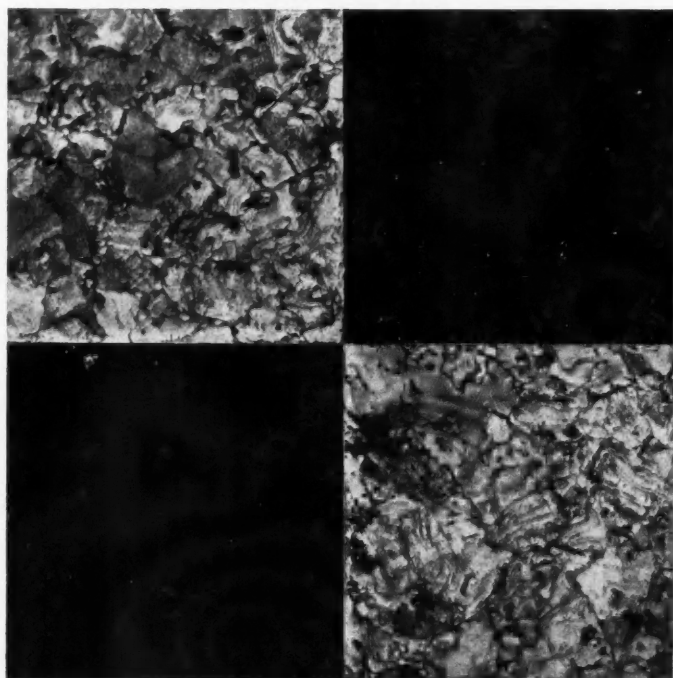


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their opinion of EXPANCO  
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