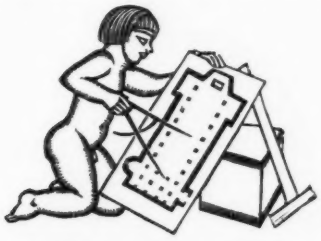
THE ARCHITECTS' JOURNAL



THE ARCHITECTS' JOURNAL
WITH WHICH IS INCORPORATED THE BUILDERS' JOURNAL AND THE ARCHITECTURAL ENGINEER IS PUBLISHED EVERY WEDNESDAY BY THE ARCHITECTURAL PRESS (PROPRIETORS OF THE ARCHITECTS' JOURNAL, THE ARCHITECTURAL REVIEW, SPECIFICATION, AND WHO'S WHO IN ARCHITECTURE) FROM 9 QUEEN ANNE'S GATE, WESTMINSTER, S.W.

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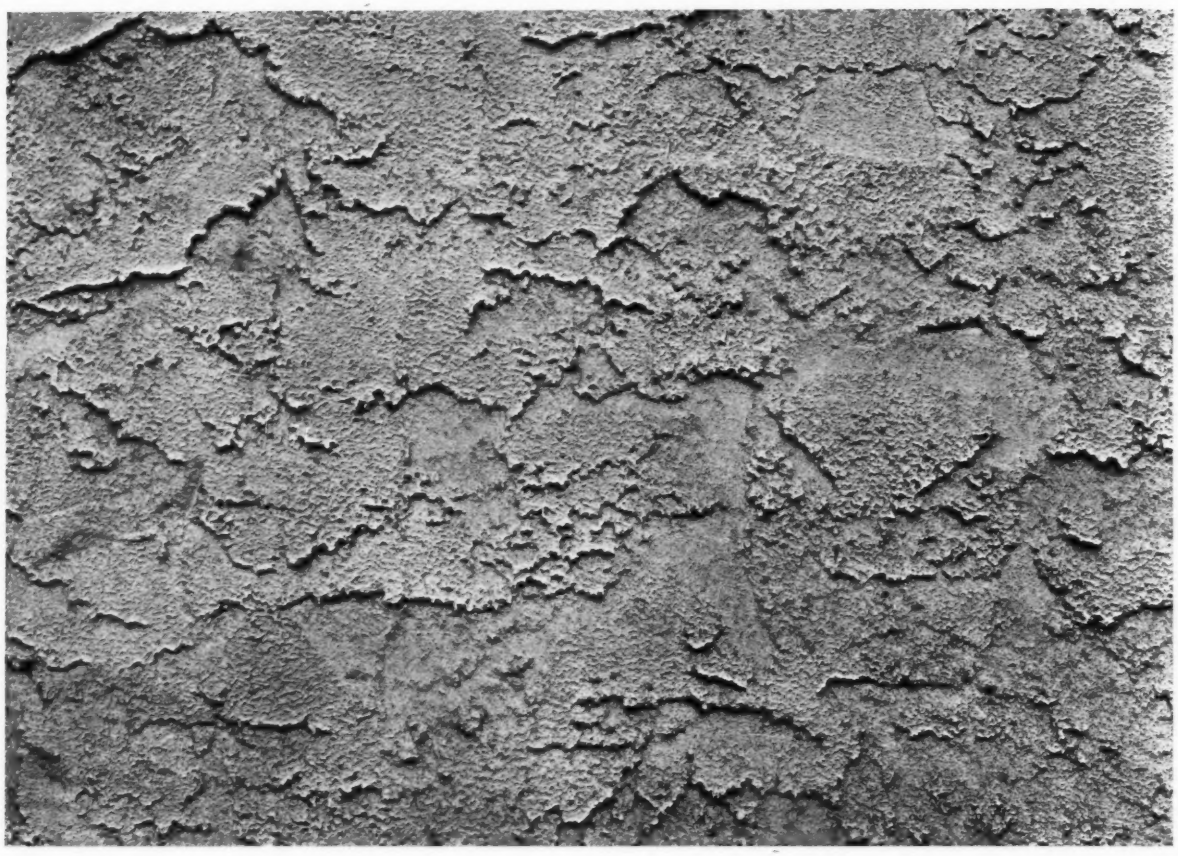
CHRISTIAN BARMAN, *Editor*

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

WEDNESDAY, AUGUST 24, 1927. NUMBER 1701: VOLUME 66

PRINCIPAL CONTENTS



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Frederic Toleman

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

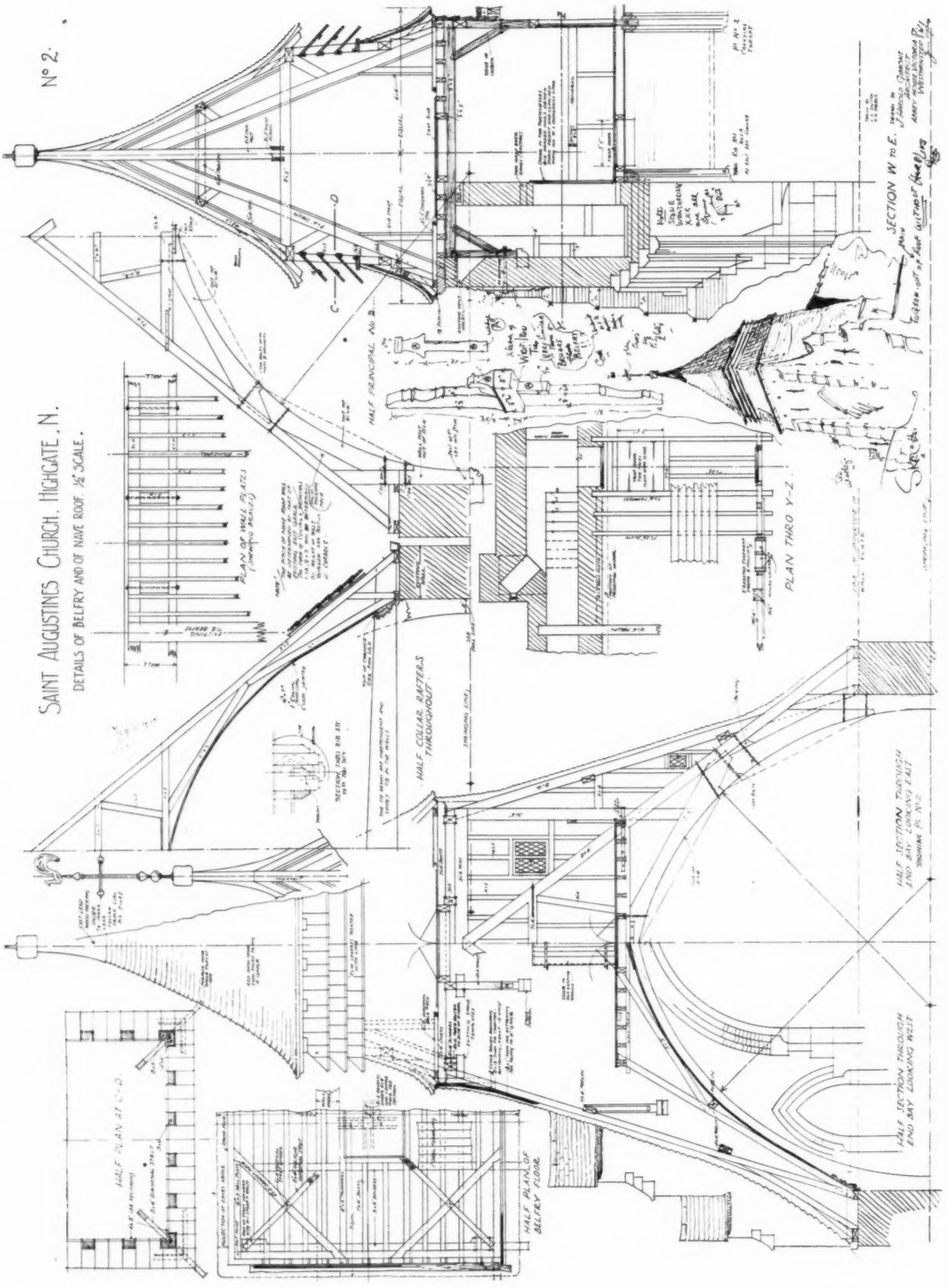
SAINT AUGUSTINE'S CHURCH, HIGHGATE. DETAIL OF BELFRY

[BY HAROLD GIBBONS]

THE WEEK'S DETAIL

[BY HAROLD GIBBONS]

The belfry is roofed with red hand-made sand-faced tiling laid to a four-inch gauge, with purpose-made angle tiles at the hips. The finial is covered with cast lead with wood packing under to make it follow same line as tiles. The louvres are elm treated with lime.



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

THE ARCHITECTS' JOURNAL

Wednesday, August 24, 1927

THE ARCHITECT'S LIABILITY

WHEN is an architect *not* held to be liable? This question must have occurred to the minds of many practitioners who, in common with other readers of the morning papers, were lately shocked by the news that part of a substantial building in the City had avalanched into the excavations preparing for a new structure next door in circumstances which might well have caused tragical loss of life. An architect's responsibilities are so much a condition of his work that he becomes unconscious of them, but it is to them that is due the lively zest and enthusiasm with which he habituates himself to foreseeing and overseeing everything, and getting his buildings soundly, economically, and expeditiously erected. There is a well-remembered saying of "David Harum": "It is a good thing for a dog to have a certain number of fleas; it keeps him from brooding on being a dog," and the unnumbered vagrant cares which infest an architect, extending even to responsibility for the acts of those who are not under his direct orders, and which keep him busily remembering himself all over are among the most salutary circumstances of his calling. An architect, in fact, glories in his responsibility even as a military officer does in his command. Yet the fact that an important building in the heart of the capital city of the Empire, and in spite of extravagant safeguards enforced by law and interpreted by an official of high technical and practical attainments, may be so designed by a competent architect and executed by an experienced builder as to bring the adjoining structure crashing into the excavations prepared for its foundations, must "give us pause." Architects are likely to take stock of how they stand. Many of them will feel conscious that like "poor Jack" in the old song they have in the past been indebted to a "dear little cherub that sits up aloft," for most architects are aware of narrow squeaks. The question presented to architects by the accident in Cornhill is not so much, What are my liabilities?—for they will often enough have taken stock in that particular—but rather, For what am I *not* liable?

A year or two ago, during the hearing of a case which had nothing to do with architects or building, the judge on the bench admonished the Court in these words: "I am not here to give justice, but to administer the law." The fact that such a pronouncement takes those who are not conversant with legal matters aback, is an indication that there is a wide misconception as to the purpose of the law and the meaning of justice. The law *is* justice; but it is justice with a wider base and more deeply-rooted than the somewhat sentimental balance of give-and-take which the word "justice" is generally supposed to connote. When, as was lately set forth in these columns, an architect's clerk makes a mistake and the architect is led to certify for the payment of the same goods to two different parties, and the judges decide not that the person overpaid must refund, but that the architect is liable, they are not concerned with the hardship to the architect, but—we may imagine—with the principles laid down by Binks (J.) in delivering judgment in the case of *Goldstein* v. *Bladdock* seventy-one years ago, which had to do with the hire of a dress suit. A judge's speciality is to be right; every judgment is not merely a decision in a particular case, but an addition to the law; a thing which may, in years to come, be quoted as a precedent. It is the affair of the law to be consistent so that all may know what to expect and shape their actions accordingly. This, after all, is part and parcel with the rule of life imposed by a greater Lawgiver. If we go into fire we are burnt, and if into water we are drowned; whether we go there by mischance or with mischievous intent, or with an heroic motive, makes no difference. There is a certain cast of mind which resents the divine rule; among intellectuals Ibsen, Tchekov, and our own Galsworthy display this tendency; and we meet every day persons who set up the standard of a "pistareen providence," as Emerson calls it, and find cause for discontent because nature does not conform to it.

A broader and more sane view, however, perceives in the ups and downs of life the origin of all that is estimable in manhood and womanhood; the source of courage, cheerfulness, firmness, initiation, and perseverance. So, too, it is his responsibilities—of which "liability" is the crude appraisement—that dignify the architect and endow his calling with such respect and esteem as is associated with it. It is not the piling up of responsibility which the architect resents, but any interference with it—any indication that he is not to be called upon to accept it in full measure. And, after all, what is the full measure of the liability which the law has allotted to him? It seems to us that the architect receives such ample acknowledgment for the risks he runs that we are ashamed to set it down in figures. The figures, however, have been estimated by skilled actuaries and persons have been found who are satisfied of finding profit by accepting the rates of insurance quoted by the Architects', Engineers', and Surveyors' Defence Union. Be it known, then, that any architect can abrogate the whole of his liabilities, to the extent of no less than £5,000, in consideration of a yearly premium of three pounds thirteen and sixpence.

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

NEWS AND TOPICS

THE BIRMINGHAM CIVIC CENTRE COMPETITION—THE PRESERVATION OF RURAL . . . SCOTLAND!—A HOLE IN THE ROAD

BIRMINGHAM has long been famed for its civic enterprise; nevertheless, I cannot help wondering how much of the vast scheme for reconstructing the centre of the city will ever be realized. Surely nothing on so big a scale has been attempted since Haussman remodelled Paris. When one thinks of the deliberation necessary today before a public authority can acquire a single building for demolition, one is astounded at the audacity of a scheme which depends upon the clearance of acres of buildings situated almost in the centre of the city. Is there a body powerful enough today to authorize the spending of such millions? Of course, every architect and town planner must hope to see the scheme adopted, especially since the winning design by M. Maximilian Romanoff would yield a truly magnificent civic centre of which any town in the world might be proud. I am not surprised that the existing Hall of Memory has not been allowed to govern the scheme. M. Romanoff has contented himself by incorporating it in a subsidiary position. Of course, it is a great pity that the design for the Hall of Memory was not deferred and made part of this larger scheme. But such forethought and co-ordination would have been contrary to the national character.

* * *

M. Romanoff's scheme is brilliant and audacious and fearlessly iconoclastic, ignoring the existence of most of the present municipal buildings; and perhaps rightly, for most of them, with the exception of Hanson's Town Hall, are eminently Victorian and dull. The winners of the £200 supplementary premiums—G. Niedermann and K. Hippenmeier, of Zurich, and L. M. Austin, of Heston, Middlesex—continue to incorporate these buildings in their schemes, and give, too, more prominence to the Hall of Memory. Both of them open up the view of the Town Hall. But Mr. Austin's plan suffers from too much complexity; it is, in fact, a series of minor schemes which are imperfectly co-ordinated. Traffic is an important consideration in a scheme of this kind, and simplicity of movement must be aimed at; moreover, clear-cut lines should enable drivers of vehicles to maintain a sense of direction. There is a certain similarity between Mr. Austin's plan and that of Oulie-Hansen, of Oslo, who was awarded one of the £100 supplementary premiums; both of them show a wedge-shaped open space between the change of direction in Broad Street and the existing Art Gallery, making its axis pass through the Hall of Memory. Supplementary premiums of £100 were also awarded to E. Prentice Mawson, of London, and Adams, Thompson and Fry, of London. I would congratulate the Birmingham City Fathers on the result of the competition, and I devoutly hope that they may have the means and the courage—for it will need as much of the one as of the other—to realize the winning project. Then, indeed, they will have set an example that London itself may one day be induced to follow.

* * *

I confess that it gave me somewhat of a shock to read the Kent Chief Constable's appeal to the public to volunteer for point duty on our main roads. Perhaps I am a little old-fashioned in these matters. If I am, it is not because I do not appreciate the pleasures and advantages of motoring. I do. I would sooner motor than train into the country any day, even in that sort of August weather which my children will no doubt describe as of the 1927 vintage. But I also realize that I, as an occasional motorist, have no claim to the voluntary assistance of the whole of society merely because I buy a car or find myself invited into one. What, I wonder, would Parliament have said to the early railway companies if they had asked the public to do their signalling for them? Motorists really want to have it too much their own way. The other day they complained that they could not go to church unless they were given space for their cars in the rectory garden. And now they want us to stand and signal for them. Of course, it may be a very good thing for people to spend their leisure hours signalling to passing motor-cars; but why not extend the same courtesy to the railways? And why not let the Midland Railway park its trains in Russell Square and in our rectory gardens? But no one has suggested this so far. I do not wonder the railways are suffering grievous losses; serves them right for trying to look after themselves! Why, they even build subways and bridges for pedestrians, which is surely the height of folly and extravagance! Catch the motorist squandering his Road Fund on pedestrians!

* * *

I am glad to hear that the Association for the Preservation of Rural Scotland has made a good start. The Earl of Crawford, who is the enthusiastic president of the English body with similar aims, is honorary president of the Scottish organization. The Earl of Haddington is president; Sir John Stirling Maxwell, vice-president; and the Hon. Lord Constable, chairman of the Executive Committee. The object of the two associations is similar, for both in England and Scotland they have been founded in order to focus public attention on the problems of how best to maintain unspoiled the beauty of our countryside. The central valleys of East Lothian, the coastal fringe of Fife, the valley of the Tweed, and the Highlands, make an appeal at this time of the year to all tourists, some of whom, maybe, do not realize how much the beauty of natural scenery may be marred by a single badly designed house or an industrial road being set down in the wrong place. When the materials used are foreign to the district the disfiguring effect is the more intensified. There is a strong committee in Scotland already at work, which includes Mr. G. D. MacNiven, who, like his colleague in the English Ministry of Health, Mr. George Pepler, is an enthusiast on the question of proper planning as a means of resisting the evil effects of the increasing suburbanization of the countryside.

* * *

St. Thomas's Hospital is now to be reckoned among the more or less distinguished invalids. It, too, is suffering from the epidemic of super-vibration. For the moment it is not on the danger list, and its condition causes vague uneasiness rather than positive alarm. Minor operations have given it temporary relief, several weak chimney-stacks having had to be restored to a healthier state. Sir Arthur Stanley, treasurer to the hospital, attributes their malady—which I take to be a sort of incipient falling sickness—to two main causes: one, deterioration of mortar; and, two, an increasing vibration that is distinctly affecting the whole sevenfold building. Unhappily, there are complications which tend to make the case rather uncertain of prognosis.

When, says Sir Arthur, the Albert Embankment, between Westminster and Lambeth Bridges, was formed, great care was taken to provide efficient concrete foundations. But he was bound to admit the bitter truth that "increasing vibration, by the heavy weight and rapid pace of traffic, throws a severe test on buildings, however admirably they may have been built fifty years ago." This is rather an under-statement of the lapse of time. It is on the records that Currey began to build St. Thomas's in 1868, and that the building was finished in 1871, so that its seven red-brick pavilions have been familiar features of south-west London for nearer sixty years than fifty. Moreover, the infirmities of age are complicated by the disquieting fact that the greater part of the hospital rests on "made ground" reclaimed from the river when the Embankment was constructed. Altogether, the case seems to call for consultation with eminent specialists rather than what I venture to call a house surgeon. I imagine that the specialists would recommend removal to country air. Eminent medical contributors to our special hospital numbers seemed to be in agreement that great hospitals and great cities mate not well together, and this opinion cannot be shaken by swift and heavy traffic.

* * *

At Victoria Station, the Southern Railway Company has set a notable example of route indication. Its improved system shows quite clearly not only the ultimate destination of the train, but also the intermediate stopping places. I commend to municipalities and local authorities generally the adaptation of this excellent idea to road-signs on our highways and byways, so that motorists and pedestrians may obtain with ease all the guidance on their inland travels. This counsel applies with even more force to town than to country. My recommendation, put briefly, is that every main road should be legibly labelled, with large white lettering on a dark background, and that immediately beneath the large lettering indicating main roads, smaller lettering should denote subsidiary turnings. Further, I would have all town street-labels illuminated by night. Granted that such a system would be costly, I contend that the loss of time consequent on the present scandalous failure to provide such guidance is a hundred-fold more costly. Those who have experienced—as who has not?—the miseries of groping one's way about in a London suburb by night, or even by day, will agree with me in condemning as utterly indefensible the neglect to make our ways plain.

* * *

A house in Greenwich that is now being restored is said to have been a sometime abode of the egregious Samuel Pepys. Walking forth in search of it the other day, I had to pass Vanbrugh Castle, which, so the legend runneth, Sir John Vanbrugh designed in reminiscence of the Bastille, in which, for his sins, he was immured awhile. This Vanbrugh building diverted me from the real objective of my journey and set me meditating that Pepys and Vanbrugh were not so very widely separated by time, locality, and temperament. True, Pepys was some thirty years the senior of Vanbrugh, but both were romantics, and I like to imagine that, both walking a good deal in Greenwich, the twain may sometimes have met on the summit of Maze Hill, whereon Vanbrugh built his alleged castle, and whence may be had a spacious view of the Thames and its shipping. This view is, indeed, so delightful, that Pepys may well have thought it worth a day's journey—say from his house in Clapham—to glimpse it once again. So methinks there is no need to assume that he lodged in the villa at Croom's Hill when, as I am pleased to conjecture, he and Vanbrugh met on common ground at the castle, where Pepys, looking reminiscently at the river, grew garrulous in recounting memories of the palmy days when he made his pile as "Clerk to the Acts of the Navy." When I am told that much sound old British oak is to be found in that house on Croom's Hill, and that this timber is assumed to be salvage from broken ships, I am obsessed by the reflection that Pepys is said to have made a considerable fortune from his pickings (not necessarily stealings) during the period of his clerkship.

* * *

Those who have testified to the possibility of movement in the subsoil of London and of its damaging effects in connection with roads and buildings may claim that their views are justified by the strange accident which befel a loaded coal cart in Sherborne Lane in the City on Friday, last week. One wheel of the cart burst through the concrete surface of the road and sank up to its hub into a vacant space. One explanation of the formation of the cavity is that the earth had been carried away particle by particle by the heavy rain soaking into a neighbouring drain, but the statement issued by an official of the City engineer's department contains a different kind of solution. "It was just a hole in the road due to the weight of the coal, and probably to the wet state of the ground beneath the surface. It was not a serious subsidence, and there is no reason to connect it in any way with the Cornhill subsidence." As Sherborne Lane is only between one and two hundred yards distant from Cornhill this denial is not altogether convincing, and it is at least possible that similar conditions have produced similar results in the two places, though the importance and extent of the damage is trivial in the one case and very considerable in the other.

* * *

The treatment of garden paths is described by a contributor to the *Daily Mail* in a manner that should prove useful to architects and garden lovers, and his suggestion that the colours of the flowers in the edging should be selected to compose well with the colour of the path is in accordance with a sound principle of colour decoration. Perhaps the statement that bricks of a red hue "will tone down and become satisfactorily weathered before long" is somewhat optimistic, for we are all too painfully aware of certain types of red brick which refuse to grow old gracefully; but the gardener who follows the hints with discrimination will probably be saved from employing them. One of the redeeming features of the bungalow is that it is possible to hide it with vegetation in considerably less time than would be taken in the case of a two-story building, but if the bricks are red and shiny, the attempt to improve matters may be worse than useless if gaudy pink is selected for part of the camouflage of blossom. A lot can be done to mitigate the hardness of a new building by the judicious employment of flowers and foliage, but for those whose colour sense has not been developed by practice, the advice of an experienced garden-planner is necessary.

ASTRAGAL

MACHINE MOTIVES IN DECORATION

[BY KINETON PARKES]

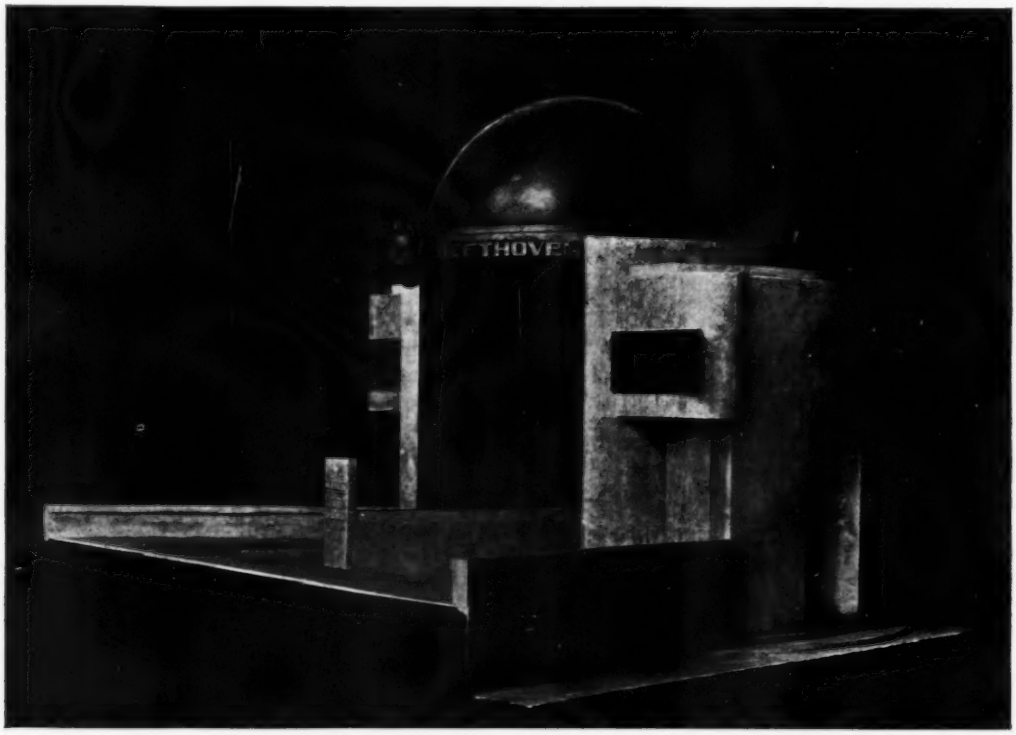
WHEN man lived in a state of nature he knew only natural things. As an artist he was impelled to represent the things he loved, and he therefore sculpted or painted what he saw; or if he happened to be an abstractionist, his genius, turning towards architecture, encouraged him to the construction of forms which Nature did not offer. Man now lives in a state of mechanism, and quite logically his invention as an artist turns to mechanical motives for representation. There is nothing more wonderful than a steam hammer thumping a white-hot ingot of steel with a pressure of 10,000 tons. It is an inspiring motive to a painter. The mechanism of a pit-head holds suggestion to the landscapist which, before the mechanical age, was never forthcoming. The howitzer did not exist for the sculptor of the past, but Charles Jagger has shown its plastic qualities in his artillery memorial at Hyde Park Corner.

These new forms come into being with the advance of civilization, and art is bound to take cognizance of them. The rich landowner commissions the painter to give him a counterfeit presentment of the most picturesque part of his domain, and it is only sensible that the millionaire millowner should commission another to give him a picture of the wonderful contrivances in their proper surroundings of the sources of his wealth.

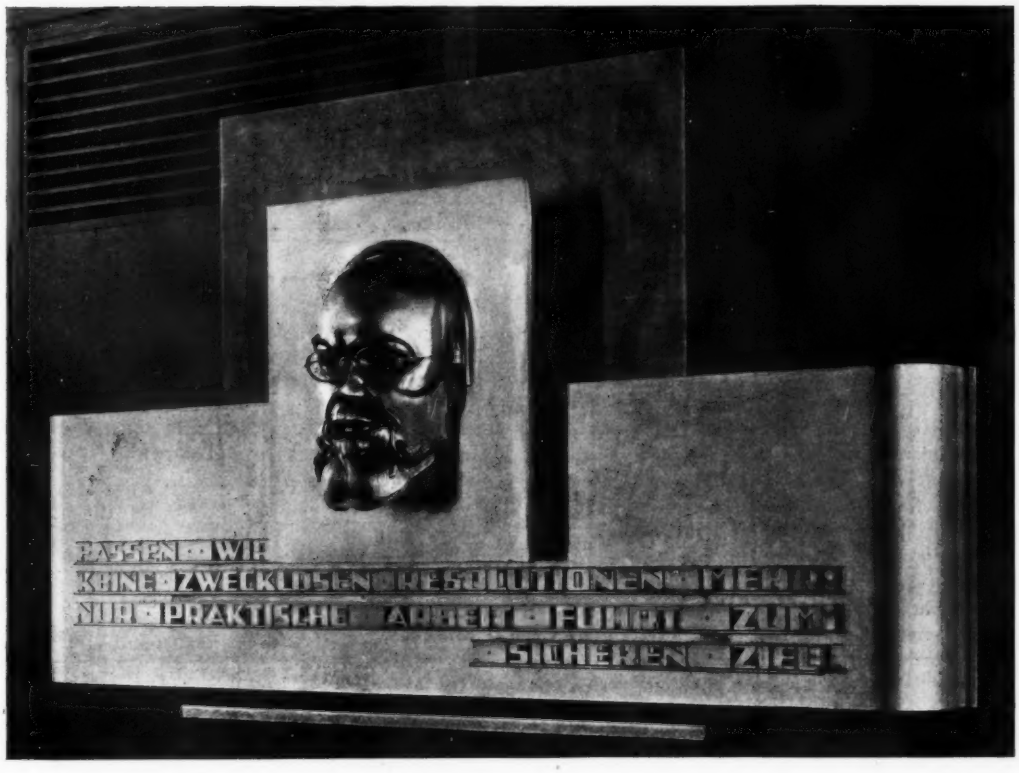
The machinery age calls for its appropriate painting, sculpture, and architecture; even for its music and poetry, lyric and dramatic, as it does for its fiction. It is no less inhuman than the pastoral age; indeed, the intricacies and subtleties of human life are infinitely extended by the new factors that arise from machine production and mass assemblage. The machinery age calls for its artists.

If the rich manufacturer prefers to demand from the architect a Palladian palace in which to live, that is his and the architect's affair; a mere matter of taste, misplaced or otherwise, according to opinion; but the manufacturer as such has to demand of the architect a building for use when he is considering his factory or mill. There is no reason why this should not be as beautifully builded as his classical hall, for there are elements of beauty awaiting discovery in every direction, and the greatest beauty of all is the beauty that admits and ensures utility. The mechanical motive is offering itself daily in the service of beauty, and it is up to the maker of beauty—the artist—to rise to the occasion.

Some there are who can and do: men tried in the rigid school of classicism, which only admits art and often deplores Nature; men trained to special and ever-recurring shapes and conventions, which they are learning how to escape from. Rudolf Belling is one of them. He is a Berliner, born in 1886, trained as a modeller, carver, and metal craftsman. He is a German with an open mind, keen on finding out, and his research is into new form. His new forms appear in the guise of architectural decoration based on mechanical motives and mechanical principles. He works naturalistically, too, and when he makes a portrait bust he makes a portrait after Nature. When he indulges his fancy for the abstract he makes strange shapes of heads and figures which more or less remotely resemble

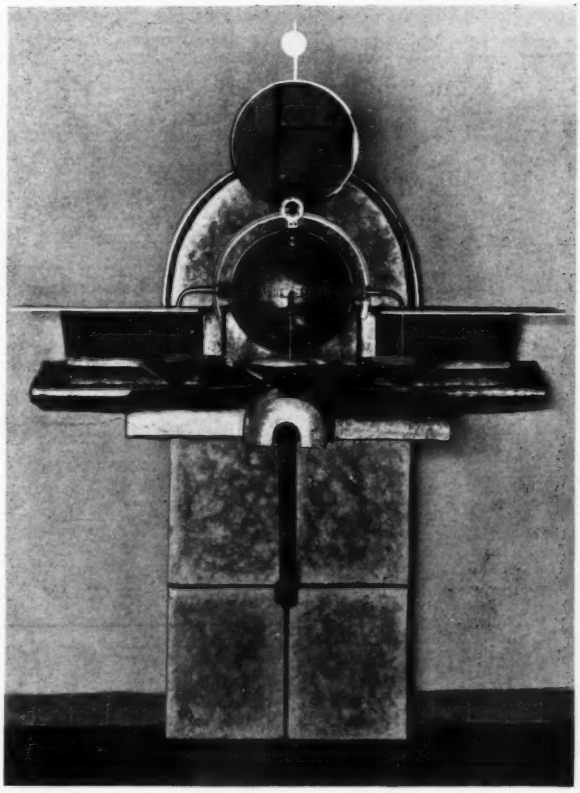


Beethoven Grave Memorial. By Rudolf Belling.



human forms, but adapted to the theory of three-dimensional space which he has evolved. He thinks in terms of the shape of the space occupied by solid forms, rather than in the matter itself. When he uses machine motives he is naturalistic in the expression of their form value, but he adapts his mechanical forms to the requirements of his plastic purposes.

These purposes are mainly of an architectural character. Fountains and monuments on an intimate scale have hitherto occupied him: a pottery fountain in the Scala Casino, designed by W. Würsbach; a pottery and metal fountain for a Berlin house, by Arthur Korn; and a decorative object, somewhat urn-shaped, carried out in polished nickel and brass of abstract design. A very intriguing fountain in the hall of the General Workers' Alliance at Düsseldorf presents a quite original conception in architecture, only possible in metal work because of its airiness of pattern and delicacy of construction. It is like a piece of machinery that may be seen in cotton spinning or in the mills of the weaving centres, where the highest types of complicated mechanism are in use, such as in braid-weaving and stocking-making. It is a fine essay in pure mechanical line, surmounted by a sphere that satisfies the demand of design. A sphere also appears, symbolically, in the striking model for a Beethoven grave memorial, with a portrait mask and simple but imposing architectural setting; a setting which is used effectively also in a mural arrangement for the display of the silvered-bronze mask of Richard Haertel, the founder of the Book Printers' Guild, in the waiting-room of his book printing establishment, the design enhanced by effective lettering in relief. In the same apartment there appears one of the most effective pieces of ornament in which mechanical factors are exclusively used. The shapes are welded into a design of purely decorative intention in the form of a printer's



Above, portrait mask in architectural setting. Below, wall fountain. By Rudolf Belling.

escutcheon or coat-of-arms, carried out in coloured ceramic and polished brass, including the principal tools of the craft. Another piece of applied architectural work is a wall-fountain in ceramic and nickel, in which the actual taps, pipes, bowls, mirror, and other accessories are welded into a thoroughly plastic design. It is in such practical directions as these that the application of the new view of architectural-sculptural decoration with the new motives derived from the world of mechanism instead of naturalism substantiates its claim to authenticity.

Above, fountain. Below, wall escutcheon. By Rudolf Belling.

THE ADVERTISING EXHIBITION

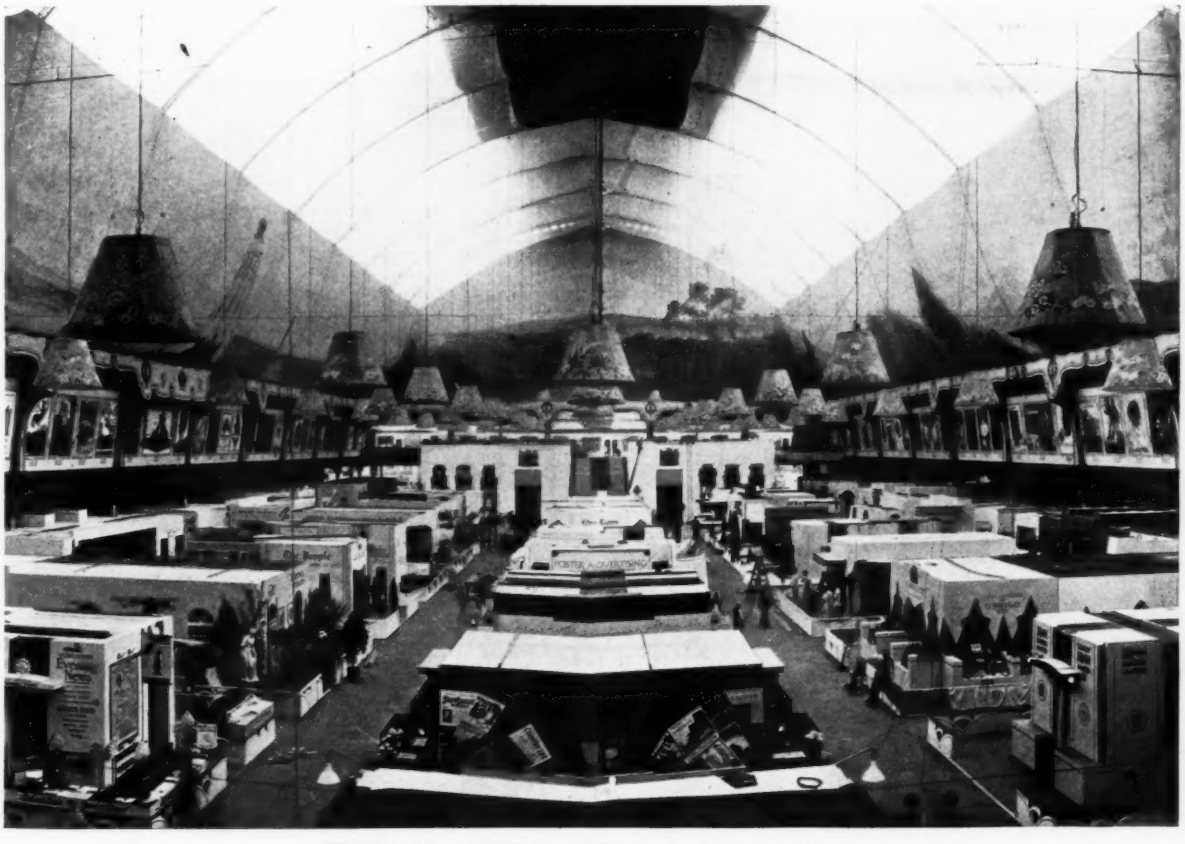
[BY ERIC L. BIRD]

LONG before the Gothenburg and Paris exhibitions set a standard for the twentieth century THE ARCHITECTS' JOURNAL was advocating the appointment of an autocratic architectural director for every exhibition. Until the recent Advertising Exhibition at Olympia it has escaped the notice of promoters that small exhibitions need any such directorate. Great undertakings like Wembley usually come in for a measure of co-ordination and the necessity for providing separate buildings affording some sort of housing for the exhibits demands fairly clearly some sort of architecture. But the numerous small exhibitions, such as are held at Olympia, and inside similar halls—which might well be labelled "interior exhibitions"—are not architecturally considered in the least. Therefore this Advertising Exhibition is a notable step forward.

The Advertising Association and its kindred bodies wisely appointed a strong executive committee, and were fortunate in obtaining Sir Lawrence Weaver as the chairman. As is generally known, Sir Lawrence has much experience of exhibitions, and, what is more important, he has firm opinions as to the nature and possibilities of modern exhibition architecture. The committee selected Mr. Joseph Emberton as its directing architect and backed him up with the fullest powers. It may be remembered that Mr. Emberton was responsible for the imaginative State Express building at Wembley, as well as for several of the smaller and more original kiosks.

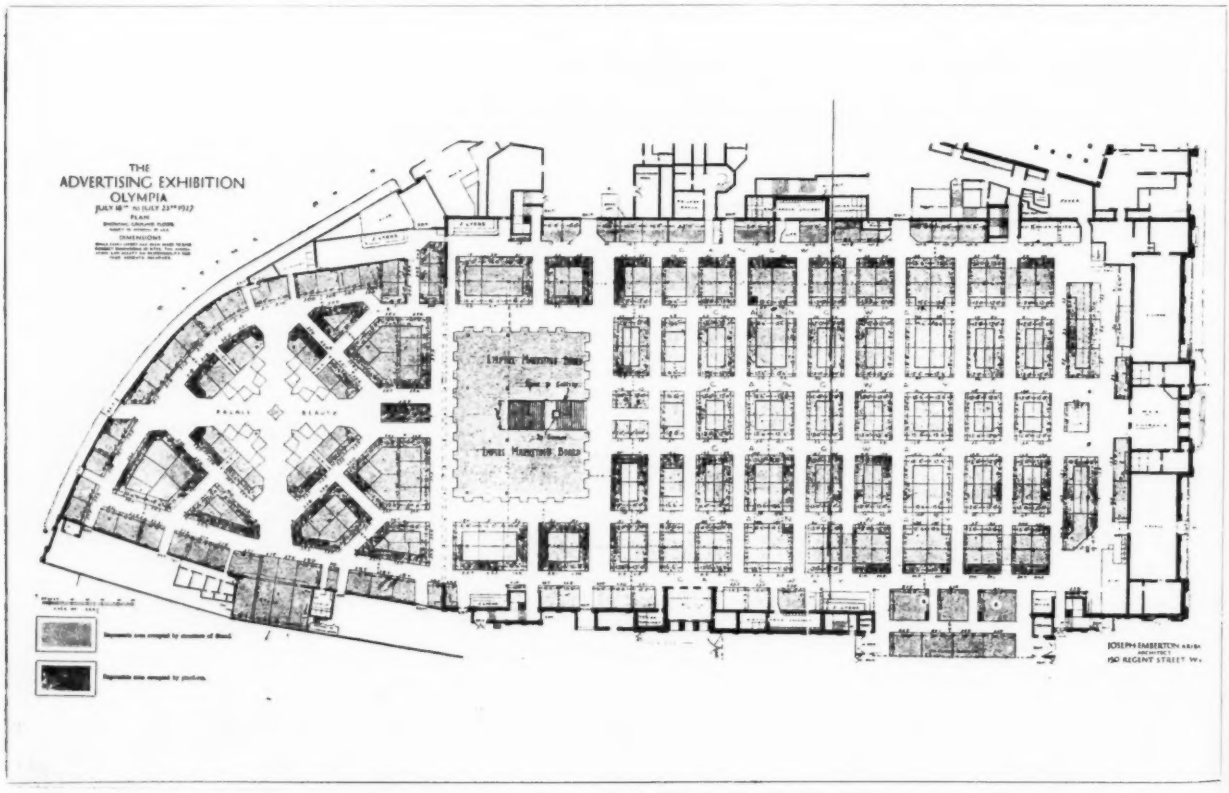
The secret of the æsthetic failure collectively of almost all our exhibitions may be found in two things. It has been impossible to coax or coerce all the exhibitors into following a single idea, and much more frequently it has been impossible to formulate or define the purpose behind the idea with sufficient imagination. There have been architectural directors of exhibitions in the past. Either they have not had the personality or the committee backing, or both, necessary to impose a general scheme on the exhibitors, and generally there has been a lamentable lack of vision on the part of the committee's exhibitors and architects. Mr. Emberton's position at Olympia was by no means nominal, but matters were made a great deal easier than usual by the fact that he personally designed a large part of the exhibition.

The guiding principles laid down by the committee were few, easily stated and obviously sensible. They are so simple that their neglect hitherto is remarkable. The first is the planning of a rational and direct lay-out with a main

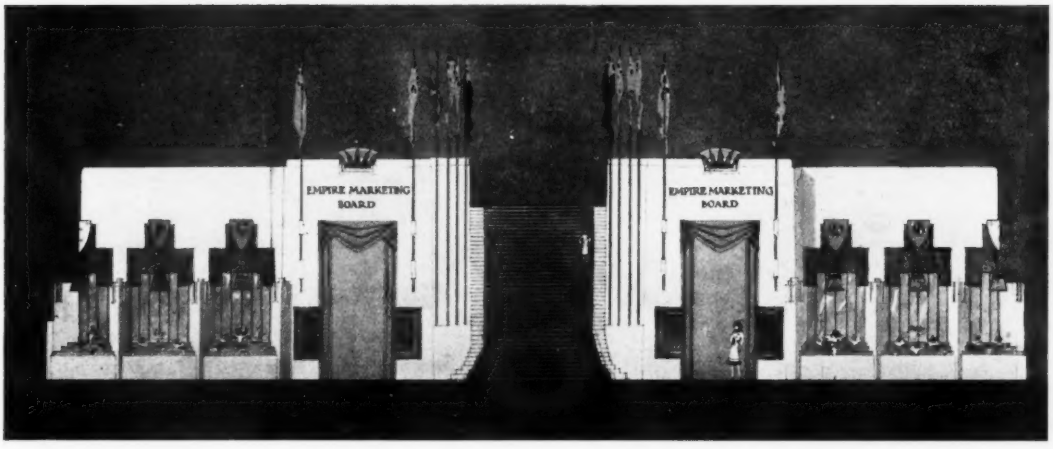


The Advertising Exhibition at Olympia, London. General view of the exhibition from the gallery above the main entrance.

dominating feature; second, the suppression of the usual discordant blatancies of individual stands, in favour of a general scheme; third, a tremendous effort to express the true meaning and purpose of the exhibition. The first of these aims was attained by terminating the twin central avenues leading from the Addison Road entrance with the stand of the Empire Marketing Board. While the other stands were regulated as to their height, this towered up to the gallery level and formed a dominant to the whole exhibition. It was designed as two pylons embracing a monumental staircase which gave access to the gallery, each of the side masses bearing the arms of the Dominions surmounting windows before which were piled various Empire products. Centrally placed on the staircase was a statue of St. George. It was obviously right that the Empire Marketing Board, which is unquestionably the leading advertiser of the country, and therefore the chief exhibitor, should occupy the place of honour. But it was a happier thought to seize on the symbolic idea behind the Empire Marketing Board and use it as the *raison d'être* of the dominant building. As a central motive this combined staircase and stand was entirely satisfying; the mass was impressive, and the colour and detail admirably handled. The exhibition was well worth a visit if only that one might realize the value of a really good central feature. A staircase of this sort forms a good setting for any accessory function, such as the opening ceremony. One wonders where these are usually held at Olympia. Most exhibitions have a



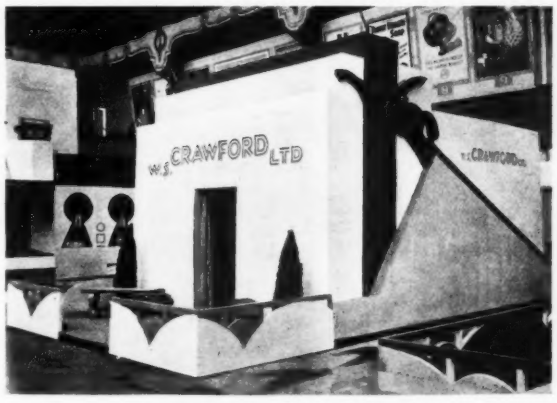
The Advertising Exhibition at Olympia, London. By Joseph Emberton. Above (left), Hazell's stand, and (right), G. Street & Co.'s stand. Below, the lay-out of the exhibition.

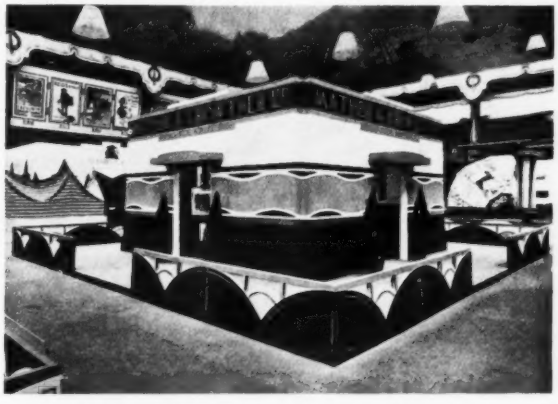


trumpery bandstand as the only space which is not stand or gangway.

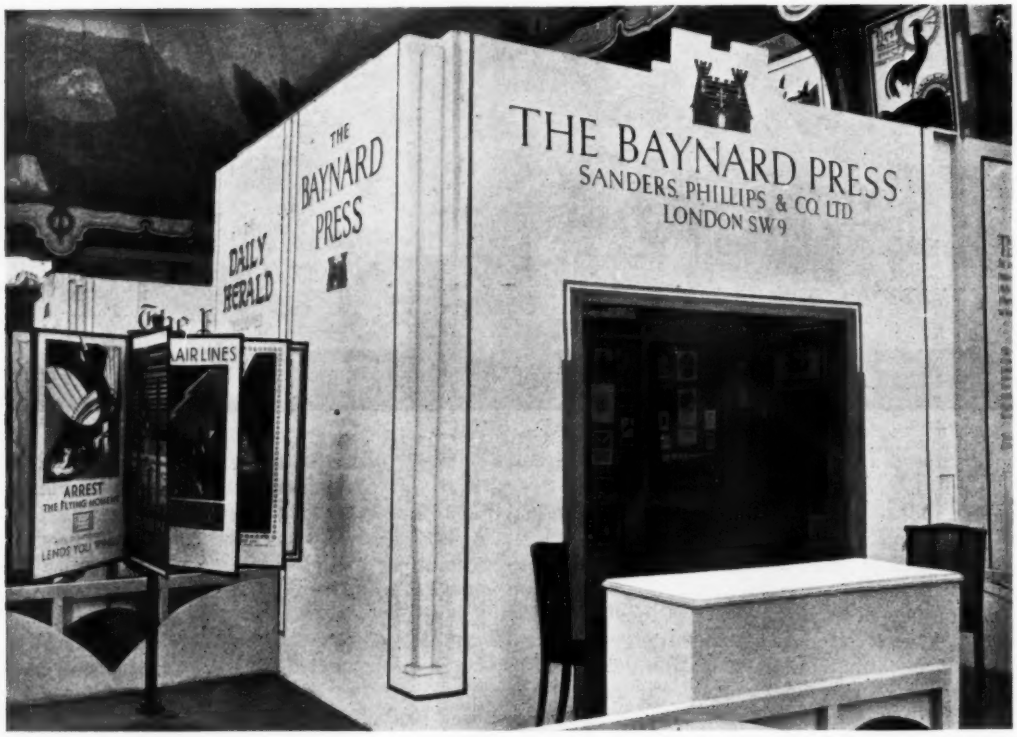
The second idea, that of subordinating individual efforts to a collective one, was very much more difficult to realize. In six short months the architect had to convince over 300 exhibitors of the desirability of co-operation in stand design as well as bring home to them how bad the old methods were. He had to convert strong-minded business men brought up in the old exhibition habit of distinctiveness from one's neighbours. His success was remarkable, but not quite complete. One or two performers were playing out of tune, but on the whole the orchestral effect was excellent. There was a feeling of ordered completion about this exhibition; the stands round the walls were linked together giving a pleasant sense of enclosure, while the regular shapes of the centrally-placed and isolated stands were rhythmic and orderly. It was at once apparent that any fear of monotony was quite groundless. Any architecturally trained person would, of course, appreciate that fact before he saw the exhibition, but when it was finished and the full result seen, the most difficult of Mr. Emberton's clients was converted. Sir Lawrence Weaver remarked that there would be not the least difficulty with the next advertising exhibition so completely had the exhibitors been convinced. Of course, the distinctiveness of individual stands was actually enhanced; the lettering, signs, and trade marks really told against a common background, and colour gave all the variation that was necessary. In passing, some exhibitors seemed almost devoid of a colour sense.

The third idea, that of expressing the true aim of the exhibition in the simplest and most direct way, was the hardest of all to graft on to the minds of the exhibitors. There is a very strong and rather terrible tradition in exhibition-stand design which usually finds expression in badly-proportioned Tuscan columns and glaring electric signs, very rarely getting farther. A radical departure was clearly indicated, and here the architect reasoned somewhat as follows: " Efficiency is the keynote of business; efficiency connotes simplicity and clarity of ideas; the exhibition must express these; what has efficiency and the advertising business to do with the customary architectural motifs and taradiddles adopted, adapted, and bowdlerized from Greece and Rome? " The obvious answer was that they are quite purposeless and a positive confusion to the main idea. Therefore the materialization of the spirit of advertising called for a modern, almost futurist, form. Once the exhibitors grasped this reasoning their enthusiasm was kindled, and it is safe to say that as far as they are concerned the old conventions have been dealt a mortal blow. Consequently the exhibition, to the unsophisticated, looked strangely novel; to the architect it appeared an energetic essay in modern design. The simple but emphatic shapes, the direct colouring and lettering, expressed the





The Advertising Exhibition at Olympia, London. By Joseph Emberton. Above, the stand of the Empire Marketing Board. Below (left), W. S. Crawford's stand, and (right), Mather and Crowther's stand.



The Advertising Exhibition at Olympia, London. By Joseph Emberton. Above, stand of the Baynard Press. Below, that of the Whitefriars Press, Ltd.

The Advertising Exhibition at Olympia, London. By Joseph Emberton. Above, the stand of Saward, Baker & Co. Below, that of Greenly's, Ltd.

function of each firm with clarity, and consequently the exhibition expressed the industry. The difference between the old and the new was as between shouting loudly and speaking clearly.

The simplicity of the stands had one curious result. It was made very obvious that the traditional lettering and trade marks of a number of firms are sadly out of date. The Gothic lettering—in some cases "rustic" lettering—that did very well for Victorian times and which still passes more or less unnoticed on the heads of newspapers, has all its weaknesses exposed when reproduced on a plain wall surface. One good (or rather very bad) example is the heading of one of the famous Sunday papers. Naturally, many firms argue that their trade mark is bound up with their goodwill, and that a change would mean a loss. On the other hand, out-of-date business methods and machinery have to give place to better in spite of losses from change, so why not out-of-date trade marks? Likewise, one may further deduce that out-of-date architectural fashions have become inappropriate and meaningless. Business methods and ideas of salesmanship are changing and expanding very rapidly, and shop design must change also. The shopkeeper does not really care for tradition, his main concerns are greater and greater sales and better service. There is consequently scope for ideas in shop design, and although originality and beauty may be desired for commercial reasons, the fact that they are desired is the important point. The matter for greatest congratulation is that blatancy and confusion and triteness are fighting a losing battle. The coffin of the "Oxford Street" era of design is already prepared!

The value of exhibition work to the architect lies in his chance to experiment. Even though it be in temporary materials it has a function requiring expression in solid form; but there is much greater freedom in the mode of expression for the architect than is possible with permanencies. Exhibition architecture must always be a little mad anyway; it must strike the eye and please the senses even if it does not quite appeal to the mind. No sane man would wish to live among exhibition architecture. The value of the Paris Exhibition was not so much in its actual buildings, which were mercifully temporary, as in the youthful spirit and progressive ideas which it evoked. Mr. Emberton has realized his freedom and has quite frankly experimented. Yet, in spite of structural improbabilities, somewhat eccentric forms and brilliant colourings, the exhibition definitely reveals the fact that a tremendous effort is being made to get clear of our clogging conventions and clichés, with all their paraphernalia of commercialized classic and Jacobean sham. That Mr. Emberton has succeeded in converting several hundred business men to his somewhat advanced views is surely a sign that they know in their hearts that architects as a rule are not "delivering the goods," at least in commercial architecture. The managing director of a large store was heard by the writer to say recently that his firm's new building was fine architecture, but it was not his idea of what a shop should really look like. In essence it is a deep-seated feeling that our modern civilization is worthy of an expression of its own. If this age has produced such beautiful things as the steamship, aeroplane, and locomotive, surely our modern industries need not be tricked out in fal-lals borrowed from assorted periods. The idea of a break with tradition which originated with the *art nouveau* has few upholders nowadays, but there is a very clear opinion that tradition has stood still long enough and is badly in need of development. The fire is low, and adding more fuel is a wiser course than raking together the ashes.

The Advertising Exhibition at Olympia, London.
By Joseph Emberton. Pritchard and Partners' stand.

TWO WORKS BY HAROLD GIBBONS

[BY P. M. STRATTON]

WHEN that great wit and good man, Charles Marson, said that the ministry the Church required was not so much Etonians and Oxonians as consecrated cads like the Twelve Apostles, he marked, without perhaps knowing it, the beginning of a change in English ecclesiastical architecture. The two churches illustrated, by an architect with a mind sensitive and alert to modern conditions, also define this change now that it has actually arrived. The typical work of the original Gothic revival is seen at St. Augustine's, Highgate; and the developed work of recent years in St. Saviour's Priory, Hackney.

The mark of the older building is in the use of Line. Perhaps it looks a little old-fashioned for 1914, the year this part of the church was built, but Mr. Gibbons had to blend his new west end with the main body of the church, a work of J. D. Sedding in 1887. In 1919 a fire destroyed the roof, including the flèche, and most of the fittings, and Mr. Gibbons had the rare opportunity of revising some of his details, notably the flèche, in the rebuilding. The main lines, however, were replaced on the 1914 model.

The massing of the building is stated by its lines, and it is necessary to emphasize the nature of the style, because the work of the Gothic revival has been so widely misunderstood. One authority has asked it to be "monumental," which is like asking the dancing David to be monumental; and another has asked it to be "urbane," which is like a request to Quixote charging sheep to be urbane.

It is the essence of the style that the lines are strong enough to dominate the masses, so that the eye is not only

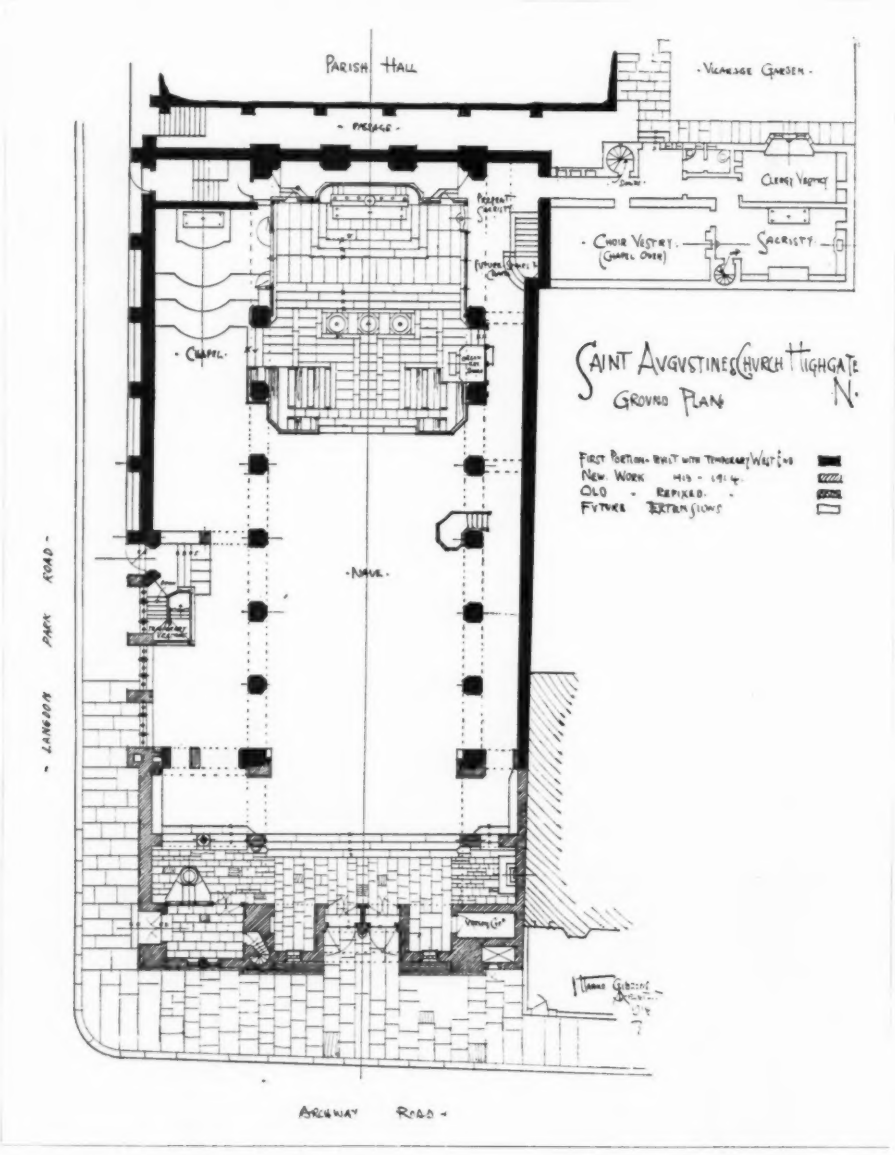
St. Augustine's Church, Highgate. By Harold Gibbons.

drawn to the building by the lines, but is not allowed to rest on the masses. The lines divide and rule the masses and lead the eye to the understanding of the construction, the enclosure and the spaces.

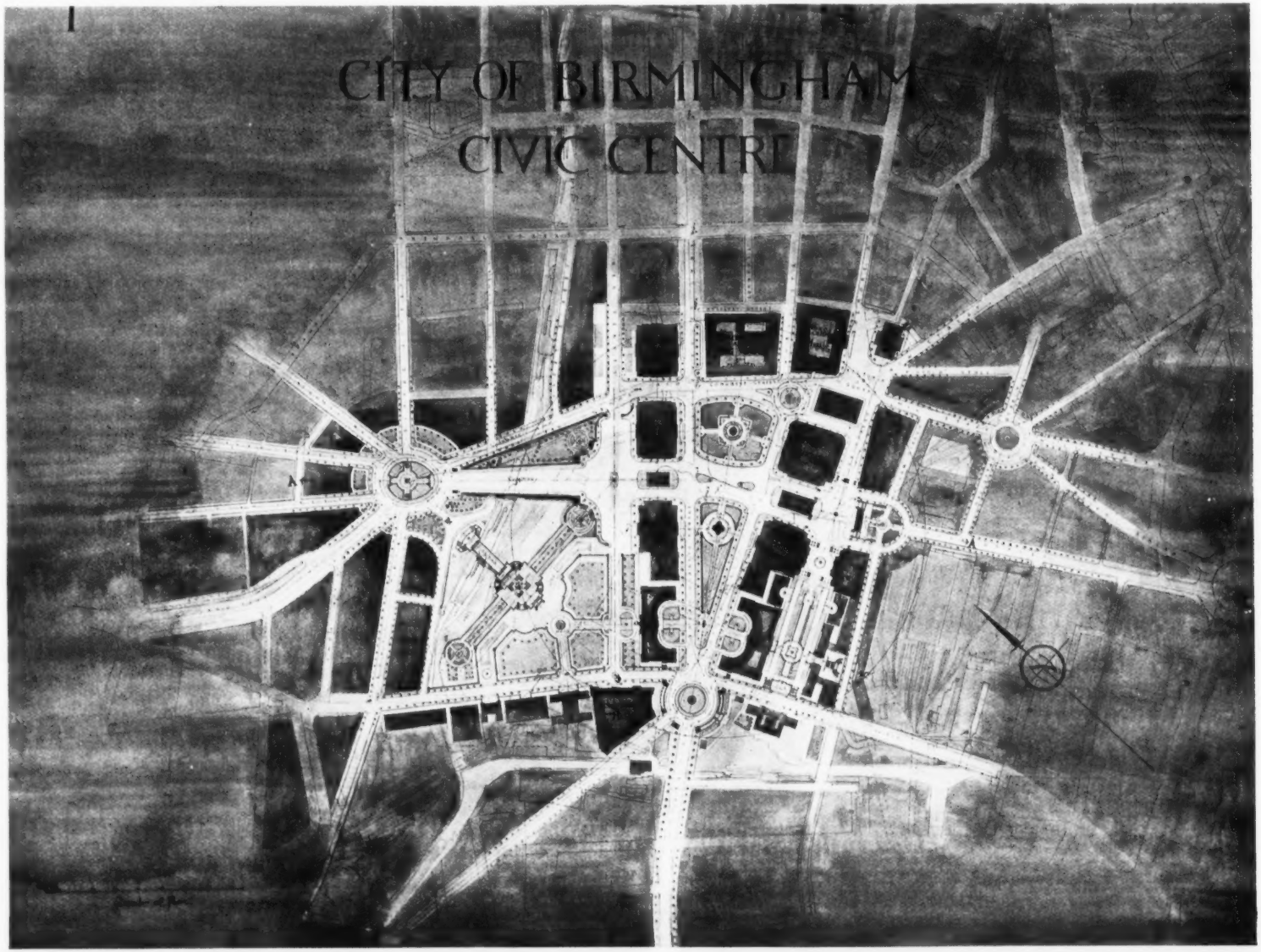
The Gothic revivalists looked on their mouldings as a draughtsman on his pencils, and their sections were studied for strength or delicacy just as a draughtsman considers the pressure of the lead point on the paper. The more when it was spread over broad surfaces it was made quite clearly a subordinate thing; and statues were almost always contained in niches, glass in lines of lead.

At its best this linear style produced organic designs ranging from something singularly graceful, svelte, and engaging to something as sinewy and austere as Newman's prose.

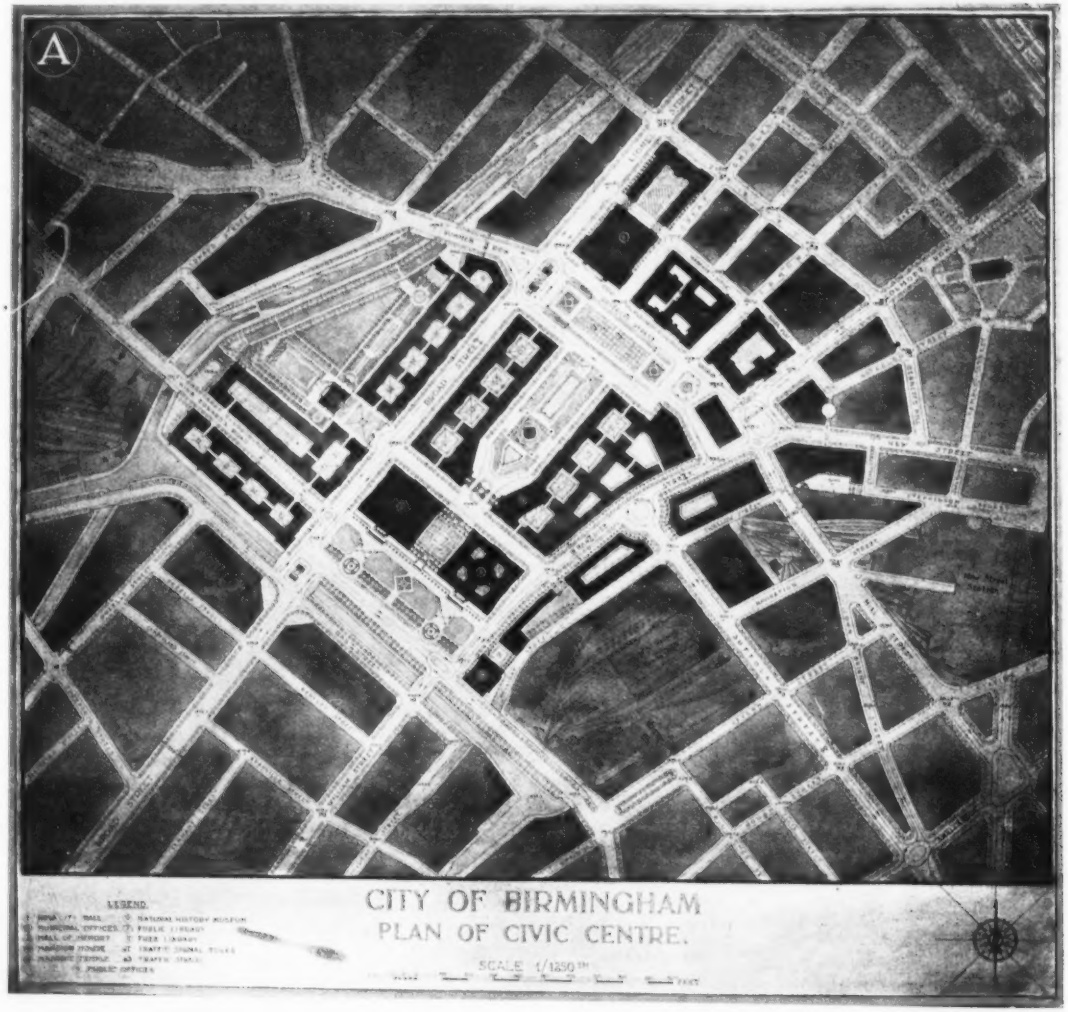
Mr. Gibbons's work at St. Augustine's is suaver than Mr.



brilliant the sunlight caught on a fillet, the blacker the shadow in a hollow, by so much more successful was the designer in neutralizing the heaviness of his massing and in giving an effect of levitation to the building and in drawing the eye to the focal points and in containing the picture and the thought. Even scale was given by length of line, rather than by the size of mouldings, features, and masses. Decoration normally followed the moulding; Sedding's, but more compact than Bodley's. The baptistery is particularly elegant; the steps connect the nave pier with its fellow on the south side of the church, and with the base of the beautiful shaft in the baptistery itself; the square-panelled openings form a resting-place for the eye before it is raised by the moulded shaft and the plain pier, to leap up the curves of the arches to the roofs. Except to a very jaded and blasé eye, this must be a satisfying



City of Birmingham Civic Centre Competition. Design awarded Supplementary Premium (£200). By L. M. Austin (Middlesex).



City of Birmingham Civic Centre Competition.
Design awarded Supplementary Premium (£200).
By G. Niederman and K. Hippenmeier (Zurich).

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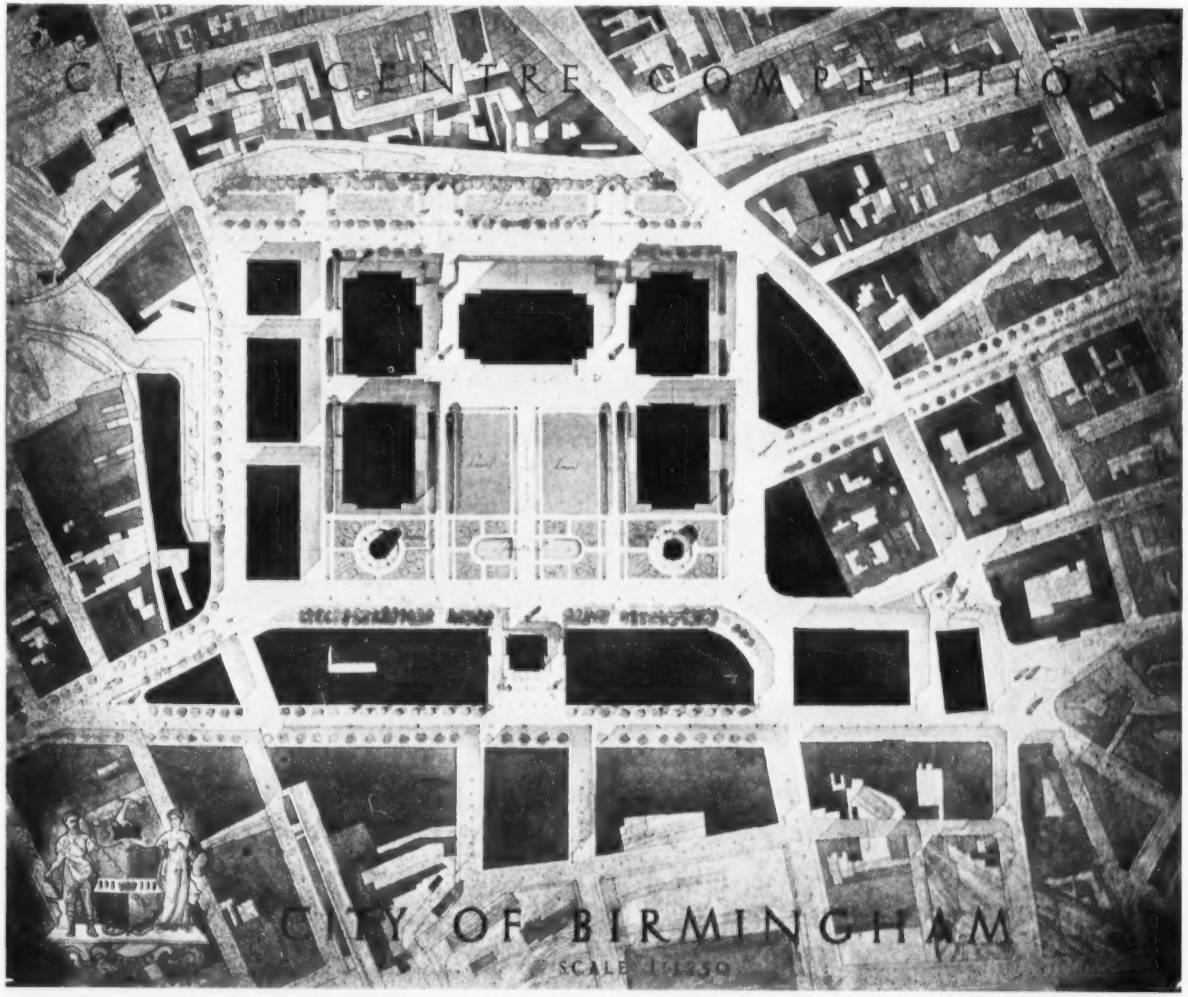


City of Birmingham Civic Centre Competition. Design awarded Supplementary Premium (£100). By Adams, Thompson and Fry (London).

City of Birmingham Civic Centre Competition.
Design awarded Supplementary Premium (£100).
By E. Prentice Mawson (London).

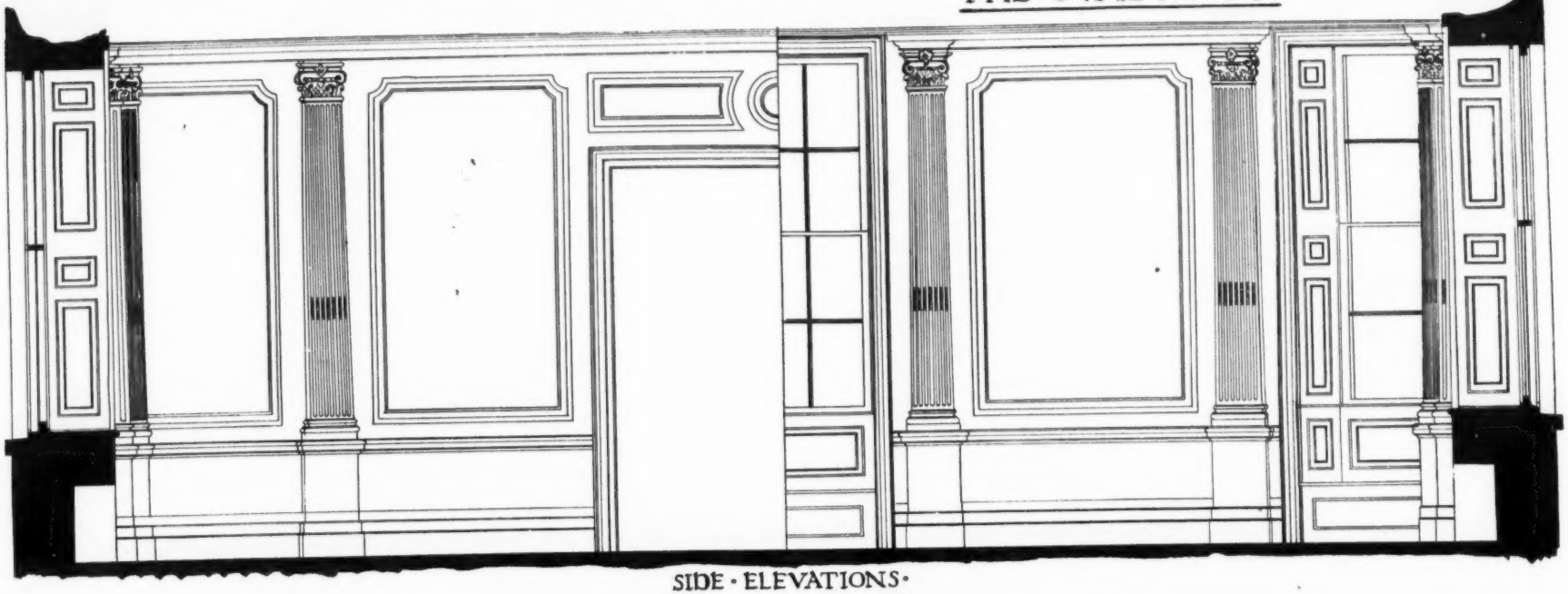
City of Birmingham Civic Centre Competition. Design awarded Supplementary Premium (£100). By E. Prentice Mawson (London).

HARRINGTON HOUSE, WHITEHALL: DETAILS OF THE OVAL ROOM.

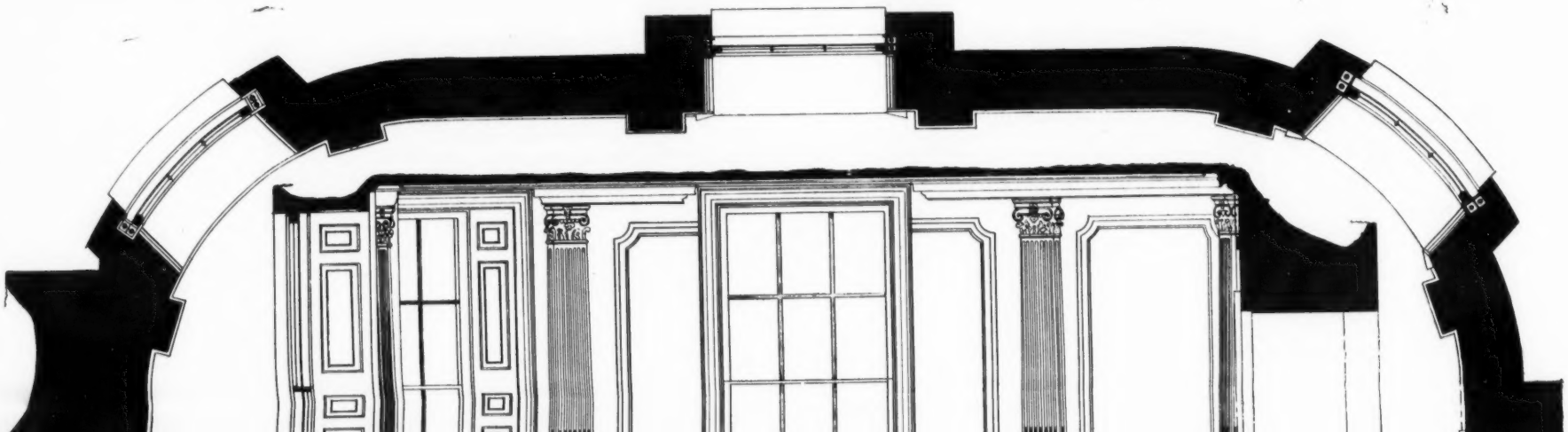
HARRINGTON · HOUSE · WHITEHALL ·

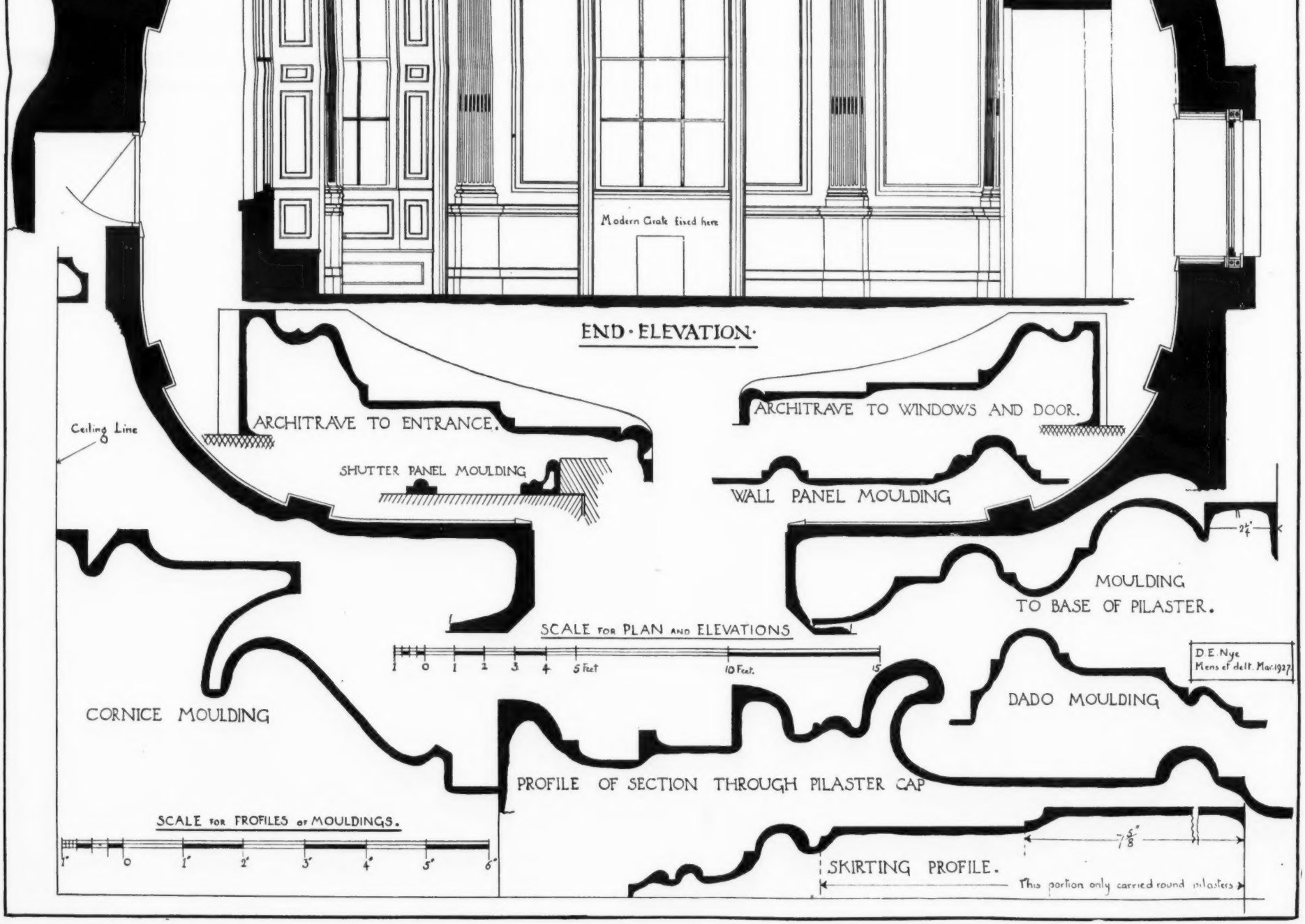
No. 5.

THE · OVAL · ROOM ·

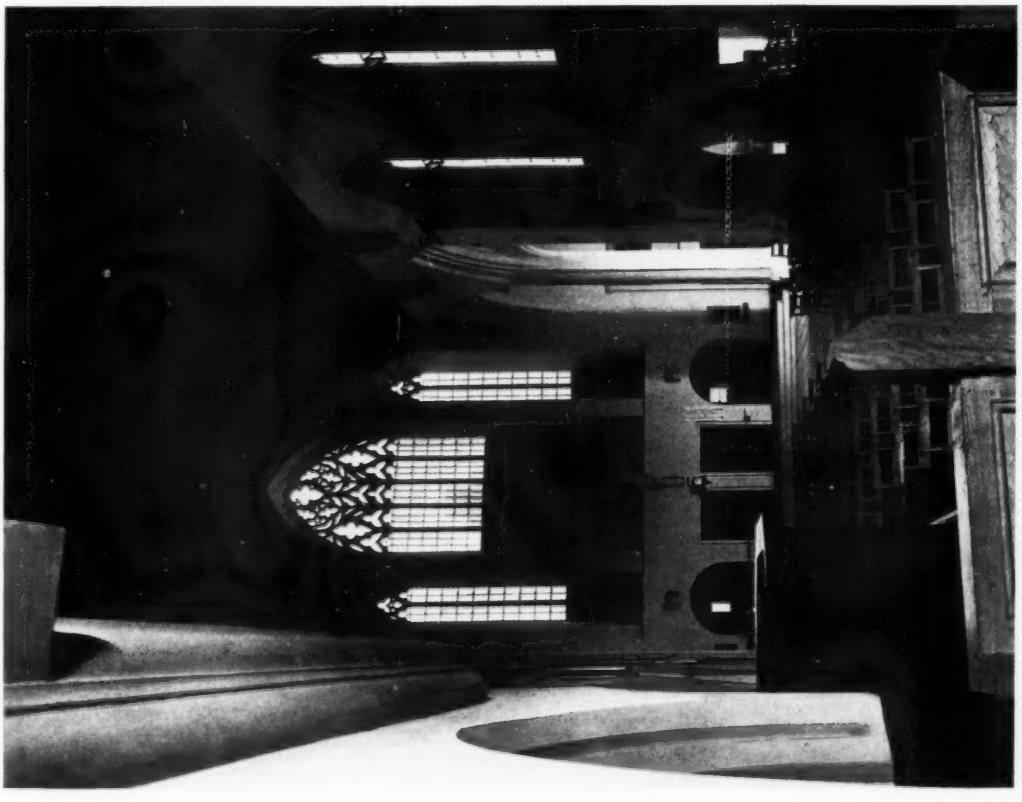


SIDE · ELEVATIONS ·





HARRINGTON HOUSE, WHITEHALL. DETAILS OF THE OVAL ROOM. MEASURED AND DRAWN BY D. E. NYE.



St. Augustine's Church, Highgate. By Harold Gibbons. Left, view from the altar. Right, the altar.

work of art, not less so because to enjoy it involves some activity.

The west end is similarly a well-conceived design in imaginative construction. It has even more that true Gothic activity which makes us think of the great French cathedrals as organisms with limbs; it has also that Victorian strenuousness which made the wit of the eighteen-eighties remark: "The World is the only refuge from the Church." The entrances under the main window are square-headed, as taking little weight, and the round-headed arch each side bridges over, to carry the weight of the piers above in safety to the ground. The sills of the side windows are like steps up to the sill of the centre window; the joy of the west end is gathered into a flight of stone traced, like cherubs of an Assumption, upon the light.

It was a dictum of the late Temple Moore that Gothic at least must be designed from within out. Perhaps it is a sound rule for all architecture (except that which is the "Mistress" of advertisement), for the result should be some expression of the purpose of the building. At St. Augustine's, for instance, the central doorways were planned for direct access to the middle aisle, and the large window to light the whole nave and chancel, for the side lights are negligible. The sanctus bell is in the flèche over this window, and is rung from the west end of the church, the raised platform of which gives a view of the celebrant. The building-up of this western façade is a very successful composition, and the exterior rood is in the right place to focus the attention of the passer-by. Dorothy Rope modelled the figures which, in scale, go with the building, and each of them is dignified.

The sanctuary has been refurnished since the fire, but is not yet completed, for the east wall will have a reredos going the whole height and obscuring the inconvenient bull's-eye in the gable. So far the furnishings are Classic in style, and from that fact the building gains in richness; nevertheless, the æsthetic of mixed styles is difficult, and likely to lead to incoherence.

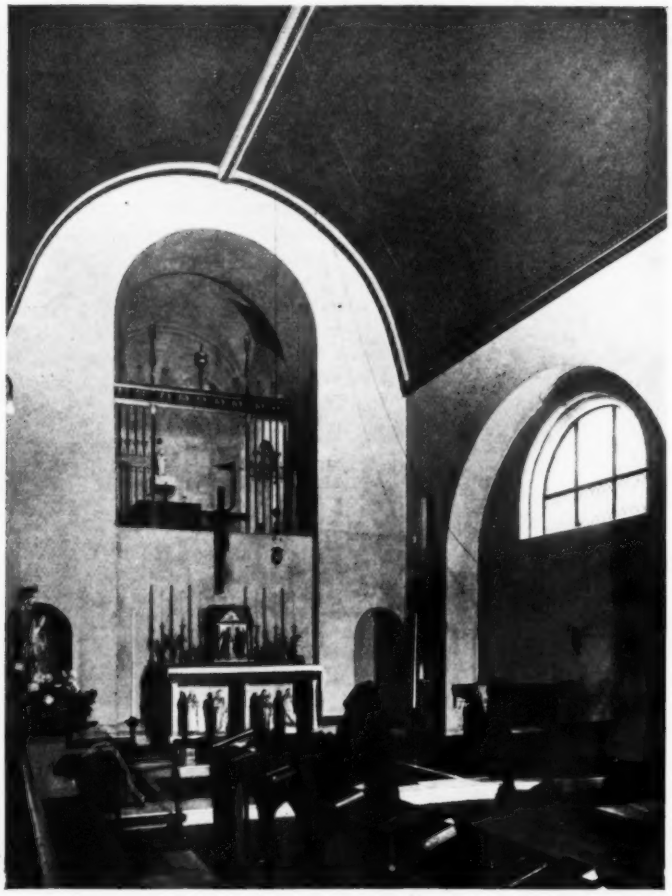
Over the south aisle a gallery has been built for organ and choir, so that the latter is practically out of sight by worshippers, a desirable consummation. At the end of the aisle itself is the prettiest incident of the whole interior—a children's chapel. The infants worship and are instructed under a low ceiling like a low sky of blue with golden clouds, from which hang two golden cherubs holding each a light over the altar; on one side is a hole in the wall filled in with blue glass as though an errant eye could look into a blue sky where a dark blue bird was flying; on the wide sill are toy figures of Our Lady and the archangel Gabriel. The window and these figures were made by Margaret and Dorothy Rope, and arranged by Harold Gibbons.

The Priory at Hackney is built, as I have indicated, in

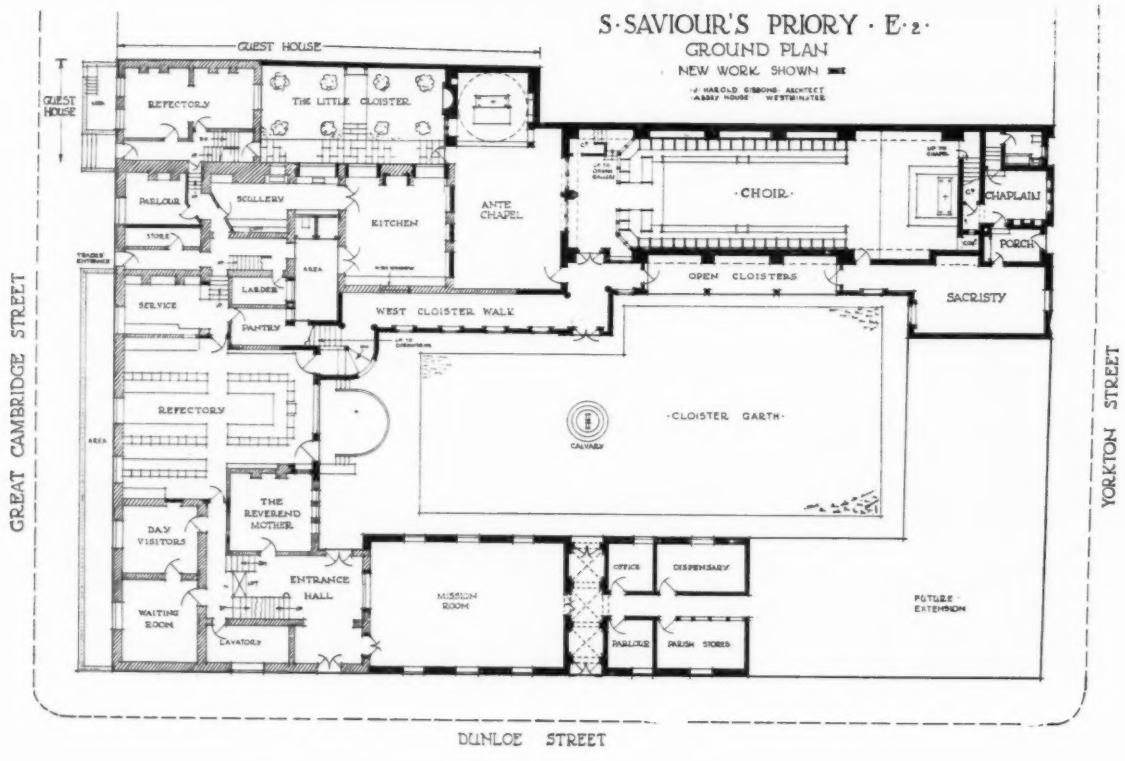
St. Augustine's Church, Highgate. By Harold Gibbons.
A view of the south-west corner showing the baptistery.

that modern phase of the Gothic revival which is swinging over from line to mass, leaving a few great buildings like Liverpool Cathedral, conceived in those magic years when mass and line received an equal understanding. Marson's cads have been consecrated and the centre of interest has gone from Eton and Oxford to Hackney and Hoxton. There is not so much money to spend; the linear Gothic is too dear, and a plain shell is emerging as the modern type of church. The comparative cheapness of plaster vaulting over stone vaulting or open wood roof has been the determinant in many cases. In St. Saviour's, for instance, there are only three lines of moulding in the shell, but it is capable of full enrichment by furnishings, stained glass, frescoes, and colouring, all of which can be added at any time. But even bare as the chapel now is, except for Mr. Bambridge Reynolds's rood screen, and the figures under the altar, the massing of its design has made it satisfying. It is not like an organic being almost anthropoidal as St. Augustine's, but it is made to receive organic beings; it looks like a refuge from the world.

St. Saviour's Priory, Hackney, London. By Harold Gibbons.



St. Saviour's Priory, Hackney. By Harold Gibbons. Above, the chapel. Below, the ground-floor plan.



DESIGNING THE LAUNDRY

(Concluded)

[BY C. F. TOWNSEND AND J. HERBERT PEARSON]

iii: LAUNDRIES FOR SPECIAL PURPOSES

THE plan given in the last instalment and most of what has been written applies to the ordinary family laundry. Other forms of laundries deserve some consideration. These include "semi-finished," "rough-dry," and "bagwash" laundries, which give cheaper services to the public, contract laundries, devoted to hotel and ship work, institution laundries, attached to hospitals, workhouses, and so forth, and hotel laundries doing the work of one particular hotel, usually on the hotel premises. There are also a comparatively small number of laundries, fitted with machinery, attached to large country houses.

The general principles of auxiliary service laundries are much the same in all laundries, the differences consisting largely in the allocation of the space inside the laundry to the various departments. Auxiliary service laundries (including semi-finish, rough-dry and bagwash) handle a much larger bulk in a shorter time than the family laundry. There is no hand work, all being done, as far as it can be done, by machines. Ironing tables are eliminated, their place being occupied by calenders and presses, and the drying-room is absent. The washing machines are usually much larger than in the family laundry. Everything is done that can be done to avoid handling. The bundles of washing for a semi-finish or a rough-dry laundry should be unloaded from the van on to a conveyor, which takes them straight to the marking and listing booths and thence to the sorters. In the most recent laundries the loads for the washing machines are taken from the sorters to the washing machines by another conveyor, and there is no reason why yet another conveyor should not take the finished work from the calenders and presses to the packing room. The difference between a "semi-finish" and a "rough-dry" laundry is that in the latter only the flat work, such as table linen and sheets, is ironed by the calender, the remainder being sent home rough-dry to be ironed by the customer. More room comparatively is required for the calenders, and there are no presses, no hand-wash troughs, and no ironing tables.

In contract laundries there is practically no marking, only sorting, and nearly the whole of the work consists of flat work, and is done on the calenders. Ship work laundries are very similar, and the greater part of the internal space is devoted to the washhouse and calenders. These laundries handle an almost impossible bulk of work in an almost impossibly short time, the whole of the bed linen, kitchen cloths and towels used on the voyage of a big passenger liner having to be laundered between the arrival of the vessel and its departure. Everything in such a laundry depends upon a good lay-out of the machinery, so that the work may go through the laundry at express speed.

The arrangement of a laundry attached to an hotel will depend upon whether it is designed to do only the sheets, table linen, towels, etc., employed in the work of the hotel, or whether it is

The Savoy Hotel Laundry, Clapham Road, London. By Stanley Hamp. The ironing-room.

The Savoy Hotel Laundry, Clapham Road, London. By Stanley Hamp. The mangles.

to deal with visitors' personal work as well. In the former case space will have to be provided for one or more washing machines, a calender, a hydro-extractor, and one or more presses for the cooks' coats and overalls. In the latter the arrangement will be somewhat the same as that of a small family laundry. As a rule the architect will have plenty of problems, as often the laundry has to be fitted into an existing basement or erected on the top floor, where questions of the weight of the machines and their vibration, especially that of the centrifugal hydro-extractor, running at 1,500 revolutions per minute, become highly important. In a laundry fitted recently in an hotel by one of us the machinery was housed in a one-story extension built in the yard adjoining the basement, the presses and the ironing tables being accommodated in the existing basement adjoining; whilst the boiler flue was connected to an existing chimney—the low-pressure boiler of the hotel being inadequate to supply either the pressure or the quantity of steam. As a general rule it is better where possible to have an independent boiler for the laundry.

As institution laundries, including hospital laundries, have to deal with very foul work from the patients, one or more "foul washers" are installed in which the work can be dealt with from start to finish without opening the machine and allowing effluvia to escape into the laundry; but these machines occupy only the same space as ordinary washing machines. It is better to house these, if possible, in a separate apartment, which would, of course, form a continuation of the washhouse. Also provision has usually to be made for a steam disinfector, which in practice is merely a long cylinder containing the clothes, into which steam is turned. Its outlet is usually in the washhouse. In all institution laundries it is very important that everything should be as foolproof as possible, and that the whole of the laundry should be under the direct observation of the person in charge, as some of the workers may be mentally deficient. Otherwise these laundries call for no special remark. Where possible an independent boiler should be installed, as where the steam is drawn from the boiler heating the building it nearly always leads to trouble.

Country-house laundries usually contain a small washing machine, a hand wash-trough, a hydro-extractor, a small calender, a press, an ironing table, and a drying-room.

The tendency in a modern laundry is towards an electric motor as the source of power in place of a steam engine. With a small laundry there would be only one motor driving the shafting; in a larger laundry there would usually be two electric motors, one for the washhouse and the other for the ironing machinery, so that one department can run when the other is at a standstill. In really large laundries there is an increasing tendency to eliminate shafting altogether and to provide each machine with its own motor. The elimination of the shafting belts and pulleys does away with a great deal of dust and dirt, as well as noise. With the cheap current we are promised when Government electrification schemes, mature electric driving will probably soon be universal in laundries.

One of the great troubles in laundries is condensation of moisture during cold weather on the underside of the roof and any other cold portions of the fabric. The condensed water, usually contaminated more or less by dirt, collects and drips on to whatever may be underneath, the most tiresome drips usually occurring over the calenders. Moreover, where gas-irons and gas-heated ironing machines are employed, as they are in nine laundries out of ten, the condensation always contains a certain amount of sulphuric acid, derived from the burning of the sulphur

compounds in the gas. If these drips fall on fabrics they are pretty sure to make holes in them. Consequently it is of the utmost importance to reduce the condensation to a minimum. Keeping the laundry warm during the night and during week-ends helps to reduce it, but the best way to overcome it is by removing the moisture as far as possible directly it is produced. The calenders are the worst offenders; then the other ironing machines and, lastly, the washhouse. The moist air from the washhouse can be removed to a considerable extent by means of a power-driven fan, but this method is not satisfactory for the rest of the laundry, as the fan nearly always short circuits, drawing air from the nearest inlet and doing little to improve the general atmospheric conditions. Much the best way to deal with the problem is by means of a system of zinc ducts, led from the various machines to a fan. The fan would then be under control and only draw air from places where it was required to do so, instead of from somewhere else. The ducts would run along the wall, or wherever it might be and open about 2 ft. above the level of the calender rollers, drawing in the steam as fast as it was produced, and the same with the presses and other ironing machines producing steam. The ironing room could not probably be treated in this way, and the only convenient method in most ironing rooms would be good ventilation with the aid of a fan or otherwise.

The question of ventilation is very important and will soon become much more so, as the projected new Factories Bill contains drastic provisions with regard to the atmospheric humidity of laundries. Consequently if, or when, that Bill passes into law, laundry proprietors will be compelled to bring their ventilation up to the standard laid down.

CORRESPONDENCE

GLAZED TILES

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Mr. Baillie Scott's letter about glazed tiles is all true—and all false. My brother, an Associate, who brought the letter to my notice, feels just the same as Mr. Scott. I have no doubt that the letter expresses the general opinion; but the very fact that Mr. Scott wants individual beauty raises the question as to what *is* individual beauty? There was no striving for beauty by the old makers. I know—I use their processes; and those processes produce just what Mr. Scott describes. The tiles are expensive because of the very small demand; and if Mr. Scott can think of some method by which the demand could be introduced to the supply, I, for one craftsman, would be glad.

Yours faithfully,

J. F. PRICE

Hereford,
August 5, 1927.

THE ARCHITECT AND THE FURNITURE TRADE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I have been on holiday; hence the delay in acknowledging your courtesy in sending me a copy of your issue of July 27, with its somewhat disparaging reference to my contribution to the recent *Cabinet Maker* symposium. You will, I am sure, forgive me for replying with equal directness.

In the first place, then, does it seem to you on reflection *quite* fair to "label" the whole of a very carefully considered contribution on the strength of one sentence removed from its context? The context shows that, so far from presuming to "patronize," I was defending the architect (for whom—especially at his "own last"—I may say, incidentally, I have an enormous admiration) from criticisms I frequently hear levelled at him. This may be impertinence (away from the context); it certainly is not patronage.

In the second place, your phrase—"a conventional (*sic*) reluctance on the part of furniture manufacturers to deal directly with an architect for fear of offending their retail customers"—aptly reverses the old saw about fools and angels. *This* "bland" fool (with considerable "inside" knowledge of the politics and difficulties of the furniture trade) "feared to tread" further than a parenthetic reference to "the somewhat nebulous line between joinery and furniture making"; and will only add now that "conventional" is the very last adjective he would have chosen to qualify a sentiment (reluctance) of which loyalty is often an ingredient as well as self-protection.

Thirdly (and lastly) forgive me for suggesting that your concluding reference to the retailer's "blunders" is neither helpful nor quite fair. It is not helpful because—so, at any rate, I am old-fashioned enough to believe—more people respond to sweet reasonableness than to abuse. Not fair, because the retailer, like "the average architect" (editor or secretary), has his living to earn, and can, under the competitive system, earn a better or at least easier living by supplying what the public want than by teaching them what they ought to want. The latter, surely, is the *métier* of the educationist and the artist.

I wonder if I should be accused of patronage if I ventured to call the architect an artist?

H. E. TAYLOR,
The London Cabinet and Upholstery Trades Federation

[We are afraid we do not see the point about "conventional." If the reluctance has set up (and we hold it has set up) a convention, then surely "conventional" is the very first adjective one would choose. And we ourselves regard both the designers of buildings and the designers of furniture as artists, and therefore under an obligation to teach the public what they ought to want. Dressmakers, hairdressers, and restaurateurs manage to do this, each in their own way; why should not makers of furniture?—Ed. A.J.]

"PROTESTANTISM AND ART"

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—On returning from the holidays I was interested to read the letter from your correspondent "A. H. A.," who, after commenting on my previous letter, proceeded to attack the Church of England. May I have your permission to answer his criticism?

The quotation he made from my letter were not the words of Karel Capek. He has evidently misread my letter.

He then states that we now build "theatres and commercial buildings" where we once built churches. This was quite outside the scope of my letter, but I would remind "A. H. A." that the number and sizes of the Christian churches for parish worship are greater in proportion to the population than in pre-Reformation days, and we still build noble cathedrals dominating their surroundings whenever they are required. Further, many of the larger medieval churches belonged to the monasteries which had enormous wealth, owning one-third of the land of England, one-third of the tithe, thousands of livings and tolls, and exemption from taxation. As very little of this was spent on the poor, on education, or on the parish priest, the abbey church provided a means of using the surplus wealth, and churches capable of holding 4,000 to 5,000 people were sometimes built for the exclusive use of two or three score of monks. Although we admire and love these buildings as architectural monuments, we must admit that they proclaim the wealth and greed of the monasteries rather than the vigour of their religious life. On their dissolution advantage was taken of their wealth greatly to increase the parish churches, schools, hospitals, and almshouses. In "A. H. A.'s" words—"the moral is obvious"!

It was the transfer of the natural resources of this country from the monks to the business men that enabled us to provide the means to build the "theatres and commercial buildings."

"A. H. A." contends that a new Church of England was established by an Act of Parliament in 1559. No such Act has been passed. Moreover, in this year were passed the Act of Supremacy and the Act of Uniformity, which restored the Church to the

position that the *same* Church occupied in the reign of Edward VI. "A. H. A." states that the continuity of the Church is only a "theory," but, apart from the legal evidence, the fact that the same congregations continued to worship in the same churches under the same priests and some of the same bishops (others having died or had been burnt by order of Queen Mary), proves that this continuity is not a "theory," but a solid fact. What further proof of continuity could one require? "A. H. A." quotes from a recent speech of Cardinal Bourne at York, but what the Cardinal said, like what the soldier said, "is not evidence." If he was referring to York Minster it is not even true, for the Minster was built for public worship and was not a monastic foundation.

Finally, the Roman Catholics were not ejected from the national Church, as your correspondent suggests; they left of their own free-will, and would no doubt be welcomed if they cared to return.

Although this is the second time I have written to defend Protestantism in its effect on art, I have studiously refrained from attacking other Churches. May I suggest this hint for "A. H. A.'s" consideration?

I apologize for presuming to take up so much of your valuable space, but feel sure that since you permit the publication of the charges you will, with your usual generosity, allow publicity to the defence.

H. T. JACKSON

57 Huntingdon Road, Coventry.

LAW REPORTS

OPEN STREAM NOW A SEWER. OWNERSHIP OF SURFACE

Duke of Westminster v. *London County Council. Chancery Division. Before Mr. Justice Romer*

An interesting point was raised in this action as to the rights of ownership in the surface of a sewer which had been an open stream in years gone by. The matter was brought up for decision in an action by the Duke of Westminster against the London County Council. The plaintiff claimed a declaration that he was entitled in fee simple in possession of certain land in the parish of Chelsea, bounded on the north by the garden of 19 West Eaton Place, on the east by Grosvenor Cottages (Eaton Terrace), on the south by Cliveden Place, and on the west by a line vertically above the central line of the Ranelagh sewer subject only to the sewer and works which were vested in the Council, and that subject to the statutory powers vested in them with regard to the sewer the Council were not entitled without the leave and licence of the plaintiff to enter upon the land. Plaintiff further asked for an injunction to restrain alleged trespass by the L.C.C.

Mr. Macmorran, K.C., who argued the case for the plaintiff, said his client claimed the right to the surface of the sewer as part of the Grosvenor estates, and the Council claimed it by virtue of the Metropolis Management Act, 1855, which was passed for the purpose of cleansing the Thames. Under that Act a number of streams were vested in the Metropolitan Commissioners of Works and afterwards transferred to the Metropolitan Board of Works, and finally to the Council. The sewer in question was formerly known as the old Westbourne stream. In the early half of the nineteenth century the stream was diverted and straightened, and subsequently it was further diverted, arched, and covered in and became a sewer for its entire length. The Duke's predecessors in title to the soil contributed to the cost of the arching and covering in of such part as was contiguous to the Grosvenor estates, and he claimed that the surface of the sewer formed part of his estates notwithstanding that the sewer itself was vested in the Council. He understood that the Council were letting the land, and amongst other things, for a drill-ground, and of this his client complained.

Mr. Gover, K.C., for the Council, contended that the surface formed part of the sewer, the earth in question being placed upon it for the protection of the brickwork and to complete the covering in. If the Duke's predecessors paid any part of the cost they did so voluntarily. He agreed that the whole of the sewer as it now existed was completed about 1847. The Council were anxious to have their position defined as this was a typical case, they having many other sewers which at one time were open streams. His case was that the soil of the surface co-extensive with the effective user and control of the sewer was vested in his clients.

His lordship found in favour of the plaintiff and granted him a declaration, with the costs of the action. His lordship said he failed to distinguish this case from the ordinary case, where in pursuance of statutory powers a sewer was laid across someone else's land. The fact that when the brickwork of this sewer was made the top was exposed to the air and for the purpose of supporting it the land was banked up on either side and it was covered over, left it in precisely the same position as if the sewer had been placed in a trench. He came to the conclusion that the soil in the land in dispute was vested in fee simple in the Duke of Westminster subject only to the Council's rights of way and passage to perform their statutory duties of cleaning and maintaining the sewer. The sewer, or brick culvert, and the place it occupied in the ground were vested in the Council so long as the sewer remained a sewer, but no part of the surface was vested in the Council in fee simple.

LIGHT AND AIR DISPUTE. BREACH OF COVENANT. MANDATORY ORDER

Achilli and others v. *Tovell and Tovell, Ltd. Chancery Division. Before Mr. Justice Astbury*

This action raised important points in a light and air dispute, and in consequence of defendants' action his lordship made a mandatory order to pull down so much of a certain wall as interfered with the plaintiffs' rights to the free access of light and air. The plaintiffs, Miss E. Achilli, sued as owner, and Mrs. E. J. Stock and Mr. G. Stock (her son), as occupiers of Nos. 98 and 99 Magdalen Street, Colchester, and they sought an injunction against Mr. H. J. L. Tovell and John Tovell, Ltd., of Colchester, to restrain interference with the free access of light and air to four windows of plaintiffs' houses, and they further asked for a mandatory order to pull down a wall erected by the defendants as being in breach of the defendant, Mr. Tovell's, covenant of purchase of his property in question.

Mr. Owen Thompson, K.C., for the plaintiffs, said his case was that the defendants' action in erecting the new wall had depreciated the value of plaintiffs' property by £150.

Mr. Charles Harman, for the defendants, disputed the plaintiffs' allegations.

His lordship said he came to the conclusion that he must make an order to pull down the offending wall, which bounded premises large, important, and expensive. Mr. Herbert Tovell, to whom No. 97 was conveyed, had turned his business into a limited company. A wall had been raised to 20 ft., double its previous height, and was within 7 ft. or 8 ft. of four windows. Two rooms became in winter time mere dark holes and the other two got only 1½ hours of sunshine a day, when there was sunshine. Notification was made of a proposed extension of stables, and the stables were supposed to be a corner building, but it seemed that the defendants had carried their stables along the full length of the wall and raised the whole wall. He was loath to order the wall of a substantial building to be pulled down, but the defendants had broken the covenant and Miss Achilli declined to be content with damages. He was of opinion that in the circumstances he had no jurisdiction to force damages upon her in lieu of injunction. He made a mandatory order on the defendants to pull down so much of the wall as interfered with the access of light and air enjoyed by the windows prior to the raising of the wall. The defendant company must pay the costs of the action. He made no order as to Mr. Tovell's costs. He granted the injunction, and stayed execution till appeal, if notice of appeal was given in a fortnight; if notice of appeal was not given, there would be stay of execution for a month to enable the parties to see if they could not come to terms.

LITERATURE

IMPRESSIONS OF NORMANDY

ALTHOUGH this book is one of a series known as *The Picture Guides*, its author expressly repudiates the name of guide-book in her opening sentence. We must not, we are told, expect "the methods and qualities of a guide" in "a writer who is a lover of art and Nature." Of course not! It would be ridiculous to expect such a combination. Indeed, we have become so used to this contemptuous attitude towards guide-books that we thoughtlessly acquiesce in it, while knowing very well, at the back of our minds, that there is often more scholarship and more intelligent criticism (not to mention practical information) in a single page of a good guide than in whole books of "pen pictures" and literary "impressionism."

Indeed, the chief distinction between the two is just a matter of precision. In both we are told to take a train from such a town in order to reach such another; but Baedeker tells you what time the train starts and the superior person does not. In both we are told that the hotels are good, or bad, as the case may be; but Baedeker goes on to tell you which to stay at and what it will cost. And, coming to that aspect of a travel book which holds most interest for architects, the same distinction may be observed. In a book of the type now before us, information about the architecture of the country is extraordinarily vague, though a considerable amount of space is given to the subject. In *Normandy*, Rouen, very properly, gets the lion's share of this space. We are told that in Rouen Cathedral we "can follow the full development of the evolution of Gothic architecture from the Romanesque period to the full bloom of the flamboyant," and that the tower on St. Romain "unites all three styles with a majestic sobriety equal to that of Chartres." All this is good, and Baedeker says something very much like it. The difference is that he goes on to give the precise date of each different part of the building, while our present author apparently despises such "minute details." But in descriptions of buildings it is just detail that we want. It may be sufficient to say of a plain that it is wide, or of a forest that it is dark; but it is not enough to call a cathedral "large," or even "Gothic." For it is the great advantage of the somewhat elaborate terminology of architecture that it does enable a writer to tell us a surprising amount about a building in a very few words. That is what a guide-book does.

Apart from these defects, however, this book undoubtedly represents a sincere and not altogether unsuccessful attempt to show us Normandy as it is. Nor will anyone be likely to quarrel with the following:

> A pleasant church in no particular style may sometimes appear as moving as the spire of a superb, flamboyant cathedral; and down on the level plains of wheat the fine openwork spires of the Norman bell-towers sum up in themselves the whole character of the place and people.

Normandy is a wonderful holiday ground for the student of architecture. As the present author remarks, the number of its churches and abbeys "amazes us." A spirited effort has been made to include all the most important of them among the photographs with which this book is profusely illustrated.

CLENNEL W. WINSON

The Picture Guides: Normandy. By Camille Mauclair. The Medici Society. 7s. 6d.

THE PARISH AND CHURCH OF KILKHAMPTON

Architecture is petrified history. Every town and village in the country bears its story written in its buildings legibly for those who are qualified to read them. The task of equipping people to read the story is primarily the architect's: he shows how to decipher the crabbed text; secondarily the historian's: he provides the comment that makes it significant. Few people are better qualified to perform the latter service than the country parson. His calling keeps him constantly in contact with his neighbours; his position gives him access to the records of their predecessors; his training often fits him for the patient and methodical research which is essential if the architectural documents around him are to be made to yield up all that they can recall.

The Rector of Kilkhampton has produced a history of this church and parish, which may well serve as a model for such works. Within a short book of 124 pages he manages to give a wonderful amount of information, and illuminates with the light of the past the village of today. A few examples will show how he does it. A narrow lane leads to the rectory, and this lane, some 600 years ago, was the scene of a notable scuffle. There had been a dispute about the presentation to the living, and the incumbent in possession had refused to obey the ruling of his superiors. Thereupon the Abbot of Hartland and the Prior of Launceston were sent to excommunicate him. But, when they arrived, "they were met by a crowd of armed and infuriated men with their faces masked and painted, lest they should be recognized," who shot arrows at the abbot and his men, and belaboured them with clubs, forcing them to fly for their lives. The author follows their flight "past Brent's Pool as far as Horston Hill," and on to Poughill, Stratton, and Launcells, where the excommunication was satisfactorily proclaimed.

Then the list of rectors—complete without a break from 1268 to the present day—is expanded by a brief biography of each incumbent, and you realize how important a part, from time to time, was played by this remote parish, tucked away in the farthest north-east corner of Cornwall, in the great events of the past. When Nicholas Monk, for instance, was rector in 1653, and acted as go-between to the Royalists and his famous brother, the General, when the Restoration was being arranged a year or two later. When Denis Granville succeeded him, became Dean of Durham, and, when his royal master, James II, was deposed, followed him into exile at St. Germains. Each rector has his brief biography, and it is astonishing how many interesting facts about them have been unearthed by Mr. Dew's careful researches.

A chapter is devoted to the Granvilles (or Grenvilles)—whose great house of Stowe stood on the road from Kilkhampton to Coombe Valley—from the first Sir Richard of Kilkhampton and Bideford, in 1135, to Sir Richard who fought the Spaniards in the *Revenge*, and Sir Bevill, who beat the Parliamentarians at Braddock Down, and was killed at "the bloody and tedious battle of Lansdown," and Charles, who fought for Sobiesky against the Turks at Vienna in 1683.

The church is adequately described, and its beautiful bench-ends are well illustrated by photographs and drawings. They gain in interest from the delightful letter from a curate of the parish named William Guard (1719), which the author inserts, wherein is described the danger they incurred from the disgraceful behaviour of the congregation at ceremonies of the church, when "Yesterday I married a couple very honest respectable persons . . . in a little tim after I began (the people) made such a noise that I could not hear the respos of either running from seat to seat spitting and ye like . . . there was a bustle in ye church and rattling as if there had been ten carpenters at work ye men throwing off their hats and wigs from each other ye women pulling off one another's caps stil making a noise that I could hardly distinguish my own voice. In short I really thought they would have pulled down all the seats in ye church. . . ."

Another chapter describes the old houses of the parish, Aldercombe (with excellent illustrations), Elmsworthy, Langford (once a leper hospital), and so on. The registers (continuous from 1539) have enabled the rector to trace the alliances of the families who dwelt and dwell in them—and most interesting must his information be to his present parishioners. Four hundred years of registers may sound like dull reading, but such eccentricities in Christian names as Trajan and Delicia were worth grubbing for, and Sosthenes Sharshell, of Houndspit, would surely have delighted Dickens. Field-names:—Tumbler's Park, Warmington's Plot, and so on are traced to their origins; Buse's Mill and Tucker's Hill find their first owners. Virgin Mary Plot, Gibbety Lane, and Gallows get a note.

The amount of patient labour involved in all this work must have been very great, as the list of sources of information—Domesday Inquest, State Papers, Carew, Prince, and so on—indicates.

The author does not confine himself to the past, however, but adds the contribution of his own time to the story: the burial, for instance, of the three men drowned in the *Scottish Monarch*, torpedoed off Ireland by the Germans and washed ashore at Sandymouth; there is a note on the drift from the country to the town; another on the present condition of the old Kilkhampton Friendly Society.

The value of such a book as this is very great indeed. Apart from the merely antiquarian interest of the chronicle, it is important that we should realize that our buildings are the visible record of a continuous life, and that if the story of the past is realized, the aspect of the present becomes significant. Some of the visible records are from time to time obliterated. The old church was plundered to help build the great new house of Stowe, which was itself demolished a century later. The crop of bungalows, which today springs up round every town and village, bright as a fungus and as transitory, will leave little record of itself a century hence. All the greater is the need for such histories as this. It is to be hoped that other parish priests who have Mr. Dew's qualifications for the task will follow his example, and that where such parish histories exist, the incumbent will make it a prime duty to add his contribution to the record, and so hand it on, unbroken, to his successor for still further additions. T. S. ATTLEE

A History of the Parish and Church of Kilkhampton. By the Rev. Roderick Dew. Wells, Gardner, Darton & Co. 7s. 6d. net.

COMPETITION CALENDAR

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

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

No Date. Designs are invited by the Herne Bay Urban District Council for the erection of municipal buildings and business premises on a prominent site at Herne Bay. The President of the R.I.B.A. has nominated Professor A. E. Richardson, F.S.A., F.R.I.B.A., to act as assessor. Premiums: £150, £100, £50. Printed conditions can be obtained from the Clerk to the Council, Westminster Bank House, Herne Bay. A deposit of one guinea is required for a set of the printed conditions, which will be returned upon the submission of a bona fide design.

TRAVELLING SCHOLARSHIP

Mr. Richard Newman, of Coalpit Heath, has been awarded the travelling scholarship in Architecture of the Royal West of England Academy. Mr. Newman, who is with the firm of Sir George Oatley, has decided to travel in Italy.

TRADE NOTES

Messrs. Filma Oil Burners, Ltd., of 68 Victoria Street, London, S.W.1, have appointed Mr. H. L. E. Bramer, of 118 Colmore Row, Birmingham, as their agent for the Midlands.

Since the recent amalgamation of the three big cement manufacturers who market their productions under the brand of "Red Triangle," a bold progressive policy in making known the vast potentialities of cement has been adopted. In addition to the brands now marketed, "England," "Greaves," and "Holborough," they have produced a new super-rapid hardening cement known as "Vitocrete." This latest product has successfully passed the most stringent tests. Full information regarding "Vitocrete" will be sent on request to the distributing headquarters, The Portland Cement Selling and Distributing Co., Ltd., Ship House, 20 Buckingham Gate, London, S.W.1.

TWO WORKS BY MR. HAROLD GIBBONS

In connection with the two buildings by Mr. Harold Gibbons, illustrated on page 265 *et seq.*, the contractor and sub-contractors engaged were as follow:

St. Saviour's Priory, E.2. General contractors, Dove Bros., Ltd. Sub-contractors: Chas. R. Price and Dove Bros., Ltd., demolition; Dove Bros., Ltd., excavation, foundations, dampcourses, concrete blocks, reinforced concrete, and structural steel; Thos. Lawrence & Sons, bricks and special roofings; James & Co., Willesden, glass and casements; J. Jeffreys & Co., Ltd., central heating and boilers; Paston Tudor, grate; Jacob, White & Co., Ltd., electric wiring; Gosletts, sanitary fittings; Mears and Stainbank, bell; W. Bainbridge Reynolds, Ltd., metalwork; Harold J. Youngman, stonework carving; H. C. Tanner, marble; M. E. A. Rofe and C. O. Skilbeck, stained glass.

St. Augustine's Church, Archway Road, Highgate. General contractors: Dove Bros. Sub-contractors: Smith-Walker, structural steel; Roberts Adlard & Co., tiles; Andersons, roofing felt; James & Co., Willesden, glass and casements; Thomas Elsleys, Ltd., cast lead; Jos. F. Ebner, patent flooring; Jeffreys & Co., Ltd., central heating and boilers; Jacob, White & Co., electric wiring; Bainbridge Reynolds, Ltd., electric light fixtures; Gosletts, sanitary fittings.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office, by our own patent expert. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

20507. Baner, B. Cast-iron core for production of columns of reinforced concrete. August 3.
20418. Corby, S. F. Construction of cubicles. August 2.
20448. Henry, P. Means for securing tread facings to steps, &c. August 3.
29785. James, A. C. Machines for consolidating concrete in moulds. August 6.
20347. Meier, A. J. Timber for building. August 2.

SPECIFICATIONS PUBLISHED

274916. Liversedge, A. F., and Downs, C. Compressing-screws of compressing and moulding machines of the worm-screw-compressing type.
274962. Gibson, W. J. Building-unit.
274972. Batchelor, A. Sheets and slabs for building purposes.
264473. Schantz, Dr. C. Process of and apparatus for preserving wood.
275100. Muller, A. Stone crushers.

ABSTRACT PUBLISHED

272944. Rings, J., 1 Schillerstrasse, Hansahaus, Essen, Germany. Lighting buildings.

OBITUARY

Mr. Robert Evans

The death took place at his home, Ravine House, The Park, Nottingham, last week, of Mr. Robert Evans, senior partner of the firm of Messrs. Evans, Clark, and Woollatt, architects and surveyors, of Wheeler Gate, Nottingham. Deceased, who was 64 years of age, was taken ill on the journey home from Switzerland, where he and his family had been for a holiday. Mr. Evans was the architect of some of the most important buildings erected in Nottingham in recent years and was at one time President of the Nottingham Architectural Society. He was also a prominent Freemason, and leaves a widow, one son, and two daughters.

THE WEEK'S BUILDING NEWS

The HULL Corporation has scheduled areas in Aldborough Road and Sykes Street as unhealthy and reconstruction schemes are to be prepared.

*

The HULL Corporation has acquired land at the corner of Sculcoates Lane and Hedon Road for a rehousing scheme.

*

Mr. William Moore has purchased land in Cartington Road, TYNEMOUTH, from the Tynemouth Corporation for the erection of houses.

*

The Rev. W. G. Bell, secretary, Chichester Diocesan Fund, has obtained a site for the erection of a church hall on the North Moulsecomb estate, BRIGHTON.

*

The CHELMSFORD Corporation has obtained sanction to grant another fifty housing subsidies.

*

The GLASGOW Corporation has now arranged terms with the Dunbarton C.C. for the construction of a bridge over the Kelvin at Killermont, the cost of which is estimated at £30,000.

*

The PLYMOUTH Corporation is to erect a smallpox hospital at Sparkwell at a cost of £3,000.

*

The WIMBLEDON Corporation has obtained an option for the purchase of a site for another housing scheme.

*

The LANCASHIRE County Council has made an agreement for the reconstruction of Agecroft canal bridge with the London, Midland and Scottish Railway Co.

*

The PLYMOUTH Corporation has decided to erect a welfare centre at Portland Place, Devonport.

*

Plans passed by the WIMBLEDON Corporation: Fourteen houses, garages, etc., Melbury Gardens, for Messrs. H. Wakeford and Sons; warehouse and stores, Wandle Bank, for Messrs. A. J. Cripps & Co.

*

The NOTTS Education Committee has purchased land at Rempstone for school purposes.

*

The GLASGOW Corporation has had a letter from the Ministry of Transport, intimating that a grant of £23,194 has been made to the Corporation, being 25 per cent. of the cost, estimated at £92,777, of the construction of the new road from Queen Margaret Drive to Hamilton Street, including the widening of Hamilton Drive to 80 ft. and the new bridge.

The DURHAM County Education Committee has obtained a site on the Townley estate, Hookergate, for the erection of a secondary school. It has also accepted the tender, £5,380, of Messrs. Durham and Veevers, of East Boldon, for the erection of an elementary school at Nettlesworth.

*

The PRESTWICH U.D.C.'s surveyor has prepared a lay-out of the Rectory fields, provision being made for football and hockey pitches, ten tennis courts, and a bandstand. Plans have also been prepared for the erection of a further sixty-two houses.

*

The Board of Education has sanctioned the purchase by the NOTTS Education Committee of land at Clayworth for the erection of an elementary school. The committee has also purchased a 3-acre site at Skegby for the erection of a school.

*

The WEST BRIDGFORD U.D.C. has prepared a preliminary town planning scheme.

*

The Basford R.D.C. has prepared a town planning scheme for the parish of GEDLING.

*

A town planning scheme is being prepared by the CARLTON U.D.C.

*

Representatives of the University of Leeds are discussing with the LEEDS Corporation the lay-out plan in connection with extensions at the university.

*

The LEEDS Corporation has passed plans submitted by Mr. F. B. Atkinson for the lay-out of an estate at Cross Gates.

*

The PAIGNTON U.D.C. is to erect parlour-type houses on sixteen sites on the Preston housing estate.

*

The BOLTON Corporation has secured sanction to borrow £25,000 for further housing grants.

*

The BIRMINGHAM Education Committee proposes by direct labour to modernize the Osler Street elementary school at an estimated cost of £26,000.

*

The LEEDS Corporation is seeking sanction to borrow £9,000 for the acquisition of a housing site off Stanningley Lane, Bramley.

*

The GLASGOW Corporation has made contracts for the erection of 198 houses at Bellahouston at prices ranging from £450 to £509 per house.

*

The DOUGLAS (I. of M.) Corporation is to proceed with the erection of sixty-six houses on the Olympia estate.

Plans passed by DOUGLAS (I. of M.) Corporation: Extensions to Noble's I. of M. Hospital, Westmoreland Road; shed, Parade Street, for I. of M. Steam Packet Co., Ltd.; workshop, Orry Street, for Mr. Kennaugh.

*

The Heworth Church Council, YORK, is inquiring from the York Corporation for a site for the erection of buildings for church purposes in Bargain Lane.

*

The Postmaster-General is to erect a telephone exchange in Heaton Road, BRADFORD.

*

The Wesleyan Church Trustees have acquired a site on the Billesley Farm housing estate, BIRMINGHAM, for the erection of a church.

*

The BIRMINGHAM Education Committee has decided to enlarge the Yardley secondary school at an estimated cost of £8,000.

*

The NORTHAMPTON Corporation is seeking permission to grant a further thirty housing subsidies.

*

The BIRMINGHAM Corporation Baths Committee is considering the provision of new baths and washhouses for the Kent Street district.

*

The Herts County Council has purchased 98 acres on Cell Barnes Lane, ST. ALBANS, adjoining the present mental hospital estate, as more land is required for the purposes of the hospital, in view of future possible additions, and also owing to the fact that it will soon become very difficult to secure land in close proximity to the hospital, as in this case, owing to the rapid development of building in the neighbourhood.

*

Plans passed by STRETFORD U.D.C.: Packing-case shelter, Westinghouse Road, for Messrs. The Metro-Vickers Electrical Co., Ltd.; bath house, Westinghouse Road, for The Metro-Vickers Electrical Co., Ltd.; alterations, "N" warehouse, for the Trafford Park Estates, Ltd.

*

The LOSSIEMOUTH Corporation is to erect sixteen houses in Dunbar Street.

*

Plans passed by BARKING U.D.C.: Shop and house, Sherwood Gardens, for Mr. C. Gray; two steel-framed buildings, River Road, for The British Anti-Fouling Co., Ltd.; alterations, 83 East Street, for Messrs. Cullens, Ltd.; garage, shop, and offices, St. Paul's Road, for Messrs. Morrall and Whitehouse; lay-out of three streets on the Faircross estate, for Estate Company; factory, River Road, for Mr. R. Orrock.

Plans passed by the BOLTON Corporation: Ten houses, Leighton Avenue, for Mr. Joseph Uttley; heating chamber and entrance hall, Picture House, Fern Street, for Mr. Flintoff Moorhouse; air filter and heater house, Mealhouse Lane, for Messrs. Tillotsons; twelve houses, Thornton Avenue, for Mr. F. E. Thornton; nine houses, Third Avenue, for Mrs. J. A. Woods; two houses, Hirst Street, for Mr. Maurice Welsh; two houses, Somerset Road, for Mr. Joseph Uttley; alterations and additions, Lever Bridge Vicarage, for the Parochial Church Council; paint store, Plover Street, for Messrs. J. Dickinson (Bolton), Ltd.; bakehouse, Venture Street, for Mr. Joseph Bate; additional story, Garfield Mill, Atherton Street, for Messrs. Kippax and Sons, Ltd.; extensions to butcher's shop, Doffcocker Branch, Chorley Old Road, for Bolton Co-operative Society, Ltd.; building for induced draught plant, Back-o'-th'-Bank generating station, for the Electricity Committee.

*

EASTBOURNE Corporation Housing Committee has approved the amended lay-out by the borough engineer for the erection of houses on Victoria Drive site.

*

The BOLTON Watch Committee has passed plans submitted by Mr. T. Flintoff Moorhouse for the conversion of Wesleyan Church premises in Deane Street and Fern Street into a picture palace.

*

The WIMBLEDON Corporation is seeking sanction for a loan of £20,000 for further housing advances; it has also passed plans for alterations and additions to the Elite Cinema, Merton Road.

*

The Derbyshire and Cheshire County Councils are preparing proposals for the reconstruction of MARPLE bridge.

*

The Hazel Grove and Bramhall U.D.C. is in negotiation with the railway company and the county authority regarding the widening of the BRAMHALL railway bridge.

*

The COULSDON Heights Estate Co. is laying out streets on their estate near Coulsdon Church.

*

The LEICESTER Corporation Highways Committee reports that the street improvement scheme has now reached a stage when it will be necessary shortly to arrange for the erection of houses for a certain number of displaced tenants, and the Committee has considered a scheme prepared by the city surveyor for the erection of various types of houses to meet the requirement of those tenants who will be displaced by the execution of the first section of the street improvement scheme. The scheme provides for the erection of ninety-five houses to accommodate 433 persons, and is to be submitted to the Minister of Health for approval.

The Coulsdon U.D.C. is to prepare amended designs for the proposed bridge at Foxley Hill Road, PURLEY, in accordance with suggestions by the Ministry of Transport.

*

The Ministry of Health has held an inquiry into the proposal of the STRETFORD U.D.C. to erect baths at Trafford Park at a cost of £13,000; it has also obtained sanction for a loan of £30,000 for further housing grants.

*

The STRETFORD U.D.C. has asked the surveyor to report upon the feasibility of providing a new artificial lake in Longford Park.

*

Tenders for the construction of the bridge for the continuation of Fulton Street, over the Cowdenhill branch railway, GLASGOW, is to be obtained by the Corporation.

*

Among the plans passed by the GRAVESEND Corporation include: Seven garages, Trosley Avenue, for Mr. J. R. Pettman; two houses, Old Road West, for Mr. T. Bennett; alterations, "Railway Tavern," Stone Street, for Messrs. Meux's Brewery Co., Ltd.; two houses, Ridgeway Avenue, for Messrs. Bridgland and Clay.

*

Plans passed by the DORCHESTER Corporation: alterations, "The King's Arms Hotel," for the proprietors; garages, Fordington Green, for Mr. Bryan Barnes; store and garage, etc., Troves Road, for Miss S. Carver.

*

Plans passed by the PLYMOUTH Corporation: Alterations, Clifton Hotel, Clifton Street, for Mrs. E. Chilcott; workshop and store, rear of 105 Union Street, Stonehouse, for Empress Radio Co., Ltd.; five shops, Windsor Lane, for Mr. W. T. Ching; six houses, Browning Road, for Mr. W. H. Heath; four houses, Highen Venn estate, for Mr. J. H. Dyer; reconstruction of premises, Regent Street, for Messrs. Legge-Wilson, Ltd.; alterations, Repertory Theatre, Princess Square, for Messrs. R. Humm & Co.

*

The KENSINGTON Borough Council has asked the borough engineer to prepare a scheme for redecorating the town hall.

*

Messrs. Hoare and Wheeler are to erect buildings on a site fronting Seymour Place, Harrowby Street, and Brown Street, MARYLEBONE.

*

The Ministry of Health is to hold an inquiry into the scheme of the MARYLEBONE Borough Council for the extension of the town hall and public library.

*

The Ministry of Health has approved of the lay-out and house plans for the erection of thirty houses under the City of YORK (Hope Street Improvement Scheme) Order, 1925.

The SWANSEA Improvements and Tramways Company is to convert land adjoining its station at Rutland Street, between Rayner Place and Albert Place, into a depot for the accommodation of its new electric trains, and to erect permanent buildings thereon.

*

The SURREY Standing Joint Committee, appointed to consider preliminary preparations for an extension of the county offices, has obtained from Mr. E. Vincent Harris, 29 St. James's Square, S.W.1, preliminary drawings of the proposed extension which are sufficient for the purpose of explaining the scheme for providing additional accommodation for the staff. In the proposed new building, accommodation will be provided for all members of the staff now housed in buildings adjacent to the County Hall and the Bittoms Annexe.

*

Plans passed by YORK Corporation: House and shop, Melrosegate, for Messrs. Gray and Sons; two houses, Wolfe Avenue, for Mr. C. Tesseyman; bungalows, Acomb Hall estate, for N.E.R. Cottage Homes and Benefit Fund.

*

Plans passed by HORNSEY Corporation: Addition, Holy Trinity Church, Stapleton Hall Road, for Mr. T. C. Brownsell; bottle-washing and filling room, Archway Road, for Mr. H. B. Evans; billiard hall, "The Chestnuts," Middle Lane, for Mr. G. Taft; workshop and garages, Wightman Road, for Mr. A. E. Stump.

*

Plans passed by FULHAM B.C.: Buildings, site of 923-31 Fulham Road, at the corner of Landridge Road, for Mr. G. R. Farrow; building in Fulham Palace Road, between Crabtree Lane and Silverton Road, for Messrs. Wallis, Gilbert and Partners.

*

COULSDON U.D.C. is seeking sanction for a loan of £20,000 for further housing advances.

*

A scheme for the erection of further buildings at Houghall Farm at a cost of £11,000 has been prepared by the DURHAM County Council.

*

GUILDFORD Corporation is seeking consent to borrow £19,000 for further housing advances.

*

The Lancashire Education Committee is acquiring land at Bobby's Lane, PRESTWICH, for the erection of an elementary school.

*

Messrs. Morrall and Whitehouse are to erect shop, offices, and garage at the junction of St. Paul's Road and Abbey Road, BARKING.

*

MARYLEBONE B.C. is considering the possibilities of the Grove Road depot site for the erection of a new public washhouse.

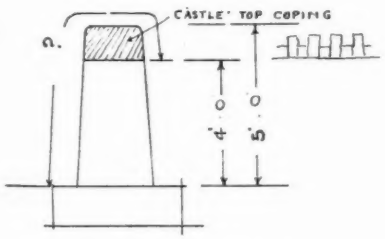
READERS' QUERIES

QUANTITIES FOR DRY STONE WALLING

R. D. J. writes: "In measuring up for quantities for dry stone walling, with coping in lime mortar, is the coping usually included in the cubic contents of walling, or separate? If it is usually included, is the wall and coping measured over the top, as sketch, for the full height?"

Stone walling should be measured at per yard cube when 18 in. thick or over, and where under 18 in. thick at per yard super, stating thickness. Facing should be measured at per yard super on cube work, and where walling is measured super with the thickness stated, it is better to describe the particular kind of facing with the walling, stating whether to one or both sides. Copings are best measured lineal, as labour and material, giving the description. The various methods of measuring copings as "extra over" walling or facing are somewhat confusing. In the example given by our correspondent, the method of girthing the coping in with the height of the wall may be a method employed in some localities to arrive quickly at an inclusive price of walling, facing, and coping, but the method is not sound in general principle, and is best avoided in a bill of quantities.

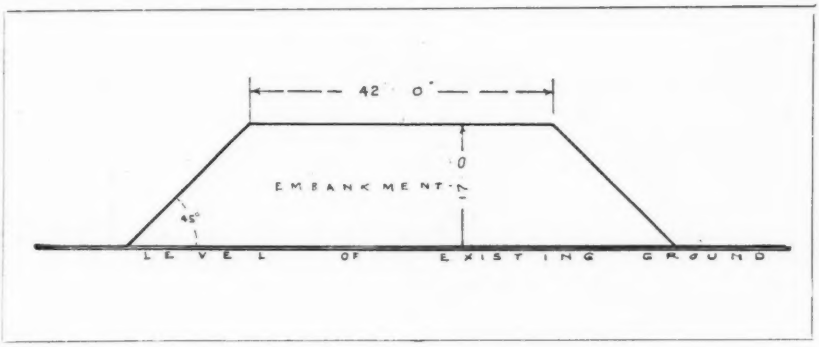
F.



SUBSIDENCE OF EMBANKMENT

R. D. J. writes: "A new road is being constructed, having an embankment with a cross-section, as sketch. The filling-in of the embankment is composed mainly of slate slab waste. In some cases the embankment is raised on peaty ground, and in other cases on ordinary soil. As there would be an enormous weight per super yard bearing on the ground, I should like to know whether there is a formula by which one could ascertain the depth the embankment would sink into the ground, according to its nature, as undoubtedly it would sink under its own weight."

Data derived from books lead to an underestimate of the amount of subsidence in such cases, since the time element is either ignored or insufficiently allowed for. Direct experiment on the site with test loads on known areas of levelled subsoil will give much more reliable information, particularly if the experiments are kept under observation for several months during which changes of weather have taken place. The subsidence will be found to renew itself from time to time in accordance with the water content of the peaty soil, and if the urgency of the work forbids long preliminary tests, the ground chosen for some of the test loads should be saturated with water artificially and the resultant sinking compared with the settlement of adjoining test loads on dry earth.



In conducting the tests the loads should be as nearly as possible equal to the anticipated unit loads which will be applied by the embankment and traffic upon it, and as a preliminary step, the weight of the slate slab waste should be ascertained. The effective area at the base of the embankment will depend upon the amount of bond between the several pieces of slate, and if no bonding action can be counted upon, it will be safest to consider the base as being no wider than the top of the embankment as far as resistance to pressure is concerned. The initial level of each test load should be recorded as soon as it is placed in position, and provision must be made for measuring the new levels taken up by the loads as they sink into the peaty subsoil by datum marks on fixed points within measuring distance.

W. H.

The Editor welcomes readers' inquiries on all matters connected, directly or indirectly, with architectural practice. These inquiries are dealt with by a board of experts, to which additions are constantly being made as, and when, need arises. No charge is made to readers for this expert service. Diagrams must be clearly and legibly drawn out and lettered in black ink. Querists must enclose name and address.—Ed. A. J.

BENDING AND SHEARING STRESSES OF STEEL BEAMS

H. H. writes: "Is there a satisfactory theory dealing with the strength to resist bending and shearing stresses of steel beams which are curved to an arc on plan, also with the bending stresses set up in the stanchions to which such a beam would be connected? The beam would be loaded uniformly along its length."

The subject is generally avoided by writers of textbooks, in that each case has to be treated on its merits; for as the curvature of the "beam" becomes more abrupt, its structural character approaches more nearly to the condition of a pair of cantilevers joined together at their free ends and departs from the condition of a genuine "beam," which is inevitably supposed to be straight on plan. Even the slightest curvature on plan introduces a tendency towards lateral rotation of the "beam" under its own weight and under its superincumbent load in a manner calculated to apply torsion in the "beam," and tension to the upper connections between its ends and the supporting stanchions. The severity of the stresses will be modified by the proposed uniformity of loading, though not so appreciably as would be the case with cantilevers projecting out in straight lines from their supports, since the leverage of the load will depend upon its point of application in relation to the supports, and the curved lines on plan throws the centre of gravity of the load farther from them. The first step in the solution of any particular case of a curved "beam" must, therefore, be the accurate determination of the point of application of the resultant loads by finding the centre of gravity of the arrangement on plan. How severely the "beam" will actually suffer from torsion will depend partly upon the nature of the material by which the load is applied, since, for example, a rigid floor slab might be made to assist in keeping the flanges of the "beam" horizontal across their breadth by riveting them to the subordinate supports of the floor.

The bending stresses in the supporting stanchions will be affected by the magnitude and position of the resultant pressure and by the length and method of fixing each stanchion at its base and upper extremity (supposing its upper extremity to be fixed). Stanchions merely supported would be in danger of immediate overturning if the loads on the "beam" were large in proportion to their weight, and, by the act of overturning, they would fail by rotation at their bases instead of failing by bending.

W. H.

RATES OF WAGES

			I s. d.	II s. d.
A	ABERDARE	S. Wales & M.	1 8	1 3½
A1	Abergavenny	S. Wales & M.	1 7½	1 2½
B	Abingdon ..	S. Counties	1 6	1 1½
A	Accrington	N.W. Counties	1 8	1 3½
A3	Addlestone	S. Counties	1 6½	1 2
A	Adlington ..	N.W. Counties	1 8	1 3½
A	Airdrie ..	Scotland	*1 8	1 3½
C1	Aldeburgh	E. Counties	1 4	1 0½
A	Altrincham	N.W. Counties	1 8	1 3½
B3	Appleby ..	N.W. Counties	1 4½	1 0½
A	Ashton-under-Lyne	N.W. Counties	1 8	1 3½
A3	Atherstone	Mid. Counties	1 6½	1 2
B3	Aylesbury ..	S. Counties	1 4½	1 0½
B3	BANBURY	S. Counties	1 4½	1 0½
B3	Bangor ..	N.W. Counties	1 5	1 1
A	BarnardCastle	N.E. Coast	1 8	1 3½
A	Barnsley ..	Yorkshire	1 8	1 3½
B1	Barnstaple	S.W. Counties	1 5½	1 1½
A	Barrow ..	N.W. Counties	1 8	1 3½
A	Barry ..	S. Wales & M.	1 8	1 3½
B3	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 6	1 1½
A	Batley ..	Yorkshire	1 8	1 3½
B	Bedford ..	E. Counties	1 6	1 1½
A3	Berwick-on-Tweed	N.E. Coast	1 7	1 2½
A3	Bewdley ..	Mid. Counties	1 7	1 2½
B3	Bicester ..	Mid. Counties	1 4½	1 0½
A	Birkenhead	N.W. Counties	*1 10	1 4½
A	Birmingham	Mid. Counties	1 8	1 3½
A	Bishop Auckland	N.E. Coast	1 8	1 3½
A	Blackburn	N.W. Counties	1 8	1 3½
A	Blackpool	N.W. Counties	1 8	1 3½
A	Blyth ..	N.E. Coast	1 8	1 3½
B3	Bognor ..	S. Counties	1 4½	1 0½
A	Bolton ..	N.W. Counties	1 8	1 3½
A3	Boston ..	Mid. Counties	1 6½	1 2
B1	Bournemouth	S. Counties	1 6	1 1½
B3	Bovey Tracey	S.W. Counties	1 5	1 1
A	Bradford ..	Yorkshire	1 8	1 3½
A3	Brentwood	E. Counties	1 7	1 2½
A	Bridgend ..	S. Wales & M.	1 8	1 3½
B3	Bridgwater	S.W. Counties	1 5	1 1
A1	Bridlington	Yorkshire	1 7½	1 2½
A	Brighouse	Yorkshire	1 8	1 3½
B1	Brighton ..	S. Counties	1 6	1 1½
A	Bristol ..	S.W. Counties	1 8	1 3½
B3	Brixham ..	S.W. Counties	1 4½	1 0½
A3	Bromsgrove	Mid. Counties	1 7	1 2½
C	Bromyard ..	Mid. Counties	1 4	1 0½
A	Burnley ..	N.W. Counties	1 8	1 3½
A	Bursiem ..	Mid. Counties	1 8	1 3½
A3	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 8	1 3½
A1	Buxton ..	N.W. Counties	1 7½	1 2½
B	CAMBRIDGE	E. Counties	1 6	1 1½
B3	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 8	1 3½
A	Carlisle ..	N.W. Counties	1 8	1 3½
B	Carmarthen	S. Wales & M.	1 6	1 1½
B3	Carnarvon	N.W. Counties	1 5	1 1
A1	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 8	1 3½
B1	Chatham ..	S. Counties	1 5½	1 1½
B1	Chelmsford	E. Counties	1 5½	1 1½
A3	Cheltenham	S.W. Counties	1 6½	1 2
A	Chester ..	N.W. Counties	1 8	1 3½
A	Chesterfield	Mid. Counties	*1 8	1 3½
B3	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 8	1 3½
B3	Cirencester	S. Counties	1 5	1 1
A	Clitheroe ..	N.W. Counties	1 8	1 3½
A	Clydebank	Scotland	1 8	1 3½
A	Coalville ..	Mid. Counties	1 8	1 3½
B1	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 8	1 3½
B1	Colwyn Bay	N.W. Counties	1 5½	1 1½
A	Consett ..	N.E. Coast	1 8	1 3½
B1	Conway ..	N.W. Counties	1 5½	1 1½
A	Coventry ..	Mid. Counties	1 8	1 3½
A3	Crewe ..	N.W. Counties	1 6½	1 2
A3	Cumberland	.....	1 6½	1 2
A	DARLINGTON	N.E. Coast	1 8	1 3½
A	Darwen ..	N.W. Counties	1 8	1 3½
B3	Deal ..	S. Counties	1 4½	1 0½
B1	Denbigh ..	N.W. Counties	1 5½	1 1½
A	Derby ..	Mid. Counties	1 8	1 3½
A	Dewsbury ..	Yorkshire	1 8	1 3½
B	Didcot ..	S. Counties	1 6	1 1½
A	Doncaster	Yorkshire	1 8	1 3½
C1	Dorchester	S.W. Counties	1 4	1 0½
A3	Driffield ..	Yorks	1 6½	1 2
A3	Droitwich ..	Mid. Counties	1 6½	1 2
A1	Dudley ..	Mid. Counties	1 7½	1 2½
A	Dundee ..	Scotland	1 8	1 3½
A	Durham ..	N.E. Coast	1 8	1 3½
B1	EASTBOURNE	S. Counties	1 6	1 1½
A	Ebbw Vale	S. Wales & M.	1 8	1 3½
A	Edinburgh	Scotland	1 8	1 3½
A	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 8	1 3½
B	Exeter ..	S.W. Counties	*1 7	1 2½
B2	Exmouth ..	S.W. Counties	1 5	1 1
B	FELIXSTOWE	E. Counties	1 6	1 1½
A3	Filey ..	Yorks	1 6½	1 2
A	Fleetwood ..	N.W. Counties	1 8	1 3½
B2	Folkestone	S. Counties	1 5	1 1
A	Frodsham ..	N.W. Counties	1 8	1 3½
B3	Frome ..	S.W. Counties	1 4½	1 0½
A	GATESHEAD	N.E. Coast	1 8	1 3½
B1	Gillingham	S. Counties	1 5½	1 1½
A3	Gloucester	S.W. Counties	1 6½	1 2
A2	Goole ..	Yorkshire	1 7	1 2½
B	Gosport ..	S. Counties	1 6	1 1½
A3	Grantham	Mid. Counties	1 6½	1 2
A1	Gravesend	S. Counties	1 7½	1 2½
A	Greenock ..	Scotland	*1 8	1 3½
A	Grimsby ..	Yorkshire	1 8	1 3½
B1	Guildford ..	S. Counties	1 5½	1 1½
A	HALIFAX ..	Yorkshire	1 8	1 3½
A	Hanley ..	Mid. Counties	1 8	1 3½
A	Harrogate	Yorkshire	1 8	1 3½
A	Hartlepools	N.E. Coast	1 8	1 3½
B2	Harwich ..	E. Counties	1 5	1 1
B3	Hastings ..	S. Counties	1 4½	1 0½
B1	Hatfield ..	S. Counties	1 5½	1 1½
B	Hereford ..	S. W. Counties	1 6	1 1½
B	Hertford ..	E. Counties	1 5½	1 1½
A1	Heysham ..	N.W. Counties	1 7½	1 2½
A	Howden ..	N.E. Coast	1 8	1 3½
A	Huddersfield	Yorkshire	1 8	1 3½
A	Hull ..	Yorkshire	1 8	1 3½

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

			I s. d.	II s. d.
A	ILKLEY ..	Yorkshire	1 8	1 3½
A	Immingham	Mid. Counties	1 8	1 3½
B	Ipswich ..	E. Counties	1 6	1 1½
C1	Isle of Wight	S. Counties	1 4	1 0½
A	JARROW ..	N.E. Coast	1 8	1 3½
A	KEIGHLEY	Yorkshire	1 8	1 3½
B1	Kendal ..	N.W. Counties	1 5½	1 1½
B1	Keswick ..	N.W. Counties	1 5½	1 1½
B	Kettering ..	Mid. Counties	1 6	1 1½
A2	Kidderminster	Mid. Counties	1 7	1 2½
B2	King's Lynn	E. Counties	1 5	1 1
A	LANCASTER	N.W. Counties	1 8	1 3½
A3	Leamington	Mid. Counties	1 7	1 2½
A	Leeds ..	Yorkshire	1 8	1 3½
A	Leek ..	Mid. Counties	1 8	1 3½
A	Leicester ..	Mid. Counties	1 8	1 3½
A	Leigh ..	N.W. Counties	1 8	1 3½
B3	Lewes ..	S. Counties	1 4½	1 0½
A3	Lichfield ..	Mid. Counties	1 6½	1 2
A	Lincoln ..	Mid. Counties	1 8	1 3½
A	Liverpool ..	N.W. Counties	*1 10	1 4½
B	Llandudno	N.W. Counties	1 5½	1 1½
A	Llanelly ..	S. Wales & M.	1 8	1 3½
	London (12 miles radius)		1 9½	1 4½
	Do. (12-15 miles radius)		1 9	1 4
A	Long Eaton	Mid. Counties	1 8	1 3½
A	Loughborough	Mid. Counties	1 8	1 3½
B	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 8	1 3½
A1	MACCLESFIELD	N.W. Counties	1 7½	1 2½
B	Maidstone	S. Counties	1 5½	1 1½
A3	Malvern ..	Mid. Counties	1 6½	1 2
A	Manchester	N.W. Counties	1 8	1 3½
A	Mansfield ..	Mid. Counties	1 8	1 3½
B3	Margate ..	S. Counties	1 4½	1 0½
A3	Matlock ..	Mid. Counties	1 6½	1 2
A	Merthyr ..	S. Wales & M.	1 8	1 3½
A	Middlesbrough	N.E. Coast	1 8	1 3½
A3	Middewich	N.W. Counties	1 6½	1 2
B2	Minehead ..	S.W. Counties	1 5	1 1
A	Monmouth	S. Wales & M.	1 8	1 3½
	S. and E. Glamorganshire			
A1	Morecambe	N.W. Counties	1 7½	1 2½
A3	NANTWICH	N.W. Counties	1 6½	1 2
A	Neath ..	S. Wales & M.	1 8	1 3½
A	Nelson ..	N.W. Counties	1 8	1 3½
A	Newcastle ..	N.E. Coast	1 8	1 3½
A	Newport ..	S. Wales & M.	1 8	1 3½
A	Normanton	Yorkshire	1 8	1 3½
A3	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 8	1 3½
A	North Shields	N.E. Coast	1 8	1 3½
A3	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 8	1 3½
A	Nuneaton ..	Mid. Counties	1 8	1 3½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 8	1 3½
A3	Oswestry ..	Mid. Counties	1 6½	1 2
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 8	1 3½
C	Pembroke	S. Wales & M.	1 4½	1 0½
A	Perth ..	Scotland	*1 8	1 3
A3	Peterborough	Mid. Counties	1 6½	1 2
A	Plymouth	S.W. Counties	*1 8	1 3½
A	Pontefract	Yorkshire	1 8	1 3½
A	Pontypridd	S. Wales & M.	1 8	1 3½
B	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 8	1 3½
A	QUEENSFERRY	N.W. Counties	1 8	1 3½
B	READING ..	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A3	Retford ..	Mid. Counties	1 6½	1 2
A	Rhondda Valley	S. Wales & M.	1 8	1 3½
A3	Ripon ..	Yorkshire	1 6½	1 2
A	Rochdale ..	N.W. Counties	1 8	1 3½
B	Rochester ..	S. Counties	1 5½	1 1½
A1	Ruabon ..	N.W. Counties	1 7½	1 2½
A2	Rugby ..	Mid. Counties	1 8	1 3½
A3	Rugeley ..	Mid. Counties	1 6½	1 2
A	Runcorn ..	N.W. Counties	1 8	1 3½
A3	ST. ALBANS	E. Counties	1 6½	1 2
A	St. Helens	N.W. Counties	1 8	1 3½
B3	Salisbury	S.W. Counties	1 4½	1 0½
A1	Scarborough	Yorkshire	1 7½	1 2½
A	Scunthorpe	Mid. Counties	1 8	1 3½
A	Sheffield ..	Yorkshire	1 8	1 3½
A	Shipley ..	Yorkshire	1 8	1 3½
A3	Shrewsbury	Mid. Counties	1 6½	1 2
A2	Skipton ..	Yorkshire	1 7	1 2½
B	Slough ..	S. Counties	1 5½	1 1½
A2	Solihull ..	Mid. Counties	1 7	1 2½
A3	South'pton	S. Counties	1 6½	1 2
B1	Southend-on-Sea	E. Counties	1 5½	1 1½
A	Southport ..	N.W. Counties	1 8	1 3½
A	S. Shields ..	N.E. Coast	1 8	1 3½
A2	Stafford ..	Mid. Counties	1 7	1 2½
A	Stockport ..	N.W. Counties	1 8	1 3½
A	Stockton-on-Tees	N.E. Coast	1 8	1 3½
A	Stoke-on-Trent	Mid. Counties	1 8	1 3½
B	Stroud ..	S.W. Counties	1 5½	1 1½
A	Sunderland	N.E. Coast	1 8	1 3½
A	Swadlincote	Mid. Counties	1 8	1 3½
A	Swansea ..	S. Wales & M.	1 8	1 3½
B	Swindon ..	S.W. Counties	1 6	1 1½
A1	TAMWORTH	N.W. Counties	1 7½	1 2½
B1	Taunton ..	S.W. Counties	1 5½	1 1½
A	Teeside Dist.	N.E. Counties	1 8	1 3½
B	Teignmouth	S.W. Coast	1 6	1 1½
A	Todmorden	Yorkshire	1 8	1 3½
A2	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 4	1 0½
B1	Tunbridge Wells	S. Counties	1 5½	1 1½
A	Tunstall ..	Mid. Counties	1 8	1 3½
A	Tyne District	N.E. Coast	1 8	1 3½
A	WAKEFIELD	Yorkshire	1 8	1 3½
A1	Walsall ..	Mid. Counties	1 7½	1 2½
A	Warrington	N.W. Counties	1 8	1 3½
A2	Warwick ..	Mid. Counties	1 7	1 2½
B	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 8	1 3½
B	Weston-s-Mare	S.W. Counties	1 6	1 1½
A3	Whitby ..	Yorkshire	1 7	1 2½
A	Widnes ..	N.W. Counties	1 8	1 3½
A	Wigan ..	N.W. Counties	1 8	1 3½
B2	Winchester	S. Counties	1 5	1 1
B	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 8	1 3½
A3	Worcester ..	Mid. Counties	1 6½	1 2
A3	Worksop ..	Yorkshire	1 6½	1 2
A1	Wrexham ..	N.W. Counties	1 7½	1 2½
B	Wycombe ..	S. Counties	1 6	1 1½
B1	YARMOUTH	E. Counties	1 5½	1 1½
B2	Yeovil ..	S.W. Counties	1 5	1 1
A	York ..	Yorkshire	1 8	1 3

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

PRICES CURRENT

EXCAVATOR AND CONCRETOR

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

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

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

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

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

Transport hire per day:

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

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.
RETURN, fill, and ram, ordinary earth, per yd. £0 1 6
SPREAD and level, including wheeling, per yd. 0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube . 0 10 6
TRIMMING earth to slopes, per yd. sup. 0 0 6
HACKING up old grano. or similar paving, per yd. sup. 0 1 3
PLANKING to excavations, per ft. sup. . 0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.
IF left in, add to above prices, per ft. cube 0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup. . 0 2 1
DO. 6 in. thick, per yd. sup. . . . 0 2 10
PUDDLING, per yd. cube 1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube 2 3 0
DO. 6-2-1, per yd. cube . . . 1 18 0
DO. in upper floors, add 15 per cent.
DO. in reinforced-concrete work, add 20 per cent.
DO. in underpinning, add 60 per cent.
LIAS-LIME CONCRETE, per yd. cube . £1 16 0
BREEZE CONCRETE, per yd. cube . 1 7 0
DO. in lintels, etc., per ft. cube . 0 1 6
CEMENT concrete 4–2–1 in lintels packed around reinforcement, per ft. cube 0 3 9
FINE concrete benching to bottom of manholes, per ft. cube . . . 0 2 6
FINISHING surface of concrete spade face, per yd. sup. 0 0 9

DRAINER

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

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

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. . 0 4 3
DO. 6 in., per ft. 0 5 6
DO. 9 in., per ft. 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 0
DO. 6 in., per ft. 0 10 0

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

BRICKLAYER

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

London stocks, per M.	£4 15 0
Flettons, per M.	2 18 0
Staffordshire blue, per M.	9 10 0
Firebricks, 2½ in., per M.	11 3 0
Glazed salt, white, and ivory stretchers per M.	24 10 0
DO. *headers, per M.*	24 0 0
Colours, extra, per M.	5 10 0
Seconds, less per M.	1 0 0
Cement and sand, see "Excavator" above.	
Lime, grey stone, per ton	2 17 0
Mixed lime mortar, per yd.	1 6 0
Damp course, in rolls of 4½ in., per roll	0 2 6
DO. 9 *in. per roll*	0 4 9
DO. 14 *in. per roll*	0 7 6
DO. 18 *in. per roll*	0 9 6

BRICKWORK in stone lime mortar, Flettons or equal, per rod . . £33 0 0
DO. in cement do., per rod . . 36 0 0
DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup. . . £0 1 0
BEDDING plates in cement mortar, per ft. run 0 0 3
BEDDING window or door frames, per ft. run 0 0 3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run 0 0 2
CUTTING do. in old walls in cement, per ft. run 0 0 4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup. 0 0 7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run 0 3 6
DO. 14 ft. by 9 in. do., per ft. run . 0 6 0
FL "NCHING chimney pots, each . 0 2 0
CUTTING and pinning ends of timbers, etc., in cement 0 1 0
FACINGS fair, per ft. sup. extra . . 0 0 3
DO. picked stocks, per ft. sup. extra . 0 0 7
DO. red rubbers gauged and set in putty, per ft. sup. extra . . 0 4 9
DO. in salt white or ivory glazed, per ft. sup. extra 0 5 6
TUCK pointing, per ft. sup. extra . 0 0 10
WEATHER pointing, do. do. . . 0 0 3
TILE creasing with cement fillet each side per ft. run 0 0 6
GRANOLITHIC PAVING, 1 in., per yd. sup. 0 5 0
DO. 1½ in., per yd. sup . . . 0 6 0
DO. 2 in., per yd. sup. 0 7 0
If coloured with red oxide, per yd. sup. 0 1 0
If finished with carborundum, per yd. sup. 0 0 6
If in small quantities in finishing to steps, etc., per ft. sup. . . . 0 1 4
Jointing new grano, paving to old, per ft. run 0 0 4
Extra for dishing grano, or cement paving around gullies, each . . 0 1 6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup. 0 0 7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup. 0 8 0
DO. vertical, per yd. sup. . . . 0 11 0
SLATE DAMP COURSE, per ft. sup. . 0 0 10
ASPHALT ROOFING (MASTIC) in two thicknesses, ½ in., per yd. . . 0 8 6
DO. SKIRTING, 6 in. 0 0 11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup. . . 0 5 3
DO. DO. 3 in.. . . . . 0 6 6
BREEZE fixing bricks, extra for each . 0 0 3

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

MASON

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

Portland Stone:	
Whitbed, per ft. cube	£0 4 6
Basebed, per ft. cube	0 4 7
Bath stone, per ft cube	0 3 0
Usual trade extras for large blocks.	
York paving, av. 2½ in., per yd. super	0 6 6
York 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, 33⅓ per cent.
DO. for Chilmark, 5 per cent.
SETTING 1 in. slate shelving in cement, per ft. sup. £0 0 6
RUBBED round nosing to do., per ft. lin. 0 0 6
YORK STEPS, rubbed T. & R., ft. cub. fixed 1 9 0
YORK SILLS, W. & T., ft. cub. fixed . 1 13 0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.. . . . . 0 1 6
DO. 2½ in. thick, per ft. sup. . . 0 1 9

SLATER AND TILER

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

Slates, 1st quality, per 1,200:							
Portmadoc Ladies					£14	0	0
Countess					27	0	0
Duchess					32	0	0
Old Delabole	*Med.*		*Grey*		*Med.*		*Green*
24 in. × 12 in.	£42	11	3		£45	1	0
20 in. × 10 in.	31	4	3		33	0	6
16 in. × 10 in.	20	18	0		22	4	9
14 in. × 8 in.	12	1	0		12	16	3
Green Randoms, per ton					8	3	9
Grey-green do., per ton					7	3	9
Green peggies, 12 in. to 8 in. long, per ton					6	3	9

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

Clips, lead, per lb.	£0 0 6
Clips, copper, per lb.	0 2 0
Nails, compo, per cwt.	1 6 0
Nails, copper, per lb.	0 1 10
Cement and sand, see "Excavator," etc., above.	
Hand-made tiles, per M.	£5 18 0
Machine-made tiles, per M.	5 8 0
Westmorland slates, large, per ton	9 0 0
DO. *Peggies, per ton*	7 5 0

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

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

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

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

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square 5 6 0
DO., machine-made do., per square . 4 17 0
Vertical Tiling, including pointing, add 18*s.* 0*d.* per square.
FIXING lead soakers, per dozen . £0 0 10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square . . 0 10 0
LABOUR only in laying slates, but including nails, per square . . 1 0 0
See "Sundries for Asbestos Tiling."

CARPENTER AND JOINER

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

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

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

Memel or Equal. Slightly less than foregoing.

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

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

continued overleaf

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-EDGED springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one-ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic :			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¾ 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, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work :			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	6
If ramped, per ft. run	0	5	0
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS :			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding, per ft. sup.	0	4	6
IRONMONGERY :			
Fixing only (including providing screws) :			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
DO. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

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

*

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

*

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

PLUMBER

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

*

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

*

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

PLASTERER

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

*

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

*

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

GLAZIER

GLAZIER, 1*s.* 8½*d. per hour.*

*

Glass : 4ths in crates :			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	6
DO. *4 ft. sup.* ,,	0	2	9
DO. *6 ft. sup.* ,,	0	3	0
DO. *20 ft. sup.* ,,	0	3	7
DO. *45 ft. sup.* ,,	0	3	9
DO. *65 ft. sup.* ,,	0	3	11
DO. *100 ft. sup.* ,,	0	4	4
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6⅝
Linseed oil putty, per cwt.	0	15	0

*

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

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

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

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

PAINTER AND PAPERHANGER

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

*

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

*

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

SUNDRIES

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

FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3*d.* to	0	0	6

*

Plaster board, per yd. sup. . from	0	1	7
PLASTER BOARD, fixed as last, per yd. sup. . . . . from	0	2	8

*

Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup.	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING : Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6

*

Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casement in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

*

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

*

PLYWOOD, per ft. sup.

Thickness	3/16 in.			¼ in.			3/8 in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4	9½	7½	— 1	0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	— 1	6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	— 1	0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—