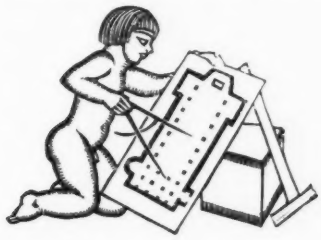
THE ARCHITECTS' JOURNAL



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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, JULY 27, 1927. NUMBER 1697: VOLUME 66

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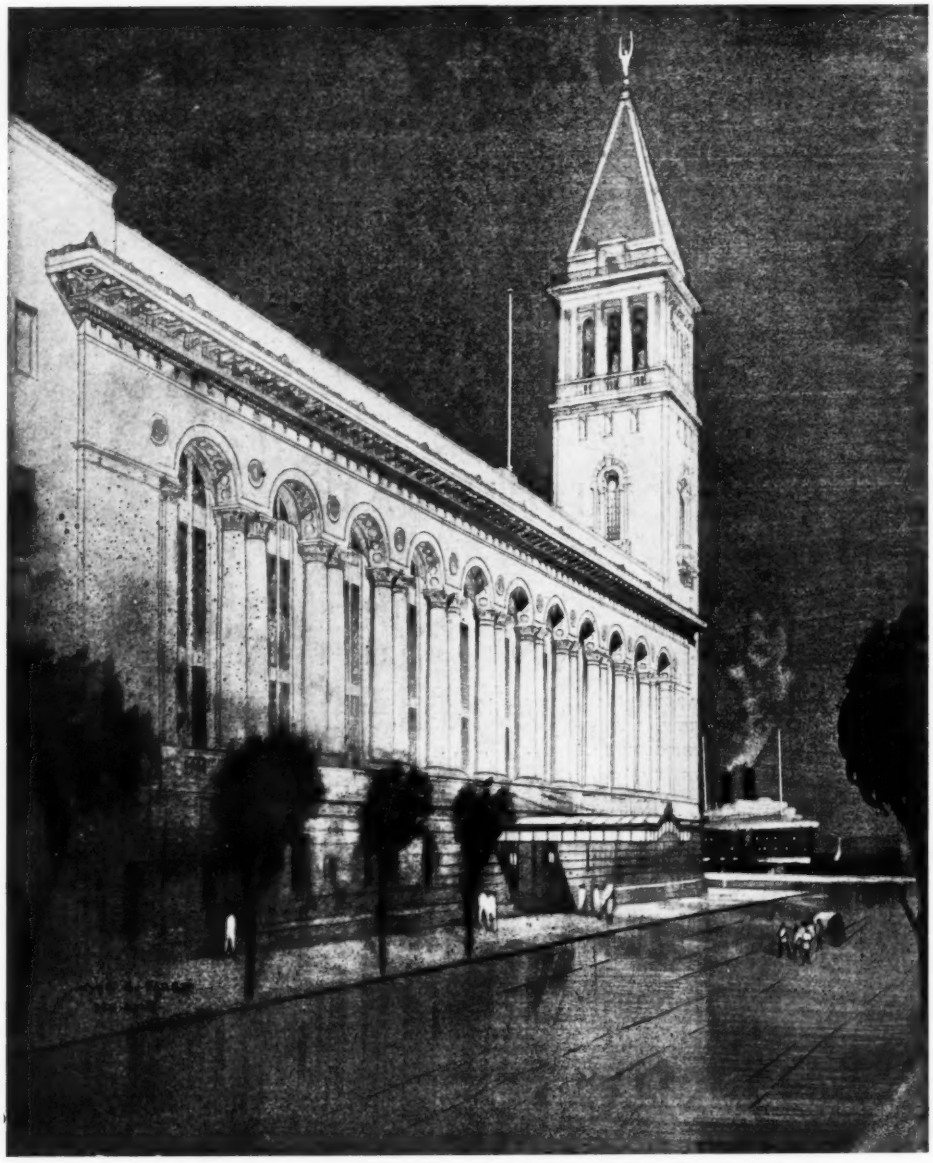


The architecture of the storied East—palaces of princes of days long gone, mausoleums of kings and temples of ancient faiths—casts a spell over the sojourner from newer lands. But Rangoon, in far Burma, boasts no stately buildings of beautiful design. A year hence, however, her waterfront will be graced by the new offices for the Commissioners of Port Trust illustrated above. T. O. Foster, Esq., F.R.I.B.A., has designed this building with a tower and façade that will command the admiration of all who visit Burma's principal port. Mr. Foster has chosen "Atlas White" Portland cement stucco to give colour content to the new building. The white stucco will add permanently to the beauty of the work: *it has the full tensile strength and lasting properties of true Portland cement concrete.* Write for a copy of "Stucco," with its plates in colour.

Regent House,
Regent Street,
London, W.1.

Frederic Toleman

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

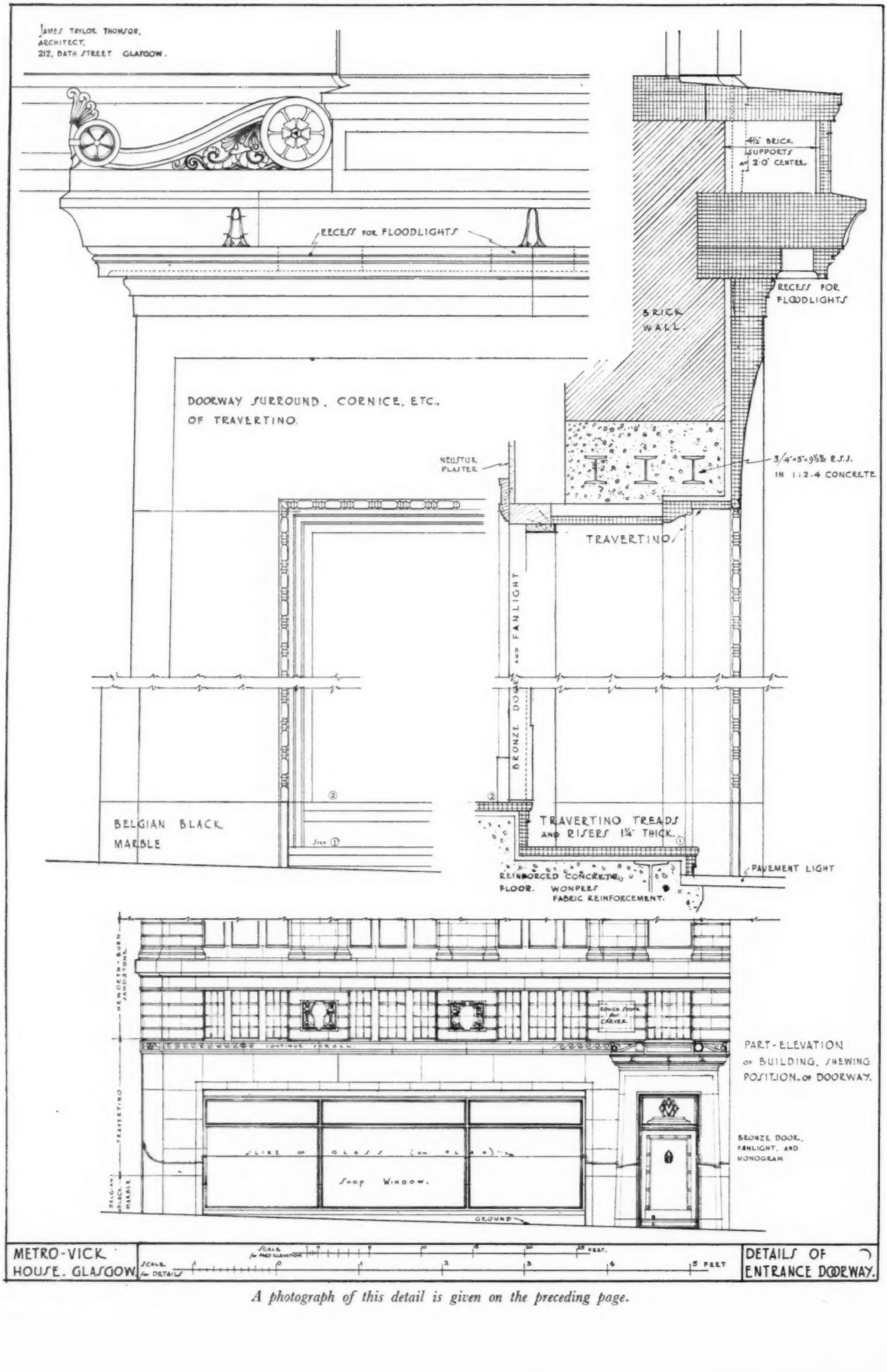
THE ENTRANCE DOORWAY TO
METRO-VICK HOUSE, GLASGOW

BY JAMES TAYLOR THOMSON

THE WEEK'S DETAIL

[BY JAMES TAYLOR THOMSON]

The photograph shows the main entrance to both the showrooms and offices, so that the design had to be in keeping with the showroom as seen from the street, as well as having a dignity appropriate to the Scottish head office of this firm. Light Travertino was used for the façade of the showroom, and the entrance is of the same material; all the arrises of the surround have been rubbed down and the line of the mitre softened off. The bead and reel ornament was cut after erection. The three recesses for floodlights in the underside of the cornice allow for the use of sliplights with parabolic reflectors to illuminate the entrance as well as the bronze lettering above the door. The pavement lights (which also occur at the showroom windows) have special hard-wearing W-glass, with carbrum tiles between the lenses; the tiles are dark in colour and absolutely non-slip. The door itself is bronze, and has in the centre a raised panel on which is a mask of Tut-Ankh-Amen. The fanlight, which is also bronze, has as its centre motif the monogram trade mark of the Metro-Vick firm.



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

THE ARCHITECTS' JOURNAL

Wednesday, July 27, 1927

THE ARCHITECT AND THE FURNITURE TRADE

Since the Georgian period architects have not exercised much influence upon the furnishing and interior decoration of the houses they design. Furnishing in the nineteenth century became a business problem, a matter of salesmanship, inspired chiefly by the desire of the furnisher to fill the rooms of his clients to the limit of their capacity. Interior decoration passed into a gloomy phase in which the pattern-book was mightier than the plan, and from those bound records of dull ingenuity by drawing-board serfs did the helpless householder choose the unrelated adornment of walls, windows and floors. Good taste was elbowed out of the way by salesmanship; and salesmanship, worshipping the great god Style, has controlled the manufacturing and retailing branches of the furnishing industry ever since early Victorian times. It has been suggested that the architect may regain something of his eighteenth-century power over furnishing, and may once more find representatives of the furnishing trade protesting that they are his very humble and obedient servants, working for him even as Thomas Chippendale worked for Robert and James Adam.

Such possibilities have recently formed the subject of considerable correspondence in our contemporary, *The Cabinet Maker*, the technical newspaper of the furnishing trade. Following an editorial question as to whether the builder and the architect would ultimately control the character of furnishing, a number of interesting letters were published from furniture manufacturers and retailers who expressed various emotions in setting down their views, ranging from the bland patronage of Mr. H. E. Taylor (the General Secretary of the London Cabinet and Upholstery Trades Federation) who thinks " the average architect is a reasonable being and quite amenable to suggestions," to the thinly-veiled irritation of another correspondent who accuses our contemporary of conducting " clever publicity propaganda . . . on behalf of architects designing furniture." There were also letters from such distinguished designers and critics as Messrs. Hamilton Temple Smith, W. J. Palmer-Jones, Percy A. Wells, and A. Trystan Edwards. This correspondence reveals a conventional reluctance on the part of furniture manufacturers to deal directly with an architect for fear of offending their retail customers. Mr. A. N. Oliver, the immediate past-president of the National Federation of the Furniture Trades, admits that there is a growing tendency for architects " to assume control over furnishing, and this, of course, is easily understood, as if an architect designs a particular type of house, it seems quite fitting that he should assume some control over the furnishing." Then Mr. Oliver states that " the difficulty arises when the manufacturer is asked to supply direct to an architect; this, of course, is not fair to the retail distributor of furniture who carries large stocks and speculates in advance of his requirements." Mr. Hamilton Temple Smith, Chairman of the Design and Industries Association, and a director of a most intelligent retail furnishing firm, referring to this " tendency of the architect to go direct to the manufacturer," points out that " it is clearly of no use for the retailer to cry ' Fie ! ' upon the manufacturer or the architect; he must begin to justify his existence or else prepare his bosom for the knife. Let him fill his shop with goods that a reputable architect can honestly recommend to his clients, and the architect, I am convinced, will be only too glad to be rid of doing for himself what the retailer ought all this time to have been doing for him." Mr. Hamilton Smith's suggestion that the architect " is driven in self-defence to design furniture suitable to take its place in his houses, not because he wants to . . . but because it simply isn't safe to let his client loose among the furniture shops and their salesmen," is a grim comment on the standards that salesmanship has forced upon the craft of furniture making. The partial absorption of the architectural profession by the large furnishing store is the confident hope of another correspondent who believes that " in the near future all big stores and furnishing establishments will be selling houses, built, completely furnished and equipped, ready for use—a great many of them advertised and sold under the hire-purchase system . . ."

In summing up the views expressed in the course of this correspondence, *The Cabinet Maker* asks whether there are enough salesmen in furnishing establishments in this country capable of advising on matters of taste with the competent ease of an architect when he gives his attention to furnishing and interior decoration. The furnishing trade is told that " if the architect of the future does attain a controlling influence on taste in furnishing, it will be due very largely to ineffective service to the public on the part of retailers." Whether the architect can ever again be the client, guide and friend of the furniture maker in the old, intimate, eighteenth-century way, is doubtful. The retailer blunders between them, his eyes screened from art and commonsense by the blinkers of salesmanship.

NEWS AND TOPICS

THE FRANCO-BRITISH UNION OF ARCHITECTS—SIR EDWIN LUTYENS IN "PUNCH"—THE CAPTAIN AND THE ARCHITECT

To indulge in agreeable social intercourse, to visit interesting buildings, and to exchange ideas, is the object of the Franco-British Union of Architects, which enables French and English architects to fraternize one year in England and France alternately. Last year our French *confrères* were entertained at Canterbury, and this year they gave us a very cordial reception in Paris lasting for three days, extending from July 4 to 6 inclusive. On this occasion the meeting was a particularly brilliant one, coinciding with the fiftieth anniversary of the "Société des Architectes Diplômés pour le Gouvernement."

* * *

Monday was the day of business; in the morning members were received at the new premises of the S.A.D.G., 120 rue de Grenelle, from where they were conducted to the Grand Palais, and visited the Salon des Arts Décoratifs. In the afternoon took place the seventh annual general meeting of the Union, with Sir Reginald Blomfield in the chair. The minutes of the sixth annual general meeting were read, correspondence and reports of the work of the session were gone through. The president of the S.A.D.G., Monsieur Georges Legros, was nominated president for the coming session, with the president of our own Institute, Mr. Guy Dawber, as vice-president. The question of international competitions was brought forward and referred to the special commission, the place in England for the eighth general meeting being referred to the British commission, with a request that it should take place within the first fortnight of June, 1928. At 4.30 p.m. a visit was organized to the works in the course of erection for a large cinema being carried out for the Paramount Co., under the direction of Monsieur Bluysen, in collaboration with Mr. Verity, on the site of the old Vaudeville Theatre, 2 Bd. les Capucines.

* * *

Tuesday was the day of excursions. Members were driven down to Fontainebleau through Barbizon and the beautiful forest. Monsieur Esparbes, "conservateur du palais," showed us "les petits appartements," including a few intimate objects belonging to the Empress Josephine. A recherché lunch was served at the Savoy Hotel, Avon-Fontainebleau—"Cuisine soignée-vins fins." After this repast, which was much appreciated, the party was driven to the famous château built during the reign of Louis XIV—1656—at Vaux, by Nicolas Foncguet, "surintendant des finances." This gorgeous palace, decorated by Le Brun, with its magnificent Renaissance gardens laid out by Le Note, is a real masterpiece of its kind, little known by the ordinary public because only visited by special permission, being occupied as a private residence. After the disgrace of Foncguet, 1661, the palace passed through many vicissitudes until bought by Monsieur Alfred Lommier in 1875, when the whole was restored to something like its former stateliness. Members were most warmly welcomed in this sumptuous abode by the present proprietor, Monsieur E. Lommier and his wife, who ordered all the fountains to be played for our benefit. The party returned to Paris after a most delightful day.

* * *

The last day of the meeting was occupied by an official reception, terminating with the usual banquet. On Wednesday morning members were cordially invited to a reception at the Elysée Palace by Monsieur le Président de la Republique. The English members present were Sir Reginald Blomfield, Messrs. E. P. Warren, W. H. Ansell, Cart de la Fontaine, Arthur J. Davis, Louis de Soissons, Philip Hepworth, A. N. Prentice, H. Bartle Cox. In the afternoon Madame Bouwens de Boijen received us in the name of the committee, "Accueil Franco-Britannique," at her charming house, 8 rue de Lota, at which Madame Marguerite Herleroy (de l'Opéra) sang some delightful old French songs. The banquet was an important affair for the *cinquantenaire* of the S.A.D.G., to which the English delegates were invited in the rooms of the "Union Interalliée," 33 Faubourg St. Honoré. This banquet was presided over by Monsieur Herriot, Ministre de l'Instruction Publique et des Beaux Arts, at which were present the Marquess of Crewe, British Ambassador, Monsieur Paul Léon, Directeur des Beaux Arts, Messieurs Luloux, Nénot, Defrasse, Tournain, and many ex-presidents of the S.A.D.G. Speeches were made by Monsieur Georges Legros, Monsieur Henry Lacoste, who spoke on behalf of the Belgians, and by Monsieur Herriot, who gave a long and interesting impromptu talk on architecture, pointing out that architecture is both a science and an art, and that a real *rapprochement* between the architects of France and England was obtained in the Middle Ages. His speech was greatly applauded, and the seventh general meeting was terminated on the most friendly terms.

* * *

A rather fine portrait, and some really shocking rhymes, mark the apotheosis of Sir Edwin Landseer Lutyens. Now, indeed, he may be counted among the immortals, since he figures as the forty-seventh of "Mr. Punch's Personalities." Quite sure am I that Partridge's true vision and deft pencil have combined to produce a far more faithful likeness than would be possible to photography; though I suspect that Sir Edwin must have had troublesome forebodings as to how his precious pipe would go down to posterity—as to whether it is a pipe that would draw satisfactorily. Further, he may have had misgivings as to the wisdom of exposing to the gaze of a person of artistic temperament the ever-open tobacco-pouch among the other more conventional "emblems of my horrid trade." But the verse beneath the portrait! I cannot praise it and I may not quote it. But what say you to the rhyme-endings? Here they be—"reveille—spell he—jelly—Delhi." It may be permissible, under poet's licence, an it please you, to make reveille rhyme to Delhi, but it is not a way they have in the Army.

* * *

As the parable hath it, the wise man built his house on the rock, the foolish man built his on sand. Of the latter part of the proposition, Higher Broughton, Salford, seems

fated to afford demonstration and proof positive. Of seventeen houses built there it is reported that their foundations are on shifting sand, which an underground stream is carrying away. Their inhabitants have been warned that they must leave at once, lest a worse thing happen to them. It seems that no effectual remedy is practicable, and the borough engineer holds that " the land ought never to have been built on." You and I, courteous reader, know lots of land just like that, also lots of persons who temerariously built on it. Furthermore, we are not at all surprised, you and I, that the occupants of the threatened houses at Higher Broughton " display the utmost unwillingness to leave their homes." Occupants, as well as houses, are often built like that, and in both cases anything short of a drastic remedy is impossible. At Higher Broughton, as in the case cited in the parable, " the rain descended, and the floods came." In the modern instance the rain assisted an underground stream to drive away the sand overlying boulder clay, leaving hollow chasms where solid support should be. In such cases the treatment indicated is prophylactic rather than remedial in the ancient wise-after-the-event manner. Which only goes to show that an architect should be something of a geologist, as well as several other sorts of scientist.

* * *

The danger of generalizations lies in the emphasis which alone gives them point, and Mr. Howard Robertson has been taken to task by a correspondent to a daily paper for saying that architecture was the most worrying profession in the world. No busy architect—to say nothing of those who find themselves not busy—would be likely to differ seriously from Mr. Robertson; but his opponent, who prefers to remain anonymous, and is clearly not an architect, seeks to demolish the statement by describing an experience at sea, when, after a night of fog, the ship was hove to until a clear morning discovered the Irish coast right in front of her. The captain had stopped just in time, and " what," the writer says, " must the worry of the master of a passenger ship be ? " All will agree that the responsibility of commanding a liner calls for far higher courage and manly resource than does the conduct of an architectural practice; a seaman in high command is looked upon as the very salt of manhood throughout the world, but responsibility, though it may lead to anxiety, is a very different thing from worry. The captain of a ship has complete authority; he can rely upon the disinterested service of those under him; the architect's authority is far from complete, and he directs many who will serve their own interests, and not his, if failure of his vigilance gives them the opportunity. If the discretion of the captain in navigating his ship was subject to the conditions imposed by a neurotic woman that the vessel should duly make port without her being inconvenienced by the vibration of the engines, and he had besides to prevent the engineer from secretly putting emery powder into the cylinders to obtain a commission on the cost of repairs, I think commanding a ship might involve as much worry to her master as running a practice does to an architect; but as things are, Mr. Robertson's opinion is not controverted.

* * *

Mr. Ralph Knott, in a letter to the *Morning Post*, refers readers who are " dissatisfied " with the Charterhouse new chapel to the pages of this JOURNAL for photographs illustrating and for the " reasoned opinion that the chapel is probably the finest memorial of the war we have." This " dissatisfaction " was expressed by the art critic of the paper, who regretted the supersession of the old chapel. I have not seen the old chapel, or if so, it made no kind of impression on me; but I have seen the new, and if the old is of a part with the rest of the school buildings its supersession is obviously a matter for congratulations and not for regrets. As Mr. Knott very justly points out, sentiment plays a large part in establishing taste, and it commonly happens that the past appears automatically the ideal. An old Charterhouse boy, to whom the school chapel is an endeared memory, finds delight in it, as he might in an old coat, which has no justification except in happy associations, and the same sentiment stultifies taste in far wider and more subtle ways. I once heard it said of a fine old dog-grate: " Oh, I hate those things; they always remind me of a horrible old aunt of mine who had one when I was a child." Mr. Powys, as secretary of the " Antiscrape," is being ridiculed by those who have surprised a sudden admiration for Adelphi Terrace born only of its threatened destruction. I shall regret it when it goes, just as I shall regret the bridge over the ornamental water in St. James's Park, which we were told was to be shortly replaced; and I shall regret the bridge the most simply because it is more familiar; it is one of my personal possessions, and though I was before quite unaware that I cared a dump about it, the proposal to take it away raises an instinctive resentment which only yields to reflection. After all, Time is inexorable; all things perish and must be renewed. The real lesson to be learned from these painful necessities of demolition is that the new thing shall be intrinsically worthy of the affection which the future will accord to it.

* * *

I am reminded by the note a fortnight ago on Mr. H. Gordon Selfridge's excursion into æsthetics, that six years ago, when he told the Architectural Association at Bedford Square what were the three most beautiful things in the world, the " beautiful woman " came last. I esteemed the speaker's courage in giving her third place, and I am not surprised that his æsthetic philosophy has yielded to the needs of social amenity. However, I am sorry to point out to Mr. Selfridge that whether he puts a beautiful woman before or after a beautiful sunset or a beautiful edifice, he is demonstrably wrong. As women are his chief customers, they must, of course, be for ever beautiful to him; but philosophic truth must rest on wider grounds, and in the sense that a bull thinks a beautiful cow the most beautiful thing in the world, Mr. Selfridge would be justified were it not that there are more women than men in the world, and therefore a beautiful man is, by general repute, a more beautiful thing than a beautiful woman. Any lover of sculpture, also, feels that the male of the human species displays a greater wonder of beauty than the female, and all sculptors know this. Chivalry has no place in philosophy, and I trust that in future editions of his famous pronouncements Mr. Selfridge will give honour where honour is due and place " a beautiful man " beside his " beautiful sunset."

ASTRAGAL

THE ART OF THE SKYSCRAPER

[BY KINETON PARKES]

REALITY has again resulted in romance. In the ever-recurring cycle of the arts there is change and decay, evolution, revolution, and devolution. Architecture, since the eighteenth century, has been struggling with a problem which New York has at length solved. It has revolved round old styles and evolved itself into something new and strange. The world has been waiting for the American architect. He has arrived with a pyramid. The pyramid is not that of Egypt, a vast uninhabitable, and uninhabited verticism, but a populated beehive harbouring thousands of workers; an upright city within a city reared above the outgrown horizontalism of the past and passing present. It has but one possible antithesis, the underground dwelling and workshop foretold by knowledgeable novelists. These are far away on the horizon of time; the New York skyscraper is here with the world today.

Vernon Howe Bailey's lithographs, recently exhibited at Cooling's Gallery, provide view after view of this realized romanticism. Pyramid rears itself by pyramid, apexed by pinnacles which may reach in the Larkin Tower, planned and passed by the New York authorities, 1,200 ft. towards the zenith. In 110 stories, hundreds of rooms to each story, a good deal of romance can be lived; a good deal of humanism displayed. There is no limit provided a sufficiently extensive base for this pyramidical wonder can be acquired. At present this is difficult; in the future the new cities will see that acres are reserved at their centres on which the feet of these romantic monsters may be firmly planted. In these accomplished lithographs of Howe Bailey they look romantic. The artist seeks in Europe for romance of the older stereotype. When he left New York he turned his back on the new romance, and he knows it. He realizes that in New York there is the strangest, most impressive, and most stimulating material for the modern artist in all the world. It is all fresh and new, and he has rendered it pictorially prior to surrendering it for the moribund but still picturesque poetry of the older world.

The Standard Oil Building, New York.
[From a lithograph by Vernon Howe Bailey.]

These great pyramids are the result of experience; experience aiding creation and waiting on demand. The ground plan of New York is too restricted for its population. The demand is for space, and it aspires. The demand is supplied by upright construction. This is inadequate, for the higher it goes the darker it shadows its understructures. This fatal defect must be met, for the streets of New York cannot be converted into mere ravines. The new zoning laws demand that the sky shall still be seen and the street still visited by sunshine. Use provides the key to beauty.

The straight skyscraper is commanded to recede as it scrapes the sky. It does so, apparently reluctantly, in steps, but in reality beautifully. The step-gable of Amsterdam has converted the otherwise unconvincing skyscraper into a gigantic thing of unimpeachable beauty. Evolution has preserved the type, revolution has fixed it in a new form. The zoning laws say that the height of a block must vary with, and conform to, the width of the street, but so long as the base is all right the superstructure can step up as far as it can as long as it steps back at the same time and so reveals the sky.

It is this aspect of New York that has prompted Howe Bailey to produce this valuable record in lithography in forty views of the New York of the last ten years—the new New York. The Woolworth, the Singer, and coeval buildings figured in some of them are back numbers, with their Gothic, Spanish, and Italian suggestions borrowed for a finish and an uncalled-for style, buildings for the most part flush on the street. The new erections are perfectly natural and useful; they have but little reminiscent style, and are therefore original, and they so combine use with proportion that they achieve beauty. Moreover, they have rediscovered an ancient architectural secret: they have reverted to colour. The American Radiator Company's building on Sixth Avenue, pictured by Howe Bailey, is mostly black and gold, cunningly flooded by concealed lighting. The Paramount building is flooded with brilliancy on its every terrace. There are buildings of this type going up here and there in the United States based on the principles which, with the long research of Léon Solon into the Greek methods of architectural polychromy, will cause another architectural revolution.

No colour, however, appears in Howe Bailey's lithographs, but with a solid, sure pencil he graphically reproduces the architectonics of the new æsthetic and provides pictures in which the mere scale is a joy in itself. There is a tremendous beauty factor in this scale which the artist contrives to accentuate by figure drawing; but devoid of figures entirely, so good is his graphic that scale is conveyed automatically. Individual buildings are treated and there are fine vistas and groupings. There are fine vistas in Seventh Avenue Canyon South, Park Avenue North, and Fifth Avenue North; excellent views of wide areas and groupings in the Bankers Trust Company Tower, and East River Bridges. As drawings the Hotel Warwick and the Metropolitan Tower are good, and the artist's technique is seen at its best in the Ritz Tower; sound drawing, with faithful representation.

In mere picturesqueness of the older variety the Hecksher building, the Standard Oil building, and Radiator building vie with the Gothic fortress-like Telephone building on the Hudson River. These, by the side of the newest structures, seem sentimental, and this feeling is engendered by the imaginative impressionism of another view of Radiator building with effects of mist from which the architecture stands out in definite and impressive planes.

This exhibition proves that lithography is an excellent medium for architectural pictorialism so far as technique goes, and that architecture in New York has entered on a more vital and authentic phase. It has been asked: "Is the skyscraper a menace?" The reply is that it is a triumphant manifestation of a new psychology.

THE TOURISTS' TOWER AT GRENOBLE

[BY H. BARTLE COX]

DESIGNED as a central motif for the great exhibition of "la houille blanche" (water power), held in 1925 at Grenoble, this unfaced reinforced concrete tower bespeaks a new "style." The exhibition, one of considerable technical and touristic importance, was attractively laid out by the well-known architect, Monsieur Jaussely, a recognized master of urbanism. The design and erection of the tower, to be a dominating feature of the exhibition, was entrusted to Messieurs Perret Frères, architects and builders. The tower is not a temporary one, but is fortunately destined to remain as an embellishment to the exhibition site and to serve at the same time as a permanent belvedere for the use of tourists. Grenoble, it will be remembered, is a famous tourists' centre situated in the heart of magnificent Alpine scenery.

This orientation tower has been greatly commented upon both in the general Press and in the French, German, and other European technical papers. It is generally acknowledged by the profession as one of the most successful buildings by Monsieur Auguste Perret and brothers, the pioneers of modern engineering architecture.[1] It is octagonal in plan, about 26 ft. across, with corner reinforcements. Inside there is a spiral staircase on the cantilever system forming an integral part of the exterior walls, and in the centre are two lifts (Otis Pifre) each for six people. The total height from the ground is about 300 ft., which is roughly twelve times its diameter. The whole is entirely constructed, including its ornamentation, of unfaced reinforced concrete composed of "super ciment," except for the panels (or filling), for which was used a more quick setting cement. The tower is highly rational in treatment, suits its purpose admirably, and is decidedly harmonious in line. Freed from the irrelevant application of motifs foreign to the construction, its own constructional parts cleverly handled logically form the decoration, and they are daringly designed in an ingenious manner suitable to the material, stripped of archaic conventionalism and emanating alone from the requirements of the problem. It is this classic spirit that gives to the works of Perret Frères the startling appearance of something "new," with no clap-trap bluff playing up to the bourgeois prejudice surrounding the unfortunate word "modern." True originality is nothing more than the outcome of new conditions to old principles. In this way sane modern building is produced and the history of architecture slowly evolved.

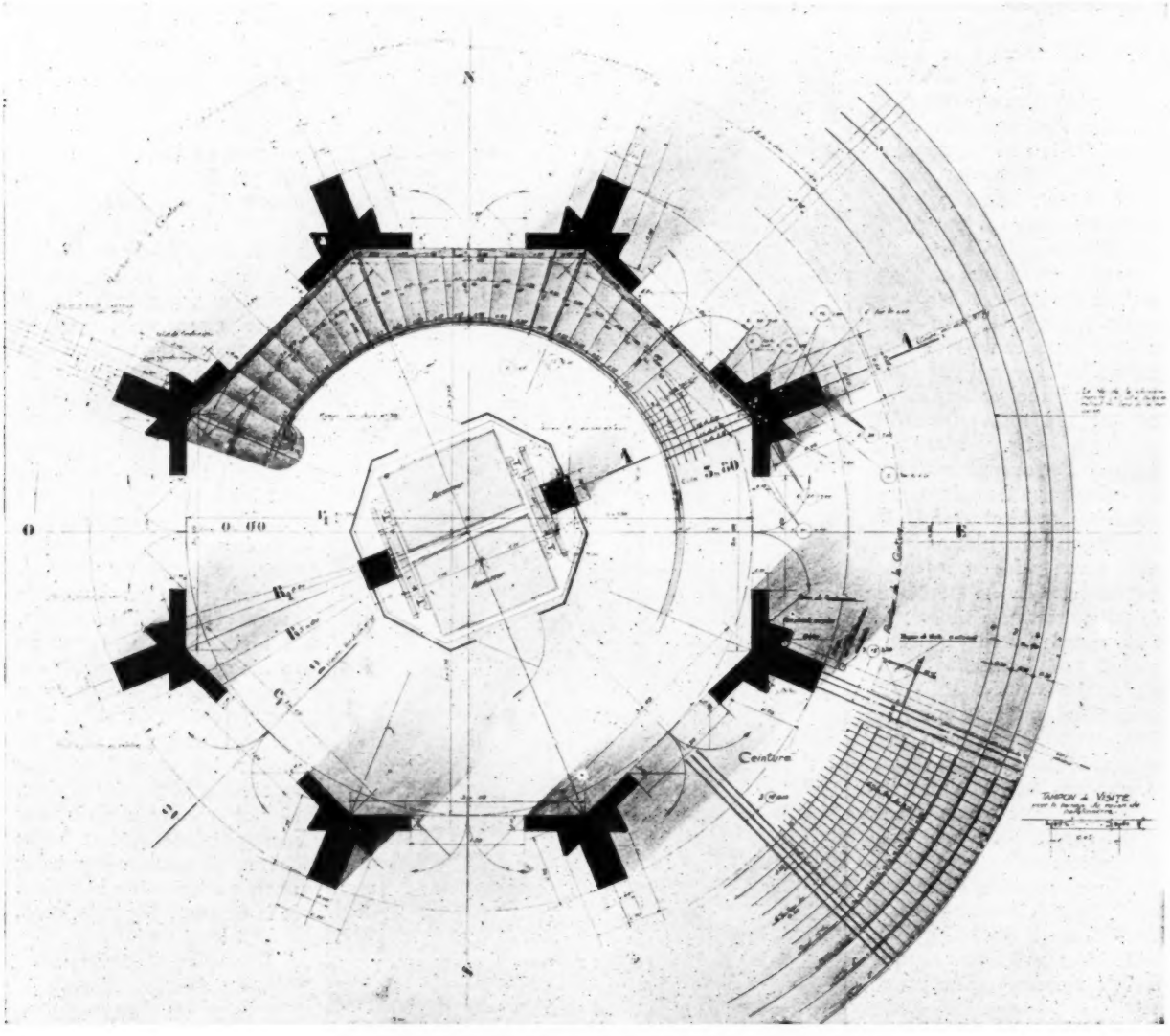
The Tourists' Orientation Tower, Grenoble. By Perret Frères. A general view.

The weight of the tower, including the foundation, is about 1,500 tons, and is supported on seventy-two concrete piles embedded 35 ft. in a damp clay soil, reaching a stony bottom more than 30ft. thick; only the top 13 ft. of these piles are reinforced, the rest is in concrete alone (*pieux Franki*). The construction, light in weight and in appearance, was rapidly erected. There is only about 700 cubic metres of material in the tower, and the whole was put up in nine months, at a cost o 440,000 frs., in 1925, plus 100,000 frs. for the lifts. The design, considered from an engineering as well as from an architectural point of view, is not merely artistic nor merely scientific, but both; the artistic qualities depending upon the scientific handling. It is economically calculated,

[1] For a fairly full description of their work, see THE ARCHITECTS' JOURNAL for December 8, 1926.

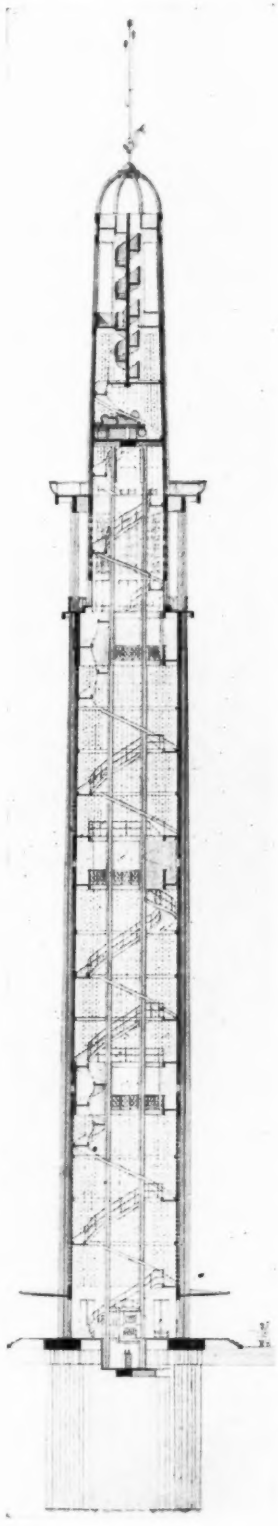
being both strong and elegant. The eternal principle of economy (not to be confounded with cheapness) is one of the chief factors contributing to the pleasure derived from looking at certain engineering works, but the pleasure (if there is any) of contemplating an isolated support like Nelson's Monument (for instance) is a purely pedantic one quite outside and foreign to the technical fitness of construction. Towers designed by engineers are often ugly through lack of refinement. Architectural towers, generally empirically designed, are often either too heavy or too light through want of a scientific basis for calculation. The correct design of a tower is a highly complicated undertaking demanding a knowledge of mathematics far beyond the reach of what we generally term an architect. This is undoubtedly one of the reasons why so many towers are merely stereotyped columns magnified, which the uninitiated are cheated into considering as architectural. However, can we expect an architect to be an engineer or an engineer to be an architect? Not exactly; nevertheless, the tenets of our creed teach us that we should expect a sympathetic collaboration in which neither the one dominates the other. When the educated layman understands the difference, or more correctly the similarity, between the two, more logical (hence more æsthetic) results will be demanded, and therefore supplied. The present-day interest in engineering works shows that this era is fast approaching, and it is not too much to say that it is heralded by the works of Perret Frères.

The design of a tower in reinforced concrete naturally has its own peculiarities, and Messieurs Perret Frères prefer to emphasize them rather than to hide them by expensive false trappings. The peculiarities are very different from those of stonework, which demand a laminated architecture of superimposition. In reinforced concrete buildings the stresses are generally concentrated into a scientifically arranged skeleton framework (similar as for iron buildings), with thin panels serving as filling, but joined in such a way as to make the whole building a monolith. This practically is never obtained in iron-framed buildings with stone or brick filling. Besides, the reinforced concrete idea, when carried throughout and not merely used for the supports,

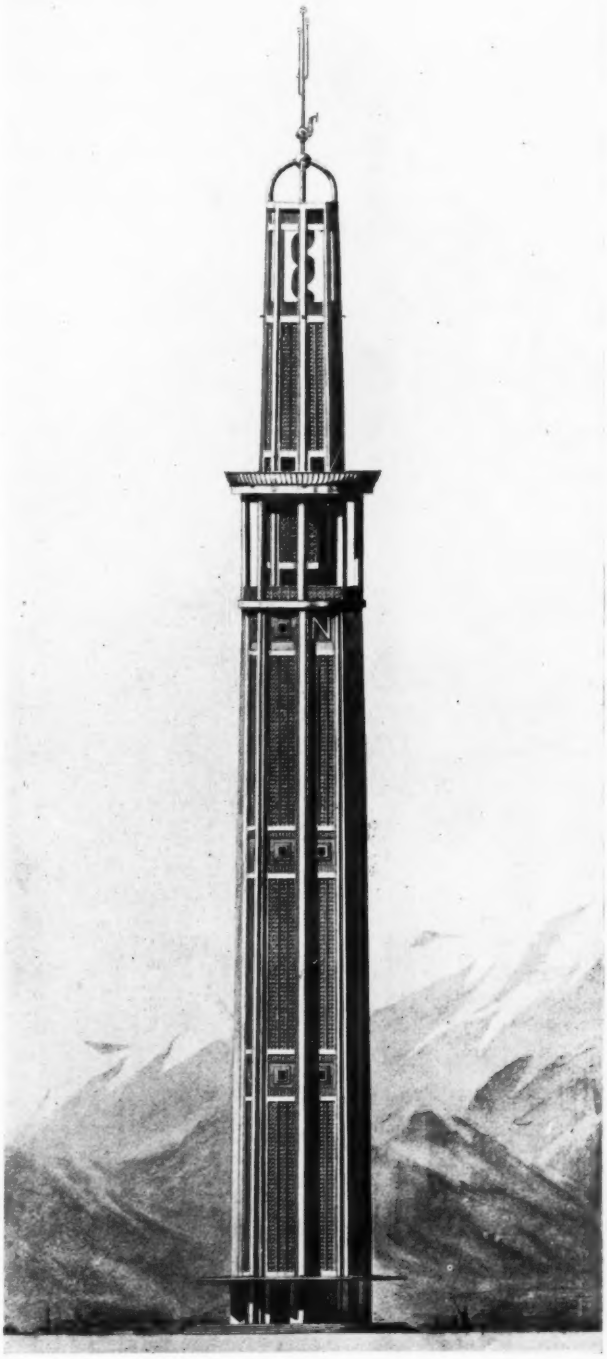


The Tourists' Orientation Tower, Grenoble.
By Perret Frères. The ground-floor plan.

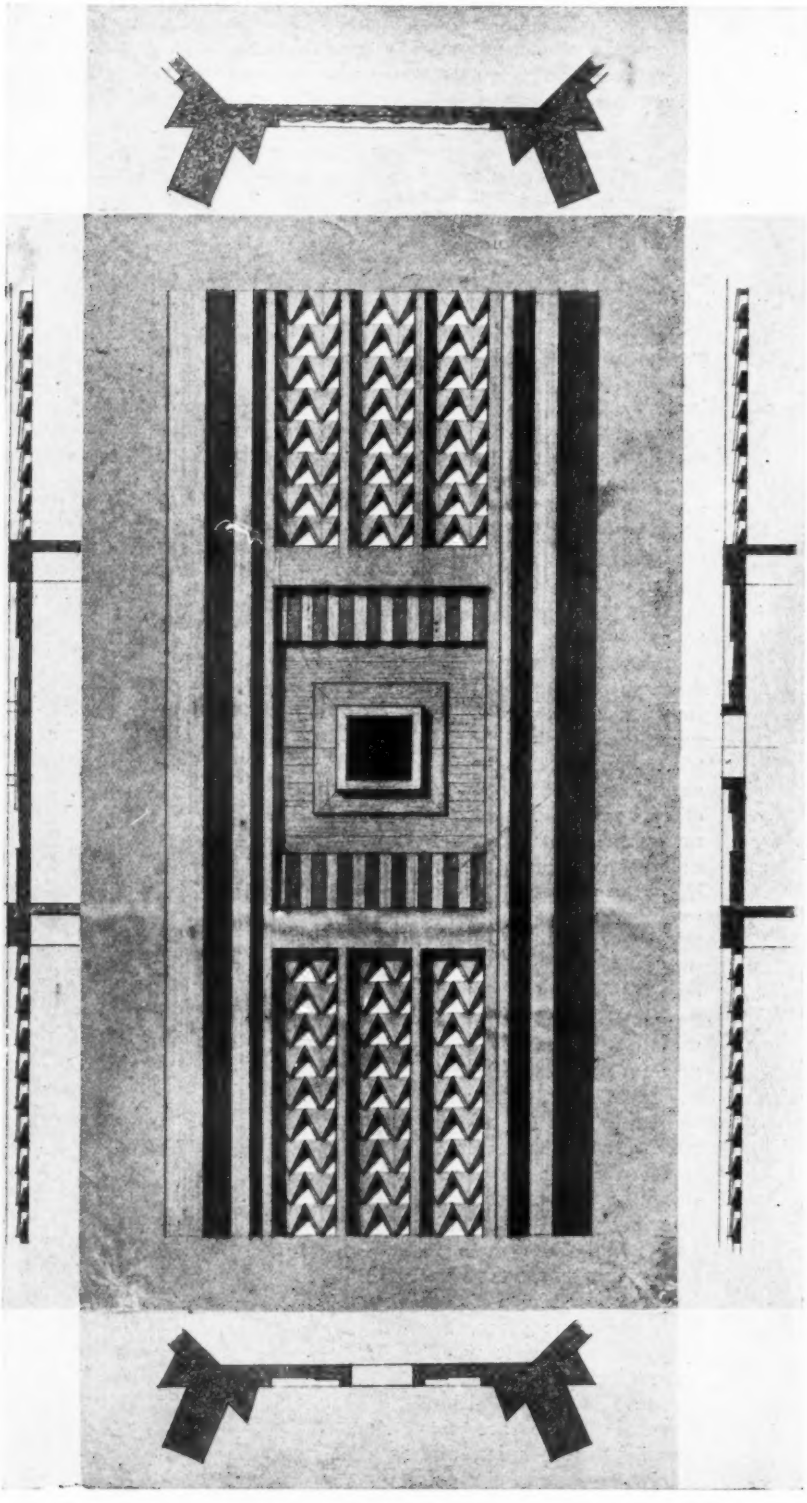
lends itself, in large buildings, to great economy of space and material, tending, in the hands of capable designers, towards strength coupled with elegance. Where money is of no consideration all forms of exterior and interior surface decoration are possible, such as mosaics and frescoes, etc. For cheap buildings, however, the question arises whether the supposed unsympathetic surface of unfaced concrete is not more than compensated for by the frankness of construction: a real satisfaction even to the uninitiated: or whether the decorum of conventionalized dress, mostly shoddy in cheap buildings and generally irrelevant to the problem, is not more than marred by the effect of superfluous expense, giving the sad impression of a puritanical fright to leave the material nude, like a respectable tradesman who for the seemliness of his suburban villa wastes his money in covering the simplicity of his ordinary flowerpots by putting them into china ones. Besides, before pronouncing too definitely as to the disagreeableness of the texture of concrete, the Grenoble tower should be seen. A difference, often lost sight of by the public, should be made between the design for concrete buildings and that for reinforced concrete ones. The design for the former is somewhat like that for stone, but an appropriate manner for the latter is, in a way, somewhat similar to that for wooden structures. The tower in question is by no means heavy in appearance, as it certainly would have been had it all been done in mere concrete. On the other hand, if it had been erected with the same grace, but entirely in iron, it would have fallen over for want of weight. In the district of Grenoble there are frequently terrific gales, and the wind-pressure for this tower was calculated at 270 kilos per square metre. We may here note that the bad construction, amounting to bad design, of certain well-known old church towers often resulted from the ignorance on the part of the constructors or designers of the way in which the forces of torsion act.



If we glance at the ground-floor plan on page 130, we note in one of the buttresses (so to speak) the arrangement of the iron reinforcement, which has been so designed as to resist the moments of torsion or twisting implanted by the wind. Furthermore, in the elevations



The Tourists' Orientation Tower, Grenoble. By Perret Frères. Left, a section. Right, the elevation.



The Tourists' Orientation Tower, Grenoble. By Perret Frères. Details of the surface treatment, showing strengthening band and unglazed holes for light and air. The dark points at the apex of each triangle are holes protected from the rain.

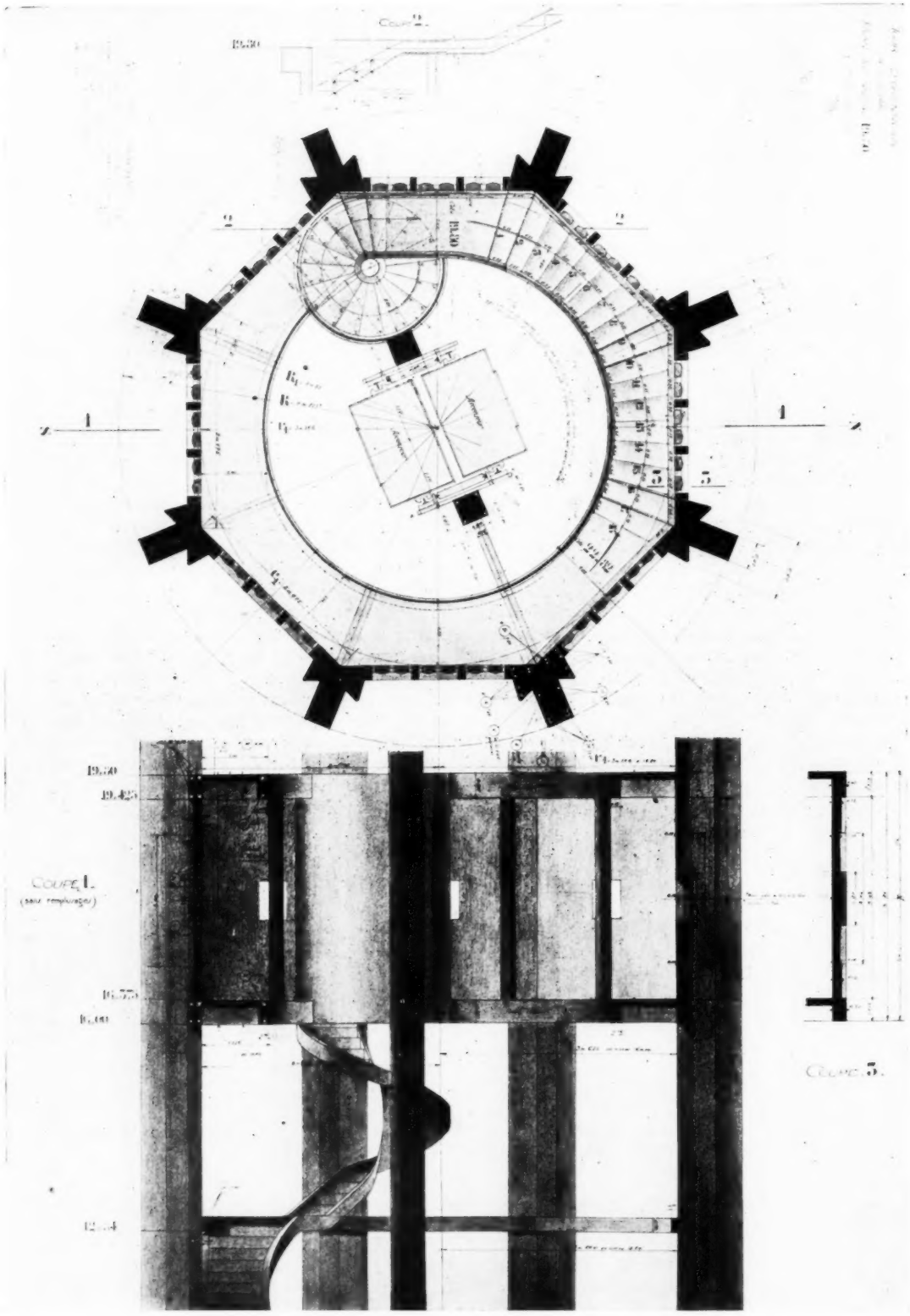
there are three strongly-marked bands which add to the rigidity by acting after the manner of the knots in a bamboo. The design of these knots (to use a pictorial expression) can be seen in the illustration on page 132. They reinforce the tower by projecting on the inside; forming a kind of covered gallery, octagonal on the outside and circular on the inside. The main staircase embracing the exterior of the tower is therefore deviated at these points towards the centre into a smaller spiral staircase, procuring access through these " knots " without weakening them. Before reaching the belvedere there are three of these smaller spirals : small tubes, so to speak, in the side of a larger one, and so placed as not to arrive one above the other.

The object of the tower is to mark Grenoble as a centre of excursions, and to facilitate tourists in orientating themselves. The points of the compass are indicated just under the lower gallery by the letters N. S. E. O., which are easily seen from the ground. All round the top gallery, which projects from the main walls (or structure) of the tower, is the orientation table, fairly high in itself to prevent giddiness on the part of the tourist, in which are embedded in enamelled basalt thirty-two photographs showing the direction and distance of the chief points of interest in the region. These attractive indications, probably the most popular but certainly the least artistic part of the tower, were paid for and fixed up by the Touring Club de France.

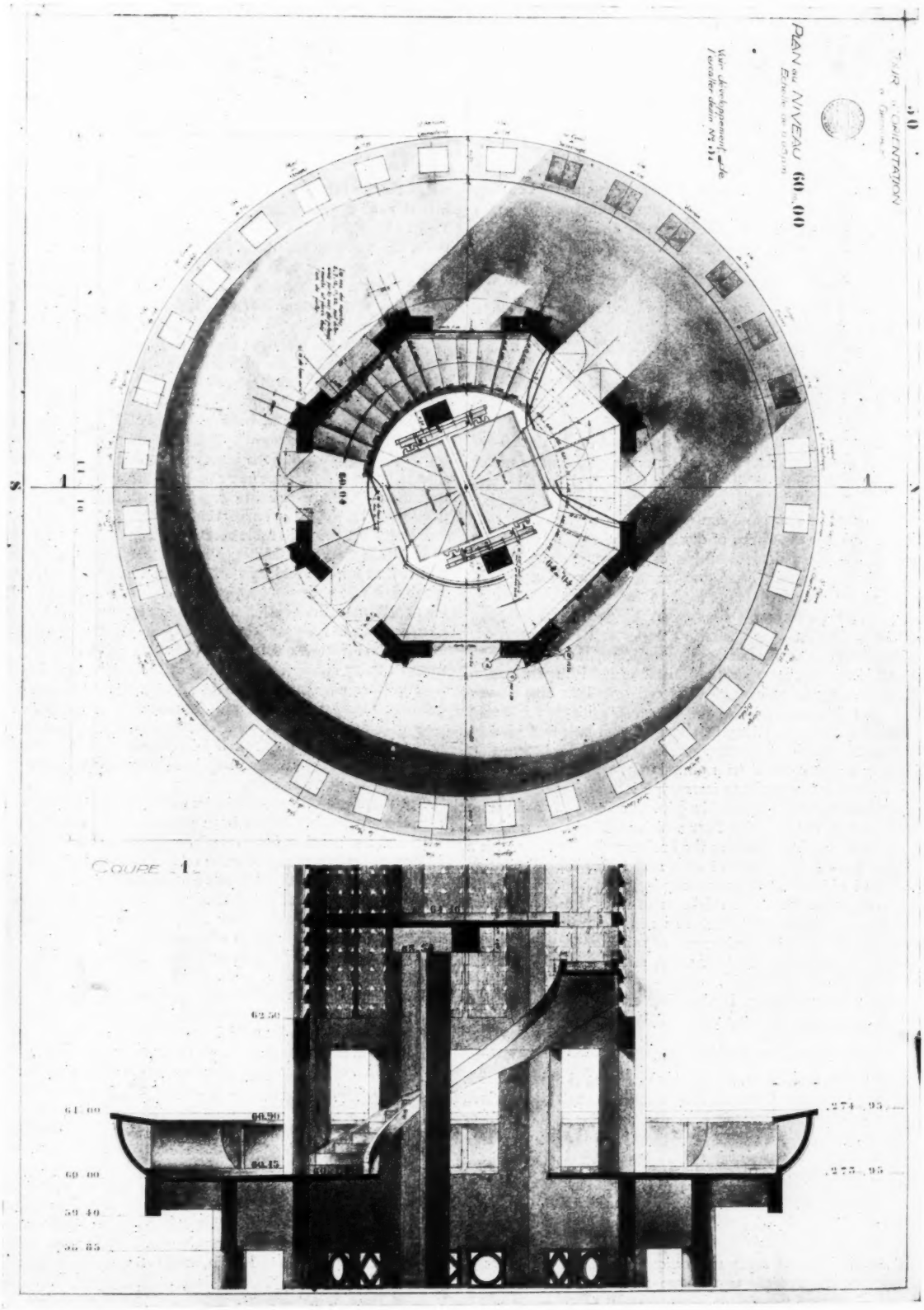
There are certain architectural refinements in the tower worthy of notice. The main walls or, more correctly speaking, very thin panels, varying from $4\frac{1}{2}$ to 8 in., are vertical; but the ribs or buttresses are inclined, being themselves vertical for a third of their height, and then twice inclined inwards for the next two-thirds of their height, arriving comparatively thin at the underside of the lower gallery. As there are eight of these of which never less than four are seen at once, and are always seen separately from a different angle, the tower in perspective assumes an entasis in its ensemble attenuating the appearance of hollowness of line, often met with in high vertical erections, giving a dry parchment-like effect. Upon the lower platform are eight circular columns without entasis slightly in advance of the ribs. The inclination of the spire is parallel to the inclination of the ribs at their upper third. The bold overhang of the covering to the entrances, about 15 ft. projection, artistically emphasizes the effect of a solid base to the tower. The visible material of the structure, as already stated, is unfaced reinforced concrete, but the surface decoration consists of a very happy effect of grey obtained by means of the claustra or holes for fenestration. These holes are unglazed throughout, but most ingeniously arranged so as to prevent the rain from entering, as well as the full force of the wind, though on a boisterous day the inside is decidedly draughty—see the illustration on page 132 with the little triangles like the scales of a fish. They are not idle ornamentation, for they have a function, and in consequence are rationally ornamental—notice the section of these : at the apex of each triangle is a small hole letting in light and air. Furthermore, by means of very slight surface inclination, a play of light is obtained in certain parts, making an agreeable opposition of darks and lights, as seen in the triangles and also on the bands near the square holes of the " knots." By these and other refinements this well-proportioned tower has, despite the concrete surface, a legitimate texture giving scale and character. Every detail of the tower has been most conscientiously studied, and the edifice remains as a landmark of twentieth-century architecture, the principles of which are well worthy of the serious attention of the younger generation who have the future of architecture in their hands. There is nothing crazy about this practical monument. It is merely modern in the same way that all good architecture was and is.

A new " style " is slow in evolution, but when it does assert itself it seems sudden. However, architectural engineering—for that is what the new style is—has been striving for years, and is now established on a firm basis well exemplified by such buildings as the Théâtre des Champs-Elysées, the Church of Notre-Dame du Raincy, and last, but not least, the much-appreciated Tourists' Orientation Tower of Grenoble.

The Tourists' Orientation Tower, Grenoble. By Perret Frères. Detail of triangles showing holes for light and air.



The Tourists' Orientation Tower, Grenoble. By Perret Frères. Detail in plan and section of the tower immediately above one of the horizontal bands.



Tourists' Orientation Tower, Grenoble. By Perret Frères. Detail in plan and section showing orientation table in the upper gallery or belvedere.

STRUCTURAL ECONOMY IN TIMBER FLOORS AND ROOFS: ii

[BY P. J. WALDRAM]

As regards strength or extreme fibre stress under bending moment, continuity over a central support between two spans of length l gives a beam no advantage over a single span l with both bearings supported, because the reverse bending moment over the supports amounts to $\frac{Wl}{8}$, which is identical with the maximum direct bending moment of supported spans.

Such beams cannot, therefore, be treated as regards strength (as represented by factor of safety on extreme fibre stress) as if they were working over a shorter span of about $\cdot 0.7$ S unless the requirements as to stiffness demand a moment of inertia which is provided by a scantling at least 1·4 times as strong as it would be if determined by considerations of strength irrespective of stiffness. But it has been shown that strength is a minor consideration as compared with stiffness, and the actual fibre under the limiting conditions of deflection $\times 1{\cdot}4$ would in all cases afford a very ample factor of safety. The reverse bending moment over central supports can therefore be neglected.

Strictly speaking, the figure of 0·7 should be slightly increased to allow of the theoretical condition of one span being loaded and one span unloaded. The more convenient figure of 0·75 is, therefore, suggested.

It is possible to construct floors possessing the same degree of stiffness (deflection = span ÷ 2500 under full load) with far less cube of timber with wide spacing of joists, than when they are placed closer together. The Ministry of Health specification limits the spacing to 14 in. apart for ordinary lath and plaster ceilings. But under present labour costs slab ceilings, reinforced or battened, may be as cheap or cheaper than lath and plaster, which requires skilled plasterers. Such slabs might be capable of spanning safely more than 14 in., but the restriction of joist spacing to that figure tends to stereotype lath and plaster. It is also questionable whether double $\frac{5}{8}$ in. flooring with a layer of felt between will not afford a floor which will be more sanitary. Such a floor is as sound-proof as the ordinary double floor with a permanent hollow space full of dust and filth. The limitation of spacing to 14 in. is also unnecessary in ground-floor joists with adequate floor-boards. The thickness of floor-boards necessary to give the same degree of stiffness as 1 in. boarding over 14 in. would vary directly with the increase of spacing, for $d \propto S$. But the thickness of 1 in. provides for wear, and a thickness of $1\frac{1}{4}$ in. over 2 ft. spacing is amply stiff.

The following suggestion is therefore made primarily with a view to avoiding unnecessary waste of timber :

That timber floor joists designed to the formula $I = \frac{BS^3}{30}$ may be spaced wider than 14 in. apart, provided that the floor-boards are not less than the thickness set forth in the schedule below, and that any ceilings carried are adequately reinforced or battened in slabs.

Schedule referred to

Spacing in clear not exceeding	Thickness of floor-boards.
18 in.	1 in.
21 in.	$1\frac{1}{8}$ in.
24 in.	$1\frac{1}{4}$ in.

The application of these suggestions to actual examples of structural design reveals very large possibilities of economy. Take, for instance, the simple example of a room 15 × 12 ft. in clear to be spanned by a wood floor (see figure one in our last issue). The familiar, one might almost say the classic, design of such a floor would be to bridge the shorter span by single joists ceiled on the under side. For the necessary sizes we refer to the Ministry of Health specification. This stipulates for a span of 12 ft., either 8 × 2, 7 × $2\frac{1}{2}$, or 7 × 3 joists. Obviously 8 × 2 will involve the least waste of timber. As the span exceeds 8 ft. we must, in order to comply with the M.H. specification, put in a row of $1\frac{1}{2} \times 1\frac{1}{2}$ sawn herringbone strutting. The necessity for herringbone strutting is somewhat of a mystery, and especially why it should be unnecessary at 7 ft. and essential at 8 ft. The fireplace we should trim as shown, probably with tusk tenon joints, making the trimmer and the trimming joists of 8 × 3 instead of 8 × 2. The maximum permissible spacing of 2 in. joists would be 14 in. apart in the clear, or 16 in. c. to c. Eleven 16 in. bays would be 166 in. We have 15 ft. or 170 in. between walls. The difference of 4 in. we can make up by the two half thicknesses of joists and by letting the floor-boards overlap the joists by 1 in. at each end. Assuming that we can obtain timber 12 ft. 9 in. long, and do not have to buy it in 13 ft. lengths and cut 3 in. to waste on each joist, this floor involves 18 ft. cube of timber.

If instead of the rigid table of scantlings specified by the Ministry of Health it were permissible to use the true basis of stiffness upon which that table is really based, and to take credit for a reduced spacing, it will be seen from figure five that by putting in an extra joist and thus reducing the spacing to 12 in. c. to c. it would have been possible to use 7 × 2 joists (which, incidentally, is a more usual market size) instead of 8 × 2, and to reduce the quantity of timber from 18 to 17 cubic feet, a saving of between 5 and 6 per cent. Still greater economy would be possible if the spacing could be increased and the size of joist increased in proportion. Reference to figure five will show with a spacing of $25\frac{1}{2}$ in. c. to c. 9 × 2 joists would be required, or 8 joists instead of 13. This would reduce the cube of timber required from 18 to under 14 ft., a saving of over 22 per cent.

But there are other possibilities of economy, even in so simple a problem as this. It has been proved that for any given joist thickness and spacing, increase of span necessarily involves increase in depth, and therefore of cube of timber required. Obviously, therefore, any reduction of span should enable smaller scantlings to be used, and in addition smaller scantlings generally cost less than large. Clearly the floor under consideration is capable of being divided up by means of one central beam into two spans of rather less than 7 ft. each or by means of two beams into three spans of about 4 ft. 6 in. each. The only question is whether the cost of a main beam or beams would be greater or less than the saving on the joists. With the help of the two diagrams figures four and five, design is simple.

The main beam in figure two is 12 ft. span, and carries a breadth of 7 ft. 6 in. of floor. Reference to the graph (figure four) shows that a scantling of 8 × 5 in. is required. For the side span of 7 ft. $3\frac{1}{2}$ in. a $4\frac{1}{2} \times 2$ joist can be at once selected from the graph (figure five). This only involves $13\frac{1}{2}$ cubic feet of timber, a saving of about 24 per cent. over figure one. Actually a 7 × 5 beam was used in this floor, as shown, after the test described later.

In figure three the main beams only carry a breadth of 5 ft. of floor, and from figure four it will be seen that a 5 × 7 in. section will be correct. The joists being less than 5 ft. span require with 16 in. spacing a moment of inertia of a little over 5. With some daring joists $3\frac{1}{2} \times 1\frac{1}{2}$ are shown, which have a moment of inertia of 5·4.

The floor shown involves only $11\frac{1}{2}$ ft. cube of timber, a saving of 36 per cent. But even if $3\frac{1}{2} \times 2$ joists were used with a moment of inertia of 7·2 the cube of timber would be $13\frac{1}{3}$ cube, or a saving of 24 per cent. as before.

It will be noticed that in figures two and three the ordinary ceiling is omitted. Immediately one thinks of the nuisance of sound between the upper and lower rooms. But this is capable of a very simple cure. Instead of using floor-boards of ordinary thickness, two layers of $\frac{5}{8}$ in. boards planed one side are used. In the bottom layer the wrought side is downwards, between the two is a layer of hair felt, and the upper layer is fixed with the wrought side upwards. The underside can then be painted white or merely whitewashed, the exposed joists whether planed or not being creosoted or stained. It will be noticed that in addition to a substantial saving in timber there is also a clear saving in height of walls, no small matter in large housing schemes.

As regards the strength of the main beams shown, the writer had occasion to test to destruction, officially, a pair of such beams, 12 ft. span. They required no less than $11\frac{1}{2}$ *tons* of distributed load to break them. The $7 \times 2\frac{1}{2}$ timbers of which they consisted were about the worst of a consignment apparently only fit for bad firewood; knots $1\frac{1}{4}$ in. diameter traversed the edges, whilst shakes, wanes, and discoloured green sapwood were only too obvious. The only precaution taken was to see that the worse defects "broke joint" before they were nailed together. This precaution —practically the sawing and reversing of the old builders—proved to be quite sufficient to enable the timber to develop a fibre stress of 5,500 lb. per square inch and an elastic modulus of 1,600,000 lb. per square inch.

As a comparative test of stiffness and sound proofing a pair of houses was built, one with flat ceiled floors and the other with the floors beamed and covered with felted double $\frac{5}{8}$ in. boards substantially as shown. The writer, after energetically jumping on both floors, and then standing below whilst an assistant—selected for weight and lung power—danced and sang on the floor above, was frankly unable to detect any difference between the two floors.

In the design of timber roofs there are even greater opportunities for effecting great economies without offending the faith in the most timid believer in textbook theories. With regard to wind pressure we may perhaps be allowed a little latitude, because the older exaggerated ideas about it, based upon inaccurate deductions from small anemometer records, have been modified greatly by tests on larger scales. The requirements of even the most conservative authorities have dropped in recent years, from the old Board of Trade figure of 56 lb. per square foot, down to 28 lb., and now, I think, to 20 lb., which still represents a force which, if it ever occurred, would demolish half the chimney-stacks in London. Of course, we know that experience in aeroplane and airship hangars during the war taught us that practically all wind pressure on roofs is *upwards*, not downwards, and probably seldom exceeds about 7 lb. But that savours of dangerous heresy. If the powers that be think that 20 lb. to 28 lb. of *downward* pressure on a roof is necessary we must accept it without question. Fortunately, even the most conservative local surveyor nowadays will admit that the wind cannot blow down on both slopes of a roof at the same time. If the design of roofs according to the ordinary principles of structural mechanics could be made permissible, we might expect large economies over by-laws designed to the old absurd convention of 56 lb. of downward wind pressure on both sides of a roof. But at once we are met with a grave difficulty, which it is suggested should be removed without delay by the Ministry of Health. Their specification calls for the scantlings which are quite safe for the most punishing conditions of pitch and weight of covering. Why should rafters and purlins be the same, whether they are carrying slates, plain tiles, pantiles, large Italian tiles, or asbestos slates? Until this matter is put

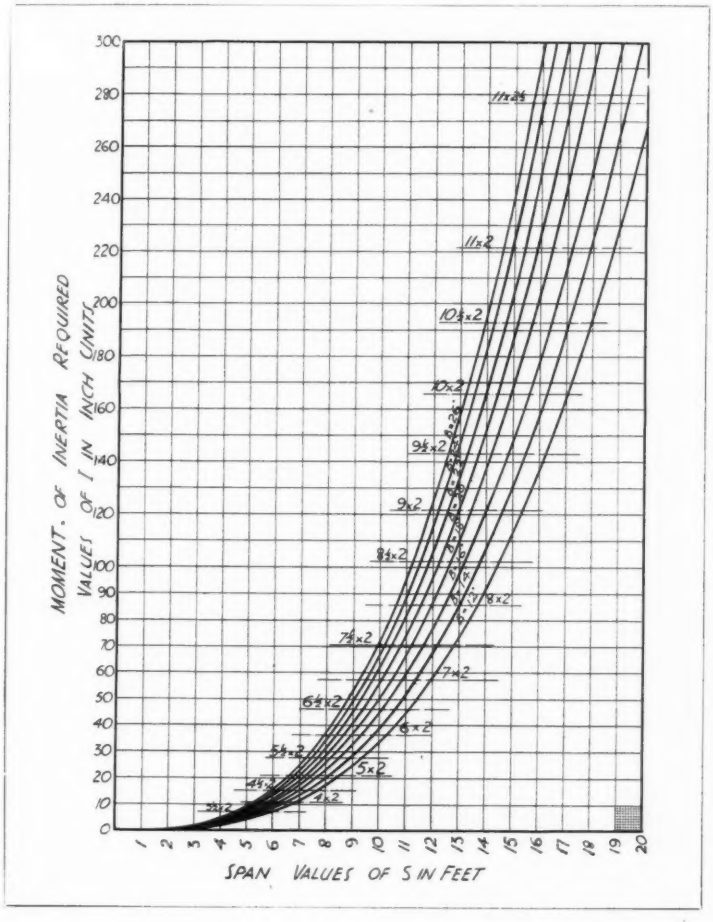


Figure five. Scantlings of floor joists consistent with formula for stiffness $I = bs^3/30$, *or deflection* = *span* ÷ 500 *when* $w = \frac{1}{2}$ *cwt. per ft. super.*

authoritatively upon a sensible basis all one can do is to exercise care, and not, for example, put in a 4×3 timber where a 5×2 which is stronger, stiffer, and 20 per cent. lighter is suitable. The difference between careful and careless selection of roof scantlings is often extraordinary.

The designer who wishes to avoid waste will do well to study roof trusses. These are seldom either required or specified (the terms are *not* synonymous) for the comparatively small spans in typical housing schemes. But in slightly larger structures they have in the past been responsible for an enormous waste of material and labour. The writer found healthy evening exercise for some weeks in sawing up for firewood a *portion* of the tie-beam of a 22 ft. span truss removed from a fairly modern city building. As soon as a span exceeds 20 ft. there appears to be an irresistible temptation to specify a king-post truss. A text-book is consulted, and something plagiarized from Tredgold is copied—a veritable orgy of wasted material and unnecessary labour. A truss built up of 1¾ in. or 1½ in. timbers bolted or even spiked together, without any of the elaborate tenons, shoulders, straps, collars, keys, etc., can be quite equally efficient. It will require less than half the quantity of timber, and can be made if necessary by unskilled labour. It is no exaggeration to say that from the average designs for wood roofs 30 to 50 per cent. of the cost in labour and material could be saved by more carefully thought-out design, without the slightest sacrifice of efficiency or strength.

WHAT THE PUBLIC WANTS

[BY EDWIN GUNN]

HOUSES used to be just houses, but now (to judge by the advertisements in the Friday papers consecrated to the week-end house-hunter) they must be either " labour-saving houses " or " houses of character." The ideal of labour saving is a perfectly comprehensible one—people now wish to work twice as hard at their amusements as they ever did at the domestic drudgery they decry, and to spend money they can ill afford in escaping the boredom which replaces domestic duties avoided.

Ideals are one thing, however, and attainment far other. To most of us it has seemed that when speculating builders advertise (as they all do) " labour-saving houses," most of them have saved themselves the labour of installing cooking appliances, contenting themselves with the provision of a perfectly good gas-pipe in the " kitchenette," and devoting a fraction of the cost so saved to an inadequate tile dado in the bathroom. A serving-hatch of rudimentary type and considerable economy in house-cleaning, produced by reducing to the minimum the quantity of house there was to clean, were usually the utmost lengths to which many of them might go.

Recently estate developers have produced houses in which from the labour-saving point of view no effort has been spared to incorporate devices and appliances definitely to reduce housework. Nothing but praise is due to the designers and builders for the thoroughness with which the problem has been faced, but it is matter for real disappointment that though " good taste " and " charming finish " are claimed for the houses, many of them conform to the too familiar " Jacobethan " standards of suburbia, with the mock-framing, club-footed bargeboards, high-transomed casements with squirmy-coloured glass, and general lack of form or clearly defined motive in design. From this point of view they are every bit as much behind the times as from the previous standpoint they are in advance of them, and they form a remarkable commentary on Mr. Oswald Milne's questioning article on " The Small House " in a recent issue. To add a question : " Is this really what the public wants, or does it perforce swallow the husk for the sake of the kernel ? " About the attractions of the kernel there can be no doubt.

The tradesmen's delivery hatch of these houses sometimes consists of a series of enlarged pigeon holes, open to the inside (behind cupboard doors), each having its labelled door to the outside within a general enclosure-door. Each small door is fitted inside with a fanlight-catch, so that when closed after articles are deposited from outside it can only be reopened from within. An opal-glass kitchen ceiling also may not be quite all that is hoped, the substance being in rather small units, so that wood cover fillets form a large proportion of the area. Dissent from the statement that *any* ceiling can be " easily washed " is possible. The shaving-cupboards recessed in the walls are useful and easily contrived.

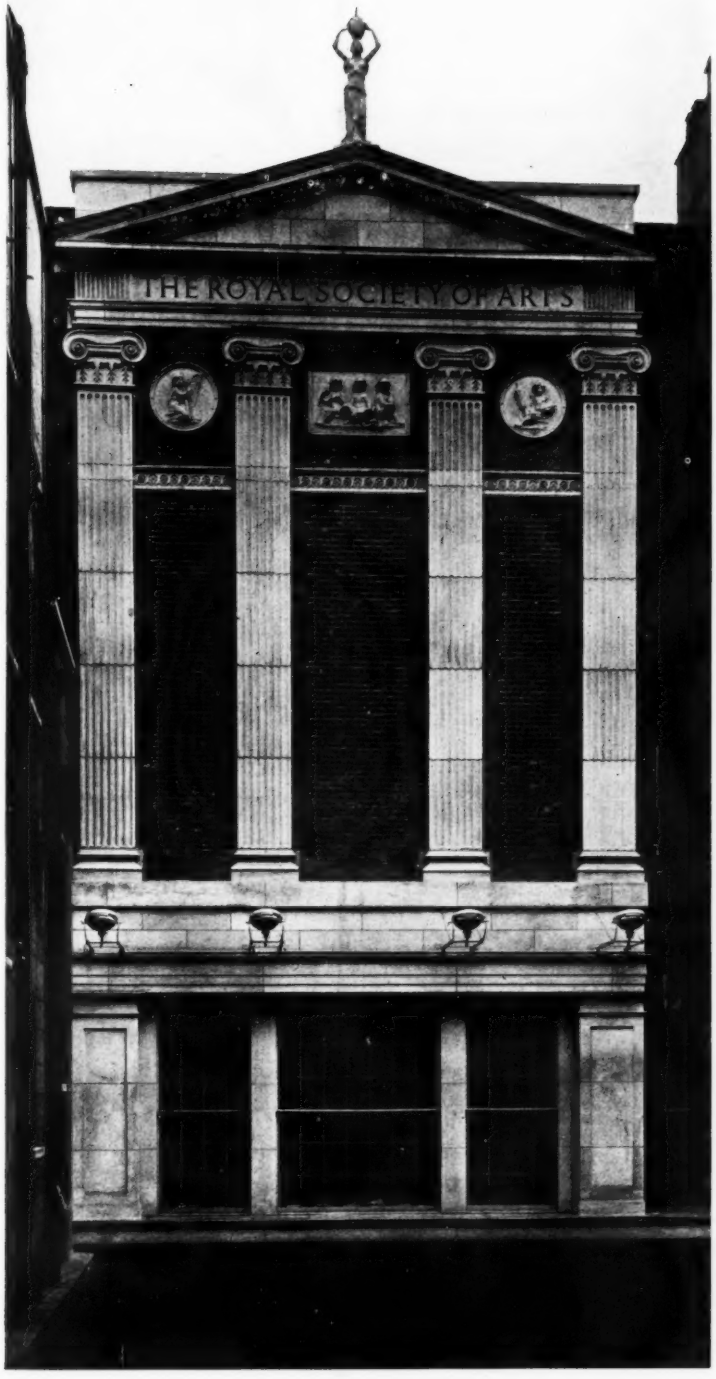
Details which are not mentioned by the estate developers, but which are worthy of commendation, are the use of a w.c. fitting of cantilever pattern on the upper floor. This not only simplifies floor covering and subsequent cleaning, but removes the chance of a defective joint due to shrinkage of wood joists and flooring, with consequent slight settlement of the pan. The enclosed bath, with its riser at side and end of synthetic marble, is in accordance with good recent practice, and the extension of bathroom wall-tiling to the ceiling avoids the constant problem of what to do with the walls above the dado. A compartment of the (rather small) larder is in the form of a water-jacketed meat safe. This consists virtually of a double tank with doors on one side, hand-filled by a plug and with a cock and waste for emptying. One may be a trifle sceptical of the joys of the ash-shoot; they will not be shared by the person who clears the manhole in the garden. This device is, of course, common in Canada, but there a special cellar compartment with much larger capacity is utilized and cleared at relatively long intervals, as naturally regulated as, say, the visits of the chimney sweep.

By a rough computation it may be judged that the average nett extra cost of the various gadgets as compared with the normal provision (or absence of provision) ranges from £80 to £100 per house, not all the houses having all or similar fittings. Probably this sum would be saved annually by any tenant who by means of the appliances installed could dispense with a domestic servant. It can therefore be demonstrated that the real labour-saving house (current ideals being as they are) is worth while on economic grounds, even allowing for maintenance and replacement of apparatus exceeding that of the old simple fittings.

There is no doubt that the speculating builder is in the best position to equip on this scale. He is spending his own money and risking little in the way of reputation by trying novelties, while a purchaser who sees what he is buying and must trust his own judgment is a better person to deal with than an employer or " client " who is, in about 90 per cent. of cases, timid and mistrustful alike of his own fancies and his architect's advice or ability; and in the remaining 10 per cent. of cases often a crank (or shall we say enthusiast) who requires restraining, and very rarely indeed a person soberly willing to risk innovations without future recriminations when initial hopes are not fulfilled. An architect therefore is in duty bound (and in practice wise) to point out that every new departure is not necessarily a lasting success. This makes for the perpetuation of the " safe " and unexciting course.

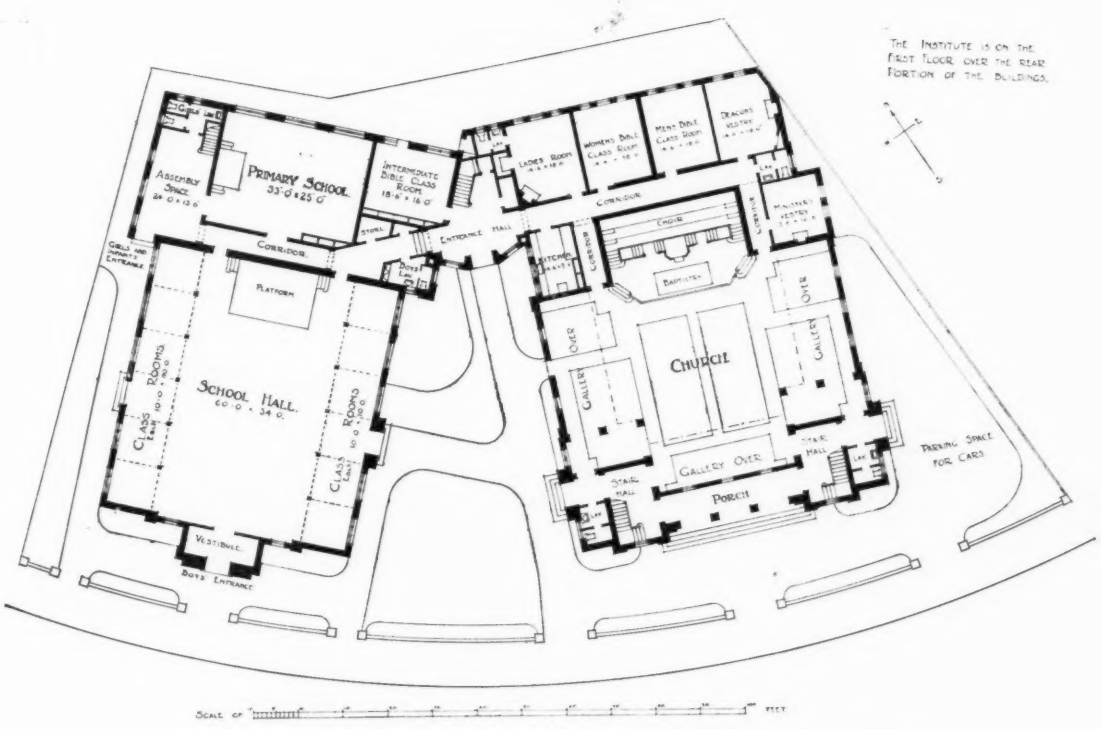
What is really required is an adequately trained architect with good sense as well as designing ability who will abandon the profession and render public service by becoming a speculating builder. There seems no other way. A large and growing section of the public, educated by journals of popular appeal to appreciate something better than the ordinary speculator offers, at present goes unsatisfied. These people, on the borderline between the servant-keeping and servantless classes, and usually not well off, can seldom face the relative uncertainty as to cost involved by the pursuit of the ideal house by medium of site-purchase, architect, tenders, and the rest. Their simple needs do not really necessitate such " retail " architecture, but would be fully met by what may be called " wholesale " design—good type plans well placed in regard one to another and carried out with inoffensive detail throughout. Work of this kind costs no more than the flashy detail and untidy plans with which we are familiar—except in training and thought. It could even be made to cost less, given continuity long enough to familiarize a band of workmen with aims which might at first seem unfamiliar.

CURRENT WORK



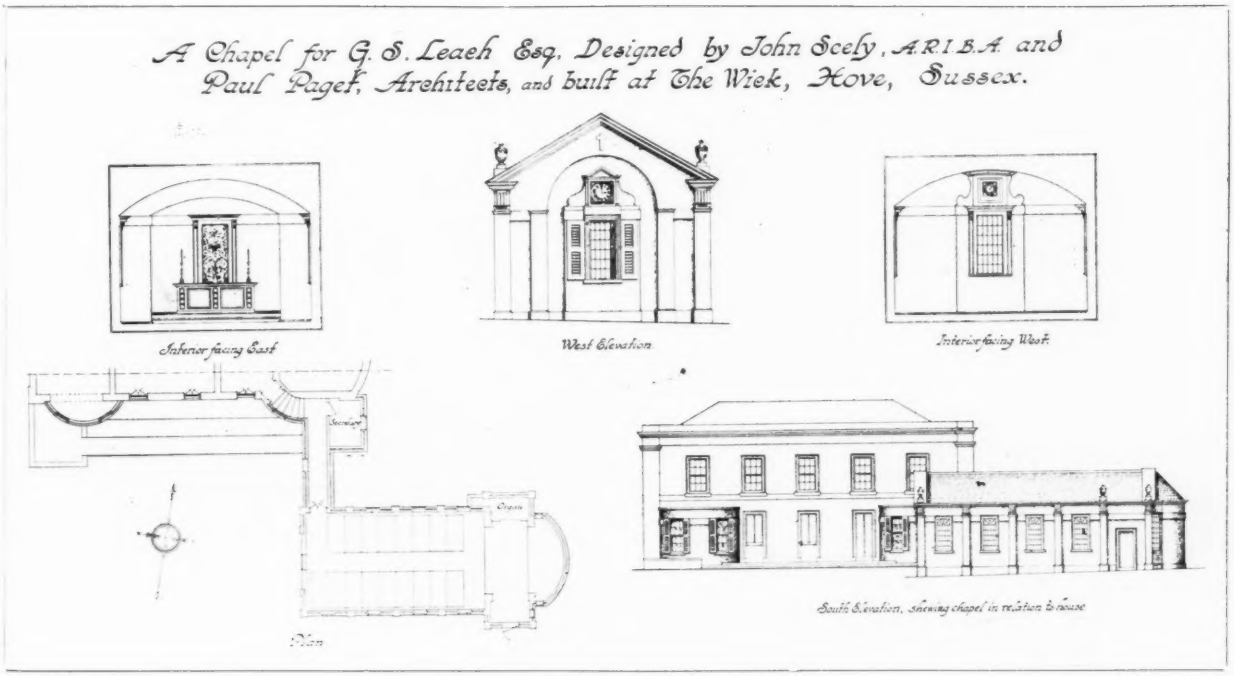
The Royal Society of Arts, Adelphi, London. Decoration of the rear wall. By Sir Aston Webb and Son.

Above, The Royal Society of Arts, Adelphi, London. Decoration of the rear wall. Detail. By Sir Aston Webb and Son. Below, Baptist church, schools, and institute at Enfield. By W. Gilbee Scott and Bernard W. H. Scott. The entrance-hall doorway.

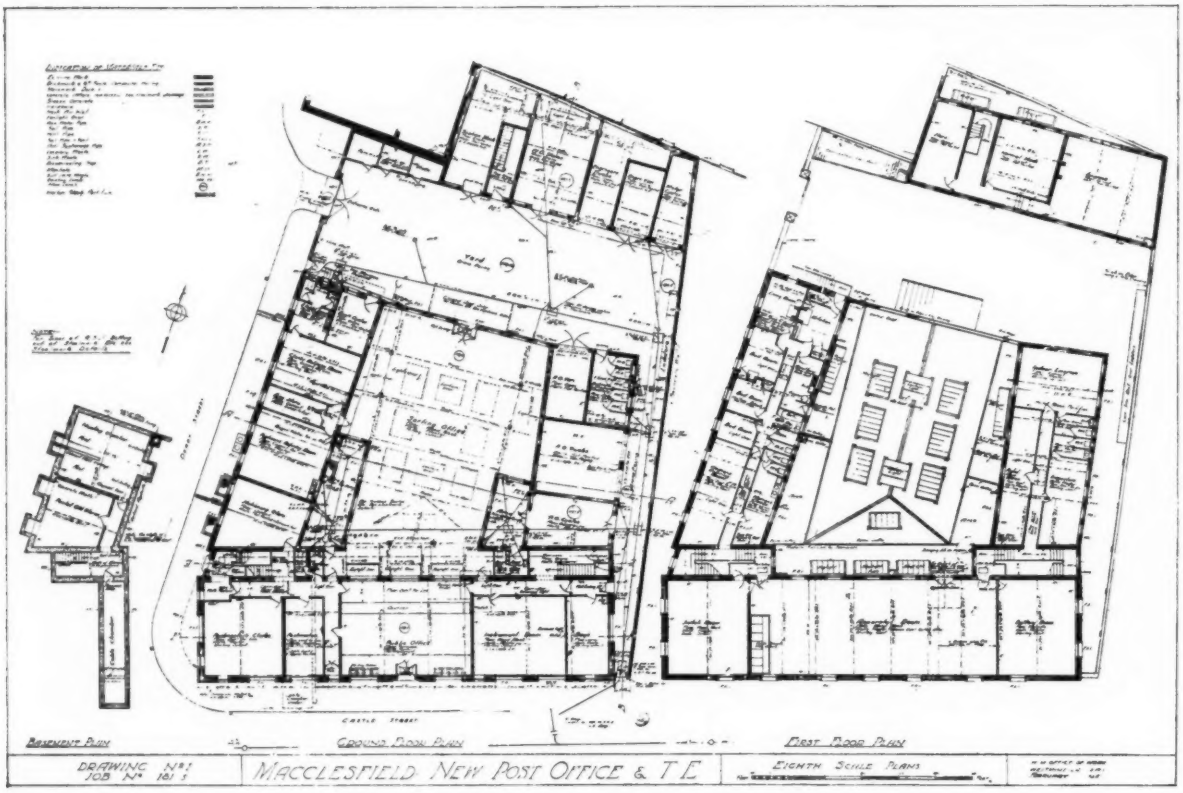


Baptist church, schools, and institute, Enfield. By W. Gilbee Scott and Bernard W. H. Scott. Above, the school. Below, ground floor plan of the school and church.

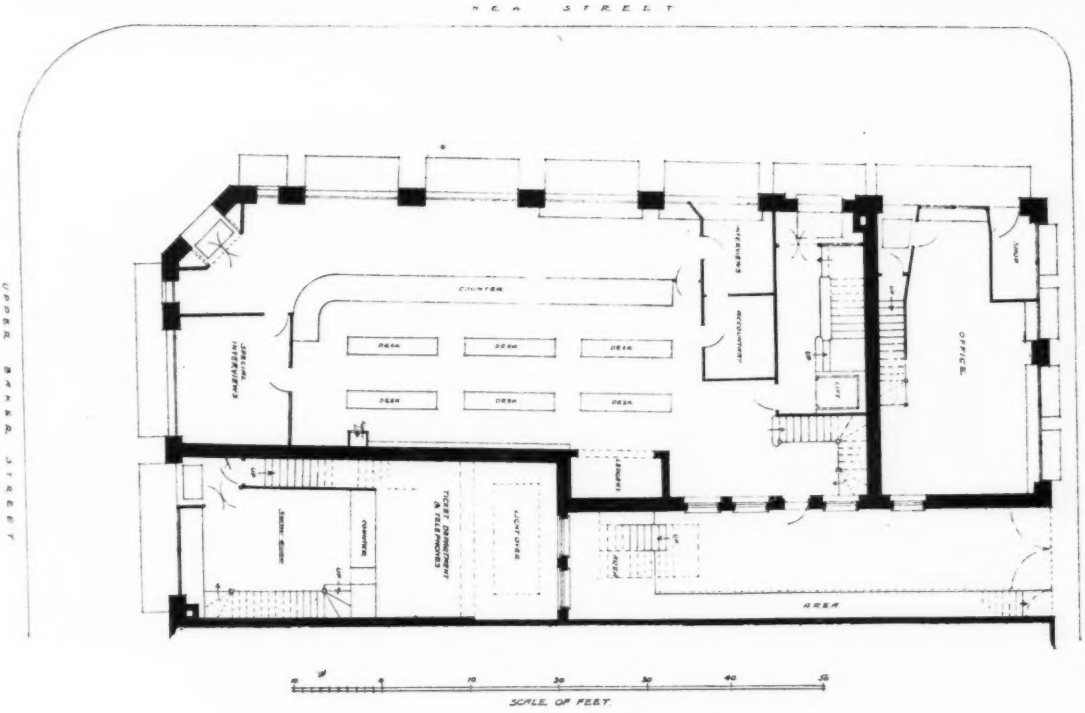
Chapel at Wick School, Hove. By John Seely and Paul Paget.



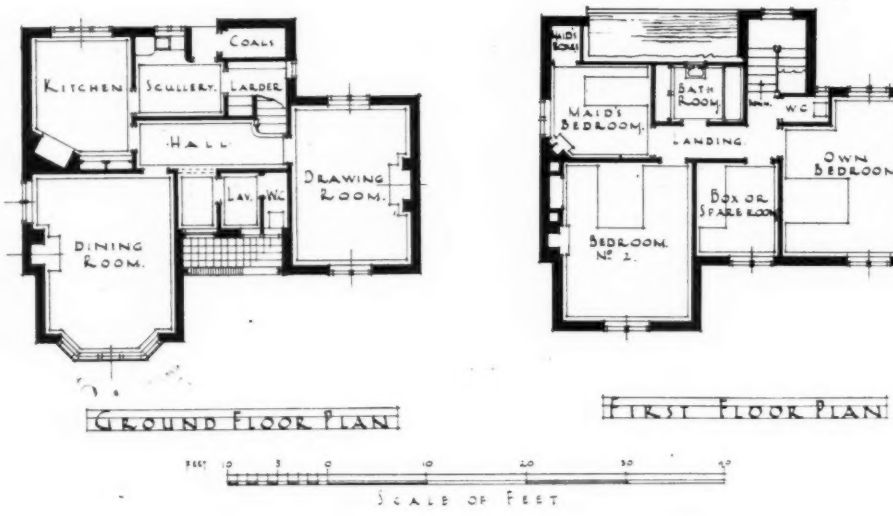
Chapel at Wick School, Hove. By John Seely and Paul Paget. Above, the interior. Below, plan and elevations.



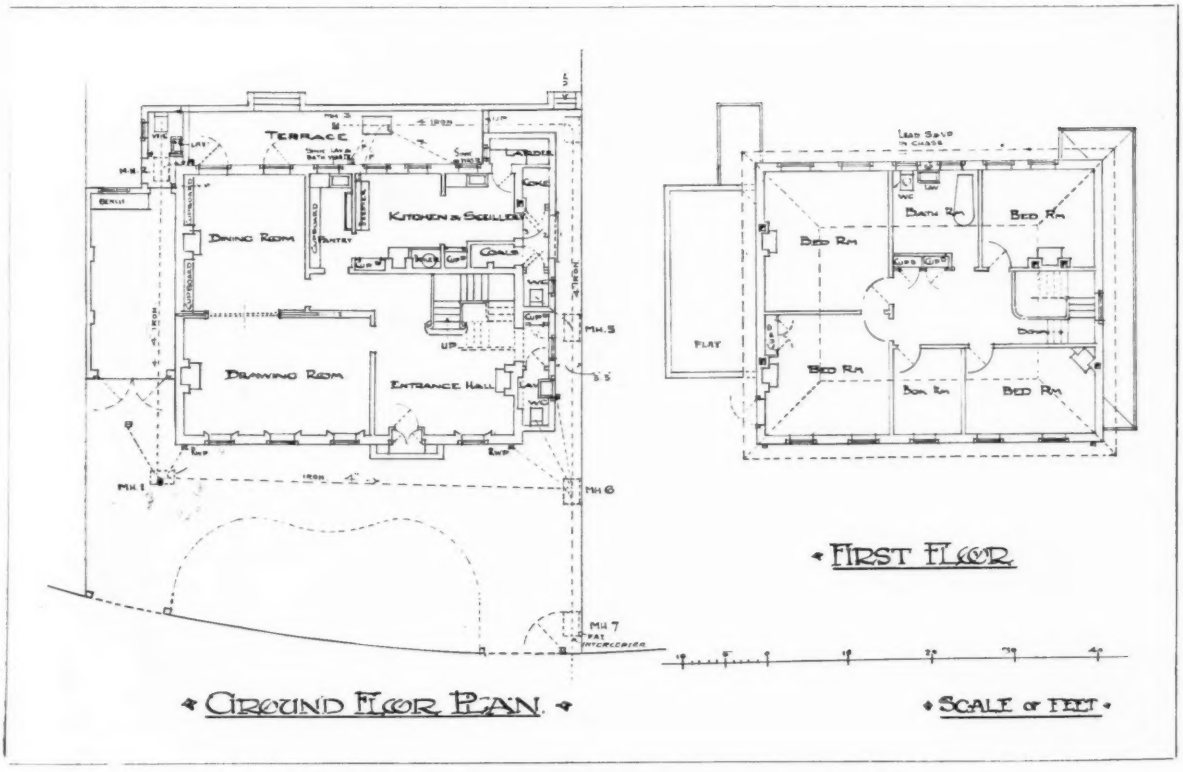
Post Office at Macclesfield. By H.M. Office of Works. Above, a general view. Below, the plans.



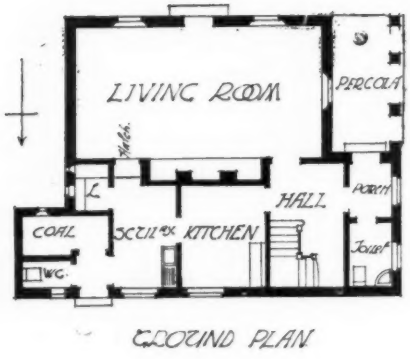
New premises for the Abbey Road Building Society, Upper Baker Street. By the late Delissa Joseph. Above, a general view. Below, the ground floor plan.



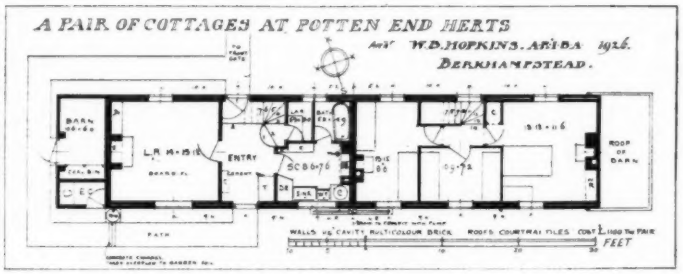
House at Wolstanton. By R. T. Longden.
Above, the entrance front. Below, the plans.



House at Hampstead. By Miss Winn. Above, the entrance front. Below, the plans.



GROUND PLAN



Above, house at Clevedon, Somerset. By C. F. W. Dening, and centre, left, the plan. Below, pair of cottages at Potten End, Hertfordshire. By W. B. Hopkins, and centre, right, the plan.

IN PARLIAMENT

[BY OUR SPECIAL REPRESENTATIVE]

At question time Sir Robert Thomas asked the Under-Secretary of State for the Home Department, as representing the First Commissioner of Works, whether he was aware of frequent complaints that the statuary group, Burghers of Calais, by Augusta Rodin, in the Victoria Tower Gardens, was placed on so high a pedestal that it could not be seen and studied to advantage; and whether, in view of the beauty and educational value of this work of art, he will have the pedestal lowered?

Captain Hacking said that the height and design of the base of the statuary group in question was fixed after prolonged consideration in full accordance with the views and wishes of Monsieur Rodin, and actually approved by him. The First Commissioner, therefore, did not see his way to adopt the suggestion made, which, apart from artistic considerations, would involve substantial expenditure from public funds.

Sir John Gilmour, Secretary for Scotland, informed Mr. Buchanan that as at June 30 last no one-apartment houses, and 7,222 two-apartment houses, were built in Scotland since 1919 under State-aided housing schemes.

Sir Robert Thomas asked the Minister of Health whether he was aware that the progress of building in this country was being retarded by the operations of rings and price-fixing associations, particularly in regard to timber, and whether he would set up a committee of inquiry into the matter?

Sir Kingsley Wood said that the Inter-departmental Committee on the prices of building material kept in constant touch with and investigated prices of building materials. In their last report, which dealt with the prices ruling on May 1 last, they stated that prices in several directions tended to become easier. As regarded timber, the schedule appended to that report indicated that between January 1924 and May 1927 timber prices generally had substantially fallen. He was advised that there was no ring or price-fixing association in the timber trade.

In reply to Mr. Bromley, Mr. Chamberlain gave the following statement showing the average prices of houses included in contracts let by, or in direct labour schemes of, local authorities during the undermentioned months:

Month	Non-Parlour Houses	Parlour Houses
	£	£
January 1927 ..	427	492
February 1927 ..	422	489
March 1927	425	494
April 1927	421	479
May 1927	397	474
June 1927	425	481

Note.—The above prices excluded the cost of land and development.

COMPETITION NEWS

Bognor Council Offices

The result of this competition is as follows:

First Premium. Charles Cowles-Voysey, 14 Gray's Inn Square, W.C.1.

Second Premium. Clayton and Black, 10 Prince Albert Street, Brighton.

Third Premium. Adshead and Ramsey, 46 Great Russell Street, London, W.C.1.

Bradford Grammar School

Mr. Arnold Mitchell, the assessor, has made the following awards in the competition for the new building proposed by the governors of the school:

First. Petch and Fermaud, 12 Buckingham Palace Road, London, S.W.1.

Second. Stratton Davis, Yates, Dolman and Rowland V. Taylor, 12 Queen Street, Gloucester.

Third. Cecil A. L. Sutton and George A. Bryan, Albion Chambers, King Street, Nottingham.

Eighty-three designs were submitted.

Shakespeare Memorial Theatre

The following result is announced of the preliminary competition for designs for the rebuilding of the Shakespeare Memorial Theatre at Stratford-upon-Avon:

Miss Elisabeth Scott, 15 Gordon Square, W.C.1.

Robert O. Derrick, 120 Madison Avenue, Detroit, Michigan.

Albert R. Mohr and Benjamin Moscowitz, 25th Floor, Pershing Square Building, New York.

Albert J. Rousseau, 2,001 Vinewood Boulevard, Ann Arbor, Michigan.

Percy Tubbs, Son, and Duncan and S. Rowland Pierce, 15 Gower Street, London, W.C.1.

D. F. Martin-Smith, 45 Bloomsbury Square, W.C.1.

Three of the successful six in the preliminary competition are British and three American, and under the terms of the competition these six architects must submit further designs by November next, and from these one will be selected by the assessors, and the construction of the new building will be placed in the hands of the architect whose design is finally chosen. Seventy-four plans were submitted.

The assessors were Mr. Guy Dawber, F.R.I.B.A., Mr. Cass Gilbert (president of the National Academy of Design of the United States of America), and Mr. Robert Atkinson, F.R.I.B.A.

Beckenham Municipal Offices

Mr. Septimus Warwick, F.R.I.B.A., the assessor, has made the following awards in the preliminary competition:

W. Naseby Adams, A.R.I.B.A.

Harold G. Cherry, F.R.I.B.A.

Cecil E. M. Fillmore, A.R.I.B.A., and A. Malcolm McKewan, A.R.I.B.A.

H. V. Lanchester, F.R.I.B.A., M.T.P.I., Geoffrey Lucas, F.R.I.B.A., M.T.P.I., T. A. Lodge, O.B.E., A.R.I.B.A., F.S.I.

T. P. Somerford, A.R.I.B.A.

E. Berry Webber, A.R.I.B.A., and J. G. Cheadle, A.R.I.B.A., A.R.C.A.

Sixty-seven designs were submitted. October 15 is the last date for the receipt of the drawings in the final competition.

COMPETITION CALENDAR

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

August 23. University Buildings, Western Australia. To cost £150,000. Premiums: £400, £300, £200. Open to British subjects or citizens of U.S.A. Assessors: Professor Leslie Wilkinson, F.R.I.B.A., Mr. A. R. L. Wright, L.R.I.B.A., President, Royal Institute of Architects of Western Australia, and Member of University Senate. Particulars from Agent-General for Western Australia, Savoy House, 115-116 Strand, London, W.C.2, or Australian Trade Commission, 44 Whitehall Street, New York, U.S.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.

CURRENT WORK

Following are the names of the contractors and some of the sub-contractors for the buildings illustrated on pages 139 to 148:

Decoration of the Royal Society of Arts Building, John Street, Adelphi, W.C.2. General contractor, Dove Brothers, Ltd. The panels in relief between the pilasters were modelled and cast by Mr. E. J. Bradford; E. J. and A. T. Bradford, ornamental plasterwork generally; Adamite Co., Ltd., "Atlas White" Portland cement stucco; Mr. Walter Gilbert, figure on pediment; Mr. Eric Gill, inscription on frieze; The General Electric Co., Ltd., floodlighting.

Baptist Sunday schools and institute, Cecil Road, Enfield. General contractors, Allen Fairhead and Sons, Ltd., Enfield. Clerk of works, Mr. G. T. Lea. General foreman, Mr. G. Warren. Contract price, £13,060. Price per foot cube, 1s. 10d. Sub-contractors: F. Bradford & Co., Ltd., concrete stairs; E. Parkinson, London, Ltd., Delabole slates; Hollis Bros. & Co., Ltd., woodblock flooring; Dilworth and Carr, central heating; Electrical Installations, Ltd., electric wiring and electric light fixtures; Wilmer and Sons, Ltd., sanitary fittings; James Gibbons, Ltd., door and window furniture; Chas. Walker & Co., marble to baptistery, etc.

Private school chapel, The Wick, Hove, Sussex. General contractors, Field & Co., Ltd., Brighton. Sub-contractors: Crittall Manufacturing Co., Ltd., casements; O. Jackson and Sons, Ltd., decorative plaster; The Maqueta Time Co., Ltd., clocks.

Head office, theatre ticket office and flats over offices, and flats over Upper Baker Street and New Street for The Abbey Road Building Society, Messrs. Webster and Girling and J. Hewlitt, Jr. General contractors, Messrs. Ford and Walton. General foreman, Mr. W. Cook. Contract price: Building Society, £31,000; Webster and Girling, £7,398; Hewlitt, £7,427. Sub-contractors: The Empire Stone Co., artificial stonework; Redpath Brown & Co., structural steel; Luxfer Fire-resisting patent glazing; General Electric Co., electric light fixtures; John Bolding and Son, sanitary fittings; James Gibbons, door furniture, casements, and window furniture; A. L. Gibson & Co., rolling shutters; Hobbs, Hart & Co., fireproof doors; Haywards, Ltd., iron staircases; Fenning & Co., marble; Waygood-Otis, Ltd., lifts; The Franco-British Sign Co., signs.

"The Top House," Hampstead. General contractors, King, Freeman & Co. Sub-contractors: Bratt Colbran & Co., stoves; Crittall Manufacturing Co., Ltd., casements; Comyn Ching & Co., window furniture.

Cottages, Potten End, Berkhampstead, Herts, for Mr. Spencer L. Holland. General contractors, H. Lacey and Sons, Luton. Contract price, £3,300 for three pairs. Price per foot cube: houses, 10½d.; barns, 9d. The walls are local multi-colour bricks and 11¼ in. cavity walls; the roofs are of Courtrai tiles.

The Macclesfield Post Office and Telephone Exchange. The walls are faced with hammer-dressed rubble from the Bollington quarries, and the stonework of the cornice, window dressing, and the lower part of the building is Darley Dale stone. When the extension for telephones is required the design will be completed by the addition of a roof-story as shown in the sketch design illustrated in THE ARCHITECTS' JOURNAL for January 6, 1926. The main building contract has been carried out by Messrs. Cooper Bros., of Macclesfield; the stone carving is by Messrs. John Daymond and Sons, of Westminster; woodblock floors by Messrs. McDougal and Sons, Glasgow; public office floor by Messrs. Rusts Vitreous Mosaic Company, Battersea; and heating by Messrs. James Coombe, Glasgow and London.

OBITUARY

The death took place, after a short illness, of Mr. Arthur Edwards, architect and surveyor, of Handsworth. Mr. Edwards, who was sixty-five years of age, was for many years in practice at 9 Bennett's Hill, and was responsible for the design of many public buildings in and around Birmingham, including Aston Technical Schools, Harborne Industrial School, and Bournville Sub-station. He was also architect for the "Three Horse Shoes," Stirchley, and the "Granville," Broad Street.

The death took place at Cavendish Drive, Rock Ferry, of Mr. Charles Ernest Deacon, F.R.I.B.A. He began practice fifty-seven years ago after completing his articles with Sir James Picton. Among the many churches which he built are St. Dunstan's, Liverpool; St. Columba's, Egremont, and St. Stephen's, Prenton. Mr. Deacon also carried out many commissions for the Liverpool School Board and the Education Committees of the Cheshire County Council and Birkenhead, while he was also architect for the offices of the Liverpool Education Committee in Sir Thomas Street.

The death took place of Mr. Thomas Purves Marwick, a well-known Edinburgh architect. The son of an Orcadian, he himself was brought up and educated in Edinburgh, where he carried on a large and successful business as architect and valuator. He was Ashpitel Prizeman in 1882 and Institute Medallist in 1884. He was recognized as one of the foremost experts in Scotland in connection with the compulsory acquisition of land and property, and frequently acted as sole arbiter in professional and building disputes and in questions of valuation. He gave willing service to the promotion of the Architectural Association, of which he was a member, and acted as President. He also held the office of President of the Incorporation of Architects in Scotland from 1922 to 1924. He took a keen interest in all matters relating to the improvement of the city from an architectural, æsthetic, and sanitary aspect, and contributed many notable buildings, among which are the buildings at Drumsheugh Place, valued at £30,000, which the late Mr. Wm. Watherson gifted to the Merchant Company of Edinburgh, of which Mr. Marwick was architect. The dairy and bakery of the St. Cuthbert's Co-operative Association of Edinburgh at Fountainbridge and the Gresham Insurance buildings in George Street are also his work. He restored Swinton Parish Church.

It is with deep regret that we have to record the death of Mr. J. H. Kerner-Greenwood, managing director of the King's Lynn firm that bears his name. Mr. Kerner-Greenwood, who was fifty-six years old, passed away very suddenly, at Bath, on July 17.

His business career, he was fond of relating in his more expansive moments, really began in earnest when he hit on the happy idea of publishing a useful little folding card to which he gave the title *Greenwood's Timber Calculator*. A carefully prepared little compilation, *Greenwood's Calculator* was successful almost immediately, ultimately becoming, thanks to judicious advertising, a "best-seller" among publications of its class, while its publisher earned the repute of an infallible authority on the technics of timber measurement.

Himself firmly and conscientiously convinced, after severe and comprehensive tests, of the absolute genuineness of Pudlo which he had put upon the market, he backed up his confidence in its efficacy in a series of uncommonly effective advertisements, in which convincing statement was blended with attractive pictorial illustration. Mr. Kerner-Greenwood developed, indeed, an excellent taste in the graphic arts, and did not stint expense on them—whether in purchasing and reproducing a Piranesi or a Meryon etching, or in commissioning an original picture by some modern architectural etcher or draughtsman. One remembers with peculiar pleasure the contagious enthusiasm with which he would call attention to the pictures with which he delighted to decorate the walls of the Pudlo stand at building exhibitions. "You know all about 'Pudlo,' but just come and see my little art gallery," was his customary greeting; and as a matter of fact, the pictures he had to show on those occasions were always worth inspecting.

Certainly Kerner-Greenwood was an adept in the gentle art of advertising. Astute and keen as a man of business, he was withal charmingly genial and courteous, and it was always delightful to be in the presence of such a perennial well-spring of cheery optimism and indomitable courage.

THE WEEK'S BUILDING NEWS

A cinema to hold 1,700 people is to be erected at 50-58 Mitcham Road, TOOTING.

*

The Pavilion Theatre, WHITECHAPEL, is to be converted into a cinema, the L.C.C. Theatres Committee having agreed to give the licence for the purpose.

*

The L.C.C. Theatres Committee has promised to grant a licence for the proposed Brixton Astoria Cinema and Dance Hall, to be erected in Stockwell Road, BRIXTON.

*

The Biograph Theatre, 47-48 Wilton Road, WESTMINSTER, is to be reconstructed.

*

The L.C.C. has passed plans for the reconstruction of the Prince of Wales Picture Playhouse, 331 Harrow Road, PADDINGTON.

*

The L.C.C. Housing Committee has prepared preliminary drawings for all the dwellings to be erected on the Ossulton Street area, ST. PANCRAS, and a model has been constructed indicating proposals for the erection of buildings comprising the main southern block. The development scheme introduces a number of special features.

*

Messrs. Martins, of Liverpool, are to carry out alterations at their bank in Market Place, RIPON.

*

Messrs. Oldham Bros., coopers, of Wetmore Road, BURTON-ON-TRENT, are to extend their premises.

*

The BURTON-ON-TRENT Corporation has decided to purchase a housing site in Rosliston Road.

*

The OLDHAM Corporation has adopted a scheme for widening Lord Street and Albion Street.

*

The borough engineer of OLDHAM has prepared plans for the erection of 486 houses on the Limeside estate.

*

The OLDHAM Corporation has obtained sanction to borrow £10,000 for further housing subsidies.

*

Mr. R. Cromie has submitted to the WIMBLEDON Corporation plans for alterations and additions at the Elite Picture Theatre, Merton Road, and been asked to submit revised plans to meet the special requirements of the Licensing Committee.

*

The L.C.C. Education Committee is to compulsorily acquire property required for the extension of the School of Printing, Stamford Street, LAMBETH.

The L.C.C. Education Committee is to provide an open-air school on a site in Du Cane Road, HAMMERSMITH.

*

The L.C.C. Education Committee is acquiring a site in Marvels Lane, LEWISHAM, for the erection of an elementary school.

*

An agreement has now been reached by the county authorities of Essex, Cambridgeshire, East and West Suffolk in regard to the extension of the Royal Eastern Counties Institution at COLCHESTER. The estimated cost of the first section of the scheme is £250,000. The plans are to be prepared by the Essex county architect.

*

The West Riding Education Committee has agreed to amended plans for the erection of the BINGLEY Grammar School.

*

The West Riding Education Committee has passed revised plans for the erection of a secondary school at ECCLESFIELD at an estimated cost of £30,500.

*

The West Riding Education Committee has acquired a site at HONLEY for the erection of a secondary school.

*

The Derbyshire Education Committee is to erect an elementary school for 300 children at BEIGHTON.

*

The SPENBOROUGH Education Committee is to erect an elementary school for about 350 children at Cleckheaton.

*

The LEWISHAM B.C. has authorized the preparation of a scheme for the extension of the central library.

*

The LEWISHAM B.C. Libraries Committee has expressed readiness to provide a library on the Downham housing estate if the L.C.C. will provide the site.

*

The STOKE NEWINGTON B.C. Baths Committee has further considered matters relating to the scheme for a swimming bath and decided on that submitted by Messrs. Hobden and Porri, at a cost of £20,000.

*

The SHOREDITCH B.C. Lighting Committee has approved the lay-out of the electricity offices, stores and showrooms. It is estimated that a suitable building consisting of three floors and a basement could be erected at an approximate cost of £18,000 (excluding equipment).

*

Messrs. Kempster and Williams are to build fifty subsidy houses at Beechwood Rise, WATFORD.

The WAKEFIELD Corporation has obtained sanction for the erection of a further twenty houses on the Thornes Road estate.

*

Plans passed by the WAKEFIELD Corporation: Additions, warehouse, Tootal Street, for Messrs. J. Hamshaw and Son; additions, spinning mill, Ings Road, for Messrs. Moore and Crabtree; two houses, Horbury Road, for Mr. H. Dobson.

*

The BARNSLEY Education Committee is to proceed with the erection of a mixed and infants' school in Doncaster Road, Ardsley.

*

Plans passed by the BARNSLEY Corporation: Twelve houses, Aldham View, for Mr. J. Cernes; eight shops, Market Hill Arcade, for Barnsley Arcade Co.; additions, club. George Street, for Barnsley Conservative Club.

*

Plans passed by the EAST HAM Corporation: Twelve garages, Church Road, for Mr. B. Underwood; two houses, St. Winifride's Avenue, for Mr. G. Saxton; eleven houses, Rancliffe Road, for Mr. F. Hamlett; alterations, 24 High Street North, for, Mr. C. Living, Junr.; additions, factory, Boleyn Road, for Mr. C. Haysey; hall, Claremont Street, for Mr. O. Archer; alterations, 126 High Street North, for Mr. G. M. Page; rebuilding, 46-48 High Street South, for Messrs. Welch and Hollis.

*

At a meeting of the BARNSLEY Corporation Abattoir Committee, the borough surveyor submitted amended plans in respect of the proposed new abattoir and an amended estimate of the cost amounting to £30,000, and the committee recommended that he consult the Ministry of Health upon the plans.

*

It was mentioned at the LONDON County Council that consideration was being given to the scheme for the addition of the new wing to the County Hall.

*

Plans passed by the HACKNEY B.C.: Additions, Star Laundry Co.'s premises, Anton Street, for Mr. C. Gordon Smith; workshop, Wick Road, for Messrs. H. Jasper and Son; stores, Amhurst Road, for Messrs. H. W. Pope & Co.

*

Plans passed by the HAMPTON U.D.C.: Fourteen houses, Percy Road, for Messrs. Snelling and Sharman; two houses, Uxbridge Road, for Messrs. W. Shepherd and Son.

*

Plans passed by the CARLISLE Corporation: Store, Thirwell Avenue, for Mr. J. Leslie, architect; bronzing-room, Water Street, for Messrs. Hudson, Scott and Sons, Ltd.

The Board of Education has approved the plans of the MANCHESTER Education Committee for the proposed extension of the Whalley Range High School for Girls.

*

The Manchester Education Committee has prepared plans for the erection of an open-air school in Middleton Road, CRUMPSALL.

*

Plans passed by the SHEFFIELD Corporation: Three houses, Marlcliffe Road, for Mr. A. Condell; six houses, Vainor Road, for Mr. J. Reed; four houses, Swaledale Road, for Mr. C. S. Smith; six houses, Knowle Lane, for Mr. G. M. Taylor; thirty-two houses, Huntley and Falkland Roads, for Messrs. Ramsden and Mottram; six houses, Crawford Road, for Mr. Tom Leadbeater; vicarage, Coleford Road, for Church Burgesses; house and club, Shiregreen Lane, for Shiregreen Working Men's Club; three houses, Myrtle Road, for Mr. G. McBean; four houses, Langsett Avenue, for Mr. G. Hardwick; six houses, Struan Road, for Messrs. Plant Bros.; three houses, Cricket Inn Road, for the Markets Committee; 127 houses, Longley estate, for Estates Committee of Corporation.

*

Plans passed by the GLOSSOP Corporation: Extensions, Turn Lee Mills, for Messrs. Olive and Partington, Ltd.; chimney shaft in connection with new boilers, Turn Lee Mills, for Messrs. Olive and Partington, Ltd.; two houses, North Road, for Messrs. H. Lord and H. Smith.

*

Plans passed by the LEWISHAM B.C.: Five houses, Fairfield Road, for Mr. H. D. Bennett; nine houses, Crantock Road, for Mr. H. R. Watt; eight houses, Warren Avenue, for Messrs. Dibben & Co., Ltd.

*

The managers of St. Aloysius School, ST. PANCRAS, have prepared plans for the erection of a new school in Aldenham Street.

*

The HULL Corporation Libraries Committee has instructed the city architect to prepare plans for an extension of the central library in accordance with sketch plans involving a cost of £14,000.

*

The Board of Education has approved the plans of the Roman Catholic managers for the erection of an elementary school at Endsleigh, HULL.

*

The HULL Education Committee has prepared preliminary plans for submission to the Board of Education for the proposed elementary school on the eastern housing estate.

*

The PLYMOUTH Corporation is to borrow £16,000 for the construction of new roads at Prince Rock.

*

The PLYMOUTH Corporation is to borrow £40,000 for the provision of new water mains.

The PLYMOUTH Corporation is to obtain a site at North Prospect for the erection of a clinic.

*

The PEMBROKE county surveyor is to prepare plans for the improvement of the bridge at the foot of Holyland Hill, near Pembroke, as the road at the foot of Holyland is dangerous.

*

The LEAMINGTON Corporation has had a letter from the Ministry of Health forwarding formal sanction to the borrowing by the Council of £25,000 on account for sewage disposal works, and stating that sanctions to the borrowing of the remainder of the amount required will be issued when the tenders for the machinery have been received and considered.

*

The GOVANHILL branch of the Independent Labour Party is acquiring a site in Dixon Road, Govanhill, for the erection of a hall.

*

Messrs. Galbraith's Stores, Ltd., are to extend their bakery in Craigton Road, GLASGOW.

*

Messrs. F. W. Woolworth & Co., Ltd., have in view the extension of their premises in Union Street and Mitchell Street, GLASGOW.

*

The Co-operative Society is to erect premises in Kingsway, HARWICH.

*

Plans passed by BATTERSEA B.C.: Conversion into flats, St. Philip's Vicarage, Queen's Road, for Mr. R. J. Lovell; alterations and additions, 21 and 23 St. John's Road, for Boots Pure Drug Co. Ltd.; alterations and additions, 81 and 83 Falcon Road, for the Battersea Labour Club and Institute, Ltd.

*

Plans passed by BOURNEMOUTH Corporation: Alterations and additions, Lads' Institute, Stourvale Road, for the governors; additions, Castle Laundry, Castle Road, for Mr. R. Bevington; corridor, New Church Hall, Easter Road, for the Rev. Sinclair Burton; alterations and additions, 207-15 Old Christchurch Road, for Messrs. Edwin Jones, Ltd.; additions, Wentworth Lodge, College Road, for the Bournemouth Collegiate School for Girls; three shops, Hawthorn Road, for Mr. Gough; flats, corner of Inverleigh and Stourvale Roads, for Mr. E. J. Mills; club, Jameson Road, for Y.M.C.A. Committee.

*

Plans passed by CROYDON Corporation: Eighteen houses, Goldwell Road, for Messrs. A. Duckit; church, Bedford Park, for Messrs. F. W. Jarman; billiard room, Osborn Road, for the Beulah Bohemian Social Club; four houses, Harrington Road, for Mr. E. Tulley; factory, Purley Way, for Messrs. A. and J. Main & Co., Ltd.; convert houses into shops with flats, High Street, Thornton Heath, for Messrs. Scratchley Bros.

The BRADFORD Corporation Baths Committee has approved plans by the city architect showing district baths proposed to be erected on the site at Thornton in which there would be provided a swimming pond 75 ft. by 30 ft., filtration plant, spring movable floor for covering the pond and surrounding gangways, and movable dressing boxes (to render the premises available for entertainments in winter), slipper baths and other necessary accommodation, at an estimated cost of £25,600.

*

The PORTLAND U.D.C. has purchased sites for the erection of sixteen houses.

*

Plans passed by the HASTINGS Corporation: Additions, "Rising Sun" P.H., East Parade, for the owners of Star Brewery Co., Ltd.; thirteen houses, Elphinstone Avenue, for Mr. H. M. Jeffery, architect; additions, corner of Parker and Beaconsfield Roads, for the Anglo-American Oil Co., Ltd.; new road, Elphinstone Avenue, for Mr. H. M. Jeffery, architect; tea rooms, Warrior Square, St. Leonards, for Mr. Harold Burleigh, architect.

*

Plans passed by the WATFORD Corporation: Two houses, Swiss Close, for Messrs. C. Brightman and Son; four houses, Whippendell Road, for Messrs. T. Rolfe and Son; two houses, Watford Heath, for Mr. F. Jeffs; two houses, High Street, for Messrs. Reeve Ayles & Co.; four houses, Kelmscott Crescent, for Messrs. Richards & Co.; alterations, 109 High Street, for Messrs. J. Goddard & Co.; three houses, Bushey Mill Crescent, for Mr. John Goss; offices, Lamb Place, for the Watford Motor Co.; addition, High Street, for Messrs. H. Kingham and Sons; alterations and additions, Eastbury Road, for the Oxhey Parish Church; alterations and additions, Merton Road, for Messrs. Benskins.

*

The Suburban Social Clubs, Ltd., are to erect a club and institute on a site on the Old Oak estate, HAMMERSMITH.

*

Mr. A. Frampton has acquired further land in Bromley Road, on the Downham estate, LEWISHAM, for the erection of shops and houses.

*

The L.C.C. has prepared a scheme for widening Great Queen Street, HOLBORN, at a cost of £24,200.

*

A memorial hall is to be erected on a site at the corner of Great Queen Street and Wild Street, HOLBORN.

*

The L.C.C. has decided to modernize the two remaining blocks of the BANSTEAD mental hospital at an estimated cost of £27,000 and the contract is to be given to Messrs. W. H. Gaze and Sons, Ltd., who have already modernized other wards of the institution.

The PLYMOUTH Education Committee has asked the borough engineer to modify the plans and cost of the new school to be erected at North Prospect.

*

Mr. Frank Lord is to erect thirty-one houses in Heron Street, OLDHAM.

*

Mr. E. R. Barrow, F.R.I.B.A., is to carry out alterations on behalf of Messrs. Matthews and Sons at the corner of Brompton Road and Beauchamp Place, KENSINGTON.

*

Plans passed by the KENSINGTON B.C.: Buildings on site in Kensington Road, abutting on Melbury Road, for Holland Park estate, and for buildings on a site abutting on Warwick Gardens and Pembroke Gardens.

*

The L.C.C. has passed plans for the erection of the Kensington, Fulham, and Chelsea General Hospital on a site at the corner of Finborough Road and Richmond Road, KENSINGTON.

*

The WATFORD Corporation Libraries Committee has approved the plans of Messrs. Gold and Newman, the joint architects, for the new library at Little Nascot, the cost being estimated at £20,000.

*

The trustees of the WATFORD Peace Memorial Hospital are to erect a mortuary block and washhouse at Rickmansworth Road.

*

The Ministry of Health has sanctioned the proposal of the WAKEFIELD Corporation to erect 350 houses on the Snapethorpe estate.

*

The WAKEFIELD Corporation has in view land at Snapethorpe for the provision of a joint infectious diseases hospital and sanatorium, and is in communication with the Ministry of Health in regard to the proposal.

*

Alderman Cox is urging the HASTINGS Corporation to carry out during the winter a scheme for the construction of a bathing pool at an estimated cost of £25,000.

*

Mr. P. H. Oxley, architect, is to proceed with the erection of orthopædic and isolation wards at the Royal East Sussex Hospital, Cambridge Road, HASTINGS.

*

The MARKET HARBOROUGH U.D.C. has appointed a sub-committee to consider the question of municipal office accommodation.

*

Messrs. T. O. King and Son are to erect new buildings and extend their factory in Manor Lane, LEE.

*

The WOOLWICH B.C. is borrowing £160,200 for the erection of a further 360 concrete houses on the Eltham housing estate.

The Wesleyan Methodist Church authorities have acquired a site in Downham Way, LEWISHAM, for the erection of a church.

*

Messrs. William Wilmot, Ltd., are to erect 102 houses on the Park estate, FOREST HILL.

*

Mr. A. R. Bignell is to build 100 houses on the Bell estate, TOOTING.

*

The LEEDS Corporation has purchased forty-two acres at Bramley for a housing scheme.

*

The MANCHESTER Corporation Housing Committee now proposes to make arrangements for the erection of 5,000 houses, forming the balance of the programme approved by the council, and they estimate that on the basis of the supply of labour now available it will be possible to complete these houses by September 30, 1928.

*

At a meeting of the DOUGLAS (I.O.M.) Corporation, a letter was received from the Government Secretary with reference to the suggested widening of the promenade between Regent Street and the Harbour Commissioners' property, at an estimated cost of £60,000. The borough surveyor was instructed to prepare plans of a suggested further improvement and the town clerk to submit amended estimates of the cost thereof.

*

Mr. T. Bennett, on behalf of the Pinnock Charity, is to construct a block of almshouses in Upper Wrotham Road, GRAVESEND.

*

Plans passed by the GRAVESEND Corporation: Ten houses, Ridgway Avenue, for Messrs. Burvill and Steen; new road off Cross Lane West, for Mr. J. R. Pettman.

*

Mr. Teare, the architect, is to report to the DOUGLAS (I.O.M.) Corporation on a suggested site for the erection of tenements.

*

Plans passed by DOUGLAS (I.O.M.) Corporation: Reconstruction of oil stores, The Bridge, for British Petroleum Co., Ltd.; alterations, Kelly's Court, for Mr. W. M. Kerruish.

*

The MANCHESTER Education Committee has acquired a site in Brunswick Street, Gorton, for the erection of a special school estimated to cost £11,500.

*

The HULL Corporation has obtained sanction to borrow £96,000 for the conversion of pail- to water-closets.

*

The MANCHESTER Corporation is to borrow £609,000 for the erection of 1,144 houses at Withington estate.

*

Mr. Louis Hyman is erecting a cinema at Newton Road, Mumbles, SWANSEA.

The L.C.C. Education Committee has now selected a site in Western Avenue, HAMMERSMITH, for the erection of an elementary school for 400 children.

*

The borough engineer of SWANSEA has prepared preliminary plans for a flood prevention scheme for the King Edward Road district at a cost of about £19,000.

*

The SWANSEA Corporation has approved a scheme of drainage for Treboeth at an estimated cost of £69,000.

*

The SWANSEA Estate Co. is to provide a shopping centre at the Grenfell Park estate.

*

The SWANSEA Corporation Housing Committee has decided to erect 100 houses by direct labour on the Mayhill estate.

*

The BRADFORD Education Committee has authorized the city architect to prepare plans for the erection of an elementary school on the Swain House housing estate.

*

The BRADFORD education director is to discuss with the governors of the Bradford Girls' Grammar School proposals for the erection of new buildings.

*

The BRADFORD Corporation is seeking consent to proceed with the erection of 200 houses by direct labour on the Shirley Manor estate, the cost being estimated at £84,000.

*

At a meeting of the BOURNEMOUTH Corporation, the borough engineer submitted detailed plans of the proposed new baths on the Northwood estate. These plans provide for a swimming pool 36 ft. by 75 ft., fifty dressing boxes and twenty slipper baths, with a gallery over the dressing boxes. The cost is estimated at £35,000.

*

The Anglo-American Oil Co., Ltd., is to erect stores in Church Lane, SLEAFORD.

*

The SHEFFIELD Corporation has prepared a scheme for the establishment of a printing department at a cost of £6,600 for the purchase of premises, £250 for adaptation, and £15,000 for printing and bookbinding equipment.

*

The SHEFFIELD Corporation is acquiring 3,210 acres in the parishes of Hathersage, Outseats, Dore, and Derwent at a cost of £35,000 for the purposes of the water undertaking.

*

The SHEFFIELD Corporation has obtained sanction to borrow £118,600 for the erection of abattoirs.

RATES OF WAGES

			I	II
			s. d.	s. d.
A	ABERDARE	S. Wales & M.	1 8	1 3½
A₁	Abergavenny	S. Wales & M.	1 7½	1 2½
B	Abingdon ..	S. Counties	1 6	1 1½
A	Accrington	N.W. Counties	1 8	1 3½
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
A₂	Berwick-on-Tweed	N.E. Coast	1 7	1 2½
A₂	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
B₂	Bovey Tracey	S.W. Counties	1 5	1 1
A	Bradford ..	Yorkshire	1 8	1 3½
A₂	Brentwood	E. Counties	1 7	1 2½
A	Bridgend ..	S. Wales & M.	1 8	1 3½
B₂	Bridgwater	S.W. Counties	1 5	1 1
A₁	Bridlington	Yorkshire	1 7½	1 2½
A	Brighouse	Yorkshire	1 8	1 3½
B₁	Brighton ..	S. Counties	1 6	1 1½
A	Bristol ..	S.W. Counties	1 8	1 3½
B₃	Brixham ..	S.W. Counties	1 4½	1 0½
A₂	Bromsgrove	Mid. Counties	1 7	1 2½
C	Bromyard ..	Mid. Counties	1 4	1 0½
A	Burnley ..	N.W. Counties	1 8	1 3½
A	Burslem ..	Mid. Counties	1 8	1 3½
A₂	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 8	1 3½
A₁	Buxton ..	N.W. Counties	1 7½	1 2½
B	CAMBRIDGE	E. Counties	1 6	1 1½
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	II
			s. d.	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
A₂	Leamington	Mid. Counties	1 7	1 2½
A	Leeds ..	Yorkshire	1 8	1 3½
A	Leek ..	Mid. Counties	1 8	1 3½
A	Leicester ..	Mid. Counties	1 8	1 3½
A	Leigh ..	N.W. Counties	1 8	1 3½
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	Middlewich	N.W. Counties	1 6½	1 2
B₂	Minehead ..	S.W. Counties	1 5	1 1
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 8	1 3½
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
A₂	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 8	1 3½
A	North Shields	N.E. Coast	1 8	1 3½
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
A₂	Whitby ..	Yorkshire	1 7	1 2½
A	Widnes ..	N.W. Counties	1 8	1 3½
A	Wigan ..	N.W. Counties	1 8	1 3½
B₂	Winchester	S. Counties	1 5	1 1
B	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 8	1 3½
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	6
Pit sand, per yd.	0	14	6
Washed sand	0	15	0

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

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

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

Transport hire per day:

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

*

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0

Exceeding 6 ft., but under 12 ft., add 30 per cent.

In stiff clay, add 30 per cent.

In underpinning, add 100 per cent.

In rock, including blasting, add 225 per cent.

If basketed out, add 80 per cent. to 150 per cent.

Headings, including timbering, add 400 per cent.

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

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

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

DO. in upper floors, add 15 per cent.

DO. in reinforced-concrete work, add 20 per cent.

DO. in underpinning, add 60 per cent.

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

DRAINER

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

*

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

*

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

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.

Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

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

*

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

Cement and sand, see "Excavator" above.

Lime, grey stone, per ton	2	17	0
Mixed lime mortar, per yd.	1	6	0
Damp course, in rolls of 4½ in., per roll	0	2	6
DO. 9 *in. per roll*	0	4	9
DO. 14 *in. per roll*	0	7	6
DO 18 *in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	£33	0	0
DO. in cement do., per rod	36	0	0

DO. in stocks, add 25 per cent. per rod.

DO. in blues, add 100 per cent. per rod.

DO. circular on plan, add 12½ per cent. per rod.

DO. in backing to masonry, add 12½ per cent. per rod.

DO. in raising on old walls, etc., add 12½ per cent. per rod.

DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar. per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano, paving to old, per ft. run	0	0	4
Extra for dishing grano, or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ 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:	*Med. Grey*			*Med. Green*		
Portmadoc Ladies				£14	0	0
Countess				27	0	0
Duchess				32	0	0
Old Delabole						
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 18s. 0d. per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries for Asbestos Tiling."

CARPENTER AND JOINER

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

*

Timber, average prices at Docks, London Standard 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, 1½ in. thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work :			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	6
If ramped, per ft. run	0	5	0
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1¼ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS :			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1½ 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

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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

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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. ¾ 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. ¾ 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

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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	6½
Linseed oil putty, per cwt.	0	15	0

*

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

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

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

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

PAINTER AND PAPERHANGER

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

*

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

*

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

SUNDRIES

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

FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster board, per yd. sup. . from	0	1	7
PLASTER BOARD, fixed as last, per yd. sup. . . . . from	0	2	8
Asbestos sheeting, ⅜ 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, ⅜ 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.			⅜ 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	—	—	—	—	—