



Wednesday, October 31, 1928

## THOMAS HARDY—ARCHITECT

THE church of St. Juliot stands buried in trees near the head of the Valency Valley, up which we had walked the mile or two from Boscastle. From without it seemed to us small but venerable. Its setting was a picture in the traditional manner; framed in heavy foliage, a jumbled foreground of tombs and mounds, and a background of hillside fields, seen faintly through branches. We entered hopefully, and found that one had been there long before us to restore away every trace of ancient occupation. Little remained in the bare aisles of all the oak, the glass, and ornament that must once have made this interior so warm and human. All was gone. We turned to leave, but noticing upon the wall a small tablet in white marble, found from it that it was here that Thomas Hardy met his first wife, then Miss Gifford. And Hardy came to this church in the guise of a restoring architect, with rod and tape and sketch-book! A very young restorer, hardly the principal in the matter, yet deeply enough involved to give him cause for repentance in his later life.

From Mrs. Hardy's newly published life of Hardy we now learn that his connection with architecture was constant until he was nearly thirty. At sixteen, after a happy school life in Dorchester, he became the pupil of an architect and church restorer named John Hicks, who carried on his practice in that town. Hardy seems to have been lucky in his pupilage, for Hicks was a cultured man and of a kindly nature. Architect and pupil vied with one another in translating from the Latin and Greek during generous respites from office work, Hicks's superior knowledge of Greek, balancing the greater all-round intelligence of the younger man.

At this time Hardy would be reading from the classics in the early morning, and playing reels and hornpipes on his fiddle at country weddings, christenings and Christmas parties on many evenings: an unusual blending of three lives in one, with his inner consciousness making a fourth and as yet hardly articulate existence.

In April 1862 he came to London to pursue the study of architecture on more advanced lines, and entered the office of Arthur Blomfield, a well-known church designer and restorer. With him, at No. 8 Adelphi Terrace, Hardy worked for over five years, and once again he was fortunate in his chief. It seems that Blomfield and his assistants enlivened the routine of office work by singing glees and catches. Hardy could sing at sight, hence Blomfield welcomed him into the office choir, "where he himself took the bass, the rest waiting until he had got his low E."

They lacked an alto, however, and Blomfield would say: "If you meet an alto anywhere in the Strand, Hardy, ask him to come and join us."

Hardy can never have felt very certain that he was fitted to be an architect. He found all but actual designing monotonous, and had no inclination towards pushing his way into circles that would help him towards the formation of a practice. He read poetry, and wrote verses which were rejected by the publishers. When it became evident to him that he would not make his living either by the practice of architecture or the writing of verses, he began to nourish a scheme of entering the Church, and becoming a curate in a country parish. After some reading of theology, and a severe examination of his conscience, he gave up all idea of pursuing this curious plan, and in 1867, rather worn by the lonely life of a young man in London, he returned to Dorchester and took up temporary work with his old employer, Hicks. His architectural career was drawing to its close, for his withdrawal from London seems to have cleared his brain and showed him some glimpses of his real vocation. Verse was abandoned altogether, and he sat down to write his first novel.

It was written in the intervals of his attendances at Mr. Hicks's drawing office, and in course of time sent to Macmillan, the publisher. The book was a sweeping satire of everything that had ever offended his youthful tastes, including the sin of restoring old churches. It must have been youthful, but sufficiently weighty to have interested Meredith and Morley, to both of whom Macmillan had shown the manuscript. At all events, it launched him on the course which he was to follow for the greater part of his life, and turned him definitely from all further pursuit of architecture.

One last commission came to him while he was writing his second work, *Desperate Remedies*. He was asked by one, Crickmay, to make a survey of the church of St. Juliot, in Cornwall, as a preliminary to restoration. Thither he went, with rod and tape and sketch-book. The church around us seemed still to mourn his coming, but no less feelingly than Hardy, the one-time instrument of destruction, now the historian of all things old and past. So speaks his verse:

From restorations of Thy fane,  
From smoothings of Thy sward,  
From zealous churchmen's pick and plane  
Deliver us, Good Lord.

## NEWS AND TOPICS

By a curious coincidence, two days after our editorial was published last week on "Drifting London," the Greater London Regional Committee came to a decision. They are now searching for a skilled town planner, who will receive a salary running into four figures and will be responsible for the preparation of a regional plan. It is at least a ten years' job. The man who succeeds in bringing order out of the present chaos will make his name as honoured as that of Sir Christopher Wren. But to succeed means winning from the outset the confidence and goodwill of the business community. The expert appointed, if he gives the impression that he is "highbrow" or unduly æsthetic, will find his work infinitely more difficult, and, in fact, the success of his ideals will be imperilled. The right man will be very difficult to select. The choice is limited. It is not intended, I understand, to advertise the vacant appointment, but it is hoped that there will be a strong "field," and that younger men, whose names may be very well known, will be carefully considered.

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I hear on good authority that the Commissioners of Crown Lands hold the view quite definitely that such open spaces in London as the Terrace Gardens round Regent's Park, Carlton House Terrace, and Carlton Gardens shall not be built over in the future. They are already amply protected. In the first place, the commissioners do not

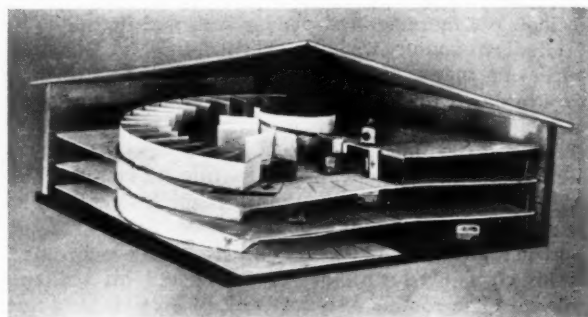
wish to build over them, and in the second place, the Crown has not the power to build without further authority given by an Act of Parliament. It is, however, not impossible that the ground in Richmond Terrace off Whitehall may in time be covered with Government offices. Indeed, at present there are only two private residences in the terrace, and all the remainder are offices. As there is St. James's Park on the one hand, and the Embankment Gardens on the river, Mr. Gaye, the secretary of the office of the Commissioners of Crown Lands, takes the view that there is not so strong a case for preserving the gardens of Richmond Terrace, except for appearance' sake.

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In order to provide accommodation for the increasing number of motor-cars in London, designs for a seven-story garage have been submitted to Mr. Edward Willis, the President of the Institution of Municipal and County Engineers. The difficulty in high garages is that lifts would have to be provided, and these are expensive. Furthermore, the time involved in bringing cars up to the higher floors, and manœuvring them out again, would be considerable. Mr. Willis advised that at present high garages were not a financially sound proposition, and, although the plans were prepared, I understand that the building owners abandoned the scheme. I hear, however, further schemes are now under preparation to serve the needs of Central London, where more and more it is almost impossible to obtain parking places for cars.

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Great interest will be aroused by the claim of Mr. R. G. Livingstone, a young naval ex-officer, that a design of his can revolutionize the present system of motor-car garaging. Mr. Livingstone has designed what can most expressively be described as a "spiral garage." Its adoption would probably mean the doom of even the "modern" garage. This spiral drive, which has accommodation for cars all along its side, has a mean gradient of one in twenty-five. The building accommodating it can be of any shape and adapted to any site. One-half of the drive can be given up to entering vehicles and the other half to those leaving. Cars can be parked side by side, but there is also considerable lock-up accommodation. There is room for workshops, of course, but in addition there can be dressing-rooms, stores, and a passenger lift. The design would cost no more than any other kind of garage, and it would give the maximum amount of accommodation with the minimum of space.



A design for a "spiral" garage.  
By R. G. Livingstone.

## ARRANGEMENTS

TUESDAY, OCTOBER 30 TO SATURDAY, NOVEMBER 17

*Architectural Association*, 34 Bedford Square, W.C.1. "Save the Countryside" Exhibition. Open daily, 10 a.m. to 7 p.m.

THURSDAY, NOVEMBER 1

*Victoria and Albert Museum*. Lecture No. 1 of series "Italian Sculpture of the Renaissance." "The Forerunners of the Renaissance." By Mr. Eric Maclagan, C.B.E., F.S.A. In the Lecture Theatre. 5.30 p.m.

*Institution of Structural Engineers*, 10 Upper Belgrave Street, S.W.1. Yorkshire Branch. Chairman's Address. 6.45 p.m.

MONDAY, NOVEMBER 5

*R.I.B.A.* Inaugural Meeting: Presidential Address. Presentation to Sir Giles Gilbert Scott of London Architecture Medal. 8.30 p.m.

THURSDAY, NOVEMBER 8

*Institution of Electrical Engineers*, Savoy Place, Victoria Embankment. Lecture on "Overhead Electric Lines," accompanied by a cinematograph film on the subject. By W. B. Woodhouse. 6 p.m.

FRIDAY, NOVEMBER 9

*Royal Technical College Architectural Craftsmen's Society*, Glasgow. Lecture on "Historic Edinburgh." By Mr. Arthur Ling, F.S.A.S.COT. 7.45 p.m.

*The river side, Lambeth Reach.*

Anyone looking at the above picture might well suppose it to be a bit of Rye or of one of those little fishing villages which are among the few remaining unsophisticated spots in our rapidly changing land. One can almost hear the waves beating on the pebbles and, indeed, can, with Wordsworth, see "the children sporting on the shore" in the persons of the three youngsters sitting on the old boat. These houses and those boys are, however, far from the ocean. Indeed, so far as Lambeth, where, in pre-Embankment days, these picturesque dwellings with their tiled roofs and delightful outline should have made, as, indeed, they did, an appeal to artists as well as to lovers of relics of the past. When the Albert Embankment was constructed during the 'sixties of the last century, these old houses were swept away to make room for that highway. Although there are no special associations connected with these tenements, their inherent picturesqueness of outline gave them a claim to existence. The old houses on the Arno at Florence are hardly more attractive than were these. But for many people a long railway journey is necessary for the appreciation of such things.

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The worm was bound to turn some time. Mr. Berton Braley, in last month's *Century*, writes what is termed a "friendly go at England's manners and methods." Part of this has to do with that condescension in "visiting British representatives," mainly lecturers, who "so patronizingly look down on our 'moronminded' people." What of the culture of England? he asks, and takes as one of his tests the reading habits of the people: "A book that sells forty thousand copies in Great Britain is at the top of the 'best seller' list. Now, what is the top in the United States? Forty thousand is moderate. The 'top' runs as high as four hundred thousand. Twice the population—ten times the sale. Ask Mr. Wells, Mr. Walpole, Mr. Kipling, Mr. Galsworthy, and Mr. Bennett where the bulk

of their royalties come from. Ask Mr. Shaw—who, never having been in the United States, nevertheless calls us a Nation of Villagers—which village, New York or London, first produced and best patronizes his plays?

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"A test of civilization is architecture?" continues Mr. Berton Braley (the American). "There hasn't been a public building erected in England in the past fifty years that compares with the best in this country. English modern architecture isn't modern. The tradition of Victorian solidity has been nobly maintained—and so also, in the main, most of the other Victorian traditions of heaviness, sameness, dullness, and not infrequently smug hideousness. The beautiful buildings in London are old buildings, erected by men who were innovators in their day, tradition-makers, not tradition-takers.

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"Seemingly, however, today's architects in England follow not the example of those who built Westminster and the Houses of Parliament, but of those who built that huge series of boxes called Buckingham Palace and the dingy stone dump called the Foreign Office. In private buildings the average is a little better, but it is by no means startling in loveliness or in originality. Liberty's new building in Regent Street is the only one I know that even approximates the beauty of a dozen non-skyscraper structures on Fifth Avenue." There, now!

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The boom in sculpture gathers in intensity. Three more exhibitions offer themselves. Foremost are the nine bronze heads, by Jacob Epstein, at the galleries of Godfrey Phillips in Duke Street. For character and unostentatious actuality those of Peggy, the sculptor's child, cannot be beaten; for authentic plastic form they are remarkable. If confirmation

of Epstein's inherent plasticity were required, it is here provided in the seventy-five nude drawings. These are modeller's drawings and have none of the quality of point-drawing, engraving or sculptural cutting. There are too many of them and they are too realistic. They are selling like hot cakes; I don't suppose there will be one left in a week's time. I hope this successful experiment in the multiplication of these ladies of full body and lean arms will not be repeated. The importance of Elisabeth Wolff's small pieces of sculpture at the Claridge Gallery in Brook Street does not warrant the expression of the large ideas in her letter of introduction. Her idea of the sculptural appreciation of Great Britain is decidedly uninformed and misguided. She ought to come to London to learn. Nevertheless, her animals in bronze and brass have vigour and form, if not very ardently expressed. Much more modest in its presentation is the collection of bronze and ceramic portrait masks, at the Redfern Gallery, by Sylva Kingham. She also gives us animals, and "Greyhounds Racing" is a lively group modelled with some distinction. There are carved pieces in wood and stone which give promise of better work of this technique in the future.

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The great building which Sir Frank Baines has erected on the Thames side at Millbank is now photographable, and here it is. With the picture I give what a fine critic, Mr. A. R. Powys of the *London Mercury*, has to say about it: "Sir Frank Baines has given London and the United Chemical Industries a building in the traditional manner which, with the County Hall, Somerset House, and the Houses of Parliament, will influence permanently the

scenery of the Thames in London. The giant building is important; its money value alone must justify that adjective. But here that point of view is not our business. It is for us to consider it as architecture worthy or unworthy to grace the Thames.

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"To see this building well, the interested spectator should stand on Lambeth Bridge. Thence, with a view from the Palace of Westminster to the bridgehead, he can see how far the neighbouring buildings there demanded of the architect his service to the traditional style. One after another, between the noble height of the Victoria Tower and this new building, rise structures of varied form where motives gleaned from books or ancient architecture crowd the fronts as though by their number and variety they would prove the wealth and learning of those who ordered them to be. Sir Frank Baines, with vital force, has proved to the world his high organizing power, but he has got to convince it that equally with that quality he possesses the sensitive mind of an artist. This new building stands clear, vigorous and orderly. It has a sort of bold effrontery, as though of inherited right it would command attention and respect. This architect hides under a determined and aggressive manner a personality that is yet kind and sympathetic. It is difficult for him to suffer fools gladly, he grudges the time that must be spent if this is done. And his building in like manner is big, generous and commanding, but it is not sensitively responsive to the quick play of fleeting sunrays. It is imperial as Rome was imperial, rather than kingly as was the work of our Third Henry."

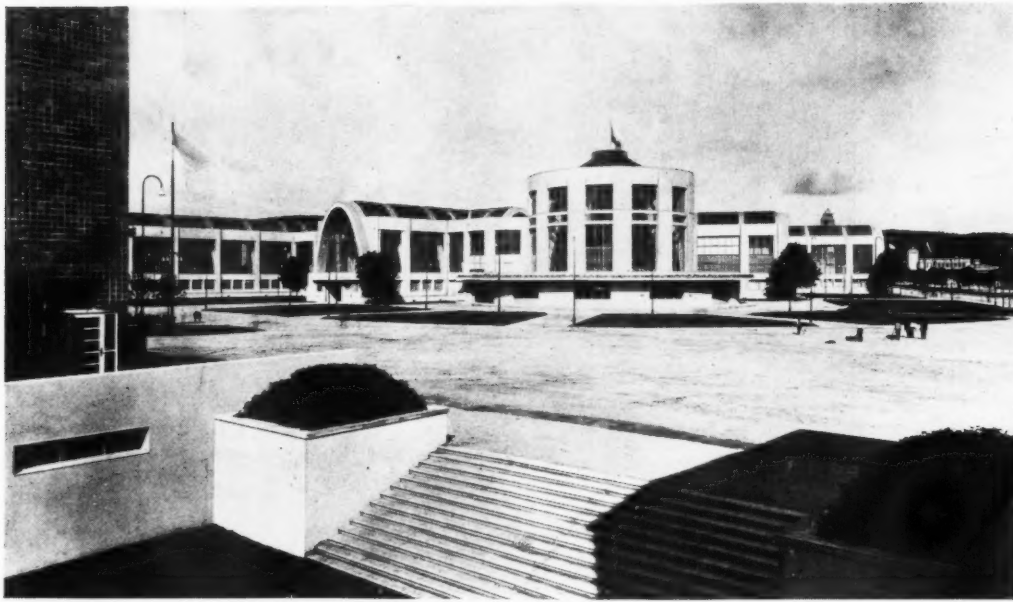
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ASTRAGAL



*The United Chemical Industries Building,  
Millbank. By Sir Frank Baines.*





*Brünn Exhibition. General view of exhibition buildings.*

## THE BRÜNN EXHIBITION

[ BY KINETON PARKES ]

FROM May to September the Republic of Czechoslovakia, with its population of 14,000,000, showed to the world its performances and potentialities in art and industry. Czechoslovakia is a live country, and in manufacturers a serious rival to the older industrial nations. The occasion was a markets exhibition, for without commercial success the new Republic is aware of the impossibility of pursuing the intellectual and artistic culture to which it warmly aspires. There was, therefore, established in this exhibition a liaison between industry and the higher life: schools and university, law and state, man's connection with animate and inanimate nature, and the development of the intellect and the arts. The artistic industries were specially prominent and sections devoted to architecture, sculpture, painting, and the minor arts and crafts.

The exhibition buildings are established over an area of 75 acres in the Vale of Pisárky, adjacent to the ancient and modern town of Brünn, which has a population approaching a quarter of a million and is the greatest industrial centre of Czechoslovakia. Brünn is the old capital of Moravia, and until the war was under Austrian rule. It is the Manchester of the country and produces cotton, wool, silk goods, and light and heavy machinery, leather and hardware. About 70 per cent. of the people are Germans and 30 per cent. Czechs. It is ninety miles from Vienna and is an important railway centre, with easy access to Prague. The old town is picturesque, with its paved streets, Rathaus, castle, cathedral, and churches. The new contains recent government offices, museum, and synagogue. The old university, having ceased to exist, the Czechs, with their enthusiasm for education, have inaugurated the Masarykova University, bearing the name of the great statesman who is President of the Republic and its best-loved figure.

In 1805 Napoleon made his headquarters here before Austerlitz; today a new and nobler form of offensive is being made from its borders.

The centrepiece of the exhibition was the main pavilion on a site measuring 20,000 square yards, and there are fifteen other buildings grouped around it. Half the area of the grounds is asphalted, and comprised in it were pavilions erected independently by various business and manufacturing houses of the Republic, for the site is to remain permanently as a showground and the buildings thereon are largely of a substantial character. These are for the most part of reinforced concrete construction, and 5,000,000 kilograms of iron have been employed, ninety truckloads of iron being used alone for gates and window frames; thirty-four truckloads of timber for planking, and twenty-two truckloads merely for scaffolding. The space enclosed with glass measures 91,000 square metres, and the 16 x 16 metres windows are loosely set in their iron frames to allow for the difference between the internal and external temperatures. The whole is painted white inside to ensure equality of lighting, and the exhibition premises are probably the largest for permanent purposes in Europe. The conception of the plan for the erection of the main palace is due to Josef Kalous, a pupil of the well-known architect, Kotěra.

If this exhibition had been established in Prague the architecture of that city might at once have suggested baroque. But even if Prague had been the venue, the Czech architect, who since last century is not traditional, might have demurred, for he is very modern. It was easier, however, in a town less dominated by architectural features to introduce the last modernities. This has been done by the respective architects, who are Roškot, for the City of

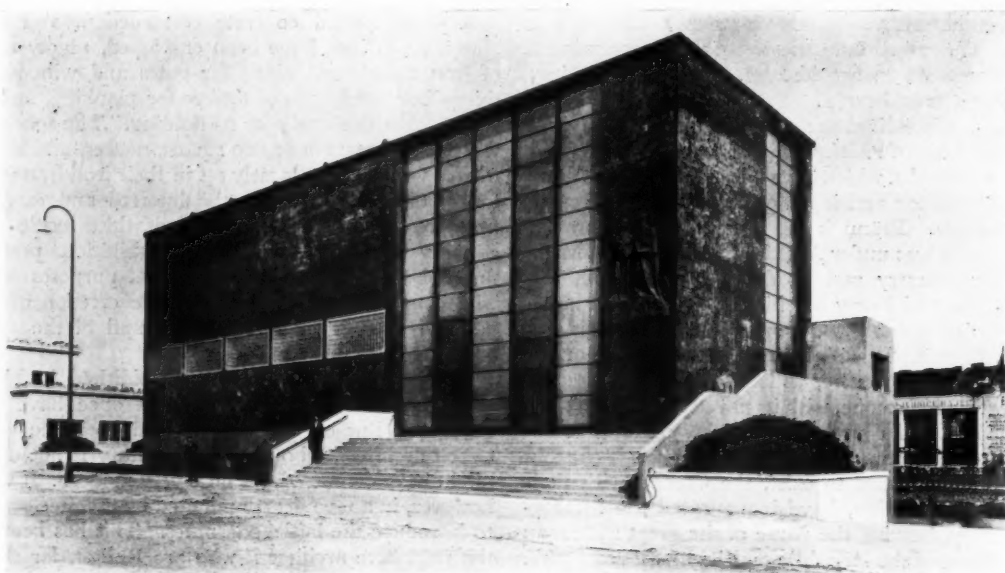


*Brünn Exhibition.  
Above, interior of  
the rotunda.  
Below, a pavilion.*

Prague Pavilion; Fucho, for the Brünn; Chroust, for the Province of Moravia; Gožár, for the Academy of Fine Arts; Janák for the Industrial Arts School of Prague; the National Industrial Arts, Havilček; the Brünn Markets, Cermak; and the Electric Farm, Vašíček.

At Brünn, there being no architectural shackles which the

Czech builder cares nothing for except to throw them off, Renaissance and post-Renaissance have had no restraining hand on him, and he has had perfect freedom to indulge his taste for the attack *de novo*. The requirements of exhibition buildings are admirably met by concrete construction. At Brünn the architects were unhampered by any prejudice



for the necessity of traditional adornment, Classic, Gothic, or any other.

Exhibition buildings need light, air, warmth, undetected ventilation, floor space for display, and facility for large crowds in movement for the purpose of observation; no pillars, no corners, no passages, no distractions from the business of sightseeing. The great exhibition is a modern phenomenon to be elucidated by the phenomenal means of modern architectonics. The elements are glass, iron, and concrete—all formidable things and each requiring its special technique. But tradition cannot wholly be ignored in construction however ornament may be slighted. In the most modernistic structures there is atavism, to shape as well as to structure. But even classic tectonic has become more feasible and effective, for the materials of today are more mobile and permit of a more rapid develop-

ment. The plasticity of stonework is superseded by the actual fluidity of concrete, and the rigidity of stone is acquired by the use of steel for reinforcement. For the time being there is less decorative elegance, but no less structural efficiency; less ornament, but greater structural effectiveness, and elegance will come with refinements of construction, resulting in the evolution of a more logical and higher plastic form-being.

In the Brunn buildings what is atavistic is useful, too: the rotunda, the colonnade, the tower, but there is no throwback in treatment either to Egyptian, Grecian or Byzantine. It is a matter of shape rather than of structure. The vaulting of the wings centring round the elevated rotunda consists of slender reinforced concrete pillars. The wings are 5 metres high from the floor to the vaulting, and the rotunda 30 metres.



*Brunn Exhibition. Interior of the Klavniho palace.*

## A WEST-END BUSINESS HOUSE

[ BY E. MAXWELL FRY ]

THE latest example of purely commercial architecture to be built in the West End of London has taken its place at the corner of Hanover Square, among the queer assortment of façades that mingle so incongruously with the few remaining examples of eighteenth-century domestic architecture. By comparison with the overloaded decoration of the newer buildings in the square, Celanese House is an orderly and well-mannered piece of work, and would more nearly approximate to the original façades, were it not that it is removed from both in as many ways as it is possible to differentiate buildings, one from another.

The contrast is not one of size or of what we have been accustomed to regard as scale. The new building, so far as it offers any means of judging its size, might be anything, and by common standards it has no scale. It is a structure in which the human figure plays a small and quite subordinate rôle, whereas in the older standards, by which we should be at first inclined to assess it, it was to the human figure that all parts of the building were ultimately related.

No real comparison of the two types of architectural expression which rub shoulders here is possible without reference to the conditions of society out of which each arises. One may call the eighteenth-century buildings urban and social, and this twentieth-century building metropolitan and anti-social, but this would be a generalization which we should have to qualify by more particular examination before justice could be done to either.

If we examine the conditions of urban expansion in the centres from which this new type of building is an exportation, it will be seen that forces not hitherto bearing upon the design and construction of buildings have tended towards the evolution of a type that is divorced in nearly every particular from its antecedents. The congestion of business interests within great cities forces up the price of land to a degree which prohibits the erection of any but the largest type of building that modern engineering can supply, and there is evolved by slow process of trial and error a system

of building owing very little to the accumulated knowledge of the past.

In New York, owing to the fact that this state of chronic congestion was entirely unforeseen at a time when the roads and building lots could have accommodated themselves to new conditions, enormously tall buildings were erected on the sites of two-story shanties, and the skyscraper resulted. Two things made the skyscraper possible: steel-frame construction and the electric lift. These two factors, in spite of all that the experimenters of twenty-five years might say to the contrary, have increasingly dominated both the construction and the design of all the many types of buildings which owe their birth to the skyscraper.

For a long time it was felt that steel construction could be adapted to the practices of the architecture it replaced, and in this faith were built many fine buildings that differed very little in externals from what had gone before. The similarity, however, was almost entirely on the surface, and a wealth of fibrous plaster was only a temporary cloak for real problems of construction and design that called for a less involved solution. Ductile as the medium might be in capable hands, the most economical use of steel construction implied a regular and uniform arrangement of straight lines on plan and elevation, which to depart from involved difficulties, both with the material itself and with the engineers whose business it was to handle it.

In course of time construction won the day. The building became a rigid structure of light steelwork, as simply made as an iron wine-bin, and in its naked state, relatively as flimsy. The finished building added but a skin, a series of thin floors arranged in vertical sequence, and a lift-shaft like a vertical road connecting them from roof to cellars.

How far removed this structure is from the type of building it superseded will be realized when you think that it has no weight in the sense that, say, Vanbrugh's buildings had weight. No one would accuse Mr. Cass Gilbert of burdening the earth with loads which, by comparison with Vanbrugh's remains, are mountainous. Nor, in any other sense could the clearly articulated, expressive, and humanly ponderous works of the older architect be used as a standard



*Celanese House, Hanover Square, W. By Gordon Jeeves. A detail of the entrance.*



by which to judge a skyscraper. For one is a complicated work of art, wherein the external appearance is a most subtle reflection of the plan, the content and the heart of the thing, whereas the other is no more than an arrangement of floors, piled one upon another up to the sky; its shape or outline little more than the carving or fashioning from without of a stratified piece of rock.

Bereft of plan and inexpressive of particular function, the modern commercial building becomes a box, a "hive

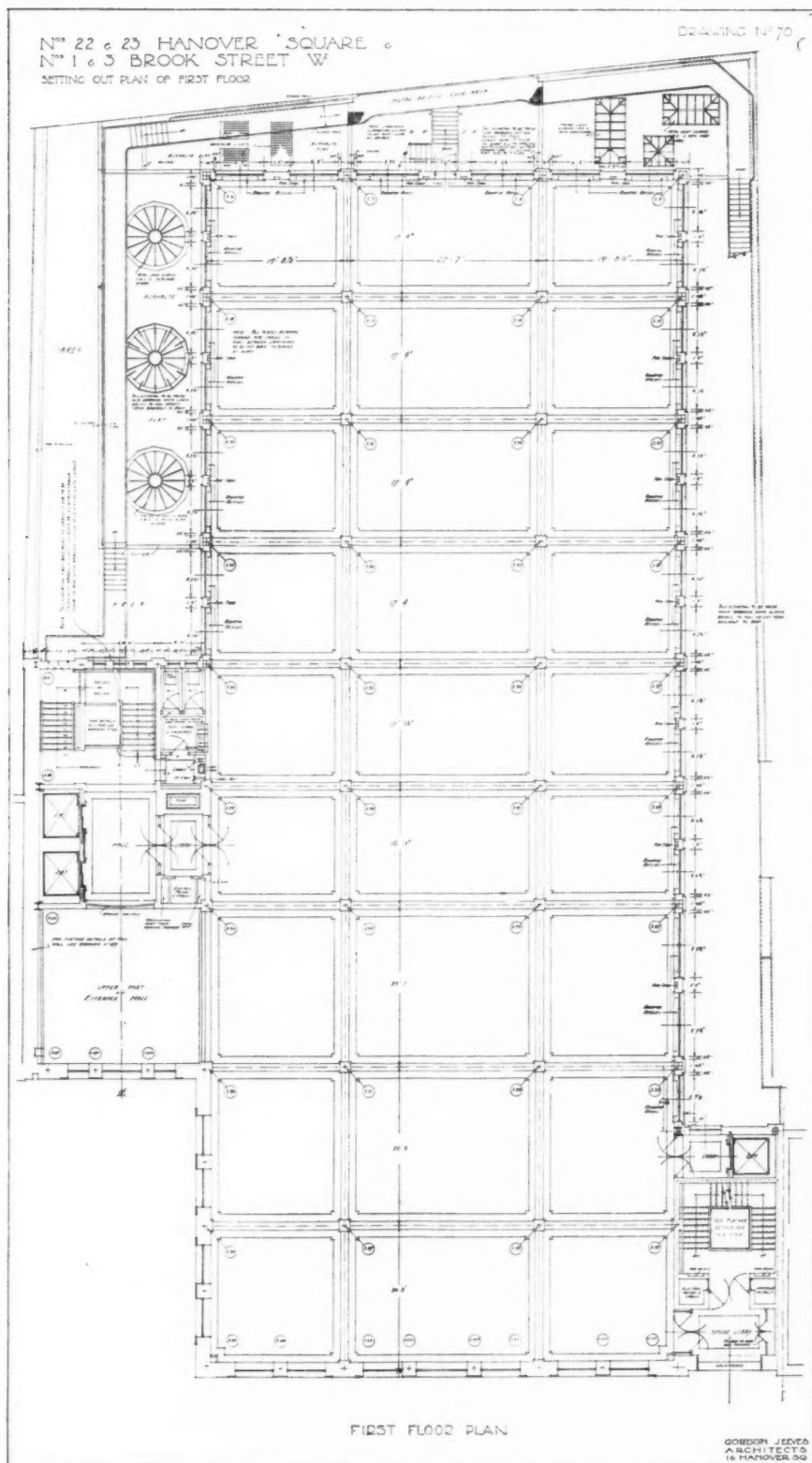
of industry." It may be a well-proportioned box, a gilded hive, yet so long as its value as a work of art rests in its external fashioning, it must take a place lower in the scale of architectural importance than the more highly-organized products of a former age.

Judged by the not yet clearly enunciated standards of modernity, Celanese House is a work of extreme refinement. Not so much a box as a delicately wrought casket, it achieves an absolute balance in its parts by the exact



*Celanese House, Hanover Square, W.  
By Gordon Jeeves. A general view.*





*Celanese House, Hanover Square, W.  
By Gordon Jeeves. Plan of first floor.*



*Celanese House, Hanover Square, W. By Gordon Jeeves. Above, the board room. Below, a staircase landing.*



proportioning of its base and cleverly modelled attic story to the preponderating surfaces of main walling. It is light and graceful. There is no heaviness, neither mental nor physical. Indeed, I find in the treatment of the beautifully graded ornament, an assurance and mastery over matter that seems lightheartedness itself.

Then to come across a well-defined attic story after the miles of foolish mansard roofs that spoil most of latter-day London, is a joy in itself. Nearly everything about this façade, with the modified exception of the cornice, is a

subject for congratulation all round. I don't feel altogether sure that the cornice is as logically certain as the rest of the building. There is a lingering doubt, not quite within the compass of my words to express, that leaves the cornice the least satisfactory part of the design. The open staircase and cartway contained within a separate tower, are dissociated from the main block of the building and need not be considered to do more than echo the rest. The shaft of this structure strikes a harsh, unsympathetic note, and but for its segregation, would upset the careful balance of the



*Celanese House, Hanover Square, W. By  
Gordon Jeeves. The entrance hall.*

larger block. The building was not originally built for the present owners, and some of its features, such as the loading dock, have apparently been added since the building changed hands.

The entrance doorway, barely distinguished by its low-toned metalwork of Edgar Brandt inspiration, leads into a square hall two stories in height, with an elevator lobby beyond. It is decorated in that blend of Queen Anne *cum* Grinling Gibbons—board-room architecture which seems

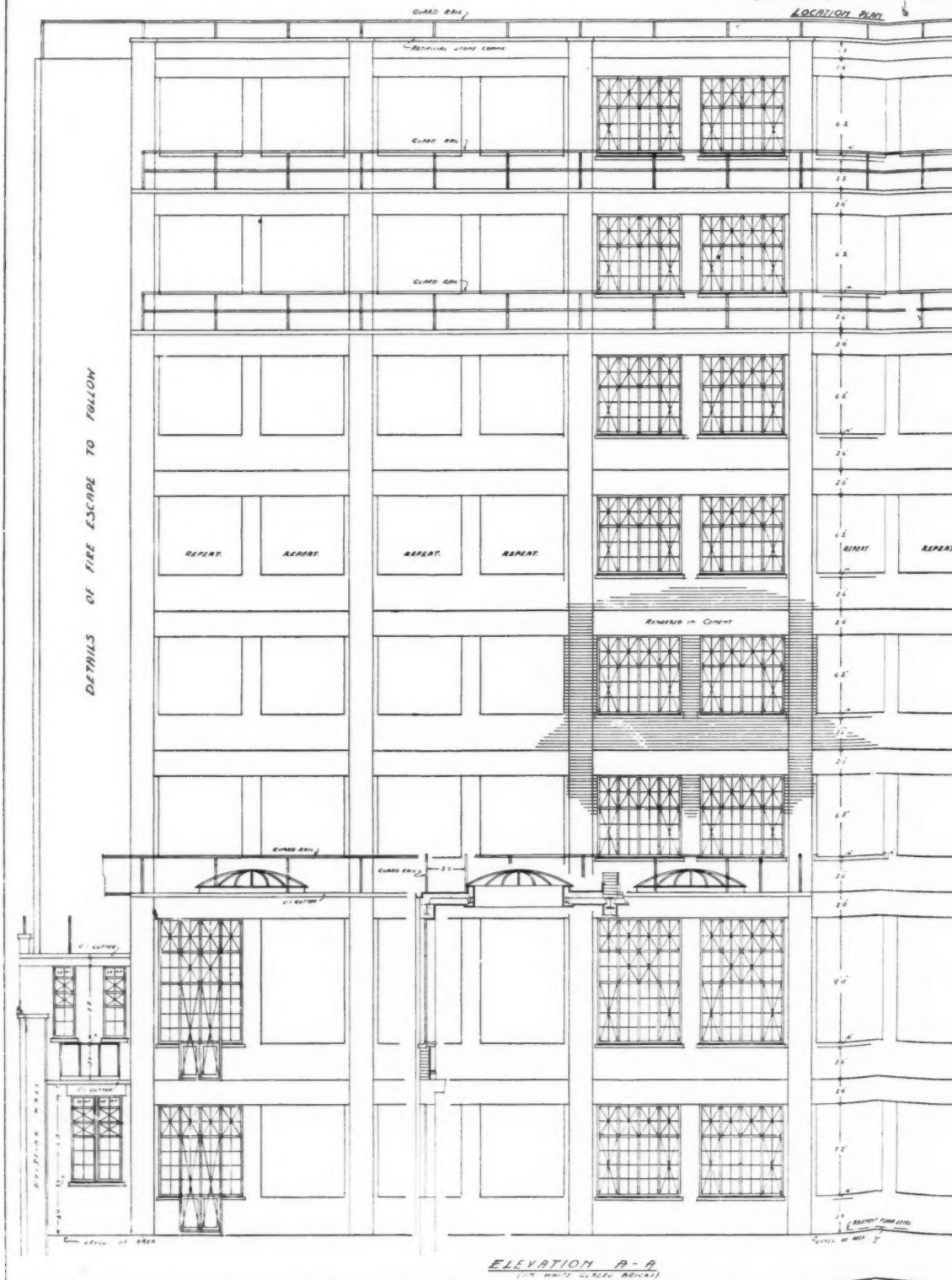
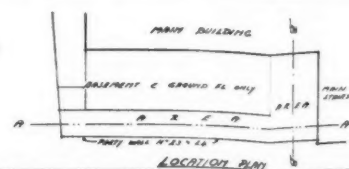
to be accepted as the only possible treatment for heavy office interiors. This hall is particularly well done. It makes a dignified, lofty apartment, but by comparison with the adventure of the outside it is dull and unresponsive, and whenever steelwork drops too low and beams project, in doubtful taste. You pass through this hall to floor after floor of open office space, filled with steel filing cabinets, and typewriters, and adding-machines, and a multitude of Mr. Zeros plugging their way through their mechanical day. This is



*Celanese House, Hanover Square, W. By Gordon Jeeves. Looking up a light well.*

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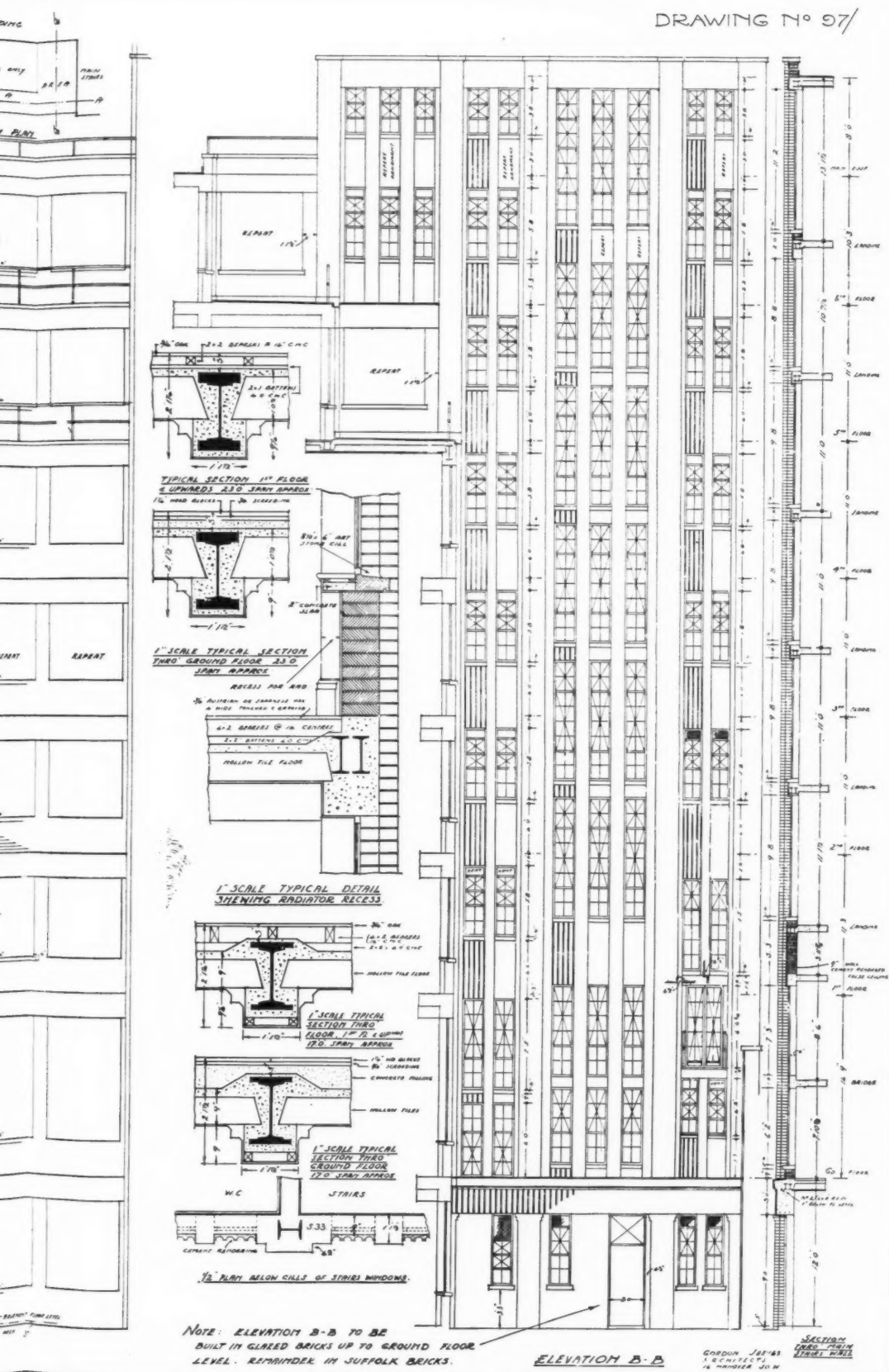
N<sup>os</sup> 22 & 23 HANOVER SQUARE &  
N<sup>os</sup> 1 & 3 BROOK STREET. W.  
DETAILS OF NORTH EAST AREA.



### DETAILS OF FIRE ESCAPE TO FOLLOW



DRAWING N° 97/



CELANESE HOUSE, HANOVER SQUARE, W. BY GORDON JEEVES. DETAILS OF THE NORTH-EAST AREA.

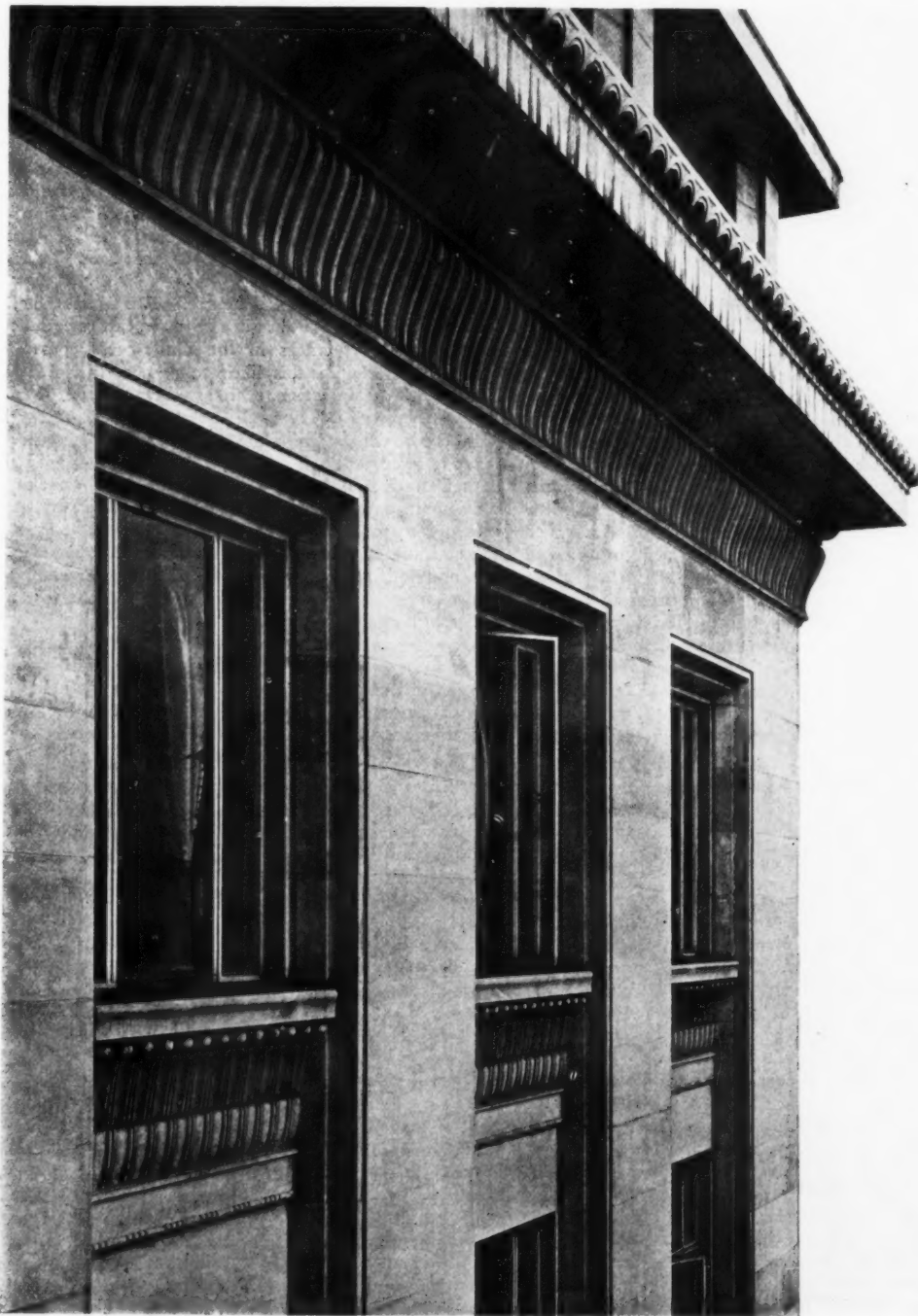


the real building. Grinling Gibbons only serves as a sort of mental pile carpet leading to the board room.

I do not dare to scorn the "Celanesian" damsels who flit, with swish and flutter of fadeless fabric from one department to another. They are, according to my most valued authority, the villainesses of the piece, the emancipated ones, the makers of Wannamakers and Selfridges and Dr. Drefus the world over. For them have these many-floored wildernesses been created, and by their power has

the whole population of modern business been swept from its labyrinthian ways into the wide open spaces of the systemized office building. They have turned architecture into a form of mass sculpture, and man, its rightful inhabitant, into the ants that swarm about its base.

I have tried to imagine the whole of Hanover Square continued as an extension to Celanese House, but when I saw the picture it reminded me of "Metropolis," and I shut it off.



*Celanese House, Hanover Square, W. By  
Gordon Jeeves. A detail of the cornice.*

## SOME CAUSES OF DAMPNESS

[ BY EDGAR LUCAS ]

DAMPNESS causes greater deterioration and destruction in buildings than any other process of attrition. It is the cancer of building fabrics, as fatal as the cancer of the human tissue and as difficult to treat. Modern investigators, like Mr. Edwin Gunn, have done much to reveal causes previously neglected or misunderstood, especially in relation to modern building methods which have not been in use for a sufficient time to make their faults obvious. There is still, however, a great amount of research work to be done. The present trend of research is alarming and iconoclastic. Dr. Oscar Faber has recently pointed out, for instance, that steel which is embedded in porous brickwork will almost certainly be subject to continual corrosion, and a time will come when this corrosion will have so far reduced the factor of safety as to make the structure dangerous. Here is a new line of attack for damp, and one which will evidently prove to be more disastrous in its magnitude than the destruction of woodwork. That is unless we accept the warning and devise methods of permanently protecting steel from moisture.

In the following classification I have described a number of causes of dampness of which I have had experience, and which appear to have received little or no recognition.

1: Soft Bricks. It is obvious that if a wall 9 in. thick constructed of unusually soft bricks is subject to driving rains water will penetrate to the interior plaster face before it can be evaporated by the sun's heat. To prevent this trouble do not build such walls in exposed positions. The cure indicated is a treatment with waterproof material; waterproofed cement wash, rendering, or rough-cast; or with gas tar (this last the most hideous of wall coverings).

2: Hard Bricks. The large amount of condensation which takes place in a room demands absorbent materials, and if the walls are of exceptionally hard and non-absorbent brick and the plaster is thin or rather hard, interior moisture will condense on the plaster face. If the walls have been distempered, a cure may be effected by papering, as the paper will probably provide the requisite amount of absorbent material. Failing this the only

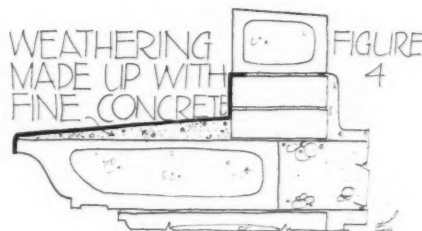
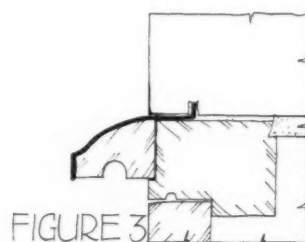
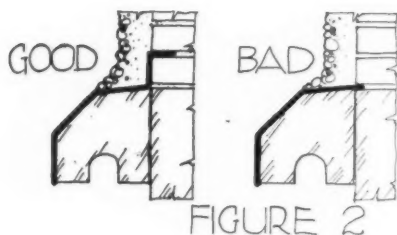
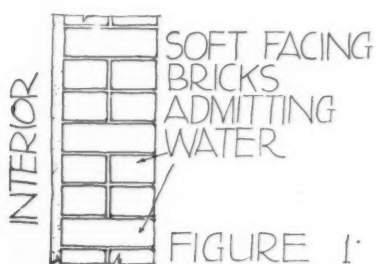
cure is to hack the plaster face and float and set with an absorbent plaster. Hard and non-absorbent bricks, like Staffordshire blues or glazed bricks, as is well known, also cause condensation on the external face and the condensed water may soak through the joints to the interior. If the mortar joints are defective in patches this may cause patches of damp on the interior plaster face. This could be remedied by raking and pointing the joints in cement.

3: Soft Brick Dressings and Stringcourses. If these are used in conjunction with hard bricks or other non-absorbent materials, like waterproofed cement, water may easily percolate through the headers—see figure one. A transparent waterproofing compound should effect a cure. Stringcourses are usually of hard material, but the accumulation of water with insufficient weathering and defective joints often allows water to penetrate. Such a fault is easy to detect and remedy.

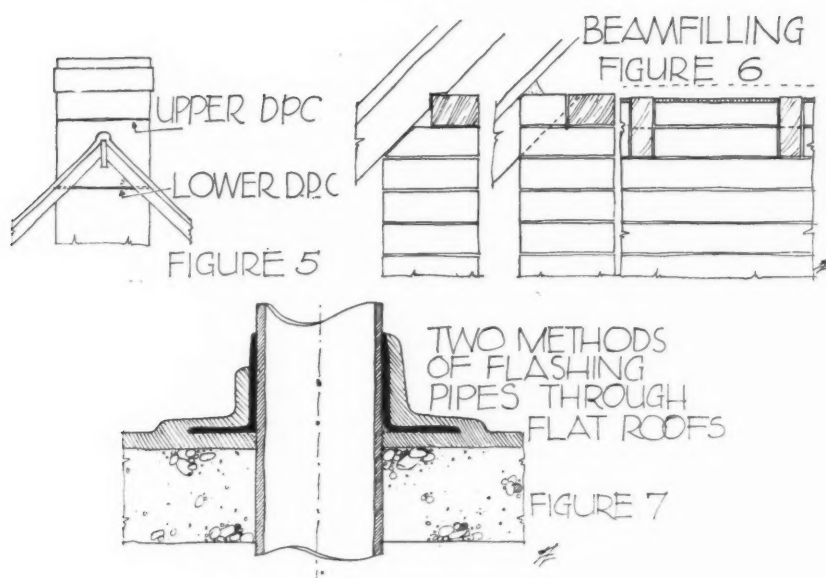
4: Defective Damp-proof Course. This is more likely to be found in old buildings than in new ones, but unequal settlement sometimes causes cracks in the damp-proof course of a new building, especially is this likely to occur with violently unequal loading of the foundation, such as where a heavily loaded beam bears on a wall. The well-known practice of covering the dampcourse when digging the garden causes a lot of trouble, but is easily remedied.

5: Defective Flashings. Old flashings which have decayed are a frequent source of trouble, but they can be easily detected and remedied. Not so tractable are the inefficiently designed flashings in new buildings, and the points which ought to have been flashed and are not. Mysterious patches of dampness which are often due to these defects are sometimes very difficult to trace as the bad spot is generally concealed.

Wood beams, lintels, and frames should be adequately protected from water, and in designing protective flashings it is foolish to spoil the job for a ha'p'orth of lead. One often finds a flashing turned almost straight over a beam instead of being brought up a course or so and then turned into a brick joint, as shown in figure







two. The flashing should always rise well above the vulnerable point, as water has an uncanny power of creeping and climbing. The head of a window or door frame fixed flush with the exterior of a wall is a very weak spot and should always be flashed, the lead being turned into a groove cut into the brick head as shown in figure three.

Terra-cotta cornices are frequently not lead covered, and with small cornices which are properly weathered lead covering is not necessary; but it must be remembered that terra-cotta may be considerably distorted in firing. Although the distortions are not usually noticeable from an ordinary viewpoint, they are very noticeable, indeed, when each block is viewed at close quarters, and the weathering of large cornice blocks is often neutralized by a distortion which makes the top of the block flat or even reverses the direction of fall. If this distortion is allowed to remain uncorrected, the water instead of running off will accumulate on the cornice, percolating the joints. Such defects can be remedied by making up the weathering of the cornice in fine concrete or cement before laying the lead. Architects and quantity surveyors would do well to watch this point and include a provisional quantity in the bill which can be priced in by the contractor to form a basis of settlement.

6: Defective Roofs. It should be unnecessary to state that ordinary tiling is not waterproof, but as many small houses are now built with tiles hung direct to battens with a little imperfect torching, it is well to point out that such work is by no means a perfect barrier against driving rains. A roof must be boarded and felted before the tiling is laid if it is to be damp-proof, and if the economy of omitting boarding and felting is indulged in, there are sure to be a number of points which will give trouble. It is surprising how far water will travel from a roof defect before it reveals itself. A leak near the ridge may admit water which will cause a damp patch on the plastering of the front wall. In cases of damp in bedrooms it is always well to make a careful examination of the roof interior.

In many houses built for speculation damp-proof courses are omitted from the chimneys and water percolates easily to the bedroom chimney-breasts. Even the ordinary chimney damp-proof course is not always effective. Chimneys are so exposed to heavy driving rains that the water often soaks the brickwork and then pours down the surface over the dampcourse. The only really effective method is to have two damp-proof courses, as in

figure five. The lower course could be of single course slates in cement if it is desired to be economical.

The eaves sometimes make a weak point, generally owing to the defective design or execution due to a too pressing demand for economy. Open eaves should be carefully beam-filled. This is often imperfectly done, even in work of the best class, as it is not easily seen. And though the builder's intentions may be honest the workmen may be careless, and it is a point which the foreman may overlook. Instead of the patching with pieces of tile and cement, which is often done, the brickwork should be properly built up round the rafters and pointed, as in figure six. Where the rafters are embedded in brickwork and mortar they should be protected from rot by preservative treatment.

Although asphalt is, in many ways, an admirable roof covering, it must be remembered that it may develop small defects which need periodic attention. It is necessary to provide adequate falls for flat roofs, as a design which allows only a small fall is difficult to execute so as to ensure an even fall, and, with the most skilled care, flats or even hollows may be left in the work. It is important that efficient asphalt skirtings are provided to all parapets and chimneys, and the asphalt should be pressed into each horizontal joint in the brickwork as well as being turned into the top joint.

It is rather difficult to make pipe holes in flat roofs waterproof. It is not sufficient to turn the asphalt up round the pipe (in felted roofs the felt is sometimes turned up round the pipe and a little hot mastic dabbed on it!), but efficient flashing with turned down joints is as necessary as with a chimney—see figure seven.

7: Hard Wall Finishes. The moisture in the atmosphere of a building will condense very readily on a cold non-absorbent surface. Hence an absorbent wall finish like plaster is necessary. Such condensation as occurs in the inside of window glass is generally unavoidable, except in the case of a shop window, where it can be prevented by making the fitting airtight (not by ventilating it to the outside air, as is often supposed). Window sills and boards should be protected by drained condensation channels if it is desired to prevent the condensed moisture flooding the sill board, as it is frequently allowed to do, even in the best work.

Before deciding on tile or marble wall finishes one must recognize the risk of very troublesome condensation. For passages, corridors, and lavatories, where the temperature is low and little moisture is generated, these hard non-absorbent wall finishes are safe, but in small, ill-ventilated rooms (and no small room can be

adequately ventilated) excessive condensation on these hard materials cannot be avoided; and if any of the cheaper compositions or imitation marbles are used, the condensation may spoil the surface in a few years, and constant polishing and treatment may be necessary if the surface is to be preserved even for twelve months.

Hard plasters can be very troublesome, but are not absolutely non-absorbent, and if treated with an absorbent distemper or paper they should not cause any troublesome condensation. But, if a hard plaster is painted two or three coats with oils or enamel considerable condensation is liable to occur. This makes the problem of wall finish for a kitchen or scullery, especially for small rooms, very difficult. In such rooms, where steam is being constantly generated, one must choose between excessive condensation or excessive absorption, and there is such a large amount of moisture to absorb that all soft plasters disintegrate under such conditions. The best way to treat this problem is to provide special means of carrying the steam away by flues or ducts. It is well worth a little forethought and extra expense.

## LAW REPORTS

### QUESTION OF BUILDING SCHEME

*Goodbody v. Mlinaric. Chancery Division. Before Mr. Justice Eve*

This was an action in which Mrs. E. Goodbody, of Crossdeep, Twickenham, sought damages from the defendants, Matjas and Franjo Mlinaric, for wrongfully erecting a garage abutting on plaintiff's premises, and also an injunction restraining any further erection of such a building.

Mr. C. A. Bennett, K.C., for the plaintiff, stated that the plaintiff's and defendants' houses were erected on land which originally formed part of the Crossdeep estate of Sir Frederick Maitland Freake, and he, as tenant for life, developed it as a residential estate. Plaintiff's case was that Sir Frederick imposed on purchasers of the plots stipulations and regulations for their benefit and for the benefit of the estate generally. One of these prohibited the erection of any building in the gardens without the written consent of the vendor or his successors in title. Plaintiff's and defendants' houses enjoyed beautiful views of the River Thames, and plaintiff's case was that the stipulations were imposed for the preservation of these views. She alleged that defendants' garage, if completed, would obstruct the view from her premises and would be an eyesore. Counsel contended that the estate was laid out in accordance with a general scheme of building development.

Mr. Farwell, K.C., for the defendants, submitted that the plaintiff had not proved the existence of a building scheme. The covenants imposed by the vendor were such as could at any moment be waived. Defendants denied that they were imposed for the preservation of the views of the river. The vendor had parted with his interest in the property and there was now no one whose licence was required for the completion of the garage, the plans of which had been approved by the Twickenham and District Council.

His Lordship said he came to the conclusion that there was a development agreement, but no building scheme. Under these circumstances the action failed and he dismissed it with costs.

He ordered an inquiry as to damages resulting from the interim injunction, which had been granted, and he reserved the costs of this.

### QUESTION OF NOTICE TO TREAT

*Kerman v. London County Council. King's Bench Division. Before the Lord Chief Justice and Justices Atton and Branson*

This was a case which had been remitted to the arbitrator for more information on the question whether, had the notice to treat not been given, the claimant would have sold the land at a higher price than that he could have got after the notice was withdrawn.

Mr. Topham, K.C., for the claimants, now stated that the arbitrator had answered to the effect that if the notice to treat had not been received Mr. Kerman would have sold the land at a higher

price than the value of the land at the time of the withdrawal of the notice, and the loss he had sustained was £1,830. He also held that, although Mr. Kerman did not attempt to sell the house and grounds on the land, the diminished value of that property by the action of the Council and the scheme they carried out adjoining it, amounted to £1,000. However, the applicants did not claim that sum; but they asked for the payment of the £1,830.

Mr. Stafford Cripps, K.C. (for the Council), said it was entirely wrong to state that a freeholder was stopped from selling his land when notice to treat was received from the local authority carrying out a building scheme. He was only prevented from disposing of his land in such a way as to throw an additional burden on the body giving the notice to treat when the payment of compensation was considered.

The Lord Chief Justice: But the answer to that is that the notice would at once affect the mind of a willing purchaser who would say: "I want land on which I can freely build, and not land encumbered with a notice to treat in connection with a possible housing scheme."

The Lord Chief Justice, in giving judgment, said the Court decided against the applicant, answering "nil" to the question whether the sum arrived at by the arbitrator, or what sum, was payable, which meant that the claimant received nothing under any head of claim except an agreed sum of £75. With regard to the costs the Court ordered the L.C.C. to pay £38 6s. fees to the arbitrator, while with regard to other costs each party would pay their own. The Court gave no reason for their decision on the question raised on the special case.

Justices Atton and Branson agreed.

### NEW STREET: QUESTION OF BY-LAW

*Edwards v. Prideaux. King's Bench Division. Before the Lord Chief Justice and Justices Atton and Branson*

This was an interesting appeal on the construction of a by-law that "any new street should be opened to the full width of the street at both ends."

The appellant was Mr. Geo. Edwards, a builder of Shrewsbury, who was the owner of a new street on a building estate at Shrewsbury, and he appealed from a decision of the local Justices, who had found him guilty of the contravention of the by-law which provided that "any new street should be opened to the full width of the street at both ends."

Mr. F. O. Langley, who represented the appellant, said his client built eighteen houses on the estate and made up the road lightly for the purposes of the inhabitants of those residences. At one end of the road was a hedge. That hedge was the bone of contention because the Corporation insisted that their by-laws stipulated that the hedge should be removed and the road made right through to join another and main road. Mr. Edwards objected. It meant that if he were forced to do what the Corporation surveyor wanted the expense would be heavy because the road would have to be made up to stand heavy through traffic. His case was, that having made up the road to suit the needs of the occupants he had done all that was expected of him, that the Corporation could not impose a "constructional" obligation upon the public concerned, and that appellant was not obliged to do any more than to leave the road in such a condition that it could be thrown open when the Corporation desired to carry it through. Further, as the suggested offence was committed in July 1927, it was complete then, and proceedings instituted, as they were, in February 1928, were out of time.

The appeal was dismissed, with costs.

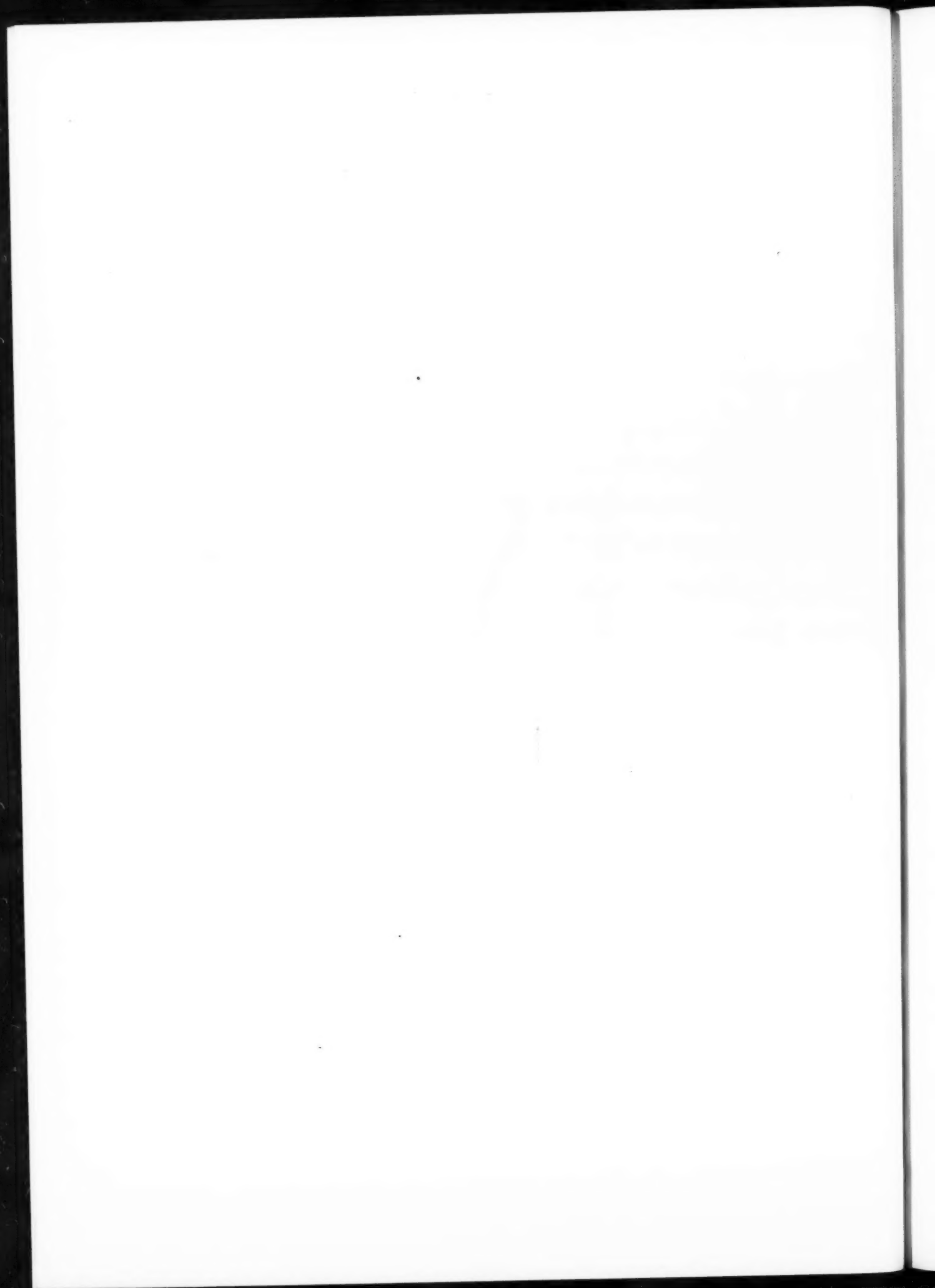
The Lord Chief Justice, in giving judgment, said the whole question was what was the meaning of "shall provide that each end shall be open?" It had been contended, in a desperate argument, that what was meant was that the street should be left in such a condition that somebody else could, when necessary, open it to meet another road. The by-law did not, however, say "shall be capable of being opened," but it said "shall be open." His Lordship was also of the opinion that the offence was a continuing one because it existed from day to day.

Justices Atton and Branson concurred.

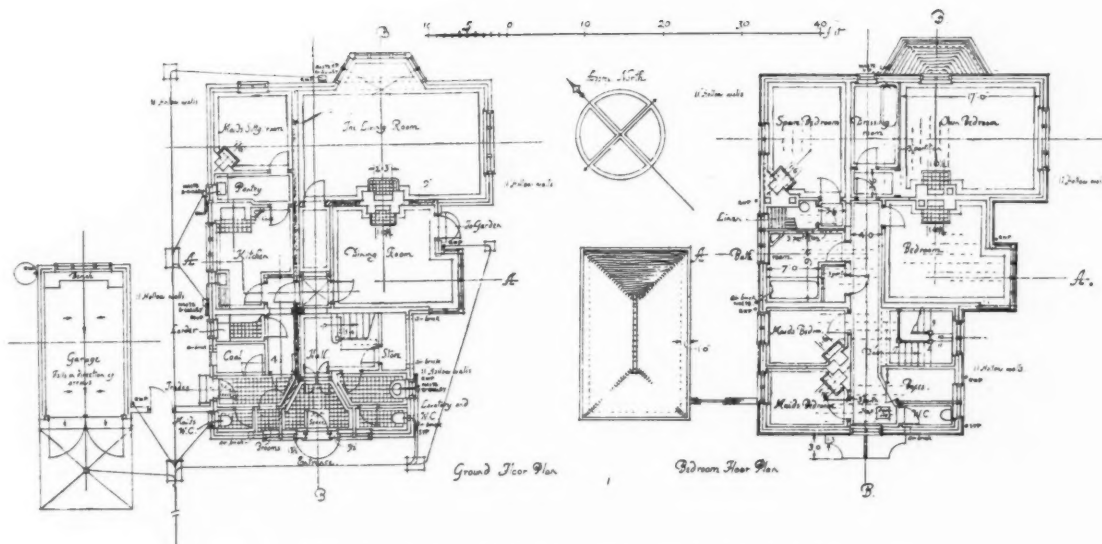


## ENGLISH PRECEDENT

37 Conington, Cambridgeshire. This door (c. 1730) forms the western entrance to the parish church, and it is no doubt contemporaneous with the flanking brick buttresses which strengthen the tower. The marriage between the oval window and the broken pediment, though unconventional, is entirely satisfactory, the chief discord being produced by the small inverted keystone superimposed on the larger one of the door. In spite of this the door is a notable one, and the nave of the church, which was also brought into line with the then prevailing fashion, bears testimony to the skill of the architect who was responsible for the changes.—[HAROLD TOMLINSON.]



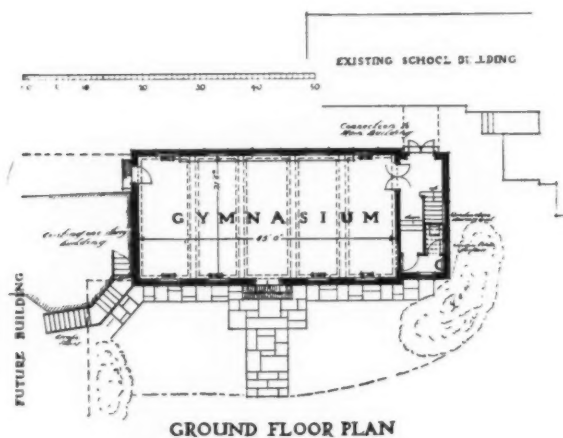
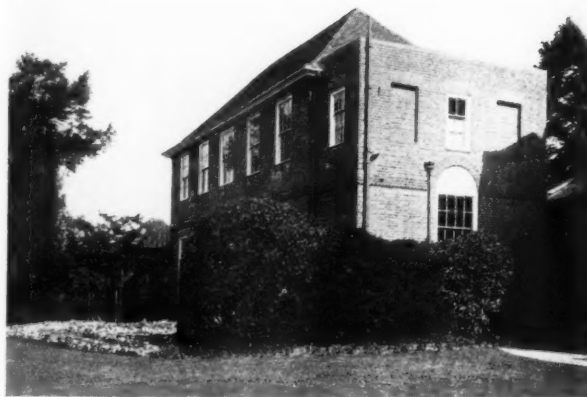




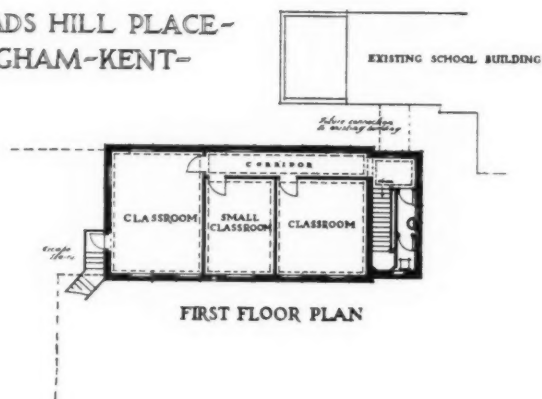
*The Red House, Purley, Surrey. By Sydney Tatchell and Geoffrey C. Wilson. Above, the south front. Below, the plans. The house is brick-built, faced with quiet-toned bricks and tile hanging, and roofed with hand-made sand-faced tiles. Most of the ground-floor rooms have oak floors. The kitchen, etc., have wood-block floors, and the lobby and offices are tiled. Metal casements and lead glazing are provided throughout.*

## A NEW SCHOOL IN KENT

GADS HILL PLACE, occupied by Charles Dickens from 1857 until his death, was purchased by its present owner in 1923 for use as a girls' boarding school, its situation and extent being well-suited to this purpose. No portion of the house, however, was adaptable for conversion into a spacious gymnasium essential to modern educational practice, and, after schemes for the conversion of the coach-house block had been abandoned, plans for the new building were adopted which provides, as illustrated, a gymnasium for forty pupils and classrooms arranged on the upper floor. The advantages in this proposal were that a new building could be easily connected with the house and, in affording accommodation conforming with the best principles of hygiene, with the house would form the nucleus of future buildings to be based on a trilateral plan.



-GADS HILL PLACE-  
-HIGHAM-KENT-



New school building at Gads Hill Place, Higham, Kent. By T. O. Thirtle. Above, a general view. Centre, the plans. Below, the main front.

## ARCHITECTURAL SCHOOLS

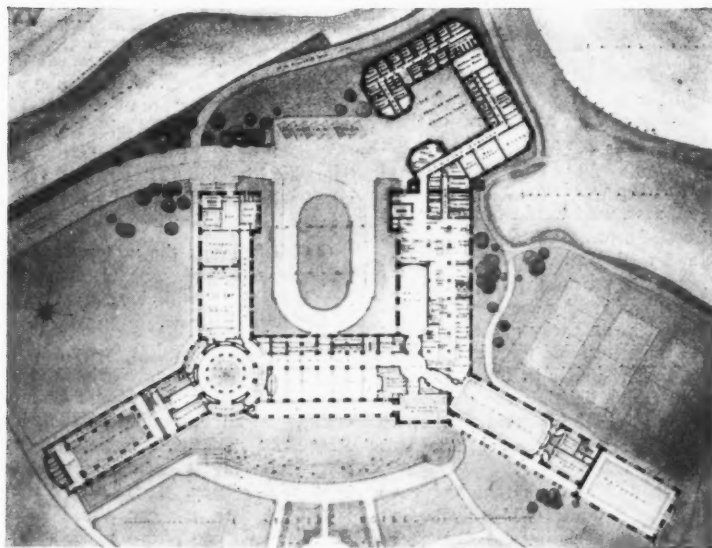
### *Liverpool University School of Architecture*

The accompanying illustrations show a design for an Atlantic Hotel, by A. T. Davidson: an example of fifth-year work at the Liverpool University School of Architecture, and two of a set of drawings submitted as a thesis for diploma. The illustrations are reproduced from the prospectus of the school for the forthcoming session, which contains a number of other examples of the work of the students. The school offers courses which are designed to provide a full professional education at a University standard for all who intend to practise as architects and who wish to acquire their training in an atmosphere of liberal studies side by side with the students of other professions. To meet the varied needs of architectural practice as they have now developed, the school offers courses of study leading, if preceded by matriculation, to the Degree of Bachelor of Architecture (B.Arch.), or, if not so preceded, qualifying for the Diploma in Architecture. These courses, which are identical both for the degree and for the diploma, extend over five years and are of three kinds—the pass course, the course with honours or distinction in architectural design, and the course with honours or distinction in architectural construction. The curriculum of the first three years is common to all three courses, whilst that of the fourth and fifth years in the case of students taking honours or distinction goes beyond the pass type. Each of the courses is devised so as to equip the student with the most efficient training possible for the vocational work he proposes to do. The study of design, beginning with exercises in the elements of architectural form, is finally carried to a stage at which it involves the solution of large and complex problems of composition. Construction is taught in its simplest aspects in the first year, and in that year, as in all the subsequent parts of the courses, is progressively related to the teaching of design.

From the third year onwards students are required to develop carefully rendered schemes with the detailed and working drawings necessary for a contract. Throughout, stress is laid on logical planning as the basis of good architecture, and a large proportion of the subjects set in the school studios are planning problems. The lecture courses are arranged to run parallel with the work done under instruction in the studios. Under the regulations governing the courses of study students are required to spend six months of their fourth year in some approved form of practical work, usually in an architect's office where they can earn a salary. For some time past the school has established connections with certain of the best-known architectural offices in New York. In consequence, capable students during the summer term and long vacation of their fourth year of study have the opportunity of securing temporary positions as paid assistants in these offices at rates of pay which, with care, cover their passages either way. Arrangements have been made to admit Liverpool students straight into the country. Professor C. H. Reilly, O.B.E., M.A. CANTAB., F.R.I.B.A., is Roscoe Professor of Architecture in charge of the school, and Professor Patrick Abercrombie, M.A., F.R.I.B.A., is Lever Professor of Civic Design.

### *The Welsh School of Architecture*

A scholarship covering tuition fees and a maintenance grant of £40 per annum for three years at the Welsh School of Architecture at the Technical College, Cardiff, has been awarded to Mr. D. G. Thomas, of Troedryhiw, Merthyr Tydfil. These scholarships, which are open to residents and non-residents of Cardiff, are awarded annually on the results of an examination of about the same standard as matriculation in the following subjects: English, mathematics, a modern language, physics with mechanics, or chemistry, or higher mathematics, history or geography. Candidates must satisfy the head of the school of architecture as to their ability in elementary drawing, or they may substitute an examination in this subject in lieu of one of the above-named



*A design for an Atlantic Hotel. By A. T. Davidson, fifth-year student, Liverpool University School of Architecture. Two of a set of drawings submitted as a thesis for diploma.*

subjects other than English and mathematics. Further particulars concerning these scholarships will be supplied on application to Mr. W. S. Purchon, M.A., A.R.I.B.A., head of the Welsh School of Architecture, the Technical College, Cardiff.

## SOCIETIES AND INSTITUTIONS

### *The C.P.R.E.*

A Devon and Cornwall branch of the Council for the Preservation of Rural England is to be formed.

### *West Essex Architects*

A meeting of the West Essex Chapter of the Essex Society of Architects was held at the Painter-Stainers' Hall, when a paper was read by Mr. T. M. Pritchard, clerk to the company, from which they learnt something of the historical side of the painting crafts. The banqueting plate of the company was on view. The company later visited Lloyd's Shipping Buildings. The architect, Sir Edwin Cooper, conducted the company over the buildings, explaining the working of the shipping insurance and the meaning of the symbolic design throughout the buildings. The carving was particularly admired, and a warm discussion followed as to the comparative merits of these buildings and those of the Port of London Authority, which it is hoped will later be the subject of a visit by the Chapter.

### *The South Wales Institute of Architects*

The South Wales Institute of Architects (Central Branch) and the Institute of Builders (South Wales Branch) have made arrangements for a series of lectures on architectural and building subjects, which, it is hoped, will be of interest, not only to their own members, but also to the public. At the first of these lectures Mr. W. S. Purchon, M.A., A.R.I.B.A., head of the Welsh School of Architecture at the Technical College, Cardiff, gave a lecture on "Architecture and Environment." His lecture was illustrated by lantern slides and dealt with the influence of environment on architecture in ancient, medieval, and modern times, and also with the influence of architecture as part of the environment of the people. Members of the public, including ladies, are invited to the lectures.

### *Architecture and Manners*

Professor C. H. Reilly gave the first two of the four annual lectures on art, at the University College, Bangor. His first subject was "Architecture as an expression of power," and he showed a series of some sixty slides of buildings from all over the ancient and modern world, including America, to exhibit the quality of power he desired to illustrate, indicating in each case how the materials were used to bring out their inherent qualities and how much of the power of the buildings to hold our imagination was due to this.

Professor Reilly suggested that social manners were a good test of civilization, and that nowhere were such manners or want of them more easily visible than in the buildings of our towns and villages. They revealed the quality of their minds and of their idea of their relationship to their fellow-men as clearly as did the clothes they wore. The man who would go to an important civic function, where the dignity of the town was involved, in a suit of plus-fours was the same type of man who would build a great obtrusive shop in the main street of a town, destroying the lines and atmosphere of the street and calling attention to himself at the expense of his neighbours. He was the man who would build in an old grey village, dominated perhaps by the grey tower of the village church, a bright red villa, all cocky gables and bay windows, with coloured glass in the latter, and gilded railings in front of them. Oxford had a by-law under its town-planning scheme which every town might adopt, limiting the size of all lettering on buildings to 18 in., and another providing that no commercial building shall overtop its ancient colleges. That was the spirit they wanted everywhere.

Among the slides the professor showed were several which gave fine landscape views, and then the buildings which looked at these views. He showed again a variety of slides from all over the

world pointing out where buildings paid deference to one another, to the street, to the town, and to the mountainside; and he showed cases of the reverse.

### *Sheffield and South Yorkshire Architects*

Members of the Sheffield, South Yorkshire and District Society of Architects and Surveyors, prior to their inaugural session, inspected the travelling collection in the Mappin Art Gallery of notable architectural drawings which have gained prizes in the competitions organized by the R.I.B.A. Mr. S. Welsh, the new lecturer in architecture at the University of Sheffield, gave a talk on the drawings.

## COMPETITION CALENDAR

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

**December 10.** The Portland Cement Selling and Distributing Co., Ltd., announce a competition for architects, with prize awards totalling £300. Designs for a house costing £1,500 are called for, and the winning design will be erected at Olympia for the *Daily Mail* Ideal Home Exhibition, which opens on February 26, 1929. Assessors: Messrs. Ernest B. Glanfield, F.R.I.B.A.; Oswald P. Milne, F.R.I.B.A.; and Douglas G. Tanner. First prize, £250; second prize, £150; third prize, £100. Particulars from the Secretary, House Competition, Ship House, 20 Buckingham Gate, London, S.W.1.

**December 31.** Elementary School, West Bromwich. Competition open to architects resident in the United Kingdom. Assessor: Mr. Herbert T. Buckland, F.R.I.B.A. Premiums: £150, £100, and £50. Particulars from Director of Education, Education Offices, West Bromwich. Deposit £1 1s.

**January 15.** Municipal Buildings and Market Hall proposed to be erected on a site in Whitby Road, Ellesmere Port. Assessor: Mr. T. R. Milburn, F.R.I.B.A. Premiums: £100, £75, and £50. Particulars from the Clerk to the Council, Council Offices, Ellesmere Port. Deposit £1 1s.

**February 13.** Art Gallery to be erected in Christchurch, New Zealand, under the R. E. McDougall gift. Amount to be expended, £25,000. Competition in two stages. 1st stage: Pencil sketches from which will be selected by the assessor three designs, each of the authors to receive £100 honorarium. 2nd stage: The authors of the three selected designs to compete and the one adjudged the winner by the Jury of Award will be employed as architect. Open to all architects on the Register of the R.I.B.A. and all affiliated Institutions. Assessor: Mr. S. Hurst Seager, C.B.E., F.R.I.B.A. Jury of Award: the Donor; the Rev. J. K. Archer (who is at present the Mayor of Christchurch); Mr. R. Wallwork, Director of the Canterbury College School of Art, Christchurch (and at present the President of the Canterbury Society of Arts); and the Assessor. Particulars from the Office of the High Commissioner for New Zealand, the Strand, London, or from Mr. J. S. Neville, Town Clerk, Christchurch, New Zealand.

## TRADE NOTES

To obviate any possibility of an erroneous impression being gathered from their advertisement which appeared in our issue of October 24, Messrs. W. T. Henley's Telegraph Works Co., Ltd., inform us that the three new cinemas in Hull which were referred to as having been wired with Henley cable by the City Electrical Company of Hull, are the Carlton, Cecil, and Savoy cinemas. The new Piccadilly Theatre and Plaza Theatre in London were wired with Henley cable by the Berkeley Electrical Engineering Co., Ltd., of 29 Buckingham Gate, S.W.

On November 1 the motor travelling caravan of the National Radiator Co., Ltd., which is fitted with a working Ideal Cookan-heat installation, will give demonstrations opposite "The Marquis of Granby," Harrow.

Messrs. Alfred Goslett & Co., Ltd., of 127-131 Charing Cross Road, London, W.C.2, have been appointed sole agents for Sunray Glass for London, the Home Counties, and the south and east coasts. In an interesting booklet, just issued under the title of *Summer Days Always*, it is claimed that Sunray Glass allows the ultra-violet rays to penetrate to 2,600 Angstrom units; 100 per cent. of efficiency. It is stated "that the question one must ask is not whether one can afford to put in Sunray glass, but whether one can afford to be without it! It can be done so



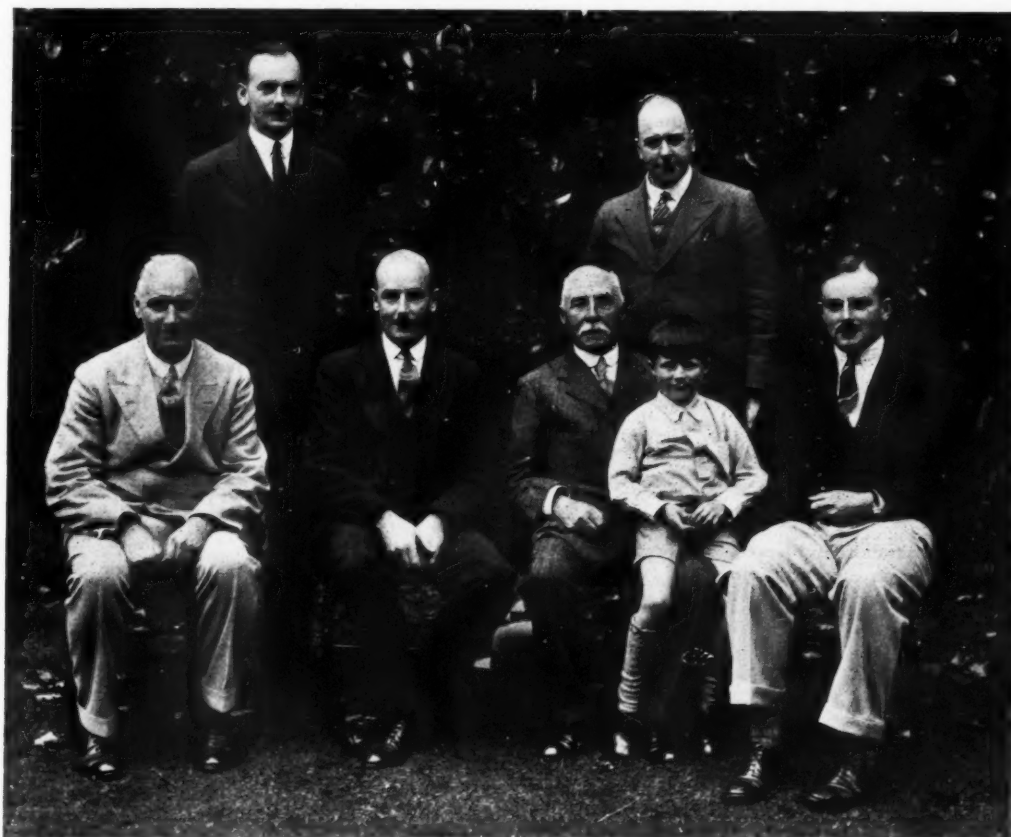
easily; for instance, replace all breakages with Sunray glass, do up one room of the house at a time, starting with the nursery, add a pane of Sunray glass here and there, and in next to no time health enters your home as a permanent guest." A copy of the booklet may be obtained on application to Messrs. Goslett & Co.

Messrs. O'Brien, Thomas & Co., of 17-18 Upper Thames Street, London, ironfounders, have just celebrated the jubilee of their foundation. The history of the growth of the business is interesting. The firm was founded in April 1878 at a small office in Clement's Lane, and moved to 7 Upper Thames Street in September 1878. By July 1880 the whole premises of 7 Upper Thames Street were acquired. In April 1882 the firm moved to 229 Upper Thames Street, and in April 1884 acquired 228 Upper Thames Street. In 1890 the firm took a building lease of White Lion Wharf, 17-18 Upper Thames Street, and completed the buildings in 1892, and in 1897 built St. Paul's Wharf buildings. In 1900 they built the street front of the warehouse and office of White Lion Wharf, as now occupied, and in 1911 purchased the ironfoundry business of Messrs. Yates, Haywood & Co., and Messrs. Skelton, Corbitt & Co., Rotherham. Messrs. Yates, Haywood & Co. celebrated their centenary in 1921. In commemoration of the jubilee the whole of the London staff was entertained to an outing at Tunbridge Wells. The entire office and warehouse staff of Thames Street was present, including Mr. Henry O'Brien, the founder, his three sons, and Mr. E. H. Howard and Mr. A. P. Harrop, the other two partners. There were also present Mrs. Henry O'Brien and Master "Pat" O'Brien,

son of Mr. H. W. O'Brien and grandson of the founder—thus the three generations were present. The total company was 105. After lunch, Mr. O'Brien welcomed the employees of the firm. He spoke of the early days of the firm when the staff consisted of himself, his late partner, Mr. Thomas, and Mr. Jack Sears, who remained for many years afterwards as foreman in the warehouse. He mentioned the great pride he felt in being present at the jubilee of the firm, a privilege not enjoyed by many, as fifty years was a large slice of a man's life. He took the opportunity of thanking a number of the staff with over thirty years' service for their long and loyal devotion to the firm.

## A WEST END BUSINESS HOUSE

Following are the names of the architects, consulting engineer, contractors, and sub-contractors for Celanese House, Hanover Square, W.1., illustrated on pages 600 to 607: architects, Messrs. Gordon Jeeves; general contractors, Messrs. Ford and Walton, Ltd.; consulting engineer, Mr. John Dewar, M.I.STRUCT.E. Sub-contractors: The Bath and Portland Stone Firms, Ltd., stone; The Empire Stone Co., artificial stone; Redpath Brown & Co., Ltd., structural steel; Caxton Floors, Ltd., fireproof construction; Hollis Bros., wood-block flooring; Richard Crittall & Co., central heating; Cecil Cooper & Co., electric wiring; A. Jones Lock Co., door furniture; W. James & Co., Ltd., casements; Saml. Haskins and Bros., rolling shutters; Charles Tozer, decorative plaster and joinery; Fenning & Co., Ltd., marble.



Three generations of the family of Mr. Henry O'Brien are shown in this photograph of the directors, taken on the occasion of the jubilee outing. Seated from left to right are Mr. E. H. Howard, Mr. H. W. O'Brien, Mr. Henry O'Brien (founder), Master "Pat" O'Brien (grandson), and Mr. Terence O'Brien. Standing are Mr. D. P. O'Brien and Mr. A. P. Harrop.

## THE WEEK'S BUILDING NEWS

Plans passed by the CHESTERFIELD Corporation: Brick kilns, Whitecotes Lane, for Mr. W. Gibbons; two houses, Hawkesley Avenue, for Messrs. J. Collis and Sons, Ltd.; two bungalows, Newbold Road, for Messrs. J. Collis and Sons, Ltd.; two houses, Tapton View Road, for Mr. A. Needham; four houses, Ashgate Road, for Messrs. G. F. Kirk, Ltd.; alterations, Railway Hotel, Whittington Moor, for Messrs. Wm. Stones, Ltd.; workshop, Clayton Street, for Messrs. J. Collis and Sons, Ltd.; extensions, Walton Works, for Messrs. Robinson and Sons, Ltd.; hall and canteen, Chatsworth Road, for Messrs. Robinson and Sons, Ltd.; alterations, Angel Hotel, New Whittington, for Messrs. Tennant Bros., Ltd.; alterations and additions, Union Offices, Newbold Road, for Board of Guardians; business premises, Vicar Lane, for Mr. W. T. Parker; eight houses off Ashgate Road, for Mr. A. Heath; two houses, Langer Lane, for Messrs. Heath & Co.

The Metropolitan Asylums Board is seeking sanction for a loan of £224,250 for the extension of Queen Mary's Hospital for Children, LONDON.

Plans passed by the WAKEFIELD Corporation: Gas meter house, etc., Stennard Island, for British Jeffrey Diamond Co., Ltd.; workshop, St. Marks Street, for Mr. W. H. Ogden; two houses, Stanbridge Lane, for Mr. H. Dobson; Registry of Deeds, for West Riding c.c., Bond Street, for Mr. P. O. Platts; fifty-six houses off Balne Lane, for Mr. J. P. Firth; bath-house and changing-rooms, Grammar School, for Mr. J. P. Firth.

The Church of England authorities are to erect a church on the Lupset housing estate, WAKEFIELD.

The WAKEFIELD Corporation has decided to erect another fifty houses on the Lupset estate.

The WAKEFIELD Corporation is to erect fifty non-parlour houses on the Portobello estate at an estimated cost of £25,000.

The WAKEFIELD Corporation has decided to erect 100 non-parlour houses in the Eastmoor area at an estimated cost of £48,500.

The BOURNEMOUTH Corporation has approved the plans of the borough engineer for the extension of the West Undercliff extension. The cost is estimated at £38,500.

Messrs. C. and A. Modes, Ltd., 53 Bond Street, London, are to erect large buildings at the corner of Cambridge Street and Sauchiehall Street, GLASGOW.

Messrs. Montague Burton, Ltd., have in view a scheme for the reconstruction of Nos. 2-8 Buchanan Street, and Nos. 122-132 Argyle Street, GLASGOW.

Plans passed by the BRISTOL Corporation: Two houses, Clare Avenue, for Mr. A. D. Turner; twelve houses, Valley Road, Bedminster, for Mr. W. J. Kew; four houses, Portway, for Mr. H. B. Stride; sixteen houses, Parson Street, Bedminster, for Messrs. Greenhill and Low; eight houses, Portway, for Mr. A. Cooper; ten houses, Filton Avenue, Horfield, for Mr. W. J. J. Lee; forty-four houses, Bloomfield Road, Brislington, for Mr. E. H. W. Wilmott.

Plans passed by the LOWESTOFT Corporation: Two houses, Yarmouth Road, for Mr. S. F. Godbold; classroom, Wesleyan Church, Lorne Park Road, for trustees; bungalow, Yarmouth Road, for Mr. W. Calver; extensions, 84 London Road, for Messrs. Marks and Spencer; two bungalows, Normanton Drive, for Mr. F. Geater; brick store, Beccles Road, for Mr. T. Clarke; house, The Avenue, for Mr. W. Beaumont.

The L.M.S. and the West Riding c.c. have approved amended plans for the construction of railway and canal bridges at CALVERLEY and Horsforth at a cost of £49,000.

The NEWCASTLE Corporation is to clear the Elswick East Terrace area and rehouse the tenants at a cost of £98,000.

The Sutton Dwellings Trust is to erect forty-two houses in Barrack Road, NEWCASTLE.

The NEWCASTLE Corporation is to lay out land at Benwell as a cemetery at a cost of £23,000.

Plans passed by the PORTSMOUTH Corporation: Five shops, Grove Road, for Mr. F. H. Frankeiss; nine houses, Torrington Road, for Mr. H. Williams; twelve houses, Torrington Road, for Mr. J. J. Canterbury; four houses, Pervin Road, for Mr. H. E. Pitt; four houses, Northern Parade, for Mr. E. A. G. Wright; new streets of estate of Winchester College, for Messrs. Frank Bevis, Ltd.; six houses, Burbridge Grove, for Mr. W. Ward; three houses, Stubbington Avenue, for Mr. J. Brittan; six houses, Torrington Road, for Mr. V. Dye; three houses, Battenburg Avenue, for Mr. G. Coleman; sixteen houses, Torrington Road, for Mr. R. C. Brittan; extensions, 18-20 London Road, for Messrs. E. and A. Sprigings; fourteen houses, Berney Road, for Mr. M. R. Berney; flats, Hawke Street, for Portsmouth Housing, Ltd.

The ISLINGTON B.C. has purchased a site at Avenall Road, Highbury, for the erection of thirty-two flats.

Plans passed by the BOURNEMOUTH Corporation: Additions, Boscombe Hippodrome, Christchurch Road, for General Theatre Corporation, Ltd.; amended plans, Westover Cinema, Westover Road, for Savoy Cinemas, Ltd.; additions, Lancaster Hotel, Southcote Road, for Mr. H. A. Jones; two shops, Holdenhurst Road, for Messrs. Hayward and Abbott; cottages, Tuckton Farm, for Messrs. Jones and Baines; four houses, Cyril Road, for Mr. E. Elliot; hall, Brassey Road, for Mr. T. J. Rowley; two houses, Seafield Road, for Messrs. F. A. Griggs and Sons; two shops, Southbourne Grove, for Mr. A. C. Hunter; rebuilding, 14 Commercial Road, for Messrs. J. Lyons & Co., Ltd.; stores, 90 Commercial Road, for Messrs. Eldridge, Pope & Co.; two houses, Haddon Road, for Mr. J. Cole; business premises and flats, Bourne Avenue and Richmond Hill, for Richmond Chambers, Ltd.; four houses, Redbreast Road, for Mr. A. H. Hicks; seven shops and houses, Christchurch Road, for Mr. S. Kermod; seven houses, Malvern Road, for Mr. J. Head; twelve houses, Redbreast Road, for Mr. C. E. Baker; six flats, Exeter Park Road, for Mr. H. Riches; church, Calvin Road, for Pastor W. G. Stalley; ten houses, Athelstan Road, for Mr. H. F. Algar; twelve houses, Balfour Road, for Mr. Rowley; motor showrooms and living accommodation, Christchurch Road, for Tennyson Motor Co., Ltd.; rebuilding shops, Wimborne Road, for Mr. J. Davies; additions, 521-523 Christchurch Road, for Mr. J. J. Allen; six flats, St. Stephen's Road, for Messrs. Guillaume; two houses, Ravine Road, for Mr. G. T. Chamberlain.

The Board of Education has approved the plans of the COLCHESTER Education Committee for the erection of an elementary school at Lexden at a cost of £18,000.

The borough engineer of COLCHESTER has prepared a layout plan for the erection of 279 houses on a site in Harwich Road.

The borough engineer of COLCHESTER is to prepare plans for the erection of a further fifty-eight houses on the Defoe Crescent estate.

The BEXHILL Corporation is to grant a site at Galley Hill to Major J. R. Gould for the establishment of a yacht-building business.

Mr. Frank Verity, the *Manchester Guardian* understands, is to be the architect of the new enormous cinema building that is to be erected in Oxford Road, Manchester.

Plans passed by the SHOREDITCH B.C.: Building at Branch Wharf, Branch Place; building to abut on Pitfield Street, Aske Street, Fanshaw Street, and Ashford Street; partial reconstruction, 32-33 Eagle Wharf Road; factory, Adelaide Wharf, Great Cambridge Street.

Plans passed by the COLCHESTER Corporation: House, Greenstead Road, for Mr. J. F. Keeling; house, Maidenburgh Street, for Mr. T. Macklin; two cottages, Berechurch Park, for Mr. H. Messer; shop and house, Ipswich Road, for Mr. R. Woodhouse Beales; house, Capel Road, for Mr. F. G. Crone; house, Ipswich Road, for Mr. T. H. Baker; two houses, Elmstead Road, for Messrs. W. A. Hills and Son; house, Mersea Road, for Mr. F. J. Martin; four houses, Serpentine Walk, for Mr. T. Macklin; house, Ipswich Road, for Messrs. H. G. Pryke and Son; six houses, Brook Street, for Mr. E. Mower; reconstruction, "Six Bells," Greenstead Road, for Mr. T. H. Baker, on behalf of Messrs. Truman, Hanbury, Buxton & Co., Ltd.; warehouse, furnishing dept. and office block, Victoria Place, for Mr. L. G. Ekins, on behalf of Co-operative Industrial Society; alterations, 58 High Street, for Messrs. Arnold and Sons, Ltd.; workshop, St. Helena Road, for Messrs. J. Moss and Son; rebuilding, 20 Long Wyre Street, for Messrs. Goodey and Cressall; house, Abbots Road, for Messrs. E. A. Cook and Sons.

Plans passed by the CROYDON Corporation: Four flats, The Waldrons, for Mr. H. Macintosh; four shops and flats, Wickham Road, for Messrs. Burcote, Ltd.; two houses, Bramley Hill, for Messrs. Gurney & Co.; twelve houses, Hatch Road, for Messrs. Truett and Steel; twenty-four garages, St. Augustine's Avenue, for Mr. A. Sanders; hall, Montpelier Road, for Mr. F. S. Smith, of Ross Parade, Wallington; workshop, Canterbury Road, for Messrs. Godbolt Bros.; shops and flats, Denning Avenue, for Mr. F. W. Foster; eight houses, Brading Road, for Messrs. Leonard Davey and Hart; shops and flats, 25-41 South End, for Croydon Corporation; alterations, 62 South End, for Messrs. Chart, Son and Reading.

The West Riding Education Committee is proceeding with the erection of a secondary school at ECCLESFIELD at a cost of £33,000.

The governors of the SKIPTON Grammar School are to undertake extensions at a cost of £19,000.

The SHEFFIELD Education Committee is to proceed with the erection of an elementary school for 200 children at Woodhouse Mill and a school for 1,700 at Hukin Lane.

The PORTSMOUTH Corporation Mental Deficiency A&T Committee is inquiring for a site for the erection of a mental colony.

Plans passed by the PAIGNTON U.D.C.: Layout of field, Dartmouth Road, for Mr. L. I. Taylor; two bungalows, Elm Park, for Messrs. Maunder and Sons; two houses, Knapp Park estate, for Mrs. Oldbury Brown; store and six garages, Esplanade Road, for Dellers Supply Stores, Ltd.; three shops, six flats, and four garages, Torquay Road, for Mr. W. Bourne; store adjoining 160 Torquay Road, for Mr. S. Rossiter; five houses, Warefield Road, for Messrs. C. and R. E. Drew.

The PAIGNTON U.D.C. has adopted an amended scheme of Mr. Sidney R. Lowcock, consulting engineer, for the main drainage scheme, with an outfall at Brixham at a cost of £252,250.

The governors of the BINGLEY Grammar School are now to proceed with extensions at a cost of £24,000.

The GLASGOW Corporation Housing Committee has allocated a site at Carntyne for the erection of seventy-two houses by the Balshagray Building Company.

The GLASGOW Corporation Housing Committee has decided upon the erection of eighty additional houses on the Tollcross and Shettleston estates.

The STOKE-ON-TRENT Corporation Housing Committee is acquiring sites totalling 24 acres at Trent Vale, at Bucknall, and at Brownhills, Burslem, for housing schemes.

The STOKE-ON-TRENT Corporation has obtained a valuation of 141 acres at Meir, and the General Purposes Committee is being asked to co-operate with the Housing Committee in its acquisition with a view to the land being used partly for housing purposes and partly for the proposed municipal aerodrome.

The STOKE-ON-TRENT Corporation has decided to utilize the Carmoustide Farm estate just acquired as follows: 45 acres for housing; 104 for a cemetery; and 12 for an open space.

Plans passed at HANLEY: Two houses, Ridgway Road, for Mr. S. G. Peake; entrance and Café, Regent Picture Theatre, Piccadilly, for National Provincial Cinematograph Theatres, Ltd.; alterations, Foundry Street, for Walpamur Paint Co.; alterations and additions, Market Square, for Halifax Building Society, Ltd.; shop premises, Broom Street, for Messrs. E. Cooke Bros.; alterations, Crown Bank, for Midland Bank, Ltd.; workshop, Abbey Road, for Messrs. J. Simpson and Son; fitters' shop, Nelson Pottery, for Messrs. E. Cotton, Ltd.; two houses, Baskerville Road, for Mr. W. T. Cherry; nine houses, Vine Street, for Messrs. T. Godwin and Son.

The borough engineer of PLYMOUTH has reported that the cost of various schemes under consideration or decided upon by the Corporation is as follows: Borough hospital extension, £70,000; mental hospital extension, £138,000; public abattoir, £71,000; new refuse destructor, £31,000; layout of central park, £84,000; and foreshore improvements, £14,500.

Plans passed at BURSLEM: Two houses, New Avenue, for Mr. E. A. Bird; twelve houses, Hanley Road, for Mr. G. M. Sambrook; ten houses off High Lane for Mr. T. Finney; alterations, Red Lion Hotel, Swan Square, for Messrs. Worthington & Co.; warehouse, Hamil Road, for Mr. J. A. Farrington; two houses, High Lane, for Mr. C. Kearton; alterations, 35 Queen Street, for Messrs. Melias; alterations, Leek Road, for Messrs. Swettenhams, Ltd.; additions, Waterloo works, for Messrs. T. and R. Boote, Ltd.; printing works, Sandbach Road, for Messrs. Mostons; six houses, Milton Road, for Mr. B. S. Phillips.

Plans passed at TUNSTALL: Alterations and additions, corner High Street and Garden Street, for Mr. F. Denby; institute, Oxford Road, for Miners Welfare Committee; church hall, Church Street, for Rev. J. L. Monk; classrooms, Wesleyan Sunday School, King Street, for trustees.

The STOKE-ON-TRENT Corporation has obtained sanction to borrow £62,460 for the erection of 170 houses on the Hanford estate.

The borough engineer of TORQUAY has prepared layout plans for fifty houses at South Parks and 180 houses at Lummaston Farm.

The STEPNEY B.C. is erecting by direct labour 154 maisonnettes at Milk Yard at a cost of £106,500.

The L.C.C. is to grant the subsidy to the Sutton Dwellings Trust in respect of 375 flats to be erected on the St. Quintins estate, KENSINGTON.

The STOKE-ON-TRENT Corporation Housing Committee has asked the city engineer to prepare plans for the layout of the Swan Lane housing site at Trent Vale.

The medical officer of health of STOKE-ON-TRENT reports that the following capital expenditure will be required during the next five years: Hospital for treatment of surgical tuberculosis, £100,000; extension of maternity home, £10,000; children's hospital, £25,000; extension, Stanfield sanatorium, £12,500; analytical department, £5,000; beds for treatment of venereal diseases, £5,000; tuberculosis dispensary at Burslem, £3,000; X-ray apparatus and light treatment, £1,000. There will also be considerable expenditure in connection with the clearance of unhealthy areas.



## RATES OF WAGES

		I		II				I		II								I		II			
		s.	d.	s.	d.			s.	d.	s.	d.			s.	d.			s.	d.	s.	d.		
A	ABERDARE	S. Wales & M.	1 7	1 2		A <sub>1</sub>	E. Glamorgan-shire & Monmouthshire	S. Wales & M.	1 7	1 2		A <sub>2</sub>	NANTWICH	N.W. Counties	1 6	1 1			1 6	1 1			
A <sub>1</sub>	Aberavenny	S. Wales & M.	1 7	1 2								A	Neath	S. Wales & M.	1 7	1 2			1 7	1 2			
B	Abingdon	S. Counties	1 5	1 1		B	Exeter	S.W. Counties	1 5	1 1		A	Nelson	N.W. Counties	1 7	1 2			1 7	1 2			
A	Accrington	N.W. Counties	1 7	1 2		B <sub>2</sub>	Exmouth	S.W. Counties	1 4	1 0		A	Newcastle	N.E. Coast	1 7	1 2			1 7	1 2			
A <sub>1</sub>	Addlestone	S. Counties	1 7	1 2								A	Newport	S. Wales & M.	1 7	1 2			1 7	1 2			
A	Adlington	N.W. Counties	1 7	1 2		B	FELIXSTOWE	E. Counties	1 5	1 1		A	Normanton	Yorkshire	1 7	1 2			1 7	1 2			
A	Airdrie	Scotland	1 7	1 2		A <sub>3</sub>	Filey	Yorks	1 6	1 1		A <sub>1</sub>	Northampton	Mid. Counties	1 7	1 2			1 7	1 2			
C	Aldeburgh	E. Counties	1 3	1 1		B	Fleetwood	N.W. Counties	1 7	1 2		A	North Staffs.	Mid. Counties	1 7	1 2			1 7	1 2			
A	Altrincham	N.W. Counties	1 7	1 2		B <sub>2</sub>	Fleetwood	S. Counties	1 4	1 0		A	North Shields	N.E. Coast	1 7	1 2			1 7	1 2			
B	Appleby	N.W. Counties	1 4	1 0		B <sub>3</sub>	Frodsham	N.W. Counties	1 7	1 2		A <sub>2</sub>	Norwich	E. Counties	1 6	1 1			1 6	1 1			
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2		B <sub>3</sub>	Frome	S.W. Counties	1 4	1 0		A	Nottingham	Mid. Counties	1 7	1 2			1 7	1 2			
A	Atherstone	Mid. Counties	1 6	1 1																			
B	Aylesbury	S. Counties	1 4	1 0		A	GATESHEAD	N.E. Coast	1 7	1 2		B	OAKHAM	Mid. Counties	1 5	1 1			1 5	1 1			
						B <sub>1</sub>	Gillingham	S. Counties	1 5	1 0		A	Oldham	N.W. Counties	1 7	1 2			1 7	1 2			
						A <sub>2</sub>	Gloucester	S.W. Counties	1 6	1 1		A	Oswestry	Mid. Counties	1 6	1 1			1 6	1 1			
B	BANBURY	S. Counties	1 4	1 0		A <sub>3</sub>	Goole	Yorkshire	1 6	1 1		B	Oxford	S. Counties	1 6	1 1			1 6	1 1			
B	Bangor	N.W. Counties	1 4	1 0		B	Grantham	Mid. Counties	1 6	1 1													
A	Barnard Castle	N.E. Coast	1 7	1 2		A <sub>1</sub>	Gravesend	S. Counties	1 7	1 2		A	PAISLEY	Scotland	1 7	1 2			1 7	1 2			
A	Barnsley	Yorkshire	1 5	1 0		A <sub>2</sub>	Greenock	Scotland	1 7	1 2		C	Pembroke	S. Wales & M.	1 3	1 1			1 3	1 1			
B	Barnstaple	N.W. Counties	1 7	1 2		B	Grimsby	Yorkshire	1 7	1 2		A	Perth	Scotland	1 7	1 2			1 7	1 2			
B	Barrow	S. Wales & M.	1 7	1 2		B	Guildford	S. Counties	1 5	1 0		A <sub>2</sub>	Peterborough	Mid. Counties	1 6	1 1			1 6	1 1			
A	Barry	S.W. Counties	1 4	1 0								A	Plymouth	S.W. Counties	1 7	1 2			1 7	1 2			
B	Basingstoke	S.W. Counties	1 4	1 0		A	HALIFAX	Yorkshire	1 7	1 2		A <sub>3</sub>	Pontefract	Yorkshire	1 7	1 2			1 7	1 2			
B	Bath	S.W. Counties	1 5	1 1		A	Hanley	Mid. Counties	1 7	1 2		B	Portsmouth	S. Wales & M.	1 7	1 2			1 7	1 2			
A	Batley	Yorkshire	1 7	1 2		A	Harrgate	Yorkshire	1 7	1 2		A	Portsmouth	S. Counties	1 5	1 1			1 5	1 1			
B	Bedford	E. Counties	1 5	1 1		A	Hartlepool	N.E. Coast	1 7	1 2		A	Preston	N.W. Counties	1 7	1 2			1 7	1 2			
A <sub>2</sub>	Berwick-on-Tweed	N.E. Coast	1 6	1 2		B	Harwich	E. Counties	1 5	1 0													
A	Bewdley	Mid. Counties	1 6	1 2		B <sub>2</sub>	Hastings	S. Counties	1 4	1 0		A	QUEENS-FERRY	N.W. Counties	1 7	1 2			1 7	1 2			
B	Bicester	Mid. Counties	1 4	1 0		A	Hatfield	S. Counties	1 6	1 1													
A	Birkenhead	N.W. Counties	1 7	1 2		B	Hereford	S. W. Counties	1 5	1 1		A <sub>2</sub>	READING	S. Counties	1 6	1 1			1 6	1 1			
A	Birmingham	Mid. Counties	1 7	1 2		B	Hertford	E. Counties	1 5	1 1		B	Reigate	S. Counties	1 5	1 1			1 5	1 1			
A	Bishop Auckland	N.E. Coast	1 7	1 2		A	Heysham	N.W. Counties	1 7	1 2		A <sub>3</sub>	Retford	Mid. Counties	1 6	1 1			1 6	1 1			
A	Blackburn	N.W. Counties	1 7	1 2		A	Howden	N.E. Coast	1 7	1 2		A <sub>1</sub>	Rhondda Valley	S. Wales & M.	1 7	1 2			1 7	1 2			
A	Blackpool	N.W. Counties	1 7	1 2		A	Huddersfield	Yorkshire	1 7	1 2													
A	Blyth	N.E. Coast	1 7	1 2		A	Hull	Yorkshire	1 7	1 2		A <sub>2</sub>	Ripon	Yorkshire	1 6	1 1			1 6	1 1			
A	Bolton	N.W. Counties	1 7	1 2								A	Rochdale	N.W. Counties	1 7	1 2			1 7	1 2			
A	Boston	Mid. Counties	1 6	1 1								B	Rochester	S. Counties	1 5	1 1			1 5	1 1			
B	Bournemouth	S. Counties	1 5	1 0								B	Ruabon	N.W. Counties	1 7	1 2			1 7	1 2			
B	Bovey Tracey	S.W. Counties	1 4	1 0								A <sub>2</sub>	Rugby	Mid. Counties	1 6	1 1			1 6	1 1			
A	Bradford	Yorkshire	1 7	1 2								A <sub>3</sub>	Rugley	Mid. Counties	1 6	1 1			1 6	1 1			
A	Brentwood	E. Counties	1 6	1 2								A	Runcorn	N.W. Counties	1 7	1 2			1 7	1 2			
A	Bridgend	S. Wales & M.	1 7	1 2																			
B	Bridgewater	S.W. Counties	1 4	1 0								A <sub>3</sub>	ST. ALBANS	E. Counties	1 6	1 1			1 6	1 1			
A	Brighthelm	Yorkshire	1 7	1 2								A	St. Helens	N.W. Counties	1 7	1 2			1 7	1 2			
A	Brighouse	Yorkshire	1 7	1 2								B	Salisbury	S.W. Counties	1 4	1 0			1 4	1 0			
B	Brighton	S. Counties	1 5	1 0								A	Scarborough	Yorkshire	1 7	1 2			1 7	1 2			
A	Bristol	S.W. Counties	1 7	1 2								A	Scunthorpe	Mid. Counties	1 7	1 2			1 7	1 2			
A	Brixham	S.W. Counties	1 4	1 0								A	Sheffield	Yorkshire	1 7	1 2			1 7	1 2			
A <sub>2</sub>	Bromsgrove	Mid. Counties	1 6	1 2								A	Shipley	Yorkshire	1 7	1 2			1 7	1 2			
C	Bromyard	Mid. Counties	1 3	1 1								A	Shrewsbury	Mid. Counties	1 6	1 1			1 6	1 1			
A	Burnley	N.W. Counties	1 7	1 2								A	Skipton	Yorkshire	1 6	1 2			1 6	1 2			
A	Burslem	Mid. Counties	1 7	1 2								A	Slough	S. Counties	1 6	1 1			1 6	1 1			
A <sub>2</sub>	Bury-on-Trent	Mid. Counties	1 6	1 2								A <sub>2</sub>	Solihull	Mid. Counties	1 6	1 2			1 6	1 2			
												A	South'pton	S. Counties	1 6	1 1			1 6	1 1			
A	Bury	N.W. Counties	1 7	1 2		A	ILKLEY	Yorkshire	1 7	1 2		A	Southend-on-Sea	E. Counties	1 6	1 2			1 6	1 2			
A <sub>1</sub>	Buxton	N.W. Counties	1 7	1 2		A	Immingham	Mid. Counties	1 7	1 2													
						B	Ipswich	E. Counties	1 5	1 1		A	Southport	N.W. Counties	1 7	1 2			1 7	1 2			
						C	Isle of Wight	S. Counties	1 3	1 1		A	St. Shields	N.E. Coast	1 7	1 2			1 7	1 2			
B	CAMBRIDGE	E. Counties	1 5	1 1								A	Stafford	Mid. Counties	1 6	1 2			1 6	1 2			
B	Canterbury	S. Counties	1 4	1 0		A	JARROW	N.E. Coast	1 7	1 2		A	Stockport	N.W. Counties	1 7	1 2			1 7	1 2			
A	Cardiff	S. Wales & M.	1 7	1 2								A	Stockton-on-Tees	N.E. Coast	1 7	1 2			1 7	1 2			
A	Cardle	N.W. Counties	1 7	1 2		A	KEIGHLEY	Yorkshire	1 7	1 2													
B	Cardthorpe	S. Wales & M.	1 5	1 1		B	Kendal	N.W. Counties	1 5	1 0			A	Stoke-on-Trent	Mid. Counties	1 7	1 2			1 7	1 2		
B	Carnarthen	S. Wales & M.	1 5	1 1		B <sub>1</sub>	Keswick	N.W. Counties	1 5	1 0			B	Stroud	S.W. Counties	1 5	1 1			1 5	1 1		
A	Carnarvon	N.W. Counties	1 4	1 0		A <sub>2</sub>	Kettering	Mid. Counties	1 6	1 1			A	Sunderland	N.E. Coast	1 7	1 2			1 7	1 2		
A	Carnforth	N.W. Counties	1 7	1 2		A <sub>3</sub>	Kidderminster	Mid. Counties	1 6	1 2			A	Swadlincote	Mid. Counties	1 7	1 2			1 7	1 2		
A	Castleford	Yorkshire	1 7	1 2								A	Swansea	S. Wales & M.	1 7	1 2			1 7	1 2			
B	Chatham	S. Counties	1 5	1 0		B	King's Lynn	E. Counties	1 4	1 0			B	Swindon	S.W. Counties	1 5	1 1			1 5	1 1		
B	Chelmsford	E. Counties	1 5	1 0																			
A	Cheltenham	S.W. Counties	1 6	1 1																			
A	Chesham	N.W. Counties	1 7	1 2																			



## PRICES CURRENT

## EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. per hour; LABOURER, 1s. 4d. per hour; NAVY, 1s. 4d. per hour; TIMBERMAN, 1s. 5d. per hour; SCAFFOLDER, 1s. 5d. per hour; WATCHMAN, 7s. 6d. per shift.

Broken brick or stone, 2 in., per yd.	£0 11 6
Thames ballast, per yd.	0 11 0
Pit gravel, per yd.	0 18 0
Pit sand, per yd.	0 14 6
Washed sand	0 15 0
Screened ballast or gravel, add 10 per cent. per yd.	
Clinker, breeze, etc., prices according to locality.	
Portland cement, per ton	£2 15 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

HARDWARE, 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

POUDLING, per yd. cube 1 10 0

CEMENT CONCRETE, 4-2-1, per yd. cube 1 18 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. 4d. per hour; TIMBERMAN, 1s. 5d. per hour; BRICKLAYER, 1s. 9d. per hour; PLUMBER, 1s. 9d. 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.

Leadwool per cub. £2 0 0

Gaskin, per lb. 0 0 4

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

CAS-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. 9d. per hour; LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. per hour.

London stocks, per M. £4 15 0

Flettons, per M. 3 0 0

Midhurst white facing bricks, per M. 5 0 0

T.L.B., multi-coloured facings, per M. 7 7 9

DO. red best facings, per M. 7 7 9

DO. rubbers 9 in., per M. 12 0 0

Staffordshire blue, per M. 9 10 0

Firebricks, 2 1/2 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 4 1/2 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 12 1/2 per cent. per rod.

DO. in backing to masonry, add 12 1/2 per cent. per rod.

DO. in raising on old walls, etc., add 12 1/2 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 2 1/2 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 planing 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. 1 1/2 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 carborandum, 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, 1/2 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, 4 in., per yd. 0 8 6

DO. SKIRTING, 6 in. 0 3 11

BREEZE PARTITION BLOCKS, set in cement, 1 1/2 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. 9d. per hour; DO. fixer, 1s. 10d. per hour; LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. per hour.

Portland Stone:

Whitbed, per ft. cube £0 4 6

Bashed, per ft. cube 0 4 7

Bath stone, per ft. cube 0 3 0

Usual trade extras for large blocks.

York paving, av. 2 1/2 in., per yd. super 0 6 6

York templates sawn, per ft. cube 0 6 9

State 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, 12 1/2 per cent.

Deduct for Bath, 33 1/2 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. 2 1/2 in. thick, per ft. sup. 0 1 3

## SLATER AND TILER

SLATER, 1s. 9d. per hour; TILER, 1s. 9d. per hour; SCAFFOLDER, 1s. 5d. per hour; LABOURER, 1s. 4d. per hour.

N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

Portmadoc Ladies . . . £14 0 0

Countess . . . 27 0 0

Duchess . . . 32 0 0

Old Delabole . . . Med. Grey Med. Green

24 in. x 12 in. £42 11 3 £45 1 0

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

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

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

Green Randoms, per ton . . . 8 3 9

Grey-green do., per ton . . . 7 3 9

Green pebbles, 12 in. to 8 in. long, per ton 5 13 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 cub. . . 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 6

CORNISH DO., per square . . . 6 3 0

Add, if vertical, per square approx. 0 13 0

Add, if with copper nails, per square approx. 0 2 6

Double course at eaves, per ft. approx. 0 1 0

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

Med. Grey Med. Green

24 in. x 12 in. £5 0 0 £5 2 0

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

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

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

Green randoms . . . 6 7 0

Grey-green do. . . 5 8 0

Green pebbles, 12 in. to 8 in. long 4 13 6

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. 6d. 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. 9d. per hour; JOINER, 1s. 9d. per hour; LABOURER, 1s. 4d. per hour.

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

7 x 3, per std. . . £21 0 0

11 x 4, per std. . . 33 0 0

Memel or Equal. Slightly less than foregoing.

Flooring, P.E., 1 in., per sq. . . £1 2 6

DO. T. and G., 1 in., per sq. 1 2 6

Planed boards, 1 in. x 11 in., per std. 30 0 0

Wainscot oak, per ft. sup. of 1 in. 0 1 4

Mahogany, Honduras, per ft. sup. of 1 in. 0 1 3

DO. Cuba, per ft. sup. of 1 in. 0 2 3

DO. African, per ft. sup. 0 1 0

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

DO. ft. cube . . . 0 12 6

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

## CARPENTER AND JOINER: continued.

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

## SMITH

SMITH, weekly rate equals 1s. 9d. per hour; MATE, do. 1s. 4d. per hour; ERECTOR, 1s. 9d. per hour; FITTER, 1s. 9d. per hour; LABOURER, 1s. 4d. per hour.

Mild Steel in British standard sections, per ton	£12 10 0
Sheet Steel:	
Flat sheets, black, per ton	17 0 0
DO., galv., per ton	19 0 0
Corrugated sheets, galv., per ton	18 10 0
Drying screws, galv., per gr.	0 1 10
Washers, galv., per gr.	0 1 1
Bolts and nuts per cut. and up	1 18 0
MILD STEEL in trusses, etc., erected, per ton	25 10 0
DO., in small sections as reinforcement, per ton	16 10 0
DO., in compounds, per ton	17 0 0
DO., in bar or rod reinforcement, per ton	20 0 0
WROUGHT-IRON in chimney bars, etc., including building in, per cwt.	2 0 0
DO., in light railings and balusters, per cwt.	2 5 0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0 2 0

## PLUMBER

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

Lead, milled sheet, per cut.	£1 9 0
DO. drawn pipes, per cut.	1 10 0
DO. soil pipe, per cut.	1 12 0
DO. scrap, per cut.	1 0 0
Copper, sheet, per lb.	0 1 3
Solder, plumber's, per lb.	0 1 3
DO. fine, per lb.	6 1 9
Cast-iron pipes, etc.:	
L.C.C. soil, 3 in., per yd.	0 4 0
DO. 4 in., per yd.	0 4 9 1/2
R.W.P., 2 1/2 in., per yd.	0 2 2
DO. 3 in., per yd.	0 2 7
DO. 4 in., per yd.	0 3 6 1/2
Gutter, 4 in. H.R., per yd.	0 1 6 1/2
DO. 4 in. O.G., per yd.	0 1 10 1/2
MILLED LEAD and labour in gutters, flashings, etc. per cwt.	3 0 0
LEAD PIPE, fixed, including running joints, bends and tacks, 1/2 in., per ft.	0 2 0
DO. 1 in., per ft.	0 2 3
DO. 1 1/2 in., per ft.	0 3 0
DO. 2 in., per ft.	0 4 0
LEAD WASTE or soil, fixed as above, complete, 1/2 in., per ft.	0 6 0
DO. 3 in., per ft.	0 7 0
DO. 4 in., per ft.	0 9 9
WIPED soldered joint, 1/2 in., each	0 2 6
DO. 1 in., each	0 3 2
DO. 1 1/2 in., each	0 3 8
BRASS screw-down stop cock and two soldered joints, 1/2 in., each	0 11 0
DO. 1 in., each	0 13 6
CAST-IRON rainwater pipe, jointed in red lead, 2 1/2 in., per ft. run	0 1 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, with all joints, on brackets, each	1 10 0

## PLASTERER

PLASTERER, 1s. 9d. per hour (plus allowances in London only); LABOURER, 1s. 4d. per hour.

Chalk lime, per ton	£2 17 0
Hair, per cut.	2 0 0
Sand and cement see "Excavator," etc., above.	
Lime putty, per cut.	£0 2 9
Hair mortar, per yd.	1 7 0
Fine stuff, per yd.	1 14 0
Sawn laths, per bd.	0 2 5
Keene's cement, per ton	5 15 0
Sirapite, per ton	3 10 0
DO. fine, per ton	3 18 0
Plaster, per ton	3 0 0
DO. per ton	3 12 6
DO. fine, per ton	5 12 0
Thistle plaster, per ton	3 9 0
Lath nails, per lb.	0 0 4
LATHING with sawn laths, per yd.	0 1 7
METAL LATHING, per yd.	0 2 3
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, 1 1/2 in., per yd.	0 2 4
DO. vertical, per yd.	0 2 7
RENDER, on brickwork, 1 to 3, per yd.	0 2 7
RENDER in Portland and set in fine stuff, per yd.	0 3 3
RENDER, float, and set, trowelled, per yd.	0 2 9
RENDER and set in Sirapite, per yd.	0 2 5
DO. in Thistle plaster, per yd.	0 2 5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0 0 5
EXTRA, if on ceilings, per yd.	0 0 5
ANGLES, rounded Keene's on Portland, per ft. lin.	0 0 6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0 0 3
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1 11 6
FIBROUS PLASTER SLABS, per yd.	0 1 10

## GLAZIER

GLAZIER, 1s. 8d. per hour.

Glass: 4ths in crates:	
Clear, 21 oz.	£0 0 4 1/2
DO. 26 oz.	0 0 5
Cathedral white, per ft.	0 0 7 1/2
Polished plate, British 1/2 in., up to 2 ft. sup.	0 1 2
DO. 4 ft. sup.	0 2 3
DO. 6 ft. sup.	0 2 6
DO. 20 ft. sup.	0 3 1
DO. 45 ft. sup.	0 3 3
DO. 65 ft. sup.	0 3 5
DO. 100 ft. sup.	0 3 10
Rough plate, 1/2 in., per ft.	0 0 6 1/2
DO. 1 in. per ft.	0 0 6 1/2
Linseed oil putty, per cut.	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, 1s. 6d. to 2s. per ft.  
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up £0 3 0  
Glazing only, polished plate 6d. to 8d. per ft. according to size.

## PAINTER AND PAPERHANGER

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

Genuine white lead, per cut.	£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
Knottling, per gall.	0 18 0
Distemper, washable, in ordinary colour, per cut., and up	2 5 0
Double size, per brick	0 3 6
Pumice stone, per lb.	0 0 4 1/2
Single gold leaf (transferable), per book	0 2 0
Varnish, copal, per gall. and up	0 12 6
DO., flat, per gall.	1 2 0
DO., paper, per gall.	0 18 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 2 1/2
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0 3 8
FIGURED DO., DO., per yd. sup.	0 5 6
FRENCH POLISHING, per ft. sup.	0 1 2
WAX POLISHING, per ft. sup.	0 0 6
STRIPPING old paper and preparing, per piece	0 1 7
HANGING PAPER, ordinary, per piece	0 1 10
DO., fine, per piece, and upwards	0 2 4
VARNISHING PAPER, 1 coat, per piece	0 9 0
CANVAS, strained and fixed, per yd. sup.	0 3 0
VARNISHING, hard oak, 1st coat, yd. sup.	0 1 2
DO., each subsequent coat, per yd. sup.	0 0 11

## SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.  
The measured work price is on the same basis as per ft. sup. £0 0 2 1/2

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

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

Asbestos sheeting, 1/2 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, 1/2 in. punched per M. grey 16 0 0  
DO., red 18 0 0

ASBESTOS COMPOSITION FLOORING: Laid in two coats, average 1/2 in. thick, in plain colour, per yd. sup. 0 7 0  
DO., 1 in. thick, suitable for domestic work, unpunished, 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.

Thickness	1/2 in.	1 in.	1 1/2 in.	2 in.	3 in.
Qualities	AA. A. B. AA. A. B. AA. A. B. AA. A. B. AA. A. B.				
Birch	4	3	3	3	4
Alder	3	3	3	3	4
Gaboon	4	3	3	3	4
Manogany	4	3	3	3	4
Figured Oak	4	3	3	3	4
Plain Oak	4	3	3	3	4
Oregon Pine	4	3	3	3	4

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A. A. B.  
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